Computer Aided Religious Learning in a Secular Context

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Declaration of authorship

I declare that this thesis titled *Computer Aided Religious Learning in a Secular Context* and submitted in 1995 to The University of Edinburgh for the degree of PhD is entirely my own work and has not been presented for any other award in any other academic institution.

To ensure academic probity, the conduct of the research on which the thesis is based has observed ethical standards of reasonable care towards those taking part in the study, reasonable care in the collation and analysis of data, and truthfulness in the presentation of findings and conclusions.

Bruce Wallace

Acknowledgments

The assistance of a number of people in making this research study possible is gratefully acknowledged. There are my past teachers who variously challenged and formed my understanding, and who pointed me to the writers and texts from which I have learnt so much; I trust I have been faithful to their intentions. In this connection I would especially affirm how much I owe to the late Professor John M Graham of Aberdeen University who has been my model of the religious teacher; I remember his wisdom, humanity and personal kindness to me with gratitude and deep affection. More immediately, there are of course the children and the teachers who took part in the piloting and trials; preservation of confidentiality prevents their being named. Ian Glen, Lothian Region’s Adviser in Information Technology and Educational Computing, gave invaluable technical assistance and moral support. My supervisors, Dr J I H McDonald and Mr Jolyon Mitchell, have offered practical and moral support whenever that was needed. Above all, however, I would like to acknowledge the support of my wife Pauline and my children, especially David and Laura, who have patiently borne my seemingly endless attachment to a computer when they might reasonably have expected to have my attention. To them I owe a debt of love which I hope to repay in two ways; first in the time I can now give them, and second through the encouragement I hope this study will give teachers to develop a religious education which contributes to the formation of people whose world views are more comprehensive, coherent and consistent. It is to people so empowered that we must look if the world is to become a more deeply human and welcoming place for our children to spend their futures.

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Abstract of thesis

The CD-ROM opens up the possibility of a new approach to religious learning which is particularly relevant to secular contexts. This thesis arises from the question of how a public education system may respond appropriately to the religious dimension of life in a plural society. Three main issues are considered: the nature of religious learning, the ethical legitimacy of its provision in a secular context, and the feasibility of using computers to assist in this learning. These issues are brought together in an experimental study conducted across nine local authority primary schools in one Region of Scotland.

Contemporary religious education in Scottish schools is set against its distinctive historical background. Principal arguments connected with its theory and practice are discussed, and a review is undertaken of what religion means today. The case for the primacy of religious studies in schools is rejected and religious learning, understood as world view formation, is proposed as both ethically acceptable and necessary for a fully developed secular education. The relevant legislation as well as data collected from the study both advance the argument that non-denominational does not equate easily with religious, and might more appropriately be considered secular. It is in this context of uncertainty about religious matters that the power of the interactive CD-ROM has a special place.

An original paradigm for world view analysis is proposed and discussed. From this paradigm is derived a personal profiling instrument which is used to map the world views of a normal sample of 808 children in the 9-12 years age range. These personal world views are seen to have no statistically significant association with the subjects' experiences of religion and attitudes to it. At the same time as generally valuing moral behaviour, subjects appear to value religion less the more they know about it. As might be expected, girls are seen to value caring more than justice, and boys justice more than caring. Girls, however, also value justice more than boys.

The paradigm also generated the conceptual framework for the CD-ROM whose development is described and trial evaluated. Little doubt remains about the feasibility of an interactive programme to aid religious learning, but its effectiveness is not fully established in this study; several contributory factors external to the CD-ROM are identified. Those taking part in the trial amplified the effect already identified of simultaneously knowing more and caring less about religion. This result reinforces doubts about the current focus on religious traditions in the school's religious and moral education curriculum. The thesis is thought to have been satisfied in all essentials, and the need to review the direction now being taken in non-denominational religious and moral education is the main conclusion drawn.
Notes about language usage

The difficulty of using the English language in a gender inclusive way is well known. In recent years a number of approaches have been adopted to try to meet this deficiency: using the plural form; always writing he or she or s/he; using he and saying that it includes she. I am uncomfortable about all of these options and instead I have used she, which literally does include he. Although I am not entirely comfortable with this decision, I do consider that my use of female language goes some way to redressing the male language of the writers I quote, and in reading over the text I have felt that this usage has given it some much-needed freshness.

It is also problematic, particularly in religious discourse, to know how to refer to transcendent reality. The variations are numerous: Being-itself; object of ultimate concern; Ultimate Reality; God; and so on. I have not felt constrained to use only one term. Where I am commenting on a writer I continue with that person’s usage. When I am writing from within a Christian framework I tend to use the word God, otherwise I use transcendent reality. The reasons for being sensitive about usage in this field do not need elaboration, but I am bound to say that I have no difficulty in using these terms interchangeably. At the same time, I am aware that different significances are attached to these words and the reader may actually understand something entirely different from me. Nonetheless, it would seem to me to be of the essence of the religious life that whatever we convey in language about transcendent reality will be at best partial and at worst misleading.

When I think about it, I am very uneasy about the use of the word religion. If it cannot be guessed immediately why that should be so, it will be apparent before the reader has gone very far. I would like not to use the word, but I do, particularly when I am referring to contexts in which the same sensitivity does not obtain. On other occasions when I use it, it should be taken as rather imprecise, a simple wave of the hand in the direction of the subject. I hope my meaning will nonetheless be clear, and if that proves not to be the case I apologise now.

Throughout the thesis I use language which I acquired as a young student influenced by Christian existentialist theology. This is the language in which I best understand religious life. I trust that it is a language that will communicate my meaning adequately.
Anthem

Let us praise our Maker, with true passion extol Him.
Let the whole creation give out another sweetness,
Nicer in our nostrils, a novel fragrance
From cleansed occasions in accord together
As one feeling fabric, all flushed and intact,
Phenomena and numbers announcing in one
Multitudinous oecumenical song
Their grand givenness of gratitude and joy,
Peaceable and plural, their positive truth
An authoritative This, an unthreatened Now
When, in love and in laughter, each lives itself,
For, united by His Word, cognition and power,
System and Order, are a single glory,
And the pattern is complex, their places safe.

W H Auden 1945

Chapter 1
Rationale for research programme

I would only remark that the understanding which we want is an understanding of an insistent present.
A N Whitehead

Summary
The extent and limitations of the study are set out. The historical and contemporary context of religion in public education in Scotland is explained briefly, and the distinctions between religious education in the non-denominational and Roman Catholic sectors clarified. The research question and thesis emanating from this context are stated together with an outline of the research study.

Introduction
The rationale for this thesis necessitates bringing together a wide range of theoretical and practical issues in the field of religious education. Its breadth of interest in the disparate fields of theology, education and information technology still has to come within the scope allowed for a doctoral thesis, which inevitably determines the structure and presentation of the research. This is not a tightly drawn empirical study which, because its conceptual parameters are agreed, permits and requires deep analytical probing and evaluation. This research study argues for a new approach to religious education in secular schools and attempts to justify it in religious and educational terms; it presents an original paradigm for this new approach; it shows the paradigm applied as an instrument for profiling children’s world views and also applied in the design of a religious education curriculum; and finally it shows how this religious education curriculum might be made available as an interactive computer programme. Consequently, the principal test of the adequacy of this thesis lies in its establishing the coherence of the research and not in deep analysis of each of its constituent elements; that would be the subject of further research endeavours.

A Scottish context
This research study is firmly located in Scotland, not just because its focus is here, but because it draws on seams of Scottish experience which lead back significantly to 1560, and beyond. It addresses a situation which has its own distinctively Scottish legislative framework and ways of dealing with social issues. Like many Scottish products, however, it may have significant value beyond Scotland’s shores because it addresses a problem which is faced by governments across the world: how can a public education system take account

1 A N Whitehead The Aims of Education: and other essays Ernest Benn Ltd. 1950 (Williams & Northgate 1932) p.3.
Scotland has struggled with the relationship between religion and public education since the Scottish Reformers proposed in the first Book of Discipline in 1560 that education should be compulsory for all from age 5 for as long as they could benefit from it, right up to age 24. They planned to make this possible for those who could not afford it by providing bursaries. The Scottish Parliament of the day rejected the proposal for reasons which need not be examined here. Burleigh describes the Reformers’ concept of education as: “instilling wisdom, learning, and virtue into the youth of the land, so that the Church should not lack preachers nor the commonwealth its necessary officers. . . . . From beginning to end education is religious education.”

Evidence for this last assertion is to be found in The Scots Confession of the same year. It shows a latent theocracy, with civil authorities charged with the duty “to maintain true religion and suppress all idolatry and superstition”, to be loved, supported and obeyed so long as their orders were “not contrary to the commands of God”. Together, these documents express fundamental values of equity and principled pragmatism which are breath-taking in their vision and audacity.

Declining influence of religion in schooling

In the intervening centuries, in spite of the Churches being major providers of education, not just for narrowly religious ends but to enable people to take a full and morally principled part in the economic life of Scotland, there has been a steady secularisation of education which was encouraged by the industrial revolution and again later by the Great War. In the Education (Scotland) Act of 1872, those Church schools which were then passing to the control of local School Boards were simply at liberty to continue the custom of providing religious instruction and religious observance, and parents were granted the statutory right to withdraw their children from either or both without detriment. The Secretary of State for Scotland would keep a timetable of the provision made but would not inspect it nor provide any financial support for its maintenance or development. The legislature dealt very fairly with Roman Catholic schools in the Education (Scotland) Act of 1918 when they were given a distinctly denominational status within the state system of education. In 1929, however, it

2 The British Journal of Religious Education has a number of articles on how states are tackling this issue: e.g. Russia (Vol. 14 No. 2, 1992), the former German Democratic Republic (Vol. 15 No. 2, 1993), Turkey (Vol. 15 No. 2, 1993). Much earlier, Nicholas Piediscalzi (in the Journal of the Religious Education Association, Religious Education Vol. 75 No. 6 Nov. - Dec. 1980: “The Separation of Church and State: Public Education Religion Studies”) asserted that the United States Supreme Court in 1962 and 1963 had stated emphatically that “education without the study of religion is incomplete and that such study is not prohibited by the First Amendment.” The significance of this lies both in the recognition that religion is necessary for a complete curriculum and in the refuting of the assumed prohibition of religion in American schools in order to preserve impartiality.


was thought necessary to amend the legislation to protect the status of religious education; it became illegal for a local authority to discontinue the practice of providing religious education and religious observance without first conducting a poll of the local electorate. By the 1960s the lack of provision of religious education in non-denominational schools was causing such concern that the Secretary of State in 1968 established a Committee chaired by Malcolm Millar, Professor of Mental Health at Aberdeen University, to “examine moral and religious education in Scotland and to make recommendations for its improvement.” These recommendations were to be made within the existing framework of statutory provisions and were to apply only to non-denominational schools. The importance of the ensuing Millar Report 6 can scarcely be overstated.

The Millar Report halts the decline by proposing change

The Millar Report was direct in stating its view of the place of religious education in the curriculum:

“We take the view that the place of moral and religious education (particularly the latter) in the school must be justified on educational grounds and that the nature of moral and religious education must be determined by educational considerations. A distinction is therefore necessary between the task of the school and that of the Church, the home, and other institutions.” 7

“5.1 The aims which we have set out in the preceding chapter imply considerable changes for teachers and schools in attitudes to religious education and in the method and content of its teaching. Specifically, our conviction that every aspect of religious education must be governed and tested by educational aims and educational criteria has very important implications for its place in the school and the way it should be tackled. Religion and morality (including the rejection of conventional views on both) are fundamental attitudes to life, and it is a quite primary concern of the school to encourage and assist children to develop their convictions in those fields in a healthy and reasonable way. This is not to say that either the teacher or the school should be indifferent to what conclusions a pupil reaches - that would be to regard the field of ethics and of religious belief as essentially unimportant. But religious education is no longer aimed at producing assent to any particular set of propositions or commitment to one particular faith: it aims to develop a child’s awareness of himself and others, his insight into situations that pose moral and religious questions, and his capacity to respond to these situations in a balanced and understanding way.” 8

All this is in direct contrast to what had been the officially accepted understanding of the purpose of religious education. That understanding is most succinctly put in a statement from the Scottish Joint Committee on Religious Education (SJCRE) in 1962 in which the Aim of Religious Education is expressed thus:

“Religious Education is designed -
(a) to ensure the understanding of the great affirmations of the Christian faith as revealed in the Bible;

5 Local Government (Scotland) Act 1929.
7 Millar Report p.53.
8 Millar Report p.68.
(b) to relate the personal and community life of the children to Christian moral standards;
(c) to train the children in habits of reverence by worship so far as it falls within the province of school life;
so that ultimately the child may be brought to believe in the Lord Jesus Christ.”

Given that this Scottish Joint Committee was responsible for devising the syllabuses of religious education which were recommended for use throughout Scotland, the Millar Report should be taken as a watershed in official understanding of religious education. The above quotations from the Millar Report should be seen as one benchmark for the present research study, and whatever is proposed here as religious learning in a secular context must satisfy at least the Millar Report’s criteria for religious education.

The present position in Scottish religious education

Since the publication of the Millar Report there has been steady and mounting activity which has led to the gradual regularising of religious education in the school curriculum. There are now public examinations in Religious Studies and in Religious and Moral Education. The Secretary of State for Scotland told Parliament in 1981 that he had consulted with the Churches and other interested bodies and the desire was for religious education to be treated on the same footing as other subjects. He moved to meet that desire and introduced inspection of religion in schools by Her Majesty’s Inspectors with effect from 1 January 1983. In a Circular issued in 1991, the Secretary of State made it plain that there are sound educational arguments for religious education and that all pupils should take it if they are to have a properly balanced education: “Religious education should receive the attention and facilities merited by its fundamental place in the curriculum.” Parents are still entitled, however, to withdraw their children if they choose. The Secretary of State has advised that pupils in primary schools (ages 5 - 12) should spend a minimum of 10% of curricular time on religious and moral education and pupils in the first two years of secondary schools (ages 12 - 14) a minimum of 5%. Pupils in the next two years (S3 and S4) should spend not less than 80 hours, and for pupils staying on at school beyond that stage there should be a continuing element as part of their personal and social development.

The Secretary of State has also made recommendations about the content of religious and

9 Religious Education in Scottish Schools a leaflet of the Scottish Joint Committee on Religious Education, Edinburgh, March 1962. The Scottish Joint Committee was founded in 1927 by the Church of Scotland, the United Free Church of Scotland and the Educational Institute of Scotland (EIS) to prepare a new syllabus of religious education in Scottish schools. The SJCRE has continued since then with a considerably expanded membership which now includes Roman Catholic representation. The joint secretaries are still appointed by the Church of Scotland and the EIS.
moral education. Religious education should be based on Christianity for cultural and historical reasons, and other world religions should be included, for the same reasons. National Guidelines\(^\text{12}\) for pupils aged 5 - 14 have been published and commended. Pupils should be conducting their study in such a way as to help them reflect on those questions which need to be addressed to achieve personal and social development. In the public reports of school inspections, non-denominational schools are currently criticised regularly for failing to meet the minimum time requirements, and Roman Catholic schools for failing to pay sufficient attention to religions other than Christianity.\(^\text{13}\)

"Roman Catholic and other denominational schools should also take account of the fact that there are many different beliefs and attitudes in contemporary society, and their programmes should aim to help pupils to develop understanding and respect for those who adhere to other denominations and other world religions."\(^\text{14}\)

"... with the exception of denominational schools, few devote the recommended minimum of 10% of curricular time to religious and moral education; in most schools the actual time allocated is around 5% and in a few cases significantly less than that."\(^\text{15}\)

The Secretary of State's proposals do not meet with universal approval. Within the teaching profession there is a reluctance to provide the time, and secondary Head Teachers frequently try to evade time requirements by saying that their school's social education programme covers half the allocation for religious and moral education. In Lothian Region the Director of Education now has Education Committee support for advising such Head Teachers in uncompromising terms that continued obfuscation of the issue will not do.\(^\text{16}\)

The Humanist Society of Scotland for long opposed religious education, but it is now reconciled to an objective treatment of religious matters in schools, although it is still concerned about religious observance and the provision of religious education in the form in which it appears in Roman Catholic schools, where it is viewed as a form of indoctrination. The guidelines for religious education in Roman Catholic schools\(^\text{17}\) lend support to this contention. Cardinal Winning at the national launch of these guidelines made plain that the purpose of religious education in Roman Catholic schools is "evangelisation". This, according to the guidelines, applies to "every aspect of school life",\(^\text{18}\) not just the formal

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13 Individual school reports are too numerous to list, but the extracts from the HMI report on Effective Learning and Teaching make the same points.
15 Effective Learning and Teaching p.7. See also A Survey of Religious Education and Observance in Dumbarton and Lanark Divisions of Strathclyde The Scottish Office Education Department 1991. This report by HM Inspectors was of a survey in 1989-90 of 22 non-denominational primary schools.
17 Religious Education 5-14 Roman Catholic Schools Scottish Office Education Department and Scottish Catholic Education Commission, October 1994.
18 Roman Catholic guidelines p.1.
courses in religious and moral education.

"The aims of Catholic Religious Education are to help pupils to:

- know, love and worship God as Father, Son and Holy Spirit, and to know and love Jesus Christ and his Gospel;
- know and understand the doctrinal and moral teachings of the Catholic Church, which flow from the revelation of Jesus Christ;
- develop their faith in the light of Scripture, Tradition and the teaching of the Church;
- accept Christian moral values and live according to them;
- investigate and understand the meaning and purpose of life, with the guidance of the Scriptures and the Tradition of the Catholic Church;
- acquire an appreciation of other Christian traditions;
- acquire an appreciation of some other World Faiths through an appropriate knowledge of their principal beliefs, spiritual values and traditions."

This statement is in stark contrast to the position expressed by the Church of Scotland. "The General Assembly in 1989 rejected overwhelmingly for the second time the proposal for the establishment of Christian schools on the ground that these would be socially divisive, . . ."  

The present division into denominational and non-denominational schools is popularly thought to contribute to sectarian divisions within Scottish society. The minister for education in Scotland, Lord James Douglas Hamilton, who was interviewed for Scottish Television's Scotland Today programme on the day of the launch of the Roman Catholic guidelines (28 October 1994) seemed to be inviting schools to apply to The Scottish Office for recognition of religious or denominational status, presumably on an opt-out basis. The main Protestant denomination in Scotland, the Church of Scotland, accepts that religious education in public schools, in what both it and the Secretary of State's guidelines acknowledge is a plural society, should be neither confessional nor attempt to evangelise: "The approach of the Joint Committee was firmly rooted in the tradition of basically confessional use and wont. With hindsight, the purpose of religious education in schools seen by the Joint Committee, even so late as the 1960s, displayed an apparent confusion between evangelical and educational aims. This was clearly not in the interests of religious education in schools particularly at a time of ferment in curriculum development in Scottish education."  

The National Guidelines sees the aims of religious and moral education as helping pupils to:

"develop a knowledge and understanding of Christianity and other world religions and to recognise religion as an important expression of human experience;

appreciate moral values such as honesty, liberty, justice, fairness and concern for others;

investigate and understand the questions and answers that religions can offer about the nature and meaning of life;

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19 Roman Catholic guidelines, p.3.
develop their own beliefs, attitudes, moral values and practices through a process of personal search, discovery and critical evaluation.” 22

Closer consideration will be given to this statement of aims along with other Scottish statements about the nature and purpose of religious education when general theories of religious learning are discussed in Chapter 2.

Government intervention

One of the features of the 1872 legislation governing religious education was its desire to protect religious freedoms. It was for this reason that the Secretary of State was debarred from involvement. Responsibility for ensuring provision was devolved to local authorities, first School Boards, then single tier multipurpose local authorities and finally Regional Councils. The failure to maintain adequate provision is thus a failure of local government both to attend to a statutory obligation and to have a sufficiently broad educational vision. It is of some historic interest that, in order to safeguard religious freedoms, Parliament has now had to lift the bar on the Secretary of State's involvement in religious education. There is a fear, however, that the Secretary of State may be tempted to return to a position which is less open than the one which emerged after the Millar Report. The evidence for this concern is found not only in the support given by The Scottish Office to the Roman Catholic guidelines but also in the strong emphasis placed by the Secretary of State on the place of Christianity in the curriculum and in relation to religious observance.23 The tension would appear to be less between Church and State and more between what one might call traditionists and modernists. One can easily detect, however, an echo of The Scots Confession's call for civil authorities to promote “true religion”.24 What would be particularly encouraging for the Scottish Reformers is the commitment on all sides to “instilling wisdom, learning, and virtue into the youth of the land”.25 One might say that the problem which this study addresses is how this commitment is to be met in practice in schools which reflect a wide spectrum of positions on faith. In the contemporary scene there are perceived difficulties in three areas: professional readiness, professional support and child development. All these perceived difficulties are found embedded in the face of the historical seam already identified.

Perceived difficulties

i) Professional readiness

The relevant statute does not specify how much time should be spent on religious education and all the anecdotal evidence points to this being minimal. This oral tradition is corroborated to some extent by the reports of HMI inspections and the reports referred to

22 National Guidelines p.2.
23 Circular 6/91 states that the curriculum should be based on Christianity and that religious observance should be of a “broadly Christian character”.
24 The Scots Confession p.78.
25 A Church History of Scotland p.173.

page 7
above. The new arrangements advised by the Secretary of State signify a considerable review of thinking about the place of religious education in the curriculum. Primary teachers in particular, who may have had no more than forty to sixty hours training for religious education in their entire pre-service teacher training, and who are not likely to have had much systematic study of religion in their own secondary schooling, are faced with a major new curricular area to incorporate into the thinking, planning and delivery of their teaching. Their understanding of the purpose of religious education may be limited or confused, their familiarity with available resources slight, and knowledge about religions vague. Primary teachers in Lothian schools were asked to indicate their staff development needs in 1989. When courses were offered to meet those needs, however, the uptake fell far short of the demand, principally, it would seem, because other demands were given higher priority. School Development Plans in Lothian seldom include religious and moral education as an area of priority.

Teachers are also now being required to assess attainments in religious and moral education and to deliver courses which allow for progression in learning. Because these new and exacting requirements are being placed on teachers at a time when they are being asked to make similar responses across the curriculum, there is a danger that the minimalist approach of the past will be carried forward for some time. Planning has been based on the perceived values of the different curricular areas and not on meeting the requirement to deliver a balanced curriculum. Thus, instead of the planners acknowledging that it will take a long time to implement religious and moral education policy, which would suggest an early start, they have kept putting it to the end of the queue after English language, Mathematics, Environmental Studies and Expressive Arts. This leads on to the second area of perceived difficulty.

ii) Professional support
Teachers might expect support in the form of staff development opportunities, course designs, course materials and sympathetic management, “the facilities and resources merited by its fundamental place in the curriculum”. Opportunities for staff development, of course, are

26 Scotland’s largest teacher training college, Glasgow’s Jordanhill College of Education, currently provides Primary B.Ed. students with 47 hours for Religious and Moral Education in their four year course, going up to 56 hours from October 1995. Teachers following the one year post graduate primary teaching qualification get 20 hours. There are in addition elective courses, but these are followed by a small minority of students. A similar situation obtains at Edinburgh’s Moray House Institute of Education, the second largest teacher training centre, where B.Ed. class contact time was raised in 1993 from 40 to 80 hours. 27 “... much confusion remained in teachers’ minds about the nature and definition of religious education, about its aims and objectives, about what is legitimate to include or exclude from pupils’ learning experiences, and above all about assessment. Religion was commonly seen as an area of difficulty and uncertainty.” Survey of Religious Education and Observance in Dunbarton and Lanark Divisions of Strathclyde Region SOED 1991.
28 See Curriculum and Assessment in Scotland: A Policy for the 90s The Scottish Office Education Department, March 1989.
29 Circular 6/91.
available in all aspects of the school curriculum, and perceived priorities, as already
indicated, may not favour religious and moral education. Sympathetic management is only
possible if there is a good understanding of how religious education can make a necessary
and distinctive contribution to the education of the whole child, and when it can be
demonstrated that there are appropriate courses to satisfy this purpose. Course designs
depend on the purpose of religious and moral education, and course materials will follow
the design. With the steady progress towards devolved school management, head teachers
as school managers are faced with a range of responsibilities which may lead them to
implement the Secretary of State’s advice without being able to give it all the reflection they
believe it deserves. This could prove problematic for the further development of the subject
through making false assumptions, settling for levels of performance which are too low for
the pupils concerned, closing off opportunities for teachers and pupils to see the subject’s
full potential for personal development and social responsibility and thereby its necessary
place in the education of that “constellation of qualities” which is the whole child.30 This
leads to the third area of perceived difficulty.

iii) Child development
Recent research evidence suggests that children do not place a high value on religion, and it
is frequently seen as personally irrelevant and untrue.31 More recent research, however,
suggests that children may now be forming a more open attitude to religious issues,
although the value they attach to Christianity seems to have decreased.32 Both studies
indicate a very negative attitude to school lessons about God. As will be shown later these
conclusions are corroborated in the evidence emanating from the present study. Questions
arise as to what precisely the development of the whole child entails, and what distinctive
contribution religious and moral education can make to it. What, indeed, constitutes
religious learning? Are the findings of Francis and his co-researchers an indication that
children are on the one hand acquiring more mature insights or more sophisticated
attitudes, or, on the other hand, receiving inappropriate or inadequate education? What do
we know about children’s world views and how can these be developed, and how would
we know if they had been? Why should we be concerned about any of these questions?

30 James Scotland CBE (Ed.) “The Aims of Education” in A Good Education, part of the
Church of Scotland Education Committee’s Report to the General Assembly of 1982, p.5.
Also p.8: “Against this background our view of the present condition of Scottish education
may be tersely stated. First, its emphasis is too strongly on individual development.
Second, the place given to spiritual and especially religious education is inadequate.”
31 Leslie J Francis, Harry M Gibson and Peter Fulljames “Attitude towards Christianity,
Creationism, Scientism and Interest in Science Among 11 - 15 Year Olds” in British Journal of
Religious Education Vol. 13 No. 1 Autumn 1990.
32 Leslie J Francis “Monitoring attitudes toward Christianity: the 1990 study” in British
Disagreement and confusion requiring resolution

It has already been indicated that there is both disagreement and confusion over what religious education is. The disagreements tend to be among those who have an investment in the promotion of religious education, (members of the Government, specialist teachers and religious activists) and the confusion among those who have to deliver the religious education curriculum in primary schools. Secondary schools on the whole have appointed specialist religious education teachers who have studied religion at university degree level and subsequently undertaken appropriate teacher training, so they do not share the same confusion. The secondary religious education teacher has a major interest in the subject and takes a professional stance in relation to it. It is probably secondary religious education teachers as a group who are most strongly in disagreement with the Secretary of State’s pronouncements; they are at least suspicious of the Government’s intentions. They also comprise the group which feels most keenly the depredations of funding for resources and of time to provide an adequate curriculum. The secondary school is further affected by a serious shortage of fully qualified teachers to meet the estimated needs of the Secretary of State’s curriculum and to provide opportunities for pupils in the fourteen to eighteen age range to study religion in greater depth. The Scottish Office Education Department admits that the statistics on staffing can be confusing and that the staffing deficit of 4% for 1990 is an underestimate.33 The figures for Lothian Region are more revealing:

"There are currently 55 FTE34 Religious Education teachers in post in secondary schools: 22 schools have Principal Teachers, 5 schools have Assistant Principal Teachers, 15 schools have Religious Education teachers who are either unpromoted (12) or whose promotion is not in Religious Education (3), and 4 schools have no teacher with a qualification in this subject. This represents steady but slow progress over the past ten years: there were 33.5 FTE in 1985 and 49.4 FTE in 1992. An analysis of curricular provision indicates that there is currently an imbalance of approximately 33 FTE teaching staff with the relevant qualifications to resource all teaching of Religious and Moral Education by specialist staff. In recent HMI Reports on the Region’s secondary schools comments have been made about the adequacy of provision for RME which have encouraged Head Teachers to add Religious Education teachers to their staff.

It is evident that gradual change in the balance of secondary school staffing needs to be continued. The delegation of staffing budgets to Head Teachers within the framework of Devolved School Management (DSM) is relevant to the possible pace of change, and the way in which relevant appointments might be made. The overall figure for these specialist staff indicates the pattern of resourcing implied by the Secretary of State’s wishes within the the total secondary staffing complement of almost 3000 FTE posts.35 Following consultation with individual Head Teachers, I would report further on the ways in which such a change in the balance of staffing might be achieved."36

33 Effective Learning and Teaching: Religious Education p.10.
34 FTE is full-time equivalent. It indicates that the number includes full-time and part-time staff. Two teachers each employed for half the time is 1 FTE.
35 This refers to the total number of secondary teachers employed by Lothian Regional Council.
36 Religious and Moral Education in Lothian Schools. Report number 94/174 from the Director of Education to the Education Committee of Lothian Regional Council, 1 June 1994.
This extract refers to secondary provision, where it is possible to measure provision accurately, and illustrates some of the difficulties. In the primary school other related difficulties obtain, but they may be much more difficult to rectify because they are embedded in the curriculum in ways which make them difficult to treat. In the primary school there are many cross-curricular links, flexible timetabling, and teachers who are individually expected to cover the whole school curriculum regardless of their personal level of interest and degree of professional competence in each area.

The research question and thesis

It is out of this background which displays both continuing uncertainty and active interest that the present research question emerges: how can a public education system take appropriate account of the religious dimension of life in a plural society? The particular issues this question raises can in their turn be restated as a series of questions. How can the knowledge in which primary teachers are thought to be deficient be made available? How can understanding about the purpose and nature of religious education be clarified? What is meant by the term religious learning? Is there any way of measuring progress in religious learning? How can an appropriate curriculum be delivered to meet the criteria set out in the Millar Report? How could a religious education curriculum be designed which allowed for individual learning programmes according to individual needs without promoting the cult of the individual which so concerned the Church of Scotland’s Education Committee in 1982? 37

There was evidently a need to give primary teachers relevant knowledge about the ways in which people are religious; how that knowledge relates to other knowledge; why that knowledge is significant; what to do with children once that knowledge has been assimilated. How might all this knowledge be managed? Could the rapid growth in information technology and the appearance of the CD-ROM as an affordable medium for storing vast quantities of knowledge be one possible way of resolving the complex set of practical problems which are raised by the research question? On the face of it, it seemed improbable that a machine could contribute to moral and spiritual development, but if the potential inter-activity of the computer could be harnessed to a religious learning process it would become a powerful tool in the classroom and have effects beyond the 10% time slot allocated to this area of the curriculum.

Thus the thesis proposed is this: the CD-ROM opens up the possibility of a new approach to religious learning which is particularly relevant to secular contexts.

37 A Good Education p.8.
The research study

There are three distinct elements to this research study. One element is purely conceptual, from which two practical elements are derived. The conceptual element consists of a review of contemporary discussion about the nature of religious education, with a particular focus on religious learning. In developing the thesis, consideration is given to defining terms, principally distinguishing between religious studies, religious education, religious understanding and religious learning, and identifying what constitutes a secular context. This leads to the construction of an original paradigm for world view analysis and formation. An argument is advanced for claiming that the approach to religious education adopted in the research study is new and has particular relevance in secular contexts. The practical elements comprise, first, an instrument for outlining personal world views and, second, an interactive software package to assist the development of personal world views.

This research study has generated much original material in reaching its findings and conclusions. The inherent problems in adopting this method are acknowledged; there is only limited opportunity within the scope of this study to verify the reliability and validity of the instruments for collecting data. Some internal features are examined to test for reliability, and usual statistical analyses applied. Although sufficient comparisons are made with the findings of cognate research studies to establish validity, much more detailed scrutiny and discussion of the data would be both possible and desirable.

The research method

The first step was to determine what religious learning is. The conclusion was reached that it involved the development of the individual’s personal world view to make it more comprehensive and coherent. An original paradigm, called the LivesCan world view paradigm, was constructed to assist in the analysis and development of world views.

Using the paradigm, an instrument was devised which would measure comprehensiveness and coherence in a personal world view. This instrument, which I called the LivesCan Personal Profile, was designed for use with children in Primary Classes Six and Seven (P6 and P7), that is children aged approximately 10 and 11 years old. The instrument was piloted and subsequently modified to improve clarity of understanding, and extended to cover a wider range of options and introduce greater scope for determining reliability: a larger range of items would show up either strengths and weaknesses in individual items or in the Personal Profile as a whole.

A second instrument was devised to collect data about children’s experiences of religion, at

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38 The word LivesCan comes from combining two separate words, an idiom much used in computer-speak where the second and subsequent words are given initial capitals to maintain their identity. As well as signalling its association with information technology, this term reflects the project’s concern with people’s potentialities. As a play on words (live scan) it refers also to the interactivity of the computer learning programme.
home, away from home, and in school. This was similarly piloted and subsequently modified to make it easier to complete. This was known as the Religious Profile.

Nine schools were chosen to take part in the research project, which was known as the LivesCan Project. One of the schools was chosen because it was in the immediate locality of the church which featured in the software package. The others were chosen to reflect different levels of social deprivation. The criterion used for establishing this was the percentage of free school meals. Having decided on the approximate placing on the list of free meals, the schools were thereafter chosen in pairs to satisfy three further criteria: they should have comparable roll sizes, have similar catchment areas, and be as large as possible. The purpose of selecting pairs of schools was to allow for the possibility of establishing control groups if the research proved able to develop in this direction.

The software package, simply called LivesCan, was developed to allow users to explore a religious environment and consider different kinds of questions through interacting with a computer. The kinds of questions which could be considered had been developed in line with the LivesCan paradigm, and all the choices and decisions made by users were recorded in files for later analysis. This was to allow for comparison with the LivesCan Personal Profile and the Religious Profile completed prior to the experience of using the computer.

Five schools, the “local” school and one from each of the pairs had software packages for a year to use with Primary Seven (P7) classes. The teachers in the five schools who had the opportunity to use LivesCan were interviewed to ascertain their views on the package. The pupils who had used LivesCan completed a questionnaire, and a sample was interviewed to explore more closely how the experience could have been improved, and what they thought they had learnt from it.

The final stage was to analyse and interpret the data, to declare the findings, draw conclusions and suggest further research studies.
Chapter 2
Religion in secular education

So far as I can remember, I carried in my memory from school only a single remark at all theological in its character, and it was of a kind suited rather to do harm than good.

Hugh Miller

Summary
Consideration is given to how the concept of religion may be viewed and how it relates to recent advances in the theory and practice of religious education. The argument is that the current emphasis on cumulative tradition is misplaced. This misdirection is seen to be a consequence of curriculum developers failing to respond appropriately to a penetrating phenomenology of religion supported by theological considerations. In support of the argument, the concept of faith is shown to be more necessary to understanding religious life than other phenomena, and more inclusive than the concept of religion. Important characteristics of faith are identified and offered as making more explicit the personal value of religious traditions. Faith development is taken as the basis for a new approach to religious education which, because it is radically learner-centred, is more open and life-enhancing than religious studies; it empowers by virtue of its immediate and ultimate concerns, and is palpably of practical relevance. The focus of religious learning is taken to be the development of personal world views. Religious education thus preserves its distinctive place in the curriculum by responding to the cause of religious life rather than its social effects. Recent curricular developments in Scottish religious education are shown to be particularly receptive to this approach to religious education.

Introduction
The view to be presented here of what constitutes appropriate religious learning for local authority, non-denominational schools departs to some extent from conventional wisdom. The high point of the conventional, one might even say paradigmatic, view is plainly visible in Michael Grimmitt's Religious Education and Human Development. Grimmitt's creation is an outstanding work, the product of extensive and careful research over a long period. It combines two approaches to constructing a religious education curriculum, the existential and the dimensional, about which more will be said later. It is enough for now

to say that the knowledgeable would be forgiven for listening with deep scepticism to someone who is pointing to an alternative direction-finding landmark. Compared to Grimmitt’s shining tower, my putative direction-finder is an ancient tree, slowly choking to death with parasitic creepers and set some way off from the highway that leads straight to the tower. Mine is consequently a hard case to make. It may even be that in choosing the metaphor of tree and tower I am already weakening it, for it might be argued that Grimmitt’s tower surrounds and protects the tree of life. I want to argue, however, that building a tower round the tree not only obscures it from general view but kills it more surely than allowing it to grow in the open, creepers and all. However, it is not my intention to turn a relatively simple metaphor into an elaborate analogy.

Defining Religion

Before explaining what is meant by religious learning in the title of this thesis, it may be helpful to take one or two sightings on religion as a concept. This is more problematic than might at first seem the case. While the discussion of religious education in the introductory chapter will have been, I believe, largely intelligible, several assumptions were made there about religion which need to be made explicit and examined more critically.

i) An elusive concept

Religion is a difficult word, a weasel word, finding its way into every crevice of the English language where the user wants to indicate a degree of seriousness. In most instances it is easier to understand what it means in its colloquial usage than in its academic. I do not propose to make the general picture either clearer or more confused by attempting to offer some definitive account of religion. As John Hick states:

Scholars have proposed an immense range of definitions of ‘religion’, attempting to discriminate between that to which the word does and does not properly apply. . . . All these definitional strategies embody decisions and either reveal or conceal commitments. Each can be, and has been, attacked and defended; and indeed much time and energy has been devoted over the years to the rival definitions of ‘religion’. But Wittgenstein’s discussion of family-resemblance (or, as they have also been called, cluster) concepts has opened up the possibility that ‘religion’ is of this rather different kind.”

Earlier still, however, W W James had already found it necessary to talk about religion as “a collective name” because of its breadth and diversity, and he defined very precisely what he meant by the term “for the purpose of” his Gifford Lectures. It would be foolish in the extreme not to listen to those wise and eminent voices which span almost a century of scientific and philosophical inquiry into religion. Consequently, I propose to do no more than make clear what I think is an appropriate understanding of religion for secular schools in Scotland today and suggest how it might be approached here. At the same time,

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I shall try to avoid using the excuse that because religion can have any of a large number of meanings I am free to propose an idiosyncratic personal view. In pursuit of this end I refer to important ideas and commentary from writers and teachers who have made formative contributions to thinking about religion, particularly as it might relate to religious education.

ii) A human phenomenon

The human being is a religion-making animal. This is the judgment of scientific inquiries into the nature of the person; the historian, the anthropologist, the sociologist and the psychologist all affirm that this is so, and we have additionally the compelling evidence of our own immediate experience. There may be some discussion as to what precisely is meant by the word religion, its causes and effects, but there is sufficient agreement about the phenomenon, however viewed, for us to assert with some confidence that religion is a persistent feature of human experience. At the same time, because definitions tend to reflect the disciplines from which religion is viewed, we find a variety of psychological, sociological, political and other versions of religion. The interesting feature about most of these definitions is that they represent the various disciplines just as much as they contribute a fresh view of religion, but even in recognising their partiality, one also has to respect their contextual validity.

iii) Phenomenology

In recent decades, the phenomenology of religion has been the main focus of discussion, particularly in relation to arguing the place of religion in the curricula of local authority schools. The insights of this discipline are no less penetrating and valid than those of other disciplines, and, like them, partial. The 1970s saw the ascendancy of the phenomenological approach to the study of religion in British Universities but, as Grimmitt has pointed out, this approach to understanding religion did not always turn out as intended when translated to schools. A phenomenology of religion became a 'dimensional approach' which drew its inspiration from a classification of religious phenomena in Smart's seminal work, *Secular Education and the Logic of Religion*.5 Smart identified religion as having six interrelated dimensions which encompass the historical phenomena of religions and the 'parahistorical' claims of religions.6 In his list of five aims for religion in education he concluded:

"Fifth, religious studies should emphasise the descriptive, historical side of religion, but need thereby to enter into dialogue with the parahistorical claims of religions and anti-religious outlooks."7

5 Ninian Smart *Secular Education and the Logic of Religion* Faber and Faber 1968, pp.15 - 18.
7 *Secular Education and the Logic of Religion* p.106.
This is a view of religious education to which I shall return, but it does indicate a seemingly scientific approach to understanding religion which phenomenology at school level came to represent.

Some years later, Ninian Smart answered the question “What is Religion?” by repeating his descriptive account of a religion and providing a separate account of religion:

“So then we can reckon some questions about value to be sufficiently ‘deep’ and serious to warrant their being called religious, even if they are not posed in explicitly religious terms. . . . However, it would be very foolish to think that all value-questions are ipso facto religious. . . . this means that though all value-questions have in principle a religious aspect, in fact it is more practical to see the deeper value-questions as religious.”

This account of religion is interesting because it suggests a pragmatic, fluid approach to using religion as a labelling device for deeper value questions. It is particularly interesting in its claim that all value questions are in principle religious. The argument would appear to run this way: all value questions are religious, but it is the deepest of these that we call religious. These religious questions are given in the human condition and are thus not exclusive to religious traditions, where they find particular and diverse expression. The immense significance of this argument when applied to religious education will be made apparent later when faith is discussed. This argument, however, was not one which found many supporters at the time, and it is still one which religious educationists have some difficulty in accommodating.

Jean Holm, another influential writer on religion for religious education in British schools, acknowledges that “Attempts at defining it are always unsatisfactory.” Nonetheless, in giving examples of definitions of religion, she includes:

“Yet a third definition - ‘that which is our deepest concern’ or ‘that which we value most’ - embraces absolutely everyone, including the atheist. It makes religion synonymous with being human, and although it can be very useful within a religion for describing what a religious perspective on life involves, it fails as a general definition because it evacuates the word of any distinctive meaning.”

In a later publication she states that:

“Scholars now tackle the question ‘What is religion?’ by trying to describe it rather than by trying to explain how it originated.”

While the accuracy of this statement could be challenged, it indicates the degree to which the understanding of religion which was being promulgated in schools at that time had departed from the strict phenomenological and historical concerns which Smart had been enunciating.

8 Ninian Smart & Donald Horder (Eds.) New Movements in Religious Education Temple Smith 1975, p.18f.
10 Teaching Religion in School p.7
iv) Phenomenology anatomised

In studying the dimensions of religion, or facets of religion as I would prefer to call them, there is danger of fragmentation, of examining the phenomena of religion and attending rather less to the phenomenon of religion. This is not to doubt that typical features of religion can be analysed in much the same way that the anatomist identifies and classifies the human body. The fact that the body has no life may seem a superfluous observation in the anatomist's report, but it is hardly so in the human context. Whatever the theory behind phenomenology, which includes a focus on the inner workings of the person, the practitioner does not always observe that the body is dead, no longer a person, and certainly those devising religious studies programmes for schools have more often been anatomists than physicians.

The weakness of Smart's earliest statement of six dimensions has been recognised, and attempts have been made to supplement them with additional measurements, such as the faith dimension, or spirituality, which might be thought of as the life force or soul of religion. What this appears to be doing, however, is simply refining the anatomist's analytical techniques and in no way guarantees that the body will come to life. And one is bound to conclude, with the anatomist, that the soul could not be found let alone measured. While the effective physician has a sound knowledge of anatomy, she does not display that anatomical knowledge to her patient; she uses it in her diagnosis but gives the patient treatment. The teacher of religion likewise has to have an appreciation of the forms of religion, but that does not require her teaching to be an analysis of religion as if it were simply a body of phenomena. It is life itself which is the really big phenomenon, embedded in or suffusing the body, and not capable of being isolated from it.

What the phenomenologists have done for all those interested in religion is to sharpen

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12 Smart himself redefined and expanded his six dimensions to make seven. He says considerably more about how the affective permeates religion, but the additional dimension is the material, the physical presences of the social or institutional dimension of religions. See Ninian Smart The World's Religions Cambridge University Press 1989, pp. 12 - 21.

13 See, for example, Ursula King's "The Legitimacy of Religious Education in Secular Institutions: A Response to Howard W Marratt" in Religious Education in a Pluralistic Society Ed. M C Felderhof, Hodder & Stoughton, 1985, p.94.

14 Raymond Holley Religious Education and Religious Understanding: An introduction to the philosophy of religious education Routledge & Kegan Paul, 1978. "As with all dimensions of personal life so the religious dimension is part of the self-conscious interaction which constitutes each individual person. But what makes the religious dimension so particular is that it is through and through spiritual.... In contrast to such a characterization of the religious dimension of life as through and through spiritual attention may be drawn to all the physical accompaniments of 'world religions', the intellectual constructs and rationalizations of religion. And it may be argued that religion is to be characterized by reference to those observable phenomena rather than by reference to something as elusive as the spirit. Such, however, is to be blinded by the trees and to miss the wood." p.48
their appreciation of religions other than Christianity, but it must be a matter for wry
amusement that the method of inquiry represented by phenomenology is deeply rooted in
Western secular and rationalist thought, and does little to reflect the awareness of many
in the East who understand religion to be organic, dare one say it, existential wisdom, the
kind of insight that comes with openness and not with sophisticated and protracted
academic inquiry. The study of religion for many would be the pursuit of ways of being
empty, of being open to wisdom as something always at hand and not at the end of a
seemingly interminable rational inquiry. Even in Western Christianity there is clear
evidence of mystical forms which reflect concepts of clearing the mind and transcending all
life’s contingencies. Doubtless there are also many Christians who have been grasped by
the revelation of God’s Grace and for whom the study of religion is to live out one’s life in
conformity with that revelation. What the dimensionalists appear to have done is to
give those beginning the study of religion a few measurements without actually disclosing
what religious inspiration itself is. Like the anatomist, the dimensionalist cannot handle
the soul. The criticism might be extended with ample justification to many if not most
practitioners of religious studies in schools. As with anatomy in relation to life, so the
dimensional approach points by a via negativa to what matters to followers of religious
traditions. One issue which concerns us is whether this kind of analysis of religion,
together with full-blown phenomenology, while pertinent to advanced students of religion
such as specialist teachers, is appropriate for beginners. Evidence from the present study
will suggest that children can easily tell the difference between the quick and the dead.

v) Religion as creative activity
To say that the human being is a religion-making animal does not mean that everyone is
going to make a religion any more than everyone paints pictures. There is a sense,
however, in which everyone is in some way or other engaged in the processes of art and
religion. In the ways in which people arrange their physical environment, whether
garden, sitting room or evening meal, they are both acknowledging their aesthetic sense
and expressing it. They are expressing also their view of what is fitting, saying something
about how they perceive the meaning and purpose of life, although they may not be
consciously aware that this is what they are doing, nor articulate themselves in this way.
This is perhaps another way of restating Smart’s view of religion. Without elaborating
this point, it can be reasonably proposed that insofar as people are capable of so doing,
they will fashion or discover enough meaning and purpose in their lives, to which they
may then give expression. And it should be added that it may only be through expression,
as in painting, that one grasps purpose and meaning. Religion ought to be understood as
this kind of dynamic process, in which people can engage actively and thereby grow in
their power to express the fullness of their humanity in respect of its value, meaning and
purpose. For such engagement and growth, the participant requires a belief in possibility,
a commitment to actualising possibility, a commitment to finding freedom and reality,
with all that this implies by way of seeking comprehensiveness, consistency and
coherence.
vi) Religion as a limited concept

The problem of defining religion for today’s religious education is perhaps most starkly put by Wilfred Cantwell Smith:

“This much, at least, would seem evident: that humanity is now reaching a stage of awareness in the religious realm where it may, and its leaders of thought perhaps must, decide whether or not in the future to use the concepts of ‘religion’ and ‘the religions’ as fundamental elements for understanding.”

This idea is challenging, giving rise simultaneously to feelings of panic and prospects of liberation. In his discussion of the adequacy of these concepts, Cantwell Smith avers that they are inadequate both for the participant in a religion, whose primary concern is with God, and also for the observer, for whom the construct of religion presents an obstacle to understanding what matters to the religious participant. He claims that it was the rise of unbelief that led to the Christian West referring to Christian faith in terms of a religion. This idea reflects the religionless Christianity of Dietrich Bonhoeffer:

“The time when people could be told everything by means of words, whether theological or pious, is over, and so is the time of inwardness and conscience - and that means the time of religion in general. We are moving towards a completely religionless time; people as they are now simply cannot be religious any more. Even those who honestly describe themselves as ‘religious’ do not in the least act up to it, and so they presumably mean something quite different by ‘religious’.”

Bonhoeffer also praised Barth for being the only one to have started on this line of thought about religionless Christianity. Barth later wrote:

“Faith is not concerned with a special realm, that of religion, say, but with real life in its totality, the outward as well as the inward questions, that which is bodily as well as that which is spiritual, the brightness as well as the gloom in our life.”

I shall return later to discuss the subject of faith, but in noting this particularity of the Barthian position I wish to affirm that I am far from proposing the exclusivity of that same position.

We can see, then, that Cantwell Smith’s idea of the two distinct categories, faith, which is given in the human condition, and cumulative traditions, which are the dynamic constructs of faith activities, was not new. In challenging the usefulness of the concepts of religion and the religions, Cantwell Smith wished to see the use of these words dropped

18 Karl Barth Dogmatics in Outline SCM Press 1949 (Trans. G T Thomson) p.21. This is the text of lectures given in Bonn University in 1946.
19 One could cite a number of other sources, Schleiermacher, for instance, and Calvin: “That there exists in the human mind, and indeed by natural instinct, some sense of Deity, we hold to be beyond dispute, since God himself, to prevent any man from pretending ignorance, has endued all men with some idea of his Godhead, . . .” Book I Chap. III, John Calvin Institutes of the Christian Religion trans. Henry Beveridge, James Clarke & Co. Ltd., p.43.
although he would retain use of the adjective religious. He speculated that within twenty-five years they would “have disappeared from serious writing and careful speech.”

They are still in currency, circulating nowhere more vigorously than in school classrooms. Much of what has happened in British religious education in the period since Cantwell Smith has tended to ignore his main point, which is that as concepts religion and religions are not fundamental elements for understanding.

vii) Religion as a limiting concept

The above paragraphs indicate the difficulty of defining religion, but, more important, they all suggest that as a term religion operates at the level of a simple labelling device rather than contributing to fundamental understanding of what is being labelled. The problem with maintaining religion to be the focus for religious education has been that understanding religion became the key set of activities. Smart had set the scene with his Secular Education and the Logic of Religion:

“...religious education could be designed to give people the capacity to understand religious phenomena, to discuss sensitively religious claims, to see the interrelations between religion and society and so forth.”

The integrity of religions mattered more than their utility in personal development. Jean Holm traces briefly the change in direction of religious education which had been given its principal scholarly impulse and respectability by Smart. This shift from religious education to religious studies was also made manifest in A Groundplan for the Study of Religion which the Schools Council Religious Education Committee published in Spring 1977:

“The point of the groundplan is that it sets out the necessary demands of any serious understanding and evaluation of religion and thus outlines the demands of responsible curriculum planning.”

“We are concerned,” said Jean Holm, “with the pupil’s understanding of religion rather than his religious understanding.” In schools, attention was increasingly given to a variety of world religions, which settled down to six, selected on the basis of nearness in Britain, such curricular programmes being described as multi-faith. Included in the six

20 The Meaning and End of Religion p.175.
21 Major developments in thinking about religious education took place in England following the success of Ninian Smart’s courses in Religious Studies at Lancaster University. The energy and talent which went into these developments also had an impact on the rather different circumstances of Scotland.
22 Secular Education and the Logic of Religion p.96.
25 Teaching Religion in School p.20. The italic emphasis is Jean Holm’s.
26 The Study of Religions p.5. This is an extremely dangerous argument to follow because it implies that absence of a religion is a good enough reason for not studying it. This has particular relevance for parts of Scotland where there may be no local representation of a religion other than Christianity.
is Sikhism, but not Chinese religious traditions. It would seem that the list was determined neither by the objective criteria of a properly phenomenological religious studies nor the educational merits of considering a work such as the Tao Te Ching; the respect of the elderly fostered by Confucianism; Earth-centred religious traditions which are seen to provide a basis for the ecological concerns which have assumed such prominence in the last fifteen years. One is led inevitably to the conclusion that the limiting factor in this development of religious education has been the concentration on what constitutes a religion in what you can see around you. The early decision to focus on living world religions had its own logic but its application was too limited in scope and was the source of a struggle described as being between religious studies and religious education which, as will be shown, continues to bring about casualties.

viii) Religion's integrity in question
There are several difficulties in referring to the integrity of a religion. In the first place it is fallacious to believe that outside a religion its integrity can be discovered and maintained; it is an essential feature of religious faith that it is not worn like a garment whenever you choose but is allowed to shape your life. The phenomenological observer does not enter to this degree. It was probably for this reason that Strathclyde Region in its policy for Religious Education (1981) wanted religions taught by their own adherents. It is the reason that the Roman Catholic Church insists on retaining its distinctive place in the Scottish education system, and why some Muslims have set up or wish to set up their own schools. The question of whether this kind of direction was tenable in a secular and plural society was discussed by Ian McDonald in a consultation in 1984. The models he proposed all included the view that there was a specific educational value in Christian commitment apart from the general provision a school might offer. The relevance for religious education of this observation was circumscribed by the prevailing dogma that faith and commitment were self-evidently inadmissible in non-denominational schools.

Second, as Cantwell Smith shows conclusively, a religion is dynamic, multiform,

27 Report of the Working Group on Religious Education and Religious Observance, Strathclyde Regional Council Education Committee, January 1981, p.76. Strathclyde is the largest Scottish local authority, covering almost half the population of Scotland. This substantial report of some 35,000 words contains phrases which appear in subsequent national documents. It is a very mixed, some might say mixed-up, statement with a very strong confessional bias, but it does contain a number of statements which support the general argument of the present thesis, e.g. "Religious Education should be much more than the description and attempted comparison of observable phenomena selected from various religions: it involves the development of spiritual insight and the understanding of spiritual values." p.8. "Religious Education should aim at provoking and stimulating the capacity of the pupil to develop religious sensitivity, religious insight and religious understanding applicable to all forms of activity." p.34.
28 J I H McDonald "Religion and Education in Social Context" in Family, School and Church in Religious Education Occasional Paper 2, Department of Christian Ethics and Practical Theology, University of Edinburgh 1984.
29 The Meaning and End of Religion chapter 5.
internally inconsistent and frequently subject to such massive differences of self-understanding that it is hard to understand how it is helpful, or indeed what it would mean, to say that a religion has integrity. It is certainly possible to talk of looking at the whole of a religion which would mean looking at all the experiences of all the people who are identified with it throughout its history. Even if this were a practical proposition it is not the same as looking at its integrity or even its wholeness. It is largely because of the diversity within a religion, and its diffuseness, that people have thought to look for its essence, and similarly with the diversity between religions. This is a search which has produced some very interesting findings about the nature of human need and ambition, but it is currently considered to be a search incapable of achieving its stated objective. It could be argued, of course, that the phenomenologist distils the essence of a religion, but that would be to mistake form for essence. It would be difficult to claim that the essence lay in the community of the faithful given the major differences between the institutional branches of whichever major religious tradition one considers, in spite of, or perhaps because of, all the attempts of communities to define orthodoxy. If there is an essence, it would seem to lie in the particular relationship any person has with the tradition's object of ultimate concern, in other words to lie in personal faith.

Third, can we say that religions themselves preserve their integrity during history? The idea of pure religion cannot be sustained by any phenomenology or history of religions. Religions not only engage in internal dialectic, refining and developing their self-understanding, but they modify in their encounter with other religions. It would be strange indeed if there was no inter-religious learning. People within religious traditions vary in their perceptions and, through exploring other religious traditions, may alter their own religious understanding. Indeed, it seems no longer possible to compartmentalise a religion to preserve its integrity: with the rapid advancement of electronic and other communications insularity is increasingly difficult for the adherents of any living religion. It is, furthermore, a sine qua non for religious studies that one should study several religions because of what one learns from them and not just about them. Why should we then suppose that syncretism is a bad thing?

Fourth, in attempting to describe any religion, the typological form in which we present it is both over-simplified and idealised; it does not conform to the actualities of the experiences of the adherents of those religions. In teaching world religions to children we might too readily succumb to the now discredited view of the essences of religions. This would be to deny the historic and dynamic nature of human activity within religious

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30 Mircea Eliade Patterns in Comparative Religion, Sheed & Ward Ltd. 1958, p.1. This point is made forcefully: “Then, too, assembling one’s material presents certain important practical difficulties. Even if one were satisfied with studying only one religion, a lifetime would scarcely be long enough to complete the research, while, if one proposed to compare religions, several lifetimes would not suffice to attain the end in view.”

31 An Interpretation of Religion p.4.
traditions. For instance, the experience and understanding of Christianity and of the Christian faith of two members of the same congregation sitting in the same pew can be radically different, and when expressed might be seen to be in deep disagreement on fundamental matters, such as the Resurrection. The issue is how, in exploring a religion, to accommodate the diversity which is integral to a religion without causing confusion and frustration. This can be done only by preserving the integrity of the learner and abandoning self-deceiving attempts at preserving what can be neither found nor adequately constructed within the time and other resources available to schools.

Fifth, there has been considerable criticism of multi-faith religious education as a mishmash. This is a political criticism originating in England and comprehensively rebutted by John Hull and others. It is nonetheless a criticism which has been continued in Scotland. What it refers to, of course, is the fear that what religious education will do in the hands of the new Religious Educators is peddle the lowest common denominator and create muddle in the minds of the young. There is evidently a need to respond to this anxiety of people who do believe in the purity and fragility of their own religious faiths. I have tried to argue that whatever schools do in the name of religious studies it cannot be an exposition of the integrity of a religion, even if that is only one religion and it is Christianity. However, in attempting to satisfy this self-imposed doctrine, religious education teachers at best give a thumbnail sketch of some of its formal dimensions and some issues arising therefrom. Indeed, it could be said that in schools the encounter with religions is required to conform to an externally derived framework which selects and presents in predigested form the struggle of the religious person to deal with her identity in the face of God. This might be described as a religious-education-ism which becomes the acronym reism, perhaps appropriately by analogy with reify.

This last difficulty has been recognised and there is an increasing emphasis on helping pupils to meet the adherents of religions, although this is not without its own traumas. The problem has also been addressed in the developments associated with A Gift to the Child, an approach which encourages the bringing of children into contact with the artifacts of religions. The sophistication of this interactive approach leads to two different kinds of Believing learning outcomes, depending on whether the learner does or

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33 As a local authority education adviser I have come across instances of some adherents showing deep ignorance of their own traditions and others taking the opportunity to threaten children with the wrath of God. The teachers involved were quite unprepared to deal with either kind of situation.

does not belong to the religious tradition from which the artifact comes. Such sophistication assumes a great deal about the distinctions between believing as an adherent and believing as a non-adherent. It might very well infer in the classroom that the adherent has de facto a better or truer understanding than the non-adherent, and that the relationships between believing and the other competences are the same for all adherents. One might also infer that the adherent’s learning outcome is more insightful and more spiritually enriching than the non-adherent’s. None of these inferences, as I have tried to say, can be made safely. And if they cannot, why is the distinction being attempted? It is evidently an attempt to preserve the integrity of religions. In doing so it implies extensive theological understanding and pedagogical skill on the part of primary teachers. Whether person or artifact, however, I would argue that it is not the integrity of the religion which can be preserved but the integrity of personal encounter.

ix) Religion as poisoned chalice

The devotion to the concepts of religion and religions as outlined above supports, I maintain, Cantwell Smith’s view that these concepts are harmful. As it worked out in practice, a social phenomenology failed to take sufficient account of Smart’s ‘parahistorical’ dimensions. What emerged in schools was not even an adequate phenomenological approach but a dimensional approach by which religions were described, measured and their constituent parts ticked off. This is an over-simple account of what was happening, but Michael Grimmitt in his comprehensive and authoritative treatment of the theory and practice of religious education reflects on this period in similar vein:

“... contemporary multi-faith syllabuses require pupils to move between a multiplicity of cultures and faiths, each expressing their own distinctive religious concepts through language and symbols which are unique to them, without, apparently, offering them any assistance in assimilating or accommodating these concepts within their own schemas and so facilitating their conceptualisation of them. It is inevitable in these circumstances that their so-called knowledge of world faiths will often amount to little more than ‘verbalisation’ and will fall considerably short of the learning outcomes so confidently proclaimed in the aims and objectives of so many syllabuses.”

Grimmitt’s was the only English voice which had spoken powerfully of religious education serving the existential needs of pupils in school but too much had been invested in the dimensional approach. One of Smart’s criteria for religious education had

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been that it must “transcend the informative”. The difficulties in satisfying even this
criterion in schools were evidently greater than had been anticipated, and it will be clear
when the kind of provision currently being offered in Scottish schools is discussed, why
that was inevitable.

Once again questions are raised about the place of religion in the school curriculum. In the
first place, is Cantwell Smith right about why the concept of religion appeared at all, and
does it mean that the growth of interest in religious education reflects social and political
awareness of unbelief or absence of faith and the consequences of such faithlessness?
Second, are the kinds of developments which are taking place in religious education in
Scottish, indeed British, schools creating difficulties for pupils in the development of
their own faith? Smart spoke of the schizophrenia in religious education but there is
evidence that it exists in subsequent curricular developments. Apart from the two kinds of
Believing learning outcomes already mentioned, syllabuses and books frequently refer to
founders of religions, yet one of the principal architects of the new Religious Education
gives three reasons why they should be avoided and adds:

“It is for these reasons that any extended reference to founders of religions is best done in
the thirteen-plus years (but see chapter 14 for teaching about Jesus). Even for these older
pupils, however, the life of the founder is not the most effective way to introduce pupils to
a religion (for Hinduism and Judaism it is actually impossible).”

Put this alongside Cantwell Smith’s claim, which is hard to contest, that:

“no great religious leader has ‘founded a religion’, or preached one. Almost to a man,
religious reformers, prophets, eponymous geniuses have severely criticized or attacked the
religious environment in which they found themselves, calling men away from a concern
with mundane institutions and systems to a transcendent reality, behind and beyond these.
A religious reformer does not seek to reform religion, but seeks to reform men’s awareness of
their total environment, and men’s lives; and in the process reified religion has often to be
shattered, in order that that awareness and those lives may be restored in wholeness.”

It would appear that the new, or modern, religious education was intent on putting what
Barth saw as the obstacle of religion not only between the learner and coming to terms
with Christian faith, but between the learner and all religious faiths. Grimmitt
addressed this problem and his work has endeavoured to maintain both the integrity of
religious studies on the one hand and the personal relevance of encounter with the
transcendent reality to which religions point on the other. I believe it has yet to be shown
that this balancing act can be achieved starting from the premises of Smart’s logic as set
out in his aims and interpreted by his followers, while at the same time providing the

38 Secular Education and the Logic of Religion p.105
39 Secular Education and the Logic of Religion Chapter V “The Application of the
Forgoing to the Present Schizophrenia in Religious Education”.
40 Teaching Religion in School p.64. This point is repeated in her article “World
Religions in Primary Schools” in Approaching World Religions Ed. Robert Jackson pub.
41 The Meaning and End of Religion p.117.
most important learning outcomes for all. This modern religious education would appear to remove the potential learner still further from the impelling insightfulness of religious traditions, which would, if religious education is a distinctive discipline, be its raison d'être for inclusion in the curriculum outside of social studies.

x) Religion as waterfall
I would like to sum up my understanding of religion by way of an analogy. Most people have little difficulty in knowing what a waterfall is; it is water falling from one level to another. In doing so it exhibits an essential property of water, that it is liquid, and it acknowledges an essential property of its context, gravity. We are also aware that waterfalls vary infinitely, from the mighty falls of the Niagara or the Zambesi to the tiny falls of a Highland burn. They can be natural or artificial. The quality of water varies, from muddy to crystal clear, depending on the environment, the time of the year or sudden changes in the weather. Waterfalls act on their environment, eroding rock and changing course. They carry debris and rubbish from time to time. We might still call it a waterfall even if it has temporarily dried up or frozen solid. Waterfalls also have effects on observers. People can view them as awesome, romantic, soothing, frightening, challenging, or as promise of good fishing. How they are viewed depends on three factors: the falls themselves, for example whether they are big or small, or different from last time; the context in which they are located; the observers, for example whether they anticipated the falls, and if so how, whether they are alone at the time, and if not, how their companions are affecting them, whether they would wish to be there, what their psychological condition is, and so on. The effects of the experience are infinite, from no effect to profound change, from temporary to lasting, changeable in the light of further experience or reflection.

I suppose that theoretically it would be possible to catalogue all the waterfalls in the world and provide statistics about height, breadth, volume per minute, the energy in the falls, the efficiency of any turbines installed to generate electricity, seasonal variations, quality of water, best time to see for whatever effect, number of visitors each year, number of people who are known to have lost their lives there, a continuous update on their status, and so on. In terms of the analogy with religion, fundamental questions and issues arise. What might it mean to talk about preserving the integrity of a waterfall? Does a waterfall’s integrity include the property that it attracts people to it? Does preserving integrity mean preserving the waterfall in itself or does it include its topographical and human interactions? How might its integrity be captured? Why would we wish to communicate its integrity?

In spite of the enormous diversity of possibility, the best we can say about a waterfall in itself is that it is water falling from one level to another. As soon as that is said, however, it is clearly not actually a waterfall in itself because it depends on a context of levels. At the risk of raising philosophical questions that might divert us from the analogy, one could add that it is seldom, if ever, the same water in a waterfall, that it is an event in the progress of, say, a river reaching its final level. What is unanswerable is that when topography and people are introduced, in other words as soon as the waterfall is seen as relational, it is no longer a waterfall in itself. I would argue that you cannot capture the waterfall in itself because you now have a relationship with it, and it will be your understanding of your experience which is communicated, whether that experience is individual or felt to be shared, predominantly subjectively personal or predominantly objectively scientific.

The furthest we can go is to say that many particular waterfalls exist and, using selected examples, give a general indication of some types and their effects on the physical and human environments. We can also reflect on whether any waterfall has properties on which we might want to place a value. For it is not until we see the possibility in anything that it is seen to have value. This also applies to the self as well as to the other and beyond. For us, the identity of anything is the identity we give it, on the basis of our interpretation of what we observe. We can do no other. So when we talk about preserving the integrity of a religion what we really mean is preserving our formulated perception of its identity. That identity ought not to be based, I would contend, on the observable effects of being religious, and certainly not a reported account of those visible effects.

This is not to say of course, that our perceptions cannot be shared or should not be shared, and that what we perceive has no reality independent of us. Nor is it to judge our perceptions as right or wrong, valid or invalid, sufficient or insufficient. What it means is that all our perceptions are provisional, contingent on many factors, some we know about, some we may even understand, and others we may never know about nor suspect. Because of the centrality of the person, however, to be meaningful, purposeful and valuable, the act

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43 This is a view expressed by one of the most distinguished of religious phenomenologists, Gerardus Van der Leeuw, who maintained that every religious phenomenon constitutes the apprehending subject as well as the apprehended object. cf. Van der Leeuw's Religion in Essence and Manifestation, Harper 1933.

44 This over-simple account ignores an understanding of the quantum world, where the intervention of an observer effects change. See, for instance J C Polkinghorne The Quantum World Pelican Books 1986. The quantum experience reinforces the view that the observer is part of the identity of the observed. I say predominantly here because I believe the subjective/objective dichotomy is a fallacious argument. Things in themselves may not even exist: we only know they exist when they enter our consciousness, become part of our knowledge. The boson predicted by Peter Higgs may have decided to hide from scientists.

45 There are few more irritating human traits than someone insisting that "you will enjoy this". Such is human perversity, mine at any rate, that one is as likely to find a way of responding differently, or, in extreme cases, avoiding the experience all together.
of understanding religion has to be rooted in an understanding of what it means to be a person, and that means in relationship. It requires the establishment of an approach to understanding the self, the other, and the world in which you and I find ourselves, the world in which we may encounter one another. We become aware of our own possibilities in our encounters and in our interaction with the world. And in coming to recognise ontological possibility for ourselves, we recognise such possibility for others.46

The place of religion in the school curriculum: religious studies

i) Recognising different approaches

A distinction has been made between religious studies and religious education in relation to the provision of religion in the school curriculum. Religious studies can be seen as the product of the phenomenological or dimensional approach, whereas religious education can be thought of as offering a more personally relevant approach. More will be said later about this dichotomy, real or imaginary, but if this distinction is allowed for the moment, I would like to discuss the case of religious studies in schools, and in doing so perhaps clarify characteristics of religious studies and responses to it. While recognising that Grimmitt has brought the dimensional and existential approaches together and provided a rationale which subordinates the dimensional to the existential, there are still lingering problems. Grimmitt claims that his rationale preserves the integrity of religious studies and the integrity of those religions studied.47 I have contested the validity of claiming integrity for religions and I now cast doubt on the appropriateness of religious studies as the preferred approach in the school curriculum.

ii) Spectator as participant

The proper significance of the religious aspect of human existence is not seen by most advocates of religious studies in schools with the clarity that a phenomenological appraisal might have been expected to disclose. For many teachers the phenomenology of religion was a new approach which brought with it a breath-taking freshness, particularly for those who had for long inhaled the stale air of traditional religious education classrooms. It brought a new organisation of ideas as well as the brilliant colour and spectacle of the religious practices of a previously unexposed global village, or global city as Smart would wisely say.48 Unfortunately, this loss of breath left many unable to attend to religion and religious education in suitably critical ways. The phenomenological approach was an invitation to celebration, in which one was more exhilarated than critical. The cause of the celebration was not always remembered, and the celebration became the thing-in-itself. So the big event was obscured by the general partying. What could also escape the celebrant's notice was the fact that it was the celebrants themselves

46 Colwyn Trevarthen's work with neonates indicates that possibility, including moral possibility is a given in the human situation, and not a learned response.
47 Religious Education and Human Development p.255.
48 Ninian Smart Beyond Ideology: Religion and the future of Western civilization Collins 1981, p.21
who created the celebration, and in participating in it they were no longer the detached observers they claimed. They were themselves actually creating the activity which their pupils were being asked to take part in. In plain language, the way to study religions, essentially by observation and classification of religious effects, became the study itself. Because the observer is critically involved in what is observed, this in fact meant that for pupils, as for their teachers, religious studies too readily became removed from the inspiration for the study, the big event which the phenomenologists had identified as centrally important. And the distance grew: because some pupils, for various reasons, could not take part in the whole celebration itself, they were given edited video highlights. The danger for the learner is that the experience of celebrating, or spectating twice removed, will be taken as participation in the activity of religion. To use Kierkegaard’s levels, the religious has dropped through the ethical to the aesthetic.

iii) Touching the intangible

Perhaps it would be helpful if I explained the preference I expressed earlier for referring to the facets of religion rather than its dimensions. Allow me now to refer to a religious tradition as a crystal; no matter how closely one examines all its facets its most vital feature remains undetected, because it is invisible, transcending the crystal. The crystal we examine is the product of a process of growth and formation, and just as the anatomist examined the body out of its vital context, so the scientist or jeweller examines the crystal out of the environment which created it, sustained it and allowed it to form. This appears to be precisely the case of religious studies; in practice it abstracts religion from those contexts where it was growing and developing. It is thus disappointingly pre-Goldman in its thinking, for it seems to say that religion is about other people, and usually, for pupils in Scotland, in other places, and frequently at other times. For those pupils who are not part of any religious tradition it is always about other people, and even for those who do belong to a tradition, conventional wisdom in religious studies dictates that they should consider at least five religions as well as their own. And religious studies is pre-Goldman in another critically important sense, for it assumes that education is about stuffing knowledge into empty vessels. If this seems a harsh and misleading assessment, one need only consider the recommendation of religious studies to explore at least six religions phenomenologically and historically and to develop the necessary inquiry skills.

49 James Mackey, referring to modern reductionists, writes “they repeated so woodenly the mistake made so often by so many religious people: they took the doctrine, the theory, to be the reality, thus preferring conceptual control to practical imagination. In this way they too often shackled the liberating force of their own original revelations, . . .” James Mackey Modern Theology: A Sense of Direction Oxford University Press 1987, p.158. This might also apply to school followers of phenomenology.

50 Ronald Goldman Religious Thinking from Childhood to Adolescence Routledge & Kegan Paul Ltd. 1964, p.244. Goldman’s point is made with reference to the Bible within Christian education, but the principle still applies.

iv) A necessary praxis for religion in the curriculum

The sightings of religion which are most important for religious education are those taken from the standpoint of education not phenomenology, although, as Grimmitt has pointed out, there is also a phenomenology of education. The issue for religious studies is how religion as cumulative tradition may be fairly represented in the curriculum while prior educational claims are satisfied. It is perhaps at this point that the assertion that human beings are religion-making animals is especially significant.

Human beings make religion as a serious attempt at expressing fundamental insights into the nature and conduct of human existence. As such it belongs to the creative part of human experience. Like art and similar expressive activities, religion appeals to the aesthetic sense, but religious education, like art education, cannot be primarily concerned with the appreciative aspect. It is through designing, painting and sculpting that the individual has an opportunity to express her own unique view of the world, and it is by undergoing the creative process that the individual more deeply appreciates the artistic expressions of others. Without experiencing the process of painting, what wonder can be evoked by a Dürer painting when we are constantly dazzled by the brilliantly clear products of celluloid and electronic technologies? Indeed, by having such instant access to recorded images that mirror visual expressions from the whole history of humankind, we are in desperate danger of losing sight of the human context which brought about each expression. It is the same kind of danger from which the religious phenomenologists cum educationists have not escaped.

A characteristic of the religious person must surely be that her awareness continues to grow in depth and comprehensiveness. She takes her own existence seriously, and she takes the fact of existence seriously. Her existence is also the medium through which she expresses her awareness of the meaning and purpose of life. Consequently, religious education ought to take seriously not only the need to appreciate what people in general have said about life’s meaning and purpose, but also the need to provide opportunities for young people to express what they perceive to be its meaning and purpose, and to express it in all the ways that religions have found useful; that means visually, dramatically, physically and sensually as well as verbally. This is a view which Grimmitt has expressed, but what matters most, of course, is the kind of integrity which allows the person to express these insights through the whole of her existence. Schools, however, cannot encompass this any more than they can legislate for it or assess it, but schools can provide opportunities for exploring what it means for the learner to be religious in her own terms. This is notably different from understanding what it would mean to take a religion seriously; it is learning to explore your own religious potential.

My concern is for a valid and authentic education in religion for all pupils, not for learning

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52 Religious Education and Human Development p.211.
about religion as a multi-dimensional product from which one may learn something to one's advantage, which latter would seem to be the academic emphasis of religious studies. The expedient of promoting religious studies in schools may have been politically sensible, but its appeal has been dependent upon a prior interest in religion as a world phenomenon, as a product. It is not at all clear that the colour and spectacle of religious studies will be any more acceptable to the majority of school pupils than the ill-fated Biblical or Christian Studies it succeeded. Young people struggling with their own creative processes are hardly likely to be endeared to teachers who assail them with the sophisticated and highly advanced products of systems developed over several millennia. ("There children, you've seen what Picasso and Canaletto did. Now you do it.") Even if they were to study only Christianity as a world religion it is not apparent how this complex system could be relevant to people whose age means they are relatively immature and inexperienced and to that degree limited in self-perception.

v) Empathy as doubtful tool

Whatever its intentions, whether social, political or humanitarian, education has the learner at the centre. In the classroom, the pupils are the immediate, human, living context for religion-making. In fairness to religious studies, the claim has always been made that such teaching is also pupil aware. Although there has been a heavy emphasis on the explicit study of the phenomena of religion as manifested in the major traditions of the world, the necessarily large informative element was to be transcended by helping pupils to get inside the situation of a Jew, Hindu or Christian, to get them thinking and feeling as though they belonged to that religious and cultural tradition. The case for this method rested on other school disciplines which invite pupils to empathise with other people and situations which are not their own. In English, social studies and aesthetic subjects like art and drama, children are often invited to imagine what it is like to be a fire fighter, police officer or Eskimo, and to express their response to this exercise of the imagination. A number of questions, however, are raised by such an exercise. Can there be any prediction of what the pupil’s experience is likely to be when asked to engage in such an activity? Can we even know what it might be? Does the child imagine what she would feel like at the top of the fire fighter’s ladder, or what the fire fighter will or might be experiencing? Does the child fantasise the experience, creating an imaginary, possibly artificial sense of heroism which it is then assumed the fire fighter must feel? Is a stereotype being created and internalised? Is a false view of the world being constructed, where the fire fighter becomes an idealised figure who is perhaps herself fantasising an actual situation of mediocrity and unhappiness? When pupils engage in role-playing involving a police officer, do they not offer stereotypes, the caricatured bobby of Oor Wullie or some identifiable television character? How easy is it for us to go beyond the uniform to the parent, to the witty, sociable companion, in short to the person? It may be difficult enough for the police officer herself to see beyond the role defined for her, and we may wish to speculate on whether schooling has been an important factor in bringing about
this situation. But if there are difficulties associated with getting inside the skin of someone in our society who shares with us a cultural tradition with its common, implicit beliefs and values, how many more problems are there in trying to empathise with the Hindu villager as such or the Vietnamese monk as such? At the best we are likely to get a projection of the child’s own experience and at worst a poor imitation of more crudely distinctive aspects of the situation experienced by the other.

There is inarguably a place for trying to understand the other person, whether fire fighter, fire worshipper or human torch. In the first instance, all three are objects of wonder, but we should not be too ready to assume that we can understand them, let alone that we will understand them. Trying to understand someone else is a complex task, involving wide experience, maturity, much rational and emotional effort, as well as powers to observe, perceive, interpret, evaluate and sympathise. Empathy may be possible only if one has already had that same experience, or a very similar one. For instance, a parent who has previously lost a child may empathise with a more recently bereaved parent, while someone who is not a parent may find it impossible to do so. Even a parent who has not lost a child but who might imagine in a general way how much she would miss a daughter or son, has no knowledge of the actual experience of finding the drowned child, and of how she and the rest of the family changed as a consequence of the discovery and the loss. Nor is any bereavement like another; they are unique experiences, and we do well to remember how limited our ability is to empathise in any event.

Empathy is often difficult to accomplish, and imaginative self-transcendence may even be a contradiction in terms. To imagine what it would be like for a Scottish urban child to be a village boy or girl in India would first of all require a degree of background information which would take religious education deep into the realms of cultural or social studies. In the second place, the most that one could reasonably hope for is that the pupil would imagine how he or she might feel if put into this new situation, but this does not in any way clarify how an Indian boy or girl might feel. To be a Jew for a day, to be interviewed as a Brahmin, to walk round the sacred fire, all may be entertaining, even informative, but they are nonetheless crude imitations far removed from empathy. If the activity has not grown out of the learner’s perception of its significance it is inauthentic, and it may be so to the point of offensiveness. It can be no part of religious education’s intention to have pupils ape other people, but to give them every assistance to be more authentically, uniquely themselves, and to be more understanding of the other person’s situation. At the same time as tacitly acknowledging the uniqueness of human experience, empathy turns out not to be a magic formula to transform irrelevant and tiresome religious education into a new, dynamic and compelling force. Even if it were the tool for the job, it could be argued that the more successful the religious studies approach is in raising interest in religious positions as particular religious positions, the more it takes pupils away from the possibility of authenticating themselves; trying to understand what it means for others to
be religious in particular contexts is displaced effort if it distracts from the need to make personal decisions. Empathy appears to be most effective in exploring the possibilities for self as a human being, not for disclosing the particularities of another person's world view.

The place of religion in the school curriculum: social subjects
Whatever rationale is proposed for religious education, a significant issue has arisen about whether it is a social subject or a discrete discipline. Much of what appears to happen in religious education describes human behaviour, and discusses that description. This would place religious education firmly in the social studies camp. Persistent claims, however, are made for the distinctiveness of religious education. The formative documents of recent curricular developments in Scotland, stemming from the Munn Report, which takes much of its design philosophy from the work of Hirst and Peters, have all made it clear that both religious education and moral education are different modes from social studies. This is a distinction which is not well understood either by school managers or religious education specialists, and certificate courses in religious studies frequently appear as an option in the social subjects column along with history, geography, modern studies and economics. This has been known to cause friction because of adverse effects on numbers of pupils opting for social subjects. The dilemma has been provoked by the strenuous efforts to promote the phenomenological approach to religious studies with its emphasis on those objective inquiry skills which are also employed in the humanities. Perhaps an infusion of the aesthetic into religious education, as Holley advocated, might have gone some way to meeting the claim that spirituality holds a local position in the religious life and provided additional evidence to satisfy Phenix's claim that religion is a synoptic realm of meaning. As it is, no one appears to think of putting religious education into the aesthetic subjects column. Nonetheless, as far as Scotland is concerned, religious studies has served a political purpose in establishing the viability and academic credentials of religious education. The time has come, however, when the rationale for religious studies can no longer be allowed to drive religious education.

56 Philip H Phenix Realms of Meaning: A philosophy of the curriculum for general education McGraw-Hill Book Company 1964. "From an ultimate perspective, the activity of the artist may be regarded as an analogue of the divine creativity. . . . The religious significance of the esthetic realm is especially evident in the abundant use made of all the arts in providing religious symbols.” p.248.
The secular context for religious learning

i) *Religions as secular*
Before attempting finally to clarify what is meant here by religious learning I want to consider the context within which it is to take place, its secular setting. *Secular* has the same property as *religion* in that it also is a word whose meaning is elusive, always determined by the context within which it is used. In its narrow sense it is the converse of sacred, but I want to use it in its broader sense to refer to the prevailing cultural environment free from containment within a particular religious world view. Religious traditions are part of the secular world, phenomena in it, open, as we have seen, to investigation and comment by any of a number of academic disciplines. Present society contains many religious world views in varying stages of formation, reformation and deformation, so secular education might be expected to reflect this fact. Because the secular is also dynamic, changing according to cultural context, secular education is determined by prevailing cultural needs and not by the requirements of a particular religious tradition.

In discussing the possible relationships between theology and education, Grimmitt says that:

"Despite their title, 'religious' educators are essentially 'secular' educators. They are 'secular' educators in so far as the educational principles which govern their activities are, in the first instance, those governing the activities of all educators, irrespective of their subject disciplines. . . . Like all secular educators, therefore, religious educators engage in education as their first-order activity; their prime commitment is to the achievement of educational goals by way of a process which conforms to educational principles."57

There is an issue as to whether the secular here means religion understood as taking history seriously, or whether it is religion secularised, 'domesticated', subsumed under the relatively acceptable heading of education. As Harvey Cox put it:

"Secularization simply bypasses and undercuts religion and goes on to other things. It has relativized religious world views and thus rendered them innocuous."58

Consideration needs to be given to whether Grimmitt has bypassed and undercut religion by going on to education and thereby rendered religious world views innocuous.

ii) *A secular puzzle*
In reflecting on the relationship between the secular and the religious, it may be instructive to focus attention again on an outstanding figure in the debate, Dietrich Bonhoeffer. At the same time as proclaiming religionless Christianity and disclaiming his being *homo religiosus*59 Bonhoeffer frequently refers to his practising Christian religion, conducting services, praying, asking for prayers to be said for him:

57 Religious Education and Human Development p.258.
58 Harvey Cox The Secular City Pelican Books 1968 (SCM Press 1965) p.16.
59 Letters and Papers from Prison p.135.
"I also felt it to be an omission not to have carried out my long-cherished wish to attend the Lord's Supper once again with you... and yet I know that we have shared spiritually, although not physically, in the gift of confession, absolution and communion, and that we may be quite happy and easy in our minds about it."60

A little later in the same letter he writes about an idea he has for a story based on his own experience and on conversations he had shared with his correspondent:

"... in short, it was to present afresh middle-class life as we know it in our own families, and especially in the light of Christianity."61

How are these statements to be understood in the light of Bonhoeffer's theology and ethics? It would seem that for Bonhoeffer religion and religious practice were cultural activities which assisted in promulgating the Christian faith, and which supported it but were in no way essential to it; religion was just as likely to obscure as it was to disclose. It was making a faith of your religion that seemed to trouble him, not making a religion for your faith. In discussing the mythology of the New Testament he maintained that it was not dressing up universal truth but that the mythology was: "the thing itself - but the concepts must be interpreted in such a way as not to make religion a pre-condition of faith".62

Less than six weeks later he is writing:

"I'm only gradually working my way to the non-religious interpretation of biblical concepts; the job is too big for me to finish just yet."63

In the same letter he declares that there is no longer any need for God as a working hypothesis in any sphere of intellectual activity, including religion and philosophy. "For the sake of intellectual honesty, that working hypothesis should be dropped, or as far as possible eliminated."

This is not, however, to disregard God but to acknowledge him without discounting him. "The God who lets us live in the world without the working hypothesis of God is the God before whom we stand continually. Before God and with God we live without God."64

This could be seen as an impossible and meaningless conundrum; how can one be simultaneously with God and without God? It is possible only if two meanings are being attributed to the word God, or a particular significance is being attributed to living without. It appears that Bonhoeffer wants to convey both possibilities because he goes on to say that the decisive difference between Christianity and all (not other) religions lies in Christianity's acceptance of the powerlessness of God, whereas religions look for the

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60 ibid p.129.
61 ibid p.130.
62 ibid p.329.
63 ibid p.359.
64 ibid p.360.
power of God. In the presence of God we live, but without his aid or intervention: there is no Deus ex machina.

"To that extent we may say that the development towards the world’s coming of age outlined above, which has done away with a false conception of God, opens up a way of seeing the God of the Bible, who wins power and space in the world by his weakness. This will probably be the starting-point for our ‘secular interpretation’.”

Bonhoeffer develops this idea with a number of entirely consistent statements which are quoted here because they represent so well both the basis of the rationale for the religious education to be proposed here, and also its dilemma:

"To be a Christian does not mean to be religious in a particular way . . . It is not the religious act that makes the Christian, but participation in the sufferings of God in the secular life.”

"The ‘religious act’ is always something partial; ‘faith’ is something whole, involving the whole of one’s life. Jesus calls men, not to a new religion, but to life.”

"The Christian is not a homo religiosus, but simply a man, pure and simple, as Jesus was a man - in contrast, shall we say, to John the Baptist.”

"... it is only by living completely in this world that one learns to have faith.”

"Redemption myths arise from human boundary-experiences, but Christ takes hold of a man at the centre of his life.”

iii) Religionless religious education?
The proposition here for religious education is that it should focus on the secular world, and that the religious world, the world of homo religiosus, should be seen as part of the secular world, not as distinct from it. This would mean that the phenomena of religion are to be seen as cultural expressions. This would appear to take care of the concern that religious education might be trying to get children to be religious in a particular way, but it does rather suggest that religious education should belong to the social or aesthetic subjects and not claim a distinctive place for itself in the school curriculum. The dilemma is manifold. Bonhoeffer’s secular view of religion is impelled by a radical Christian theology (worldliness) so it is in a sense a very particular ‘religious’ view. God is not, in this approach, simply an interesting idea up for discussion, because to intellectualise God is to create something contingent on intellectual power and not to be confronted by transcendent reality. This approach to religious education, to have integrity, is bound to disclose the rationale for its interpretation of religion; to claim its distinctiveness in the

65 G Van der Leeuw Religion in Essence and Manifestation, London 1938. Van der Leeuw identifies power as the essential concept driving religions.
67 ibid p.361.
68 ibid p.362.
69 ibid p.369.
70 ibid p.369.
71 ibid p.337.
curriculum, this approach has to declare its purpose to be faith development.

If an issue for religious studies is that its apparently objective approach seems to value all religions equally and find a justification for their study in human religiousness, the issue for the faith approach is that it is a critique of religion and religious experience which gives religion subordinate value, and might even suggest its irrelevance. If a difficulty for religious studies is how to make it personally relevant, the corresponding difficulty for faith education is how to make it sufficiently open and objective. A number of other difficult questions also present themselves, for although Bonhoeffer maintains that religion must not be taken as a prerequisite for faith, could he have come to his theology without the experience of Christian life? If religion is not a prerequisite for faith, why bother with religions at all, and why bother to study them? If religions are seen as concerned with a powerful God, why have they been unable to prevent the evil power of human action in the Third Reich, or today in Rwanda or any number of other historical events? Does this mean that we should indeed eliminate religion to remove from people the potential to pass the buck, to leave goodness to the religious impulse? Are there any differences between the individual coming of age and the world coming of age? What is it that we have to learn, or most need to learn, from religious traditions? How do the boundary experiences of religion, of depth and inwardsness, relate to the worldliness of Bonhoeffer? How, if at all, are religious educators going to deal with the concept of God or transcendence? Should children be seen as progressing through religious stages prior to coming of age? What are the grounds for faith which is not dependent on religion? Why should we take Bonhoeffer so seriously?

Concerning Faith

i) Choosing faith as the focus
Faith has been the subject of extensive theological, historical and phenomenological study. It is not within the scope of this thesis to review this subject extensively or in any great depth. The only reason for dealing with religion in the way I have is to justify my pointing to a new direction for the future of religious education. Cantwell Smith has already been identified as a source for concern about the usefulness of religion as a concept and allusion has been made to his proposition that religion should be replaced by referring to cumulative tradition and personal faith. I have tried to argue that focusing on the cumulative traditions in the way followed by most advocates of religious studies is to concentrate on the wrong factor in the equation. As Cantwell Smith has made plain, we are clearly at an advantage if we can draw on other people's experience of the religious life to illuminate our own faith possibility. It is not therefore part of this thesis to suggest that the traditions are unimportant as sources of understanding; my complaint is with religious education being thought of as the pursuit of understanding religion and not religious understanding.72 Religious understanding is the position I identify as faith

72 Teaching Religion in School p.20.
ii) A brief description of personal faith
As I have been persuaded by Cantwell Smith's argument, some clarification of his view of personal faith is required. The first feature of personal faith is that, apart from one's own faith, all personal faith is known only by inference, for example as it is expressed in artifacts, communities, character, modes of behaviour and the expression of words and ideas. Faith is expressed as response to personal encounter with transcendent reality. Faith is not true, it has no permanence, it has no ideal form, it is unique for each person, it is a living quality, it is entirely mundane. Cantwell Smith has also indicated that faith does not have to be religious. In its context this would appear to mean that it does not have to be derived from a religious tradition, and by extrapolation it would seem to include the life lived in response to whatever the individual person has discerned to be definitive of their life. The account of such a radically individual faith stirs all kinds of hope for religious education. First it acknowledges that faith is a possibility if not an actuality for all people. Second, because it does not hold up an ideal form it escapes the opprobrium of indoctrination, except insofar as this particular doctrine of faith is assumed; at least it cannot be accused of itself leading to a particular faith position. Third, its dynamic character is such that it is open to development. Fourth, the fact that there are so many expressions of personal faith throughout human history and culture means it is possible to infer what people value most highly and what motivates human action. In this way one is able to deepen understanding of one's own possibilities, not only through the formal dimensions of religious traditions but through the literature, art and other creative expressions of people responding to their experience of being deeply human. Fifth, it makes clear that faith is something which shapes a way of life, which may or may not include ritual behaviour; because faith is seen not as a statement of belief but life enacted it is more accessible to those traditions outside the Middle East and Europe for whom creeds have less point. Finally, and most challenging of all, it establishes the reciprocity of faith and action and offers the individual the promise of assuming full responsibility for all actions taken.

iii) Witnesses to the truth
There are so many intellectually powerful contributors to Christian theology who speak with one voice, as it were, about the universality of faith and how religions can obscure religious understanding that it is hard to understand why religious education turned towards phenomenology for its rationale. One can only assume a failure of nerve in the face of self-proclaimed scientific certainties. It is not possible nor, I would submit, necessary within the scope of this thesis to make a serious attempt at representing the

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73 The Meaning and End of Religion chapter 7.
74 James Mackey Modern Theology: A Sense of Direction, p.29: "On religious faith and imagination little need be said beyond repeating the point that religious faith is but the highest or deepest form of human faith and not another kind of faith altogether."
arguments of major contributors to thinking about religion who support the general proposition about the central place of faith in religious experience. It may be useful, however, to identify a few representative comments.

I have already cited the eminent figures of Barth and Bonhoeffer. Allow me to add a resume of post-liberal English-speaking theologians as remarked on by Macquarrie:

"Thus, while the place of revelation is made sure, the notion of an exclusive revelation is rejected; while man's sinfulness is fully recognized, he is not deemed to be totally corrupt; while Christianity is permitted to interpret itself, the world is not shut out, while there is stress on the divine transcendence, the distance between God and man is not made so great as to preclude a genuinely personal relation between them. Indeed, the most obvious characteristic that is common to all the theologies considered in this chapter is the central place which they give to personal encounter - and in this they would seem to stand nearest to Brunner among the continentalists. In this concern for the person-to-person relation, one cannot help being impressed by the remarkable debt which Christian theology has come to owe to the Jewish philosopher Martin Buber.

But it is this very matter of personal encounter that must give us pause, and make us ask whether we can go further. Personal encounter can surely be no more than an analogue of man's relation to God."  

The salient points for us here are the acceptance of faith as possibility for all people, the centrality of personal encounter in understanding and expressing faith, and the element of transcendence in religious faith. John Baillie made the matter of faith an acceptable subject for the classroom by declaring its cognitive credentials:

"The proper name of religious experience is faith. It is by faith we apprehend the things of God."  

"The reason why we must not say that faith is based on religious experience is that religious experience, if it is authentic, already contains faith. Faith is the cognitive element in it, on which the accompanying emotional and volitional elements are utterly dependent."  

Existentialist roots go deep into a phenomenology of being. Existentialist theology is perhaps the most powerful witness to the reasonableness, some might argue the necessity, certainly the potential distinctiveness, of an approach to religious education through addressing the question of faith. It is in the dialogue between existentialist philosophy and existentialist theology that many of the issues which have led to what I have suggested might be a failure of nerve are most convincingly resolved. Humankind is seen as necessarily having to choose between mere ontic existence or ontological being. Bultmann expresses this succinctly:

"According to existentialist analysis, man's resolution is based in his being limited by death, i.e., in his temporality as a being towards death. According to faith, on the other hand, the resolution that is to be understood as love has its basis in man's being limited by the thou, who is visible to existential analysis only as 'the other', while to faith he becomes visible in love as 'the neighbour'. But now by seeing that man is actually limited by the thou, faith and love make clear that being limited by death only holds true of one

75 John Macquarrie Twentieth Century Religious Thought SCM Press Ltd 1963, p.349f.
76 John Baillie The Sense of the Presence of God Oxford University Press 1962, p.64.
77 ibid p.65.
The justification for religious education as a necessary part of the curriculum resides, I would have thought, precisely in the affirmation of the ontological character of human existence. And it provides a framework for understanding Rwanda.

Tillich is particularly important for a number of reasons. First, he equated God with being itself. As we all share in being, God is accessible to us in the very ground of our being.

"Man is the question he asks about himself before any question has been formulated. . . . Being human means asking the question of one's own being and living under the impact of the answers given to the question. And, conversely, being human means receiving answers to the question of one's own being and asking questions under the impact of the answers."79

He also expressed the view that this question appeared in early childhood. Second, he defined the object of theology as "what concerns us ultimately".80 Thus everyone confronted by ultimate concern is invited to theologise. Third, he did not consider that religion was a special function of the human spirit:

"It is at home everywhere, namely, in the depth of all functions of man's spiritual life. Religion is the dimension of depth in all of them. Religion is the aspect of depth in the totality of the human spirit."81

Fourth, like others, he also held that religion in the narrow sense of tradition can be a shameful obstacle to depth:

"It makes itself the ultimate and despises the secular realm. . . . the religious and the secular realm are in the same predicament. Neither of them should be in separation from the other, and both of them should realize that their very existence as separated is an emergency, that both of them are rooted in religion in the larger sense of the word, in the experience of ultimate concern. To the degree to which this is realized the conflicts between the religious and the secular are overcome, and religion has rediscovered its true place in man's spiritual life, namely, in its depth, out of which it gives substance, ultimate meaning, judgment, and creative courage to all functions of the human spirit."82

Moltmann sums up Tillich's view of culture thus:

"the real vehicle of the religious and most universal manifestation of the absolute: religion is the substance of culture - culture is the form of religion."83

So fifth, Tillich saw the sacred embedded in the profane. Sixth, he also applied a method of correlation84 which is useful in understanding the religious life, and in teaching about the religious life.

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80 Systematic Theology Vol.1. p.15.
82 Theology of Culture p.9.
83 Jurgen Moltmann Theology Today SCM Press Ltd. p.74.
84 Systematic Theology Vol. 1 pp.67-76.
Reinhold Niebuhr also proposed a universal revelation and wanted to make a distinction between faith and religion:

"A 'hidden Christ' operates in history. And there is always the possibility that those who do not know the historical revelation may achieve a more genuine repentance and humility than those who do. If this is not kept in mind, the Christian faith easily becomes a new vehicle of pride." 85

Use of the term faith is not without its difficulties. Hick agrees to accept Cantwell Smith's use of the word, taking it to refer to the:

"spiritual state, or existential condition, constituted by a person's present response to the ultimate divine Reality. . . . I would define it formally as the transformation of human existence from self-centredness to Reality-centredness." 86

He nonetheless points out that the term has been applied most assiduously within religions of Semitic origin and become over-intellectualised. What is for us perhaps most significant about Hick's position is his claim that Cantwell Smith's alternative vision has changed the way in which many people now perceive religion.

iv) James Fowler: Stages of Faith
The stimulus for Fowler's work 87 was the insightfulness of Tillich, Richard Niebuhr and Cantwell Smith. It was their inspiration and vision which led him to explore faith as a feature of human development. Fowler considered how the analyses of human development offered principally by Jean Piaget, Lawrence Kohlberg and Erik Erikson related to the development of faith. He subsequently identified stages of faith which correspond closely to the development stages identified by the psychologists. Six stages follow on from a pre-stage which he calls Undifferentiated faith. It is only when thought and language converge and symbols begin to be used in speech and in ritual play that the transition to Stage 1 begins.

Stage 1, Intuitive-Projective faith, spans the age range of two to six or seven years. During this period children are first aware of self, sex and death. Their lives are also strongly imaginative and fantasy enriched, and the combination of these factors are a volatile mixture open to exploitation and susceptible to repression. This stage of faith is one: "in which the child can be powerfully and permanently influenced by examples, moods, actions and stories of the visible faith of primally related adults." 88

The second stage is precipitated in the main by the emergence of concrete operational thinking. Fowler calls this the stage of Mythic-Literal faith. During this stage the child tries to sort out the make-believe from the real and sees and expresses experience

85 Reinhold Niebuhr The Nature and Destiny of Man Vol.II pp.113-14 n.3.
88 Stages of Faith p.133.
structurally as a narrative. The child's world view is thus a literal one in which the
imagination is curbed by the need to create order in the external world. The rules of this
ordered world are seen as automatic, with little scope for flexibility, which would seem to
the child to be regression. It is interesting to note that Fowler makes the same observation
about this stage as Goldman did when he remarked that there are many adults who have
not gone beyond the concrete operational stage in their thinking about religion (sub
religious stage).\textsuperscript{89} To move on to the next stage, the child has to overcome the tensions
created by reflecting on the contradictions that appear in their narratives of life. (Most of
the children who have taken part in my research study come within stage two and the
transition to stage three.)

The onset of the Synthetic-Conventional faith of stage three coincides with puberty and
formal operational thought. During this stage, the individual's world view is systematic
and interpersonal. People are not understood in terms of social networks but as individuals,
and they are evaluated in relation to personal qualities. The symbols and myths which
categorise their deepest meanings are necessary for them. There is no scope at this stage
for demythologising. An attack on the symbol is an attack on the sacred itself. Fowler
considers that this is the dominant faith of those who belong to religious institutions, but
it is also the dominant faith of most adults in equilibrium with their society. The term
synthetic-conventional comes from the holder's seeing her world view as the conventional
outlook, and it is synthetic because it has been adopted as an entity rather than arrived at
through analysis. It expresses the desire to be normal based on external authority and
approval. The vulnerability of holding this position is evident, and it is in responding
constructively to challenges to this stance that the adult begins to move into stage four.

The Individuative-Reflective faith of stage four is the phase of broken symbols, when
meaning is seen to exist independently of the symbols through which it has been mediated.
Tacit meanings can be made explicit, but in the demythologising there is the possibility of
discarding important meanings and simply transferring to another variant of stage three,
the danger of reductionism. Leaving behind the security of a world view perceived to be
conventional brings with it the pain of loss as well as the uncertainties of freedom. It is
indeed a coming of age, of the individual standing against mere conformity, of accepting
individual responsibility, of recognising relativity and forming a world view based on
critical reflection.

Stage five, Conjunctive faith, emerges from a background of dissatisfaction with
rationality and logic as the ground for faith. Fowler has some difficulty in delineating
this stage, but he is sure it exists, multilevelled and more dialectical than stage four.
Fowler, however, finds the term dialectical too clinical, too sequential and too limiting.
He prefers to use the term diatological in relation to the knowledge of this stage. He uses

\textsuperscript{89} Ronald Goldman *Education for Uncertainty* The Essex Hall Lecture 1967, the Lindsey
Buber’s I-Thou to illustrate the relationship between the knower and the known. In other words, the knower does not impose her own categories on what is to be known and understood but allows it to speak in its own terms, no matter how disconcerting its words may be. Reality is understood to be infinitely complex, and Fowler illustrates the emergence of stage five as something like “Looking at a field of flowers simultaneously through a microscope and a wide-angle lens.” Perhaps the most significant feature of conjunctive faith is its readiness to encounter other traditions than its own. Fowler is insistent that this does not mean “a wishy-washy neutrality” or a fascination with the exotic:

“Conjunctive faith’s radical openness to the truth of the other stems precisely from its confidence in the reality mediated by its own tradition and in the awareness that that reality overspills its mediation.”

This radical openness leads to a reworking of one’s world view, to the releasing of unconscious and suppressed knowledge. It reviews its appreciation of symbols. It combines opposites and is prepared to sacrifice the self in the pursuit of realising others’ potentialities. If the danger of passivity is avoided, the openness to the diversity of truth which characterises this stage brings an active, liberating peace. Nonetheless, this transforming world view remains bound to an untransformed world.

The Universalising faith of stage six is “exceedingly rare”. It is found in people who have become incarnations of a vision of the future which is understood in Christian terms as the Kingdom of God. This potentiality is there for all people of all religions where the transcendent reveals itself in the particular. This leads Fowler to discuss the absoluteness of the particular. He might have said that absoluteness comes through the particular, because he wants to be clear that the particularities themselves, whether they be people or symbols, are not absolute, and in so far as they are so considered, they cease to be windows on the future they envision. People at stage six are “leaning into the future” and Fowler proposes a number of names of those who might occupy this state: e.g. Gandhi, Martin Luther King Jr. in his latter years, Mother Teresa, and others less well known. These are people who through their lives have shown they are emancipated from the contingent categories of the present. They do not approach the future from the present but the present from the future. As a consequence of the inherent challenge of this radically different stance, such Universalisers frequently die at the hands of those whom they hope to change.

There are many questions to be asked about the theory Fowler propounds. There are general concerns about stage theories in principle, and there are particular concerns about male gender bias in his research instruments and the possibility of class and ethnic bias in his research sample. As might be expected, Fowler’s definition of faith also comes in for

90 Stages of Faith p.184.
91 Stages of Faith p.186f.
criticism, and deep inquiry has been made into the satisfactoriness of his account and treatment of stage 6. In any case, why should it matter what stage people live their lives at as long as they are content and avoid offence to others? Should we be trying to accelerate faith development, or simply expect it to happen as part of the aging process? How does one explain faith positions whose characteristics seem to belong to several stages? And Fowler’s discussion of the logic of conviction as opposed to the logic of rational certainty is not entirely convincing. On the whole, however, Fowler’s work has a powerful appeal, it does establish useful criteria for identifying aspects of faith, and it confirms that faith, as he defines it at least, is capable of development and calls for committed action. That development, however, seems to depend very heavily on cognitive skills, and one is led to wonder whether this reflects accurately the experience of encountering transcendent reality. One would also want to avoid the danger of turning this schema into a test of authentic existence. Nevertheless, anyone wanting to develop a curricular programme of faith development has to take into account this work. Sharon Parks, in offering a North American critique of Fowler, writes:

Even the more sophisticated and cynical recognize the need for a common faith - a new public paideia - by which a culture (which now must be reconceived in global terms) may renew the common life. It is in this context that faith development theory finds its resonance and makes its most significant contribution.

Faith development theory responds to this contemporary situation in three primary ways: (1) It offers a way of speaking of faith and holding traditional religious (and secular) symbols, stories, and practice that does not foreclose the conversation about ultimate values and commitments within a pluralistic world. (2) It manifests the conviction that even faith - the centering ground of human trust - can change, undergo transition and transformation, and retain its integrity. (3) It does so in a manner that potentially illuminates the relationship between the individual and his or her context, thus holding the tension (increasingly felt particularly in the individualistic milieu of western culture) between the claims of the individual and the individual’s necessary dependence on the wider community.

It is against the background of this compelling appraisal of Fowler that I would want the theoretical and practical approach to religious education which this thesis proposes for secular schools to be seen. And I believe it is also possible to show how this approach naturally emerges from the background of discussions of religious education in Scotland.

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A brief history of recent religious education developments in Scotland

i) The modern period begins

The present situation in Scotland regarding curricular design for religious education shows all the tensions of the struggle between religious studies and religious education to which I have frequently alluded. In 1971, the Schools Council Working Paper 36 had been published incorporating much of the theory advanced by Ninian Smart, followed a year later by the Millar Report with its insistence that religious education must be determined by educational considerations. The Church of Scotland’s Education Committee had submitted to the Millar Committee its view of the aims of religious education:

"a. To inform the pupils about religion, and particularly about Christianity;
b. To encourage thought about the meaning of existence;
c. To initiate pupils into thinking about religion; and
d. To give pupils a feeling for what religion is about." 94

This was a remarkably clear, simple and modern statement for the time, from a source which might have been expected to be more defensive of a confessional position. I think it showed evidence of the advanced state of theological education in Scottish Universities. It was, however, only an interesting statement with no official status.

ii) Scottish Central Committee on Religious Education

It was not until the Millar Committee’s recommendation to set up a Scottish Central Committee on Religious Education (SCCORE) had been met (1974) and this committee had reported (1978) that the aims recommended for religious education across Scotland became:

"6.2 The aims of RE within the curriculum are seen as:
(a) to identify with pupils the area of religion in human experience;
(b) to enable pupils to explore questions about the nature and meaning of existence and the answers religions offer;
(c) to help pupils understand the nature and importance of commitment whether within a religious or a secular context and to appreciate what it means to be committed to a particular way of life; and
(d) to encourage in pupils an awareness of the wider social and cultural impact of religions." 95

While some ambiguity remained about whether religion was a general concept, as in aim (a), the other aims plainly referred to particular religions. This was evidently a consequence of the debate which Smart had engendered. Some dissatisfaction was expressed with this statement of aims, however, and when SCCORE was reconstituted, in spite of its not having been part of its remit, the new committee restated the rationale and aims for religious education:

"Religious education in schools is concerned with understanding the experience of man in

94 Moral and Religious Education in Scottish Schools p.38.
95 A Curricular Approach to Religious Education Bulletin 1 of Consultative Committee on the Curriculum, Scottish Central Committee on Religious Education, Scottish Education Department HMSO 1978, p.5.
his search for meaning, value and purpose in life. The religions of the world are the classic expressions of this search and, for many people, provide the context of meaning, value and purpose within which experience is to be understood. Through his understanding of the search, the pupil is helped towards a deeper awareness of his identity enabling him to grow and develop freely in a world of divergent beliefs and values.96

The aims were seen to be:

"(a) to help pupils to identify the area of religion in terms of the phenomena of religion and the human experiences from which they arise

(b) to enable pupils to explore the nature and meaning of existence in relation to the questions religions pose and the answers they propose

(c) to encourage pupils to develop a consistent set of attitudes and practices which are the result of a personal process of growth, search and discovery."97

In Scotland, all national and most local authority developments in religious education since the publication of Bulletin 2 have started from this rationale and aims, including certificate courses in religious studies. It contained two distinctive features which marked it off from the emphases of religious studies. In the first place it stated explicitly that religions are rooted in human experience. This pointed to an immediate bridge between the human experience of the pupil and the human experience classically expressed in religions. The second important difference was that it stated that religious education should encourage principled action. This is very different from the idea that the study of religions is a sufficient study in itself. The Groundplan had explicitly excused itself98 from setting out any affective objectives beyond those required for intellectual inquiry and evaluation. This was on the mistaken grounds that the alternative was for the teacher of religion to be an evangelist. The division is not so clear cut. The 'objective' teacher of religion must still justify and commend study of religion because of the human value to students of so doing. This is itself a form of evangelisation, of religious studies as opposed to the gospels of particular religions. This was a failure of nerve on the part of the disciples of Smartianism; I am not aware that Smart himself ever eschewed the affective. Michael Kincaid writes of Bulletin 2:

"With its analysis of the study of religion and the pupil’s search, it did for both elements what Groundplan had done for one. At another level there now existed an even more urgent need to indicate how teachers could present religions phenomenologically, while at the same time assist students in their own search for meaning and value."99

iii) The dichotomy

Throughout the 1980s there was debate about the relative merits of religious studies and religious education. This was exhibited in Bulletin 2 itself where two sets of objectives

97 Curriculum Guidelines for Religious Education p.3.
98 Groundplan p.16.
99 Michael Kincaid How to Improve Learning in RE Hodder & Stoughton 1991, p.3
were drawn up which separated "Religions and other stances for living" (the dimensional study) from "The pupil’s search" (the existential study). This was a most unfortunate dichotomy because it failed to make the very connections which were expressed in the rationale and aims.100

In 1980 the Secretary of State set up a Joint Working Party (JWP) of the Scottish Examination Board and the Consultative Committee on the Curriculum to inquire into the ‘feasibility’ of having public examinations in Religious Education. This was in spite of a successful history of GCE exams and of Scottish Universities founded on the principle that Divinity was examinable. As feared, the dichotomy led the JWP to the conclusion that while it was of course impossible to have public examinations related to matters of personal relevance, religious studies was clearly possible:

“(a) Religious education will be chiefly concerned with the personal education of the pupil in relation to religion, and his understanding of the contribution this subject can make to his own search for meaning, value and purpose in his life.

(b) Religious studies will be chiefly concerned with the academic study of appropriately selected subject-matter with a view to assisting the pupil towards an understanding of the nature and human significance of that subject matter.”101

There are other issues arising from this account of a two-fold distinction in the curriculum quite apart from the false dichotomy. It suggests that personal education as defined is not open to academic inquiry, and it further suggests that the academic study of religions as defined has little personal relevance. One can infer from these two suggestions taken together that the committee believed that it was able to maintain the integrity of religions by academic study only if the dimension of personal relevance was kept at a great distance. None of these inferred propositions is true, as Grimmitt has argued.102 Even so, the subsequently formed Joint Working Party to design the first ‘O’ Grade in Religious Studies had to work within the constraints imposed by the report of the ‘feasibility’ Joint Working Party.

iv) Standard Grade: another beginning

It was not until the Joint Working Party to prepare the Standard Grade Religious Studies syllabus was formed that the tyranny of the dichotomy was largely broken. Standard Grade was being introduced in Scotland in the mid 1980s across the whole curriculum to replace the Ordinary Grade. It would offer a range of course options which would allow all those who were capable of benefiting from secondary education to leave school at age 18. As a member of the reconstituted SCCORE, I struggled hard to prevent this particular outcome. The majority of the committee was not convinced by my argumentation.

100 Report of the Joint Committee on Syllabus and Examinations in Religious Education Consultative Committee on the Curriculum and Scottish Certificate of Education Examination Board 1982, p.5. The underlining is in the report and is preceded by a statement in which emphasis is similarly underlined. The intention was to indicate that there was no absolute distinction between the two parts.

101 Religious Education and Human Development especially chapter 6.
Learning tasks were to be differentiated to take account of different abilities, and designed to encourage active learning. In Standard Grade Religious Studies the three assessable elements are Knowledge and Understanding, Evaluation and Investigating. The first two of these elements are applied to the study of two religions (Christianity and either Hinduism, Islam or Judaism) and to issues of belief and issues of morality. The two issues units refer to what might be called the broad area of religion and to personal experience and opinion. The investigating element is to be applied to any issue of belief or morality which the pupil chooses in consultation with her teacher. If there is a simple key to unlocking what Standard Grade Religious Studies is concerned with it is issues; what matters is not what somebody happens to do as part of a religious tradition but what it signifies. Life is to be shown as essentially concerned with the resolution of issues which confront people by virtue of their humanity or personhood, issues on which people are required to have an opinion on which to base future action. All this is, of course, couched in the technical languages of education and religion, but students are able to see how there is a correlation between what they find in their daily lives and what religions are fundamentally concerned with. The process of study has also enabled them to recognise that they themselves have views which they are required to support with evidence. They are additionally helped to appreciate that these are provisional views which may alter in the light of further evidence, argument or revelation.

In working out the implications of the syllabus for classroom teaching, a number of curricular models were proposed. One took the line of presenting each of the units discretely, so that students would examine the religions and issues units in turn. A second suggested the course be organised around the central issues and key concepts identified for each of the units, and a third that the course be organised around the development of skills for inquiry and evaluation. This third model deliberately integrated the discrete units to establish the relatedness of learning about religion and learning about people, notably the students themselves. In this way they not only learned from religions but also practised a procedure which had existential relevance.103

v) Scottish influences
I have given some attention to this particular practical outcome in Scotland because it illustrates so well an alternative approach to the one that was being pursued with such professional vigour in England and Wales. The question arises as to why there should be this difference. The historic period of the Scottish Enlightenment cannot be ignored, nor can a Scottish canniness, a utilitarian characteristic which asks the question, "What good does it do?". There are, however, several more immediate contributory Scottish factors. Until 1984, when the first candidates sat the 'O' Grade examination in Religious Studies, there had been in schools little or no view of religious education as an academic discipline. The Millar Report had come out against the introduction of certificate examinations.

except possibly a Certificate of Sixth Year Studies, by which time, the Millar Committee determined, students might be mature enough to deal with religious matters in a suitably disciplined way. It was thought important that young people should be allowed to explore matters of faith freely and without prejudice.

In 1969, J W D Smith had published a book which sought to respond to the growing interest in moral education as a viable alternative to religious education. He concluded his chapter on Religion and Personal Development with these words:

"Pupils in our schools are conscious of the pressures of moral choice and ultimate belief. Traditional adult interpretations may often seem irrelevant but the pressures remain and the need for guidance remains.

State schools must face this responsibility seriously and realistically. Moral and religious education is a peculiarly difficult and delicate task in modern society. ... By encouraging the growth of trust and interpreting the meaning of love religious education can play a vital part in fostering growth towards the fullest maturity of which individual boys and girls may be capable."

Smith's book was revised and republished in 1975 under the title of Religion and Secular Education. In his final chapter "Towards a New Secondary Curriculum", he quoted three questions from a Schools Council pamphlet:

"How is the study of life to lead to the study of God? How is mere fact to lead to theological insight? How is the immediate to lead to the transcendent?"

Smith dismissed the first two questions as no longer relevant but went on to the third in this way:

"The word 'transcendent' is used in several senses but its etymology may remind us that there are two points in human experience at which we are compelled to acknowledge our limitations. Man's intellect is finite and his will is frail. We are aware of mystery which our intellects cannot ever penetrate. We are conscious of moral values which our wills acknowledge but cannot attain. Man meets 'transcendence' - that which surpasses his powers - at these two points. Do these human experiences of 'transcendence' provide an acceptable ground for including study of religious questions and religious answers in the state-maintained schools of a secular world?"

Smith's answer is clear and his prescription unambiguous:

"The demand for a life-centred approach to moral and religious education arises from classroom experience and from classroom failure. "Our main concern for all our pupils is that they should gain deepening insight into the Christian meaning of love."
While the mystery of transcendence, the religious dimension, is encountered on the frontiers of the unknown, the moral dimension is addressed in bringing the pupil to an encounter with Jesus Christ. Here was the logic of Christian education.

Smith, I believe, was largely discounted because of the confessional premise upon which he based his account of appropriate religious education; the power of alleged objectivity in the curriculum was supreme. Smith did, however, stress the centrality of the learner’s needs. Although not a Scottish influence, it seems appropriate here to note that John Wilson had likewise stressed the needs of pupils when he advocated that religious education could become a respectable subject by educating children:

“in religion - that is, of helping them to become more reasonable in respect of those emotions and attitudes that are central to religion, so that they may more reasonably make or not make their own religious commitments and assess those of other people.”

Wilson was probably discounted for two reasons, the first being that he had not taken sufficient account of the place of reason in faith and secondly because the emotions are rather slippery, unlike the solid artifacts and declared doctrines and practices of religious traditions. In acknowledging the importance of the contribution religious studies makes to personal and social development Grimmett is in some measure revaluing the work of both Smith and Wilson.

The problem of what to do about personal faith was not being resolved. In addressing this issue, Alex Rodger showed convincingly that religious education in schools could no longer be seen as a source of indoctrination, and that any such accusation pointed more to the emerging school programmes of social education. He claimed confidently that:

“the fundamental task of religious education is to make a contribution to the spiritual development of the pupil.” He added, “At root, education is a spiritual activity, just as faith is basically a spiritual orientation and society is primarily a cohesive network of spiritual relationships. This should not be surprising, since man is a spiritual animal.”

It was because Rodger saw the prime objective of religious education to be the education and development of spiritual understanding that he rejected the dimensional approach to religious education. He saw this approach as useful for classifying religious phenomena for teaching purposes but not for “revealing the religiously significant structure of what is being studied.” For this purpose he preferred Patrick Burke’s analysis which focused on concerns rather than phenomena.

“The crucial difference, for our purposes is that whereas Smart and Ausubel offer a means

113 ibid p.101.
of classifying religious phenomena which is, though useful, finally arbitrary; Burke offers a way of conceptualising religion which reflects the structure of the subject rather than of the study of the subject. The Smart/Ausubel pattern is imposed on the field of study: the Burke pattern emerges from it in such a way as to reveal its inner coherence and structuredness.\textsuperscript{115}

While it could be argued that this kind of thinking had had a direct effect on the way that Standard Grade Religious Studies developed, I am not aware that Rodger’s analysis had had the impact it deserved. This probably has to do with the weight he gave to the language of Burke’s analysis. Burke defined religion as “behaviour focused on salvation”.\textsuperscript{116} Salvation, as Burke himself pointed out, is a word which has strong Christian overtones, one might even say evangelical tones. Further, Burke’s explanation of salvation was not particularly user friendly: “In the idea of salvation there is nothing that requires the concept of a personal God, and so nothing that requires the notion of the sacred. As long as a deliverance of cosmic import from significant ill is envisioned, the requirements for salvation are met.”\textsuperscript{117}

This kind of idea should have commended itself to a community of professional religious educators who were adamant that non-religious stances for living should be included in religious studies. Burke also asserted, however, that “religions do not rest on historical events”,\textsuperscript{118} a view which was not likely to have much appeal in a country which had long asserted the uniqueness of the Christian revelation in history. (Nor should the influence of the Scottish Universities be ignored, perhaps particularly Glasgow in the 1950s and 1960s where Ronald Gregor Smith, Ian Henderson and John Macquarrie explored an existentialist, religionless Christianity approach to theology, accompanied by the popularising earthiness of William Barclay.) The first of Burke’s five elements of his analysis of religion, the unsatisfactoriness of ordinary existence, did not appear to fit the evidence, neither theological nor observable. Incarnational theology suggested quite the opposite, and everywhere ordinary existence was viewed as satisfactory insofar as its material needs were being met; in the minds of tenants who were now buying their council houses there was no suggestion that their ordinary existence was cosmetically unsatisfactory. At the time of his writing, Rodger did not have the benefit of James Fowler’s work, otherwise he might have chosen to express himself differently.

Another way of expressing the problem of dealing with faith in the school curriculum is to tackle the fundamental philosophical question “What does it mean to be a person?” A phenomenological response cannot deal adequately with this question. In practice, religious studies would have to consider how particular religions answer that question for their adherents. However, the general question of personhood is unlikely to emerge before the more urgent question, “What does it mean for me to be a person?” I suggest that only

\textsuperscript{115} Education and Faith in an Open Society p.102. Punctuation as in original.

\textsuperscript{116} The Fragile Universe p.17.

\textsuperscript{117} ibid p.35.

\textsuperscript{118} ibid p.96.
the philosophically inclined student of religions, a rare species, is particularly concerned with a discussion of the general philosophical question. For the individual who has been brought to the point of self-awareness where the existential question is asked, engaging in a phenomenological discourse is a clear instance of religions becoming an obstacle to the truth that religions proclaim. Elizabeth Templeton drew attention to this issue in a lecture to Scottish RE developers in 1980 when she defined the person as “someone irreplaceable to another in community and freedom”. Someone who belongs to a religious tradition that has to be studied before you can say anything meaningful about her does not come into the irreplaceable category. Templeton elaborated her definition by adding:

“You can only be a person to me if your absence undoes me. If I can be myself adequately without reference to you, the relation between us is not personal, but something else, something more instrumental, more functional.”

As well as raising fundamental questions about what and how we may learn from religious traditions so as to be more fully human, it raises questions about the relationship between teachers and pupils, and the process of learning. Templeton set out three implications:

“If a pupil is a person for us, the relationship is one of genuine mutuality. And it is one in which we are willing for him to be undefined in terms of an open future, rather than defined in terms of the past. The third implication has to do with the initial contrast I drew between ‘person’ and ‘individual’, for I think that much of our educational practice, as well as our wider social living, fosters an individualism which is destructive of personhood . . .”

In an article I wrote in 1982 which said that the distinction between religious studies and religious education was both apparent and real I set out my own view of religious education:

The intention of Religious Education as I see it is less for young people to learn about religion than to learn from it, which means preserving the integrity of the learner, according to age, aptitude and ability, and that is radically different from the study of religions primarily for their own sake. It means selecting those features of religions which allow the learner to develop intellectually, emotionally and spiritually, i.e. to grow in understanding of the processes of religion and to discover the potential to be religious through emotional and spiritual engagement. Religious Education is essentially about dialogue, about teacher and learner interacting over issues that are deeply human, the issues of meaning, value and purpose in life. To approach these issues through academic instruction about religion seems to me to be like getting at wine through the bottom of the bottle.”

In nailing my colours to the religious education mast I was hoping to persuade my readers that it was possible actually to sail against the wind. While I might be a little less robust

119 Elizabeth Templeton “Pupils as Person” in The Religious Education Curriculum Jordanhill College of Education Publications No. 8, 1980, p.31. These are the collected papers of a National Course held from 24 - 28 March 1980 in Jordanhill College of Education, Glasgow.
120 “Pupils as Person” p.34.
in expressing my view now, it remains largely unchanged and reflects the concern expressed by Rodger that religious education should attend to the faith needs of pupils in a general way. My concern is with human development, with deepening understanding of one's own possibilities and heightening commitment to principled action which includes the other as thou. Until that goal is achieved all else is luxury. As argued above, and as will be exemplified in the experimental part of this study, the dimensional approach may be more of an indulgence of teachers than it is a benefit for pupils.

Given the kind of thinking shown to have been taking place in Scotland in the early 1980s, one might wonder why more developed statements of the existential value and purpose of religious education have not emerged so far. Several factors could be said to have contributed to this. First, Colleges of Education were losing staff in large numbers: in the early 1970s for instance, Moray House had five full time lecturers in religious education, but by the mid 1980s, even after Moray House had amalgamated with Callendar Park College of Education, that number was reduced to one. Second, local authority advisers, who had been responsible for much of the development, either directly or through national working groups, had given their best shots and were now being caught up in the creeping bureaucratic ideology of the 1980s and 90s or were, however gracefully, beginning to look for wider responsibilities. Third, the Scottish Office Education Department began to exercise a degree of control over religious education developments with its first appointments of HM Inspectors. Fourth, many developers were deeply involved in the production and supervision of the certificate syllabuses, courses and examinations that were appearing in Scotland for the first time.

Finally, the backdrop to all this change was the war of attrition being waged between those proponents of personal and social education who saw this curricular concern as quite distinct from religious education, and those who saw religious education as a natural and necessary focus for this kind of activity. This struggle went on at national as well as local level, in attempts to subsume religious education under social education. This can be illustrated by a brief consideration of the Scottish Committee on Home-School-Community Relations in the Primary School which operated from 1981 - 1985. This committee was set up to examine the interrelated contributions of the home, school and community to the education of primary school children, particularly in relation to its social, moral and religious aspects. An occasional paper it published in 1984 said this of the three aspects:

"The immediate aim of social education is to develop within the child an awareness of his position as a member of many groups which form and reform at different times for different reasons. . . . The long term aims of social education are to establish understanding of the way in which society works and to prepare children to participate fully, effectively and with confidence as responsible adults."

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122 See Education and Faith in an Open Society for a statement of this struggle, especially p.49.

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"Moral Education is concerned with the development of moral insights that are not dependent on the rigid application of a set of rules but are characterised by actions which show a respect for others and a sensitivity to their feelings, interests and needs. It is the process by which the child acquires through experience the knowledge which allows him to develop attitudes and skills for life in the pluralistic society where there are few moral signposts and no moral absolutes."

"To the school falls the task of developing religious literacy - the understanding of the religious beliefs of others - which enables the child to appreciate the effect of a faith on the lives of its followers. This study of religion therefore must clearly transcend the merely informative. Religious education . . . should be a study of a way of life. It is not just a body of facts, but is more an examination of the life led by those who believe in any given religion. It is an understanding of the life style of believers based on an historical appreciation of how their religion developed."

It is clear from these quotations that a rationale was being offered for separating personal and social development from religious education. In the committee's later publications there are claims of interrelatedness, but there is no recognition in these statements that religious education necessarily shares responsibility for the personal and social development of pupils. Moral and social education are described as members of the same team, but the metaphor does not extend to religious education, and the entire document gives the impression that social education overarches and underpins everything. Religious education is seen as a sub-set of moral education which in its turn is a sub-set of social education. This relationship could be said to be reflected in the title being given to this set of curricular interests: Social, Moral and Religious Education. This is the same struggle to which Grimmitt refers. The Scottish Committee etc. produced two rather more substantial documents which modified some of the less well-considered statements of the Occasional Paper but the relationship is still clearly stated:

"Moral and religious education are important aspects of social education since they provide a deeper understanding of the codes of behaviour and the religious beliefs which give meaning and purpose to the lives of individuals and groups within society."

The National Guidelines for Religious and Moral Education (5 - 14), take this curricular area far beyond the scope of the Home, School and Community Committee's thinking. The aims of the National Guidelines as stated above (p.6f) contain much that would satisfy a desire to deal faithfully with religious traditions, but much more emphasis is placed on the learner's personal and social development. Religion is declared to be "the expression of human experience", and religions are deemed to be important for the questions they raise about the meaning and purpose of life, and the answers they offer. Supremely significant, however, is the intention that Religious and Moral Education should assist

125 Meeting Points and Starting Points Committee on Primary Education, SCDS 1985.
126 Meeting Points p.6.
young people in the development of:

"their own beliefs, moral values and practices, through a process of personal search, discovery and critical evaluation." 127

It is a great pity that these aims should have been so ineffectively translated into the curricular strands outlined in the National Guidelines; strands define the key features of any curricular area. All the strands relating to religions are drawn from the dimensional approach, and the progression that is so sought after in education would appear to consist of the accumulation of information, knowing, for instance, about three festivals instead of two, or one. Alongside the strands dealing with religions, however, are strands under the heading of Personal Search. These refer to the natural world; relationships and moral values; and ultimate questions. While these Personal Search strands need considerable development, they do provide some opportunity for progressing towards the kind of religious learning being advocated in this thesis. All the strands for Religious and Moral Education, however, can be seen to fit the dimensional analysis of religion, and they are all phenomena. Almost all the strands in the other curricular areas defined by National Guidelines are key skills. In short, the strands do not, in the case of Religious and Moral Education, appear to follow from the statement of aims. And this appears to be the consequence of the domination of the phenomenological approach to religion in the school curriculum.

The place of religion in the school curriculum: religious education

In underwriting the claim for an alternative to a phenomenological religious studies in schools, more has to be said about the nature of religious experience, yet another slippery term. To varying degrees we are limited in our powers of perception, but perception is the heart of reflective experience. If someone’s perception of herself (her self-understanding) is that she can do nothing to transform herself or the world in which she lives, then her experience of life is markedly different from that of another who believes that we can change our ways of being and also assist in creating a different kind of future. The perceptions are different and the responses to them will almost certainly be different. We may judge a response to be authentic if it faithfully expresses the person’s perception. Perception and authenticity are both integral to religious experience.

i) Becoming more perceptive

The validity of perception is a further problem for religious understanding. One can say, however, that the more comprehensive, consistent, coherent and open one’s approach to understanding, the more valid or truthful is one’s perception likely to be. The philosophical accounts religious traditions would give of themselves would assert concern for both validity and authenticity. Accordingly, religious education needs to identify, as a core activity, confirmation of the validity of the learner’s perception and the desirability of her being authentic. Both are hard tasks for learner and teacher, but the

127 National Guidelines p.2.
need for authenticity may be a natural perception of adolescence, when independence, or
doing one's own thing, becomes an especially potent concept. It would certainly be a vital
feature of religious education to stress the importance of being true to oneself.

**ii) Becoming responsible**

This style of radically personal religious education presents difficulties in a number of
areas, including the structuring of a curriculum. By treating the person with full
seriousness, the way is opened to her being autonomous, to her acting in a responsible, free
way. Schools, however, are not remarkable for the wide range of opportunities they give
pupils for responsible behaviour. Quite apart from the authoritarianism which
characterises much of Scottish education, one could argue that the trend in State education
is towards making adolescents more dependent on schools, for these are the institutions
which hold the tickets that will gain entry to profitable or worthwhile occupations.
Furthermore, in carefully preparing programmes of social education intended to adapt
young people to socially passive forms of conduct, schools are stifling the vitality that is
necessary for solving the problems which form the barrier to the reformation and creation
of a new society. That vitality is displaced into self-oriented activities related to
personal health, intimate relationships and career choices. Contrary to the much
discussed claim of a former Prime Minister that there is no such thing as society, only
individuals and families, there is indeed a very powerful social ideology at work in
Britain, and probably throughout the Western world, to which individuals are expected
to conform. The trumpeted claim exemplifies well the concept of hiding in the light. It
suits this particular ideology to have people believe they are on their own, relationally
powerless, in a free market economy, in open competition with others, even, and perhaps
especially, for a basic standard of living. Viewed most charitably, social responsibility is
seen here predominantly as looking after self in order not to be a burden on others.
Openness, freedom and responsibility are all relative terms, and what religious education
can offer the learner is the opportunity to consider the human condition in relation to
ultimate concerns and not just immediate needs.

If there is a conflict of interest between the learner as person and the learner as individual
member of a social institution, there is a *prima facie* moral case for education seeking to
secure the best interests of the person and not the institution; it is certainly part of the
rhetoric of educationists today. This makes the teacher the servant of the learner,

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128 Margaret Thatcher interviewed for *Woman’s Own* magazine, 31 October 1987.
"When the phrase became famous, official efforts were made to defuse its significance and
insist that it didn’t mean what it seemed to mean. But it did: and it expressed, among
other things, a graphic contrast with anything the Royal Family, with their interest in
housing and the environment and inner cities and business ethics and a host of other
essentially communal concerns, would ever have said." Hugo Young *One of Us* Macmillan
1991, p.490. Thatcher's address to the General Assembly on 21 May 1988 echoed this
emphasis on individual responsibility. “The Sermon on The Mound”, *The Scotsman*
newspaper 23 May 1988, p.38.
assessing not only what is interesting about her discipline, but evaluating it in the light of what the learner needs in order to become independent of the teacher and prepared to fashion her own future. Too often, academic inquiry is seen as its own justification, or it is prostituted in the service of some unrelated activity. On the one hand there is the inbreeding of teachers teaching students to become teachers ad infinitum, and on the other hand certification may be pursued as the price for entry to an unrelated career; schools are sometimes tempted to become preindustrial training grounds rather than campuses for freedom and enlightenment. By contrast, the kind of religious education advocated here invests rather more value in the individual’s independence and creative power, both of which are so necessary to the process of education. As already indicated, the notions of value, independence and creative power are also integral to religion understood as process rather than product, and consequently religious education could be considered to some extent a tautology.

iii) Avoiding alienation

It might be useful at this point to illustrate briefly how this kind of religious education would proceed. For instance, it could be helping the learner to see what it might mean to be forgiving. The learner may understand formally what forgiveness is, namely that it is letting someone off for doing something you did not want to happen; forgiveness as a principle, however, rather than an arbitrary act, may not enter into the learner’s consciousness; why should it? The learner may accept the validity of forgiveness as a social act whereby socially she is expected to be forgiving in some circumstances but not in others according to a particular code; breaking the code induces feelings of guilt and prompts a defensive self-justification. A further possibility for the learner is to accept forgiveness as a moral principle for interpersonal relationships which should be applied at all times. However, it may be contextually or situationally difficult to apply this principle if it conflicts with another principle, for example commitment to a third person, to which you give higher value. Finally, the learner would seem to have the spiritual possibility of writing forgiveness into the very structure of her being. There is plenty of scope within this specific issue of forgiveness for the learner to have a sense of wrongdoing.

The teacher’s task in this situation is to bring the learner to recognise the problem and to assist her in expanding her perceptions of self, others, conflict and forgiveness. The resolution may be that the learner finds it in herself to be more forgiving and/or discovers that forgiveness for all its value is not an absolute imperative. In recognising her limits or in expanding her limits, the learner has brought herself more comprehensively into focus and loses the sense of guilt which had been inhibiting her further growth. She has in fact learned to forgive herself, not forget herself. The learner committed to this religious process, and given support in this process will continue to grow, enlarging, validating and authenticating her existence as she does so. What she finally incorporates into her being
is her free choice, but it cannot be any part of religious education to stop short of showing the full range of possibility for self-authenticating choice, even if that should mean inducing feelings of disappointment, regret or guilt along the way. These feelings are, after all, the corollary of the positive desire to do better.

iv) Learning to problematise
When religious education is committed to nurturing both the growth of awareness and the development of increasingly valid and authentic experience, it engages the learner in problematising as well as problem-solving. Thus religion is not seen as an externally conceived product which is to be imparted to the learner. The insightfulness which characterises religion is something which appears and grows in the individual. What schools can do is to try to create the right conditions for the germination and culture of this insightfulness. Externally derived problems may be perfectly genuine problems, and more intellectually inclined students may even have mastered the techniques for solving them, but they are not the learners’ existential problems except insofar as the teacher has manufactured a problem for them. Because they are imported problems which have not emerged from the learner’s perception of her own experience they are not personally authentic. They tend also to be invalid because the teacher is depriving the learner of the opportunity to problematise from her own experience. It is the difference between the religious studies teacher promoting “understanding of religion” and the religious education teacher promoting “religious understanding”. The religious education teacher helps the learner to perceive, validate and authenticate herself, to take part in open processes in which the question posed by human existence is explored, not supposedly answered by someone else.

v) Possibility and the future
In shifting the focus from the integrity of religions to the integrity of the person I do not intend to imply that the chimera of integrity in the former is replaced by solid fact in the latter. Truly, the person is just as many-headed, complex, diverse, dynamic and internally inconsistent as the religious tradition. The fundamental distinction being made is that the person has the possibility, indeed the responsibility, to take control over and effect change in her own being in order to achieve integrity of meaning, purpose and action. Much of what I have already said implies that this is an unremitting struggle against chaos as it manifests itself in incoherence and inconsistency; passivity and reclusion do not stop the samsaric flow of experience. While my account of religion and religious education is manifestly not definitive, it delineates an approach which recognises the human and educational contexts in which religious education has to take place and sees religion as a dynamic process in which human beings find themselves engaged. For children and adolescents the most significant feature of religion is this process in which they as religion-making animals may participate, and what matters most to them is the religion

129 See Teaching Religion in Schools p.20.
that they are making. This does not seem to me to be defining religion so broadly as to evacuate it of meaning, but rather defining it in terms of that pole identified by Cantwell Smith as personal faith, by which it has immediate and fundamental relevance to the learner. The irritation and outright condemnation occasionally directed against religious education by the young are the result of youth’s awareness that their creative, existential process is being cluttered up with the products of other people’s processes, and academic self-indulgence will not answer such criticism. It is not by educators insisting upon their own insights but by listening to the young and by sensitively cooperating with them in their unique situations that they can avoid inhibiting and deforming the growth of those in their care. It is, after all, towards the learners’ futures that religious education must be oriented, not towards the educators’ future for them. The experimental part of this study is an attempt to listen to these young voices and to offer them an interactive medium to facilitate dialogue.

Religious Learning

i) The purpose of religious learning

All learning is experiential. This seems an obvious statement to make, but it has implications for how we talk about religious learning. One implication of Bonhoeffer’s views is that we need to reflect on whether religious learning is desirable. We may put aside for the moment consideration of what constitutes a religious experience, and indeed of precisely what constitutes being religious, for the prior consideration of whether religious learning would be to grow in religion or to grow beyond it, or without it. We have had the suggestion from several sources that it is vitally important to do without religion in order to be religious. In other words, is religious learning about learning to be religious or not religious? As we have seen, the literature on religious education provides little support for the notion that religious learning is simply the intention to become knowledgeable about religion, religiously literate. In other words, the learner is expected to be changed intrinsically by the process rather than incidentally. Whatever else we can say about religious learning, we can say that it is concerned with formation, not just information. In its intention to change the learner it is in that regard no different from any other educational intention.

The question remains about the outcome of that religious formation. Oser\textsuperscript{130} has proposed that religious development is to be understood as development in understanding the relationship between the human being and Ultimate Being, or God. Five Stages are identified in this developmental process in which that relationship is differently construed, leading to the possibility of qualitatively different religious judgments. The progression of relational understanding is from God as Deus ex machina at Stage 1 through to Stage 5 where:

\textit{The divine is completely transcended by the human, and it is not conceived as divine security (holy plan) any more. Every person becomes a unique contributor to and} 

participant in divinity, and it is understood that the divine is universal through human universal connectedness. ("God became human" is the absolute and universal cipher of a lived Stage 5 relationship). 131

Oser's theory appears to account for many different, if not indeed all, religious positions. If the most advanced stage is, however, effectively religionless religion, and the transcendent is to be found in the immanent, what does this mean for the future of religious traditions? The most optimistic assessment would suggest that any religious tradition is a cocoon which the fully developed human person will emerge from, and promptly discard; I am not at all sure that religious traditions have the maturity to admit such limited utility. There is also the problem, shared with Fowler's theory and any other time-based theory of development, of knowing whether the person can be whole and complete before she is old. And what does it mean for religious education? Why should we talk at all to children about God if they are bound by their stage of cognition or maturity to produce constructs which are temporary, provisional, contingent? How is teaching a mythical God superior to teaching children to be aware of themselves, others and the world; to recognise interrelatedness; to be respectful of all; to acknowledge the mystery of createdness? It does not seem entirely sensible or particularly honest to posit an external deity (or to recognise that God will be understood as such) when all along we really mean that God is not an external entity, that indeed our very humanity transcends the myth. If theories of stage development are valid, the so-called unsatisfactoriness of humanity from which people may need to be saved is the time taken to progress through the stages. But can we be sure that this period of pupation is not the consequence of, or at least prolonged by, the intervention of religious traditions, in other words, that we have to go through a long process of unlearning? 132 How would these stages of religious development relate to Buddhist contexts? How far are the very responses of the subjects in the studies using Oser's dilemma stories limited by being implicit in their construction? What is their relationship to the overt religiousness of people? Oser himself quotes an example of a study (Achermann, 1981) in which the thinking of 50 declared atheists produced data consistent with a description of types that display some remarkable similarities to the religious development stages. 133 Oser does not take this as indicating that the religious judgment stages account for nonreligious thinking, but it has a certain resonance with Goldman's argument that religious thinking is not a different kind of thinking, only


132 Goldman wrote: "In very general terms the theology of much of Genesis does approximate to many Infant concepts, and Mosaic religion does correspond to certain aspects of Junior thinking. It is, however, quite another matter to suggest that these, and later, Bible episodes should be told to children because they meet their needs at certain stages of their development. If this were done then not only would the children's development be incredibly slow, but may, as we have seen, be arrested at an extremely childish level." Religious Thinking from Childhood to Adolescence p.228.

133 Stages of Faith and Religious Development p.45.
thinking applied to religious matters.\textsuperscript{134}

When I was teaching, more than twenty years ago, a 12-year-old boy, Richard, stated at the beginning of a lesson, “Please, sir, I thought this was supposed to be religious education.” That was certainly what was on the timetable, and I had been teaching this class for about twelve weeks. On asking what he meant, he explained, “You never talk about God or anything.” I was very pleased with this observation, and asked the class for confirmation that Richard was right. The earnestness of their support was similarly pleasing. I introduced a little uncertainty by asking the class if they thought I had done this deliberately or if I had just been careless. When no answer was forthcoming I asked Richard to say what he meant by God. He was embarrassed, so I asked the whole class to tell me what came into their minds when they came across the word God: when they read it, heard it or used it. From this class of 27 pupils I quickly got 17 different statements which I put on the chalkboard. There were anthropomorphic descriptions; metaphors from the Bible such as rock, tree, “it's not a tree, it's a bush”, cloud; ghost, “it's not a ghost, it's a spirit”; “God doesn't exist”; sponge. On asking which of the 17 items pupils thought best, only the original girl claimed God did not exist, but four put their hands up for sponge. The reason for this, it turned out, was their conceptualisation of the holiness of God. These children’s linguistic and conceptual development had meant that they had made the new word fit their existing experience. This anecdote is related because it illustrates so well how children learn, and incidentally anticipates the brief discussion of Donaldson in chapter 4. It reinforces the point made above about Oser’s theory of religious development, and which is repeated throughout this thesis; does it produce a more mature understanding of events to incorporate in your world view so contingent a concept of God? If God is to be best understood in terms of the human, would it not be better to advance understanding of what it means to be a person rather than enumerate and discuss the attributes of God? What more is there to defining what it means to be human than the nature of being, the contexts within which that being is found, and the actions which result from the interaction of being and context? I hope to show in chapter 3 how the three dimensions of being, context and action provide a matrix for identifying and developing personal world views.

\textit{ii) Forms of religious learning}

How anyone progresses in religious learning depends on personal experience. There are different kinds of experiences which can prompt and promote religious learning. There is the experience of growing up in an active religious tradition (immersion). People can have flashes of insight or peak experiences, which they call religious, and which may make them consider, perhaps for the first time, that there may be something numinous or transcendent which has significance for their lives (disclosure). There is the experience of studying one’s own and other people’s religious traditions thus increasing knowledge about

\textsuperscript{134} Religious Thinking from Childhood to Adolescence pp. 3 - 5. As Goldman points out, this is not an original observation.
religion, and conceivably adopting some of these insights in the conduct of one's own life (study). There is the experience of being drawn intellectually, emotionally or spiritually into a religious tradition (need). And there is the possibility of being drawn to a religion because of its ethical teaching and practice (righteousness).

These prompting experiences are not mutually exclusive. On the contrary, it is hard to see how a thoughtful person experiencing disclosure would not want to undertake some kind of study, however slight. For the non-religious-adherent disclosure could prompt need, and so on. Similarly, being immersed in a religious tradition from birth is no barrier to any of the other experiences, and many would argue that a person so immersed has the best opportunity to engage in the full range of religious learning opportunities. As already indicated, however, the converse is also true, that immersion can be of such a kind that it prevents free development. In between these extremes of opportunity and tyranny there are all the struggles and tensions that come with reflection and self-criticism.

iii) Religious learning in secular schools

When it comes to religious education in the secular context of the non-denominational school, two of these religious learning opportunities are immediately eliminated, immersion and need. Immersion would mean that the school was bound by a religious tradition, a condition we have defined as inadmissible for this study. Creating need would be a form of proselytising or entrapment, which has likewise been excluded as unacceptable on ethical as well as educational grounds. The most obvious opportunity for religious learning in a school is study, but I have suggested that there are some difficulties with study if it means focusing on the phenomena of religions and not on the potentiality of the person. To avoid the religious sterility of collecting religiously inert data, study has to focus on disclosure and righteousness as possibilities for the learner. In this way religious education maintains its distinctiveness, avoiding the criticism that it is another social subject, and it comes close to satisfying the criteria for education in religion which John Wilson identified: openness and ability to feel, and the ability to identify, refine and criticize these feelings. Religious education becomes the study of my potentiality as a person, illuminated, where advantageous, by the light of other people's experiences.

To be specifically religious, according to Ian Ramsey, education would also have to include the intention to bring about discernment to which commitment is the inevitable response. (This is the revelation and response of phenomenologists such as Van der Leeuw and Eliade.) While discernment as a term might not immediately raise difficulties for

135 Kierkegaard's account of his experience of Christianity is eloquent testimony to this, and to the ability to be free in spite of religion. Bonhoeffer's experience, as indicated above (p.35f), provides the contrary case.


137 Ian T Ramsey Religious Language, SCM Press Ltd. 1957, especially chapter 1.
any concept of education, commitment would. Perversely, however, it is easier to justify commitment in the practice of education than it is discernment. The purpose of education is about producing various commitments: to further inquiry, to applying acquired knowledge, developing skills and so on. The difficulty appears when commitment is tied to religious education. At the simplest level this is discriminatory; it goes quite unremarked that we encourage people to be scientists and engineers, scholars and artists, regardless of the consequences of this policy, or on the unqualified supposition that these categories of people are a necessary and public good. At the same time there is a suspicion and an assumption that religion is a private matter, of doubtful value, and not an equal claimant on the public purse.\footnote{This view was expressed, as we have seen, in the 1872 Education (Scotland) Act and its accompanying regulations. It was not the view of the Reformers in Scotland, nor, it could be argued, of current legislative thinking. It seems critically important, therefore, that religious education should not at this point in history become domesticated.} Tied in with the suspicion is a fear that when the religious educationist breathes commitment what is meant is something imposed by an external agency. Ramsey’s logic is, of course, quite the reverse; commitment is something given freely according to the range and depth of one’s discernment. What Ramsey means by discernment in relation to religious experience is that it discloses something of the reality and significance of God, Ultimate Reality. This disclosure becomes discernment when it adjusts your personal world view and evokes commitment. This would seem to be a practice consistent with what phenomenology and the history of religions tells us about religious experience.\footnote{Joachim Wach states: “The first criterion of religious experience is a response to what is experienced as Ultimate Reality.” p.30 \textit{The Comparative Study of Religions Columbia University Press} 1958. Hendrik Kraemer writes “...man’s nature is indelibly stamped with a \textit{sensus divinitatis}; a \textit{sensus religionis} is implanted in it, as ancient writers had it. To put it in a more modern fashion, human nature knows as one of its constituent factors the need for a transcendental order as the basis for meaningful life.” p.350 \textit{World Cultures and World Religions Lutterworth Press} 1960.} It also meets important theological criteria. Nonetheless, it begs the question about whether Ultimate Reality exists.

\textbf{iv) Finding Ultimate Reality in the curriculum}

Whether Ultimate Reality, or God, exists seems still to be a major issue for religious education. It has to be stated, however, that the issue is not resolved by a weak dimensional approach to the phenomena of religion. If encounter with Ultimate Reality is central to religions, as theologians, phenomenologists and historians of religion would have us believe, this encounter must also be central to religious education. It is manifestly not good enough to imagine that the approach to encounter with Ultimate Reality, whether from the side of Ultimate Reality or of humanity, can be investigated by examining human responses to that encounter; as Hume pointed out, like effects do not prove like causes. Nonetheless, people do testify to such an encounter, and that has to be taken seriously as evidence for some objective reality, even if it is not separable from the subjective encounter.
It is the issue of discernment, however, that causes most concern because it is an interference in the individual's world view in a deeply personal way which challenges contemporary, conventional wisdom. It is this which gives rise to claims of indoctrination, yet not to face up to the need for discernment leading to commitment is to look away from the principal feature of the religious life. Being grasped by the demand of Ultimate Reality cannot be replaced by explaining that other people now follow certain routines in response to the demand made in the encounter. This is the big phenomenon of religion which cannot be replaced by descriptions of lesser phenomena whose significance is entirely dependent on it; Hume again. Religious educators have to decide whether the possibility of encounter leading to discernment and commitment is given in the human condition, whether it is formative, and whether it is necessary for the fulfilment of the human potential. The decision, it would seem to me, must be emphatically in favour of these propositions because every study of religion is otherwise negated, and the justification for religious education as anything other than a social study removed.

v) Religious learning as world view formation
Acceptance of the above propositions leads to recognising that religious education is primarily concerned with formation of the individual's world view. Such formation in the secular school clearly differs from confessional formation because it does not seek to limit that formation to any particular religious or secular world view; it is entirely open. I would argue that world view formation starts from a phenomenologically stronger position than the dimensional approach and it avoids the danger of leading young people into religious cul-de-sacs or even into what the existentialists call inauthentic religion.140 This approach refuses to accept that any pupil's world view need remain unrecognised or inchoate, or become opaque with overlays of other people's symbolic representations of their encounters with reality. Chapters 4, 5 and 6 illustrate how pupils' world views may be disclosed to themselves through attending to indicative behaviours, and chapter 7 describes how the paradigm to which these indicative behaviours conform can also be the basis of an interactive computer learning programme which starts from pupils' perceptions. The dilemma of world view formation, namely that it can be construed as indoctrination, can be tackled indirectly by pointing to how education as a whole contributes to world view formation, and directly by showing how each individual necessarily has a world view by virtue of being a person; the school can develop, but it is the learner who forms. The educational task is to ensure that each person's world view is developed to be as comprehensive, coherent and consistent as possible. Comprehensiveness is immediately compromised if it does not include the possibility of encounter with Ultimate Reality. That is why religious education is a necessary element in any comprehensive education programme. Nonetheless, whatever is offered and received in religious education, as in other education programmes, is finally a matter of trust.

140 See, for instance, John Macquarrie An Existentialist Theology, SCM Press Ltd. 1960.
Religious education should arrange for young people to encounter aspects of the world which it is considered will allow them to see new possibilities for themselves. The fact that possibilities have been realised by others is interesting knowledge, but discernment comes when I recognise that something is possible for me. This perception is important because it becomes an active part of my world view. As my world view extends and develops, there emerges from my growing understanding a pattern of meaning which includes values and purposes. Because of my constant interaction with others and with the world, I am required to make many decisions. If these decisions conform to my pattern of meaning I can be said to be living authentically or authenticating myself. If I decide not to act in accordance with my world view I am denying myself; I am failing to realise my full human potential by failing to accept responsibility for myself. If I decide to give up extending and developing my world view I am giving up my claim to being as responsible for myself as I could be and thereby limiting my human potential, which would be Bonhoeffer’s contention. In this last case, if I allow my religious tradition to determine for me what I should do then I am not taking responsibility, except insofar as I may have been responsible for submitting myself to the authority of another. This may have been a voluntary act, as with the convert, or involuntary, as in the conditioning of growing up in the tradition. Although I am citing religious tradition here, the case would also be true of any set of cocooning cultural circumstances based on, say, money or self aggrandisement or national pride.

I would argue that decisions about my world view are the most important decisions I can make, because they determine the authenticity of all my other decisions. In other words, my world view is fundamentally important because it not only interprets what I see but conditions how I act, and then how I evaluate my response as it becomes actualised in the world. I can perhaps illustrate the point in relation to one important religious figure. If I admire the bravery of Jesus for suffering and dying for his beliefs, is it because I already value, recognise (know again) what he did? If I pity or despise him for not choosing a less dangerous life is it not because in my world view I value self-preservation more highly? My world view can discern Jesus’ action as a possibility for me too, and it can lead me to commit myself to this possibility. I would not want to say that an act of commitment is any the better or worse for being intellectualised; to shift the focus somewhat, I would just as well be saved from drowning by a heroin addict as a Professor of Systematic Theology, assuming that they are not one and the same person. Whoever it was, it would undoubtedly change my world view to encounter someone who thought, against whatever world view configuration, that it was worth risking her life for another person, and especially for me. Furthermore, through the opportunity which my predicament presented, that other person may also have had a transforming experience.

The values we find in the world are a consequence of the self-understanding which resonates with our personal world views. The task for religious education is to extend and
develop world views in order to encompass a greater awareness and understanding of our own possibilities and of why other people behave in particular ways. In the course of executing this task it seems inevitable that we shall establish whether another person's actuality is also our possibility. As the world view becomes more comprehensive, coherent and consistent, the greater the range of possibilities it can discern and propose, just like any other good theory. With further refinement we shall discover that, ontologically, possibilities are always the same for us all; it is only in the details of contingency that they vary.

The process I have described is not only central to human development but also to theologising within religious traditions. While theologising is clearly a feature of religious traditions, it is not exclusive to them; anyone can talk about God.

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matters little. Both Gautama Buddha and Jesus Christ call people to discover their true selves, their true potential, and act in accordance with that self-understanding. The language is different, so one’s apprehension of transcendent reality is different, on the principle that knowledge is based on the encounter of the person with Being-itself, part of which experience is the language in which it is known. It is out of this self-awareness and self-understanding that we approach the external world in which we enact and recognise our being.

To answer the question explicitly, then, about whether there are some actions which we are compelled to take in order to be fully human, we are led to the affirmative. Part of the purpose of religious education as a moral activity cannot therefore be to say that all possibilities are equally good, only those possibilities which will fulfil the pupils’ potential destiny to be fully human. When the pupil acts consistently in accordance with her understanding of what is most humanising, she may be said to be acting with integrity, or righteously, or faithfully. If we are to maintain that the integrity of the learner, and not the the integrity of religions, is the main concern of religious education, the correspondence of action with world view is particularly important. For this to happen, the first task is for the learner to clarify her own world view.143

143 Inevitably, for some people, there will be some difficulty in wanting to enlarge their world view. This could be a consequence of their stage of cognitive development, or simply a refusal to accept that they are responsible for their actions. Much more thought needs to be given to the implications of this last eventuality than is possible within the limits of this research project.
Chapter 3
Focusing on world views: the LivesCan paradigm

But now there is no world beyond our world. Our oikumene is spherical, closed, and there is no new frontier.

Ninian Smart

Summary
A number of definitions are offered which summarise and clarify the principles underlying the approach to this study. These lead on to a description of the LivesCan paradigm for world view analysis and development, around which the experimental aspects of this study are built. There is finally a brief statement seeking to justify the paradigm.

Working Definitions
In the previous chapter I tried to set out the sources for the view I hold of religious education. Before proceeding further it would be useful to summarise in the form of a few definitional statements, the stage I think I have reached. This is not all together straightforward as reference to any serious treatment of the philosophy of education makes it clear that defining education is just as hard as defining religion. One might reasonably assume, therefore, that combining the two concepts would make it still more difficult to define religious education. Scheffler, indeed, refers to three different kinds of definition of education, the stipulative, the descriptive and the programmatic. This classification might also have a place in the discussion of what religion means. For instance, W W James’ definition for the purpose of the Gifford lectures was a stipulative definition. Much of what was described as taking place within religious studies was simply that, without any strong commendation as to its value or, in some cases, any correspondence to what is thought desirable. The aims set out by Smart and others for what should take place in religious education are programmatic or prescriptive definitions. What I offer here is my programmatic definition of what I think religious education ought to be. I am required, therefore, to justify the values which inhere in this prescription.

There are several criteria by which my programme must be judged. The first of these is that it is practicable; there is no virtue in having an idealistic account of an activity which cannot be realised in practice. That does not mean, however, that a difficult purpose should be bypassed or abandoned simply because it is perceived to be difficult; the corollary is that something relatively easy to achieve, for example descriptive accounts of

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religious traditions, is not thereby made a sufficient purpose. The second criterion is that education should be understood as a lifelong process. In other words, whatever contribution an institution offers should complement and support independent learning. The third criterion is that education should be understood to be a worthwhile activity in the course of which learners are emancipated from restrictive forms of thought and experience, empowered to act effectively in this freedom to the fullness of their potential, and ethicised\(^3\) to ensure that such free and full action is exercised with a conscience. Ethicising does not mean that learners will necessarily make the same moral choices as their teachers, but they will be aware that they are facing moral choices and know how to argue for morally principled action. This does not conflict with the idea of freedom because having a view on the 'right thing' to do is no guarantee that it will happen. It can also be argued quite cogently that not to teach ethics is an effective way of restricting human possibility. These three conditions for satisfying the criterion of worthwhileness, namely, to emancipate, empower and ethicise, can be seen as operating together, each enabling the other, and with these brief introductory comments I offer my working definitions.

* The purpose of religious education is to assist pupils and teachers to discover their own possibilities for being at a deep personal level.

The first test of my prescription for religious education should be scrutiny of the programmatic definition to see how it meets the three criteria.

*Purpose* is something which religious education in itself does not have. *Purpose* therefore refers to *my*, the proposer's, purpose. Education, like religion, cannot be abstracted from its human context.

*Religious education* is to be understood here as a planned curricular programme. The curricular process includes strategies for learning. It still has to be established whether this is an ideal or practicable curriculum.

*Assist* implies first that there is already an activity in progress, or a potential to be realised, and second that the activity of assisting is subordinate to it. This would appear to satisfy the criterion that education is lifelong and not merely an institutional activity.

*Pupils and teachers* are engaged; all who engage in an open dialogical process are learners. The recognition that the teacher also learns in this process diminishes the possibility of the teacher determining specific outcomes. In this respect it is emancipating for both teachers and pupils.

\(^3\) It is a matter of some interest that there is no single verb in common use for the act of preparing people to think and behave ethically, only verbal phrases. Freire's *conscientise* has specific political overtones which make it unsuitable as a general term. *To ethicise* is the best I can do, but I am not entirely comfortable with it, although I am not sure why.

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Discover implies more than exploring, which may not lead to discovery, but it does not imply search, which requires specific knowledge of what is being sought and is therefore a closed operation. Nor does it imply any action subsequent to discovery. Personal search as a term is very acceptable if it is clear that it does not mean search by an individual but search for the person. This should satisfy the conditions of emancipating and empowering. The heuristic method is particularly relevant for lifelong learning.

Possibility implies choice and decision. This is a key term in the programmatic definition. Choice is relative to the degree to which the person is emancipated, and decision is dependent on the power to enact. In the light of the relationships said above to exist among the three conditions of worthwhileness, both choice and decision can be seen to have ethical dimensions. As possibility is referring here to the personal, it also satisfies the criterion of supporting lifelong as opposed to institutional education.

Deep as a metaphor should not be taken to imply an interiority as opposed to an exteriority. It is concerned with wholeness and fulfilment, both of which require the person to be emancipated, empowered and ethicised if they are to be realised.

Their own means exactly that; it is not anyone else’s possibilities for them. Choice and decision must be arrived at freely. The condition of emancipation is stated categorically.

Personal encompasses relational because the person is realised only in relationship. Relationship is possible with other people, the world and with the ground of one’s own being. It is in the personal that worthwhileness is ultimately discovered, and that is a lifelong progress.

The purpose set out here is, I believe, an entirely acceptable educational aim for the secular school. Furthermore, it does not compromise any developed understanding of religious faith, from whichever religious tradition, and it does not circumscribe any particular faith development although it may challenge doctrinal understanding and its institutional representation. It takes the pupil seriously as a person, challenging her to go deeper into her own possibility of being. The curricular programme requires to be structured to provide support in those ways which correspond to the needs of her faith tradition which are part of her non-school experience. I shall argue later how the CD-ROM can be particularly helpful in this regard.

Before leaving this brief section on the purpose of religious education, the distinction between teaching and learning might usefully be made, since religious learning is the main concern of this thesis. It is possible to teach towards learning without that learning actually taking place. Learning is an effect in the person which may be the consequence of the intentional activity of the teacher, or it may be the consequence of the learner herself
seeing a pattern of meaning or possibility which may or may not include the planned activities of her teachers. What is critically important is ensuring that the intended learning is not inhibited by the teaching practice. It has been argued in the previous chapter that it is quite possible that the best intended learning outcomes of religious education may not be realisable by a teaching programme which focuses on religious traditions. It is not disputed in this thesis that religious learning can be expedited and enhanced by reference to religious traditions, although it must be conceded in advance that the evidence arising from the experimental study raises searching questions about how this is to be accomplished. The educational issue is about focus and balance in the teaching programme. This leads us to formulate a second working definition:

- **Religious learning is the consequence of discovering depth in one's own being and of understanding the creative possibilities of living in the light of this discovery.**

Before offering working definitions for faith and religious faith, some further comments about faith would help the process of clarification. Faith is not to be understood here as confessing to a set of propositions or a system of belief. Nor is faith something troubled by rational thought although it may be changed by it, because faith is being defined as encompassing rationality. Faith is personal, practical and regulative, and a primal and inescapable feature of the human condition. Personal faith is weak or strong according to how well the person understands herself as an integrated whole, and according to how far the person seeks to reconcile all things or, in other words, attempts to find unity in diversity and the subjective in the objective. Stated ideally, personal faith calls for the application of the whole person to the reconciliation of all things. Thus it calls on the one hand for active commitment and on the other for openness to all possibility. People respond differently to this human characteristic, being open and committed in varying degrees. One can add that faith is necessarily unique to the person because it draws on individual experience, which is conditioned by the particular contexts of time and space occupied by each person, and because the opportunities to express it are uniquely present in those same contexts. People whose experience is enriched by a religious tradition will have a faith conditioned to some extent by that tradition, with its meanings, values and purposes helping to shape the individual person's concerns and actions. Whatever contingent factors shape personal faith, faith is a product of degrees of openness, understanding, concern, commitment and action. Without openness, possibility is restricted; in faith, commitment leads to action while understanding leads to concern; without action, concern is empty, and without concern, action is arbitrary; a faith without commitment is powerless, and a faith without openness is enslavement. If these assertions about faith are taken as true, faith is complex in structure even if its simplicity of form permits the following stipulative definition:

- **Your faith is the expression of what you ultimately set your heart upon.**
Because the term religious, as already indicated, suggests a certain depth, one may stipulate the following definition of religious faith:

- Religious faith is the expression of those creative possibilities discovered in religious learning.

The religious learning of this study is scheduled to take place in a secular context, so the following working definition is offered:

- The secular is the overall cultural environment which contains world views but is not itself contained in one.

This does not mean, of course, that no world view claims to be definitive of the overall cultural environment. At different times and places, these have been predominantly religious world views, but today many of the power bases in the West share a world view which is dominantly and decisively material in outlook. The claim is that this is a secular world view circumscribing or superseding all other world views, but it is simply another in the history of such claimants. Smart has expressed succinctly the parameters of the secular when he refers to practical problems of world views crossing the borders between the transcendent and the secular.4

Finally, in this section on working definitions, what do I mean by world view? Arising from the discussion of the place and value of world views in relation to religious learning towards the end of the last chapter, I offer this stipulative definition:

- A world view is a person's conceptual framework for interpreting and regulating personal life.

Another way of expressing this is to compare world view to faith; if world view is theory, faith is practice. Thus world view formation does not necessarily express itself in faith, which is the expression of what you ultimately set your heart upon, but it does provide the conceptual framework for faith. As such it comes entirely within the cognitive domain, with which schools are principally concerned, and considers the affective and conative as part of the possibilities for life. It is not as simple as this, I know, because it makes a false separation between the acquisition of knowledge and how that knowledge affects you in its becoming known and in any subsequent actions. Allow this brief explanation to stand, however, as indicating that cognition is the preeminent activity of world view formation, whether cognition is of self, others, the world or Ultimate Reality.

The relationships between the person, the world and a world view can be represented in

4 Beyond Ideology p.25.
two diagrams. Fig. 3.1 illustrates the activity of religious education, which is to clarify all three planes and their interrelationships and does not start from a pre-determined world view, although it does necessarily assume certain characteristics of reality. By contrast, religious education is not involved in Fig. 3.2 which represents either the free response of the individual person or indoctrination.

![World view formation](image)

Religious education clarifies
Fig. 3.1

![Faith in action](image)

Religious education is not involved
Fig. 3.2

It is evident that clarification is set within a particular context which has its own agenda and world view. The context in this study is religious education, whose purpose is defined and defended above as sufficiently open and appropriately value-laden to be legitimate in Scottish non-denominational schools. However, the statement of aims for Roman Catholic Religious Education (p.6 above) puts it outside the realm of religious education as defined here because its intention is manifestly to imprint in learners a particular and preordained world view. It fails the first criterion for education, namely it fails to emancipate the learner from the authority of another.
The LivesCan paradigm

Introduction
The process of clarification requires that learners be assisted to see what the world is like, what they themselves are like as persons, and how the world and the person interrelate and interact. Because the paradigm proposed here has ontological concerns, it centres on being. It also recognises that being is also being-in-the-world so it includes all possible contexts. Being-in-the-world expresses itself in action, therefore possibilities for action are also incorporated. I would like it to be remembered that in developing this paradigm, the main concern was to find a paradigm which children aged ten to twelve years could understand and find useful. This has imposed some constraints, although not too many. I dare say. It might be felt by some adults to be too complicated as it is, but that, I suggest would be a consequence of its novelty rather than any inherent or structural complexity. It is not anticipated that this paradigm will necessarily be instantly accessible or appealing, but that its use will lead to greater understanding of what it means to be religious, how religious traditions have formed, how religious education fits into the school curriculum, and how the paradigm can be personally relevant. The paradigm would also appear to have a high potential for other disciplines of learning.

Structure: dimensions and elements
The process of creating the paradigm was deductive and might even be described as phenomenological. The most, and possibly only, reasonably secure point from which I could expect people to begin was themselves, so any paradigm of all that is would need to begin from there. I thought of human experience as having three essential dimensions. First of all there was the consciousness of being which, according to one's point of view, I limited or enlarged to being. Second, I also recognised that being was possible only in a context. Third, I accepted that what made being so significant in the world was what people did. I could not think of any eventuality which did not come within the matrix of being, context and action. I was also aware, however, that these were insufficiently detailed to be of much use, so I determined to define them still further. At the same time I did not want to render them to the point where they simply became numerically exhaustive and unmanageable. Succinctness was all for a paradigm which I wanted children to internalise and apply. I allowed myself a maximum of five elements in each of the dimensions, and I eventually decided on five for each.

It seemed to me that there were five essential aspects of being: physical, emotional, intellectual, moral and spiritual. Without any one of these, the person was incomplete. There were five significant contexts for the individual, which were concentric or overlapping: heredity, people, culture, politics and the universe. In normal life, no one could escape any of these contexts. There were five significant causes of action: to survive, to conform, to investigate, to create and to control. Within each of these three groups of elements or aspects there was overlap. For example, without a physical brain there could
be no intellectual activity, and without some control there could be no creativity. I spent a great deal of time trying to select language which would be inclusive as well as definitive. For instance, instead of universe I considered most seriously world, creation or nature. I rejected all three because they seemed to belong to one particular theological tradition or another. For the purpose of the exploration I had in mind, universe seemed to be more immediately accessible than any of the other terms, which had a much more limited focus for those not familiar with religious and philosophical terminology. In order to minimise learning difficulties, the distinctiveness of the dimensions was emphasised by the parts of speech used to designate their elements; nouns were used for the contexts, adjectives for the quality of being, verbs for the activity of doing. For those teachers taking part in the project I also defined the fifteen elements in some detail, as follows. While considerable discussion of all these definitions would doubtless be desirable, here I simply report what was presented to teachers and any interested pupils. I would now want to extend accounts of some of the elements, particularly the emotional and spiritual, both of which use the term feelings. I would simply note that I think that emotions are specific and the spirit general, and the five elements of Being I see as constituting an ecological relationship.

Elements of Being

Physical: Consider how people are affected physically.
The body is the most obvious sign of a person's presence. It is because of the body that life as we know it is possible, and without a body a person is said not to exist. Your body, however, can only be in one place at any one time, and because of its biological structure it only lasts for a limited time and ends with death. Biological continuity of parents may be said to continue in their children.

Emotional: Consider how people are affected emotionally.
Emotional responses are usually called feelings. Feelings can be immediate and basic, such as surprise, fear, desire and anger. Feelings can grow, however, like resentment, affection, trust and respect. Feelings are your responses to stimuli from outside. They can change quickly as contexts change or as your mind takes control. Uncontrolled emotions can cause severe difficulties for yourself and for other people, even to the point of destruction.

Intellectual: Consider how people are affected intellectually.
The intellect or mind is concerned with awareness, recognition and, most distinctively, reason. Reason is the power to see relationships and patterns, and to follow thoughts through in an orderly or logical way. Reason helps you to see and apply rules in various contexts. Rational behaviour shows you are applying rules which other people can understand and which do not contradict other important rules. Rationality is given a high value because it recognises order and can create new understandings and possibilities.

Moral: Consider how people are affected morally.
It is usually actions and attitudes which people judge to be moral or, the opposite,
immoral. An attitude is said to be moral if it leads to actions which are considered to be good. An action is good if its consequences are good, or the best possible in the circumstances. People can refer to principles and rules to guide them towards good or right conduct. It is considered to be your duty to be rightly guided and to help others to be moral. To do this you must educate your will.

*Spiritual:* Consider how people are affected spiritually.
The human spirit is the power which keeps you whole when other forces threaten to break in and undermine your existence. The human spirit is often thought to be independent of the body because it can lead people to rise above, or transcend, pain. Pain is what you experience when aspects of your being are attacked. Religions have a particular interest in the human spirit because of its transcendent quality. They consider that the spirit is the bridge to aspects of reality which are above, or transcend, the created universe.

**Elements of Context**

*Heredity:* Consider the context of heredity.
Heredity is the context which contains all those features of the person which are decided before birth. The icon used to symbolise this context is the unborn baby. It is this context which determines whether you are a boy or a girl, what colour your eyes are, how able you will be physically and mentally, and how well your body will cope with disease. It defines your limits and your possibilities for development. This context makes you unique before you are born.

*People:* Consider the context of people.
People form the most significant context for each person. It is people who are responsible for your hereditary, cultural and political contexts. It is people who help you to understand yourself and the world you inhabit. People are also particularly interesting because they share the same human nature as yourself. You are part of other people's contexts. Because people are social animals, the human context is essential for personal development.

*Culture:* Consider the context of culture.
Culture is the way people organise their lives. This context includes the language you speak, the way you dress, the kind of home you live in, what you do for entertainment, the way you prepare food and the way you travel from place to place. Culture also includes rules about how people should relate to each other and how they should treat the universe they inhabit. These rules are often part of religious, social and political systems.

*Politics:* Consider the context of politics.
Politics is concerned with how power is used to manage society. It includes defence of vital

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5 In the graphic version of the paradigm each element is represented by an icon. This acts as an immediate aide memoire. See Appendix C (pp.282-287) for the graphic version.
interests such as security, the economy and the welfare of members of society. There are different political systems. Political power can be in the control of one person or a few, or be the responsibility of all members of society. Politics reminds us of how difficult it is to survive and progress on this planet, but the only way to achieve a better world for us all is through political development. Politics also refers to the distribution of power in small groups.

**Universe:** Consider the context of the universe.
The physical universe, which is symbolised by an icon of the world, is often referred to as Creation. Creation is the universe of energy, matter, space and time. It is the natural world we inhabit, and upon which all life depends. Creation is so important that much effort goes into investigating it and finding out the rules which operate throughout it.

**Elements of Doing**

**Survive:** Consider the will to survive.
People are programmed to survive. Heredity or instinct leads people to take basic actions which will allow them to function as human beings. Without food and water life cannot be supported, so the head of wheat is used as the icon symbolising the will to survive. Some bodily systems are automatic, like breathing, maintaining the right temperature, healing wounds and fighting disease. Survival can mean defending yourself from human and natural forces which threaten life. But simply keeping alive is not enough.

**Conform:** Consider the will to conform.
In order to lead an ordered existence, indeed in order to survive, you are required to conform to certain rules. There are natural laws which demand conformity. You must eat and drink and remain in an environment which does not threaten life. You cannot, without artificial help, defy gravity. There are social laws and rules which require your conformity. Breaking some of these, like the Highway Code, can be fatal, while others can lose you friends or land you in jail.

**Investigate:** Consider the will to investigate.
When people ask questions, they have begun to investigate. Investigation is the most important activity for improving the quality of life for others as well as ourselves. All aspects of life are worth investigating. As a consequence of investigation, our understanding of the world and ourselves can change. This can change contexts and lead to a change in some laws and rules which have required our conformity. When you investigate you recreate yourself.

**Create:** Consider the will to create.
The ability to create is the ability to produce or make something which did not exist before. A product or creation usually comes after investigation or thought, but sometimes it
just seems to happen. Having thoughts or carrying out investigations is also being creative. When you create something, you change the world and you also change yourself. Everyone has the power to create, and the challenge you face is to create in such a way that the world is changed for the better.

**Control:** Consider the will to control.
To control is to limit freedom of action. Being in control means having power over people and events, and being able to make things happen as you choose. Being able to control means you can do good or evil, prevent other people from being destructive or creative. In extreme cases, control can make you a bully, or even a tyrant. People who strive to be all-powerful, however, deceive themselves, for they too will die. The human spirit is the best defence against control.

**Structure: priorities and values**
There is a question of how comprehensive such a paradigm can possibly be to account for all that is. This may be resolved to a degree by a simple arithmetical exercise. Three dimensions each with five elements gives a possibility of 125 different combinations of one element from each dimension. If the order in which this combination is described signifies an order of priority (a permutation), for example that the doing is more significant in a particular case than the being, which is likewise more significant than the context, there are all together 750 permutations. If, further, each of the elements were to be given positive and negative values, there would be 1,000 combinations and 6,000 permutations.

It is inevitable that any particular case will incorporate more than one element from each of the dimensions, and it can easily be argued that all five elements from each dimension are always operational, however residually. If this feature is acknowledged, it is clear that the scope for definition of situations is of unimaginable magnitude; indeed, it would produce such refined descriptions of situations that it would be virtually impossible for us to discriminate between some of them; if all the elements can be thought of as having positive, negative or neutral value, and the order of priority is significant, i.e. that elements have an order of significance particular to a situation, the number of situations that can be generated or defined by this paradigm is 18,763,697,892,715,776,000 or almost 19 quintillion (U.S.). Initial use of the paradigm, however, is likely to be restricted to identification of one key element, an element which is considered to be most prominent in that particular case. A wedding ritual, for instance, is a product of hereditary instincts which involves a number of people in a cultural setting. These are all contextual elements, but if the wedding is of heads of different states, the most significant contextual element might be deemed to be political. And these, of course, are just four of the contextual elements. People can disagree about what should or does have priority, but the paradigm does not determine that for the user. The importance of the paradigm is in its prompting questions and in its requiring skills of observation, analysis, interpretation and evaluation to be developed.

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Although the paradigm is intended to encompass all possibilities, its structure is one of categories and values. To that extent it is itself free from contingent particularities. In the above illustration of a wedding, no consideration was given to the age of the couple getting married, what their cultural setting was, what motivated them to decide on marriage, and so on. The paradigm is intended to be such as to provide a framework for all possible eventualities, all that is. The paradigm needs testing for comprehensiveness, and we shall turn shortly to how it has been tested, but in principle it would appear to be for all practical purposes infinitely flexible, which would seem to make it of particular interest in the computing as well as the human environment. Nonetheless, it is only a conceptual tool, which depends on the skill and judgment of the user to be effective. It still has to be shown how it may be used in religious education for the formation of more comprehensive, coherent and consistent world views.

The paradigm and Ultimate Reality
In the paradigm, there is no element attributed to Ultimate Reality. That is inevitable on at least two counts. In the first place, the paradigm is ontologically based, from which one may infer a theology of being: the only possibility of our discovering Ultimate Reality is through our being in the world. In the second place it would be odd indeed if transcendent reality were to be included in a list of manifestly immanent categories. Furthermore, no conceptual tool which depended on an acceptance of Ultimate Reality could be considered appropriate in the secular context of a non-denominational school where Ultimate Reality as God would almost certainly be a major issue at point. It is this feature which makes Fowler’s theory of faith development more acceptable than Oser’s theory of religious judgment. In the paradigm then, God is a possibility not a prerequisite. While this might cause concern to those for whom God is a theological a priori, I take the view that every theology, like every theory, is in principle falsifiable, in other words provisional. That is a principle which I believe it is important for religious learners to discover and to apply. This does not mean that there are no absolutes, but that our understandings are limited, and our theories based on them necessarily provisional. Nor does this mean that we cannot act as though they are final. Indeed, not to act on provisional knowledge and understanding would be not to act at all. The activity of working with the paradigm is intended to help users to extend the boundaries of their understanding. Too often, it seems to me, people act from insufficient evidence, evidence which they might reasonably have been expected to include in reaching their decision. The point of using the paradigm is precisely to ensure that in the overall development of young people they will not neglect those aspects of human experience which have proved time and again to have been decisive in human affairs.
Chapter 4
Mapping personal world views: the LivesCan Personal Profile

There is no religion that is not a cosmology
at the same time that it is a speculation upon divine things.

Emile Durkheim¹

Summary
A case is advanced for the utility and ethical validity of the LivesCan paradigm in an educational context. Consideration is given to educational theory in relation to the selection of a suitable target population. In this connection, reference is made to some of the best practice in the religious education which stems from the phenomenological approach. The design, piloting and administration of two instruments for profiling the target population are described in some detail, while the remainder of the study is given the briefest outline.

Introduction
The central features of this study are religious learning and the suitability of using computers in assisting this learning in a secular context. I argued in Chapter 2 that the definitive characteristic of religious learning is that it leads the learner towards a more comprehensive, coherent and consistent world view, and in Chapter 3 I presented a case for the validity of the LivesCan world view paradigm as a conceptual tool. In this chapter I identify the secular context and the means by which it may be described in relation to the LivesCan paradigm and in respect of pupils’ experience of religious traditions.

The first test of the efficacy of the LivesCan paradigm was to use it to generate information about the subjects’ world views. This might answer a number of significant questions: could the paradigm be shown in practice to relate comprehensively to the actual experiences of subjects? Could one say something significant about the world views of the target population, both in relation to the whole population and to the individual? Could one relate what the paradigm’s application revealed to what is already known about the population? If positive answers could be found to these questions, it would suggest that the paradigm had a certain usefulness, particularly as it might disclose a more comprehensive view of the population’s understanding of itself than other studies in the field of religious education.² Furthermore, if it revealed what the target

² e.g. Ronald Goldman; Harold Loukes; The Bloxham Project Research Unit which was set up in 1969 inquired into what 2842 school students aged 16–18 thought about religion and society. The project starts out from the point of view of religious, specifically Christian, language and thought forms. The work of this project is written up in Images of Life: Problems of religious belief and human relations in schools by Robin Richardson and John Chapman published by SCM Press Ltd. 1973. The studies of Leslie Francis et al have focused mainly on attitudes to and effects of Christianity.
population’s world views were it would also provide starting points for the production of curricular programmes for aspects thought to be in need of development. Any such needs could be identified either by reference to the responses of the individual or of the population as a whole. Finally, to adopt this method of collecting information could be critically important for this study because it would allow for a closer correlation to be made with a computer-based programme using the same paradigm. For any future longitudinal study, this would permit researchers to identify more closely the efficacy of the computer in promoting the kind of religious learning with which this study is concerned.

Identifying a target population

i) General considerations
There were two major tasks to be completed before the study could be undertaken: identifying a suitable secular context and eliciting the cooperation necessary to undertake a computer-based learning programme. Religious organisations such as churches were obviously excluded, and by reason of their aims and ethos, local authority Roman Catholic schools were similarly self-evidently excluded. The secular institution where learning was the main activity for the majority of society was the local authority non-denominational school. Some would argue that non-denominational schools were also Christian schools in Scotland, but this is not an argument that many would pursue vigorously. As we shall see later, there is substantial evidence coming from the study’s findings for insisting that not only are non-denominational schools not Christian, they are not obviously religious either.

A decision had to be reached about what looked like the most productive target population within non-denominational schools. After considering two groups of factors, there seemed little doubt about what that was. First, in terms of theories of child development, when did important transitions take place in relation to cognition, morality and faith? Second, in terms of curricular opportunity, which school timetabling arrangements, resources and teacher interest provided the best combination?

ii) Selection arising from theoretical considerations
Much important work has been done by educational psychologists on child cognition. Foremost amongst these has been Jean Piaget. Although some of the conclusions he has drawn from his findings are now seen to be fallacious, his main theory of intellectual development remains the one against which all others are measured. He has identified different stages of cognitive development through which, he maintains, everyone must

3 Margaret Donaldson in Children’s Minds, published Fontana 1978, gave the first comprehensive account of certain difficulties in Piaget’s theory of intellectual development. Even so, Donaldson acknowledged her indebtedness to Piaget, and while she proposed certain reinterpretations she found much that was compatible with Piaget’s views and which had indeed been influenced by them.
progress in sequence. The stage which had most appeal for the present study was the one which Piaget referred to as concrete operations. This is the stage when children are able to organise their knowledge into categories and groups but before they can reason from hypotheses and deduce consequences (formal operations). Although there is no clear dividing line between these two stages, completion of development at the concrete operations stage is usually around age eleven years. The particular appeal of this stage for the present study lay in the fact that pupils were to be asked to think of experiences and knowledge as belonging to different categories. This was true both in relation to the information to be collected about the subjects themselves and the religious education they were to be asked to undertake.

The fallacy in Piaget’s theorising had arisen from his failure to recognise the degree to which children can learn to think logically within the framework of their own language and experience. Donaldson’s success in showing how this functions is particularly important for religious education. She does not care to use the terms formal and abstract because of their wide and ambiguous use, but instead prefers to talk about thought which is embedded in the child’s experience, and thought which is disembedded. It has been shown that children can solve logical problems at an early age if they are embedded in their experience. However, when it came to disembedded experience, children as old as twelve could still import factors from their own personal experience in such a way as to confound the logic of the disembedded experience. It will be clear why much of what has happened in religious education by way of introducing children to other people’s religious logic has proved confusing, the very point that Goldman had made and which was illustrated in my anecdote above (p.62). It also explains to some extent why A Gift to the Child proceeded as it did:

“We wanted to find a way of involving pupils in religious education so as neither to water down the dynamism of the religious materials (as happens in the ‘growing things’ approach), nor remain at the level of colourful community practice.”

I have already acknowledged the significance of this particular development, and the learning procedure it followed, of engaging children in talking about their responses to artifacts and then seeing them in the contexts of their religious traditions. There is evidently going to be better understanding as a consequence of this careful approach, but is it enough, or is it too much? Is the approach not still maintaining a conflict between the personal engagement and the necessary distancing that the Birmingham discovery method demands? The reflection that comes as the end point of this heuristic method does focus on a more developed understanding of the artifact, but it is based fundamentally on the ability to enter imaginatively into other people’s experiences:

“Although the distinction between concepts and images cannot be made sharply, the emphasis in this kind of teaching is upon the imagination. We are not so concerned that young children should understand the religious materials, but rather that the materials

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should be able to offer their gifts. Naturally this takes place in the context of understanding, but understanding is of many kinds. The kind that we wish to develop is not understanding of the concept or meaning, as if these were 'out there', nor the inner understanding which might be associated with religious faith and commitment."5

This is a rather bewildering statement because it suggests that the artifact is to be emptied of its entire religious significance, both as a phenomenon of a religious tradition and of its inspirational source. To state the issue briefly, how A Gift to the Child appears to function is essentially to disembed an artifact and embed it into a child’s experience with some subsequent understanding of its significance for its original context. This would appear to be a more sophisticated inversion of Goldman’s themes which were discredited in the 1970s. A Gift To The Child may be similarly discounted because the problem would seem, once again, to be that of going outside the child’s authentic experience in order to find meaning, on this occasion not just to the one religion of Christianity, but to several. The criticism might well be made that children are thereby being drawn into religious traditions in general instead of one in particular, which does not answer the question about the ethical acceptability of drawing children into the way of religious traditions as the route to their ‘salvation’. Nor does it answer the criticism of Goldman that children had been introduced to too much too soon. Much of what Donaldson has written about disembedded thinking is highly relevant to the argument the present thesis advances for religious learning and also to the systematic training in handling a world view paradigm which the computer can offer. It was argued in chapter 2 that the focus of religious education should be the pupil’s own experience, because it was through that experience that understanding of other people’s situations would be best understood, otherwise other people’s experiences are disembedded. Goldman’s themes at least had the merit of trying to help children to understand why, for example, Jesus might be called the good shepherd, or the bread of life.

Donaldson identified a key skill:

“In order to handle the world with maximum competence it is necessary to consider the structure of things. It is necessary to become skilled in manipulating systems and in abstracting forms and patterns.”6

The LivesCan paradigm is designed specifically to help users consider the structure of things, and it is itself a system from which forms and patterns may be extracted. The LivesCan computer programme is the application of this design to provide an experience, albeit vicarious, within which learners might think logically, establishing rules which can be internalised and used in deductive reasoning. It appears to satisfy all the benchmarks for intellectual growth that Bruner identifies in Toward A Theory Of Instruction.7 Perhaps the most significant of these benchmarks for the LivesCan paradigm

5 ibid p.11f.
6 Margaret Donaldson Children’s Minds Fontana 1978, p. 82.
7 Jerome S Bruner Toward A Theory Of Instruction W W Norton & Company, Inc. 1968, p.5f.
are the second and sixth:

"2. Growth depends upon internalizing events into a "storage system" that corresponds to the environment. It is this system that makes possible the child's increasing ability to go beyond the information encountered on a single occasion. He does this by making predictions and extrapolations from his stored model of the world.\textsuperscript{8}

"6. Intellectual development is marked by increasing capacity to deal with several alternatives simultaneously, to tend to several sequences during the same period of time, and to allocate time and attention in a manner appropriate to these multiple demands. There is a great distance indeed between the one-track mind of the young child and the ten-year-old's ability to deal with an extraordinarily complex world."\textsuperscript{9}

The paradigm might be applied in the organisation of learning at any age. However, because of the novelty and diversity of religious knowledge to be approached and acquired through interaction, the upper end of the concrete operations stage suggested itself.

Religious maturity is invariably associated with moral maturity, and it is clear that all major religious traditions are also powerful ethical systems. If faith is indeed the expression of what you ultimately set your heart upon, then this integral relationship is hardly surprising, as all human action is intrinsically moral. In considering religious learning, therefore, it may be particularly instructive to consider briefly what has been said about morality and moral development. \textbf{Tables 4.1.1 and 4.1.2} summarise the main theories.\textsuperscript{10} It is not part of this thesis to discuss these theories in respect of their adequacy, but to note their content. Let it be sufficient in passing to record that difficulties have been found with all these theories on grounds of their partiality: Piaget, for instance, is criticised for focusing too narrowly on rules of conduct, and Kohlberg has been shown to have a masculine bias in his theory, with the consequence that women usually score low on his scale.\textsuperscript{11} Although there is no unified theory of moral development, if all the theories outlined here are taken together, they do indicate what is required for an effective moral education: they all start from the assumption that people are not born morally mature; there is a patent need for personal development, which requires determination of what constitutes a person; social development is also required, which

\textsuperscript{8} ibid p.5.

\textsuperscript{9} ibid p.6.

\textsuperscript{10} These theories are all discussed in some detail in various texts. The sources for this compilation are:
Lawrence Kohlberg The Philosophy of Moral Development (1981) and The Psychology of Moral Development (1984);
Sigmund Freud New Introductory Lectures on Psychoanalysis 1932 (Trans. James Strachey) ;
Erik H Erikson Childhood and Society Penguin 1965 (W W Norton & Co. Inc., 1950);
Carl Rogers A Way of Being Houghton Mifflin 1980;

<table>
<thead>
<tr>
<th>Durkheim</th>
<th>Piaget</th>
<th>Kohlberg</th>
<th>Freud</th>
<th>Erikson</th>
<th>Rogers</th>
</tr>
</thead>
<tbody>
<tr>
<td>We are moral beings to the extent that we are social beings.</td>
<td>Morality consists of a system of rules.</td>
<td>Moral awareness is linked to cognitive and social development.</td>
<td>Morality is a product of unconscious, non-rational forces.</td>
<td>Morality is developed as resolving character interacts with others.</td>
<td>Moral development corresponds to the process of self-actualising.</td>
</tr>
<tr>
<td>Stage 1: Obedience - behavioural response to discipline.</td>
<td>Stage 1: Pre-conventional</td>
<td>Stage 1: Superego arises out of fear of losing parental love.</td>
<td>Stage 1: Oral sensory: task - basic trust</td>
<td>Stage 1: Oral sensory: task - basic trust</td>
<td></td>
</tr>
<tr>
<td>Stage 2: Attachment - identification with the social group.</td>
<td>Stage 2: Heteronomous</td>
<td>Stage 2: This leads to identification with same sex parent and internalising of parental expectations.</td>
<td>Stage 2: Muscular-anal: task - autonomy</td>
<td>Stage 2: Muscular-anal: task - autonomy</td>
<td></td>
</tr>
<tr>
<td>Stage 4: Equity.</td>
<td>Stage 3: Interpersonally normative</td>
<td>Stage 4: The ego ideal emerges and acts as a judge, giving rise to the possibility of guilt.</td>
<td>Stage 4: Latency: task - industry</td>
<td>Stage 4: Latency: task - industry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stage 4: Social system</td>
<td></td>
<td>Stage 5: Puberty, adolescence: task - identity</td>
<td>Stage 5: Puberty, adolescence: task - identity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stage 5: Autonomous</td>
<td></td>
<td>Stage 6: Young adulthood: task - intimacy</td>
<td>Stage 6: Young adulthood: task - intimacy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stage 5: Human rights and social welfare</td>
<td></td>
<td>Stage 7: Adulthood: task - generativity</td>
<td>Stage 7: Adulthood: task - generativity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stage 6: Universalizable, reversible and prescriptive general principles</td>
<td></td>
<td>Stage 8: Maturity: task - ego integrity</td>
<td>Stage 8: Maturity: task - ego integrity</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.1.1 Moral theories summarised
Wilson

Moral maturity requires development of moral reasoning skills.

<table>
<thead>
<tr>
<th>PHIL</th>
<th>EMP</th>
<th>GIG (1)</th>
<th>KRAT (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>concern for people as equals</td>
<td>ability to identify moods and emotions</td>
<td>knowing facts relevant to moral situations</td>
<td>bringing PHIL, EMP and GIG to bear in actual situations</td>
</tr>
<tr>
<td>justice, respect for others</td>
<td>EMP (1) (Cs) ability to identify one's own conscious emotions</td>
<td>GIG (1) (KS) knowing the sources</td>
<td>KRAT (1) (RA) relevant alertness: noticing moral situations and being able to describe them properly</td>
</tr>
<tr>
<td>benevolence, fraternity, love</td>
<td>EMP (1) (Ucs) ability to identify one's own unconscious emotions</td>
<td>GIG (1) (KF) simply knowing the relevant facts oneself</td>
<td>KRAT (1) (TT) thinking thoroughly about moral situations</td>
</tr>
<tr>
<td>having concept of person as rational, conscious, and with needs</td>
<td>EMP (2) (Cs) ability to identify others' conscious emotions</td>
<td>GIG (2) having the relevant know-how or social skills</td>
<td>KRAT (1) (OPU) reaching an overriding, prescriptive and universalised decision to act</td>
</tr>
<tr>
<td>claiming to use this concept as reason for actions</td>
<td>EMP (2) (Ucs) ability to identify others' unconscious emotions</td>
<td>GIG (2) (VC) having relevant know-how in respect of verbal communication</td>
<td>KRAT (2) translating the decision into action or feeling</td>
</tr>
<tr>
<td>PHIL (RSF) having rule-supporting feelings which support the general rule of acting in others' interests</td>
<td></td>
<td>GIG (2) (NVC) having relevant know-how in respect of non-verbal communication</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.1.2 Moral theories summarised
implies a view of how society ought to function; participation in decision-making is also seen to be particularly relevant, as is recognition of the importance of moral values; the ability to identify, interpret and resolve moral issues is a common feature. This impressive and wide-ranging list invokes all three dimensions of the LivesCan paradigm, being, context and action, which would suggest that morality is an integral feature of a personal world view, the same position reached by considering faith to be human expression.

It would be of some significance to discover if the paradigm reflected the same moral concerns as those identified in the moral theories applied to the relevant age group. Of particular interest was Erikson's identification of the period of latency as the one in which children acquired competence in life-enhancing tools and skills; failure to apply oneself to acquiring such competence brought about a sense of inferiority. The LivesCan paradigm was designed to be such an analytic tool, so the responses of pupils in latency would be worth seeking.

In Fowler's theory of faith development, the corresponding stage is the mythic-literal. At this time the child's world view is a literal one in which the imagination is curbed by the need to create order in the external world. An important purpose of the LivesCan paradigm was to provide learners with a comprehensive means for ordering the external world and locating themselves in it; it was also of course intended to provide an instrument for reflection on their own being in the external world. This was the stage that Ronald Goldman in his research in the 1960s identified as the one where children got stuck, and from which they may never progress.12 Consequently, from the point of view of faith development, this stage also commended itself as worthy of closer attention.

iii) Selection arising from practical considerations
Because I was employed by Lothian Regional Council I had good access to the schools administered by this Education Authority, so it seemed sensible to select from within this constituency. Lothian Region covers an area of 1,716 square kilometres and has a population of 753,900.13 Within its boundaries are Edinburgh, the capital city of Scotland with a population of 441,620,14 the new town of Livingston, population 43,800,15 former mining and industrial communities, and a large rural area with some of Scotland's finest agricultural land, seaside resorts and fishing villages. A distinctive feature of education in this area is the large number of pupils in independent schools, 11,270, compared to 96,450 pupils in Lothian Region's Education Authority schools. The comparable figures for the

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14 Source as for footnote 13.
15 Lothian Regional Council Department of Planning: March 1994 figure from Livingston Development Corporation.
rest of Scotland are 21,651 and 709,923. In other words, 10.5% of the combined total for Lothian are in independent schools compared to 3% in the rest of Scotland. As access to the independent sector might prove more problematic, it was decided to focus on only the Education Authority schools. It remained to be seen whether a normal population would emerge using this slightly skewed constituency.

In relation to curricular opportunity, the most obvious choice might have seemed to be in the early years of secondary school. Here, religious and moral education was timetabled in most schools and was in the charge of a trained specialist teacher of the subject. There were, however, several vital considerations which meant that it would not be wise to progress along this avenue. First, pupils at this stage of secondary school were expected to spend only 5% curricular time on this subject, half of what was expected in primary school. In many instances, secondary pupils did not receive even this time allowance. Second, secondary RE specialists already had curricular programmes worked out for their subject which would have to be abandoned; this was not so likely to be the case in non-denominational primary schools, although Roman Catholic primary schools followed a well resourced and coherent curricular programme. Third, the organisation of the secondary school meant that any group of thirty pupils would have to have access to a computer within the same forty to sixty minute time slot; in the primary school access could be spread over the entire week. Resolution of the problem at the secondary stage would be to select only one group of pupils in each first year secondary class, but this would be seen as special treatment which could cause social tensions within the class. Finally, there was also the basic problem that no RME department was sufficiently well resourced to have the necessary computing equipment. The only factor that would be strong was teacher interest, but even here it was not certain that teachers would be willing to divert their attention away from basic introductory programmes of religious and moral education.

Part of the Education Authority’s policy on information technology meant that all primary schools either already had or would soon have access to the kind of computer for which the software package was being developed. In addition they apparently had more flexible timetabling arrangements than secondary schools. They were also short of curricular resources for this area of the curriculum and, with the exception of Roman Catholic schools, with the very different rationale outlined above, were generally not well informed about its purpose and content. The LivesCan package was an opportunity to provide teachers with a complete package which might relieve them of some of their mounting responsibilities imposed by national curricular developments.

16 The Scottish Office Education Department: figures for September 1993.
17 In Scotland, there are a further 1,454 pupils in grant-aided schools and 554 children being educated elsewhere, mainly in hospitals or at home.
18 The Veritas programme of Religious Education originated in Ireland and was approved by the Scottish bishops for use in Roman Catholic schools in Scotland.
The original research design was to allow pupils access to the computer over a two year period, so it was decided that classes in Primary 6 and Primary 7 (ages 9 - 11) would be selected. There were 243 primary schools with a total population of approximately 56,027.\textsuperscript{19} Of these, 11% were in 43 Roman Catholic primary schools. In the remaining 200 non-denominational schools there were 14,004 pupils in classes 6 and 7. In selecting from this population it seemed sensible to select as large a sample as practicable. There were, however, two logistical problems to be solved. First, my employer had made it plain that a minimal amount of working time was to be spent on the research. As access to schools coincided with working time this was not going to be easy. Second, at the outset of the project it was clear that CD-ROM technology would be required to handle the large amounts of information required for the curricular package that was to test the hypothesis. Although primary schools would have the computers required, they would not have the CD-ROM technology, and attempts to raise funding from sponsors proved unsuccessful. At the time, CD-ROM players cost approximately £250, therefore to make this piece of equipment available to a large number of schools would add considerably to the already substantial development costs of the project. A decision was taken to choose the sample from a smaller number of large schools rather than randomly from the whole population.

There were 49 schools with more than 100 pupils in classes P6 and P7. It was important to ensure that this restricted population reflected the full range of social advantage and disadvantage. The criterion for measuring this in schools was normally taken as the percentage of school pupils entitled to free school meals. The range at the time went from 0% entitlement in small rural schools to 91% in some city areas which experienced multiple deprivation. The list of 49 schools was found not to reflect a wide enough range of society. As a consequence, selection was made on the basis of choosing schools at regular intervals from the list of all schools arranged in order of % entitlement to free school meals, taking into account the need to select as large individual school populations as possible. Because I hoped that extensive trials of the computer package might be conducted in some schools and the results compared with control schools, selection also took account of this by matching pairs according to size, type of location and free school meal entitlement. In addition, a primary school which might have a special, local interest in the content of the project was also included.

In considering the figures for this study, it should be borne in mind that school populations are constantly changing. Education Authorities compile tables and statistics for different purposes at different times and these reflect small changes in numbers which appear as discrepancies. Consequently, small discrepancies in numbers in this study are the effect of using officially available data and of changes which took place during the period of

\textsuperscript{19} Figures at each stage of the research were drawn from the most up to date data available from Lothian Regional Council Department of Education: the figures available at the time of selecting schools were from September 1990, and these are used here.
research. These variations are not considered to be significant over the relatively short period of this study.

The list available at the time of selection contained 243 schools, and the schools were chosen on the basis of all the statistics available at that time. (Table 4.2) As will become apparent, numbers had changed by the time the study was actually undertaken.

The average % entitlement to free school meals was 22.92% for all pupils in the total population (23.32% in Roman Catholic schools and 22.87% in non-denominational schools). In the sample of 1064 pupils it was 20%. The sample represented 7.6% of the whole non-denominational population at P6 and P7 in Lothian schools.20

<table>
<thead>
<tr>
<th>School</th>
<th>Position on list</th>
<th>Entitlement</th>
<th>Roll of P6&amp;P7</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>12 (04.9%)</td>
<td>70%</td>
<td>67</td>
</tr>
<tr>
<td>B</td>
<td>13 (05.3%)</td>
<td>70%</td>
<td>99</td>
</tr>
<tr>
<td>C</td>
<td>95 (39.1%)</td>
<td>24%</td>
<td>82</td>
</tr>
<tr>
<td>D</td>
<td>100 (41.2%)</td>
<td>22%</td>
<td>99</td>
</tr>
<tr>
<td>E</td>
<td>130 (53.5%)</td>
<td>16%</td>
<td>202</td>
</tr>
<tr>
<td>F</td>
<td>175 (72.0%)</td>
<td>10%</td>
<td>110</td>
</tr>
<tr>
<td>G</td>
<td>176 (72.4%)</td>
<td>10%</td>
<td>96</td>
</tr>
<tr>
<td>H</td>
<td>233 (95.9%)</td>
<td>2%</td>
<td>145</td>
</tr>
<tr>
<td>I</td>
<td>234 (96.3%)</td>
<td>2%</td>
<td>164</td>
</tr>
</tbody>
</table>

Entitlement column is percentage of pupils entitled to free school lunches. There were 243 primary schools on the list.

Table 4.2  Schools by free school lunches

iv) Getting agreements
Approval to use any Regional schools for research purposes had to go before the Education Authority’s research committee. A preliminary approach had been made to the identified schools to ascertain whether they were willing in principle to take part. This agreement was not always easily reached. In all cases a written statement of the project’s aims and the nature of the involvement requested of schools was followed up by a visit to the school to discuss in more detail the project’s implications. Schools were already under great pressure from HM Government and the Education Authority to carry out major curricular changes, but agreement was eventually reached, with five schools undertaking to be trial schools. The remaining four schools would have the opportunity to use the computer learning materials after they had been trialled. Formal approval was granted in due course (23 June 1992) and the identified schools were then formally approached after the summer vacation (2 September 1992) to determine whether they would be agreeable to taking part in the study.

To make participation easier for schools, I prepared draft letters for them to send to the parents of the target children and offered to prepare final copies for distribution. Once the drafts had been approved I prepared as requested sufficient copies of the various letters using the schools’ letterheads and headteachers’ signatures. These were returned to the schools together with leaflets outlining the project for parents who requested fuller information. A substantial number of parents refused permission. The overall percentage of refusals for the project was approximately 20%. This approximate figure is based on the numbers of pupils who actually completed personal profiles compared with the total number in the target population listed in the September 1992 roll figures. It does not take account of any possible absences when the profiles were completed, but these are thought to have been relatively small. The variation in refusals across schools was wide, from 7% to 30%, the smallest proportion of non-participants coming from schools with lowest percentages of pupils receiving free school lunches. The most disadvantaged schools are likely to have higher levels of absenteeism, but this in itself would not account for the distribution of non-participation, and one might hazard a guess that social class was a significant factor. One school had decided to send out the information leaflet with the letter, and 29% refused permission compared to 18% across other schools. In that school, one class had 50% refusals, two others averaged 40% and the remaining four 18%. The school’s interpretation of the high proportion of refusals in the three classes (all were Primary 7) was that decisions had been made by their pupils not to take part and they had sought their parents’ approval for this non-cooperation. Whatever the reason, it may also be important to note that this was also the school most closely associated with the church in the software package. At least one of the pupils for whom permission was not granted attended the featured church’s Sunday School.

<table>
<thead>
<tr>
<th>School</th>
<th>Roll of P6&amp;P7</th>
<th>Personal Profile Participants</th>
<th>Non Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>43</td>
<td>35 81%</td>
<td>19%</td>
</tr>
<tr>
<td>B</td>
<td>87</td>
<td>60 69%</td>
<td>31%</td>
</tr>
<tr>
<td>C</td>
<td>81</td>
<td>57 70%</td>
<td>30%</td>
</tr>
<tr>
<td>D</td>
<td>100</td>
<td>79 79%</td>
<td>21%</td>
</tr>
<tr>
<td>E</td>
<td>195</td>
<td>139 71%</td>
<td>29%</td>
</tr>
<tr>
<td>F</td>
<td>108</td>
<td>82 76%</td>
<td>24%</td>
</tr>
<tr>
<td>G</td>
<td>91</td>
<td>80 88%</td>
<td>12%</td>
</tr>
<tr>
<td>H</td>
<td>147</td>
<td>133 91%</td>
<td>9%</td>
</tr>
<tr>
<td>I</td>
<td>159</td>
<td>147 93%</td>
<td>7%</td>
</tr>
<tr>
<td>Total</td>
<td>1011</td>
<td>812 80%</td>
<td>20%</td>
</tr>
</tbody>
</table>

*Schools in descending order of % free school lunches.*

*Roll figures from September 1992 returns to Lothian Region Education Department*

**Table 4.3 Subjects by schools**
No assumptions can be made safely about why the number of refusals was at this level. The view from the schools was generally that it was a consequence of the research having to contend with perceived hostility at home to religion and religious education. It was suggested more than once that it might have been better, as with other curricular developments, not to have asked permission in the first place. On such occasions, I pointed out that this was more than a curriculum development project, and because of the sensitivity of the subject matter it could prove extremely difficult for both school and project if parents were not made fully aware of the nature of the project. Parents in Scotland had a statutory right to withdraw their children from any religious education, and the Education Authority had a policy of advising schools that they should notify parents of their rights.

It is of some interest to note that one school sent out a second letter a year after the first asking again for permission for children to take part. Some parents who had earlier not withheld permission now refused, while some who had previously refused permission now did not. Although the second letter did say that it was the same project which had simply been delayed by technical difficulties, it is possible that parents thought this was a different project, and did not want their children to go through it again, while others may have thought they had missed out the first time. It is probably significant, however, to note two factors: this was the only school which had adopted the strategy of saying in its letter that if there was no reply to the request for permission it would be assumed that the parent was granting it; the second letter was also sent out during a period of some public controversy over the Education Authority’s recently approved policy on religious observance. This policy stated that although schools were required by law to provide religious observance it should nonetheless not constitute worship in Lothian’s non-denominational schools. This particular school also had a significant minority of Roman Catholic pupils, and a member of the senior management team reported that there had been some opposition from Roman Catholic members of staff to religious education being approached by way of computers.

**Devising profiling instruments**

Two kinds of information were to be sought from pupils. The first was evidence of their world views and the second their experience of and attitudes towards religion. It was decided to keep these two kinds of information quite separate because it would allow subjects to say what their world view was without their thinking it was dependent on a body of religious knowledge with its attendant values. Two instruments, therefore, were devised, one called *Personal Profile* and the other *Religious Profile*.

i) **Design considerations for the Personal Profile**

As stated in the introduction to this chapter, if the trials proved successful it might be possible to show that the experience of using the LivesCan package had had an effect on
both the pupils’ world views and their knowledge of religious traditions. Using the LivesCan paradigm to generate world view indicators proved an interesting exercise requiring, as it did, an understanding of the general experience and development of the target population. This included abilities in language as well as experiences of life. It was probable that some children in the age group would have had experiences of life that no caring or thoughtful adult would wish for them, and indeed during contacts with schools there were verbal accounts from some teachers of the extreme difficulties some children were experiencing in drug abusing families where prostitution was a means of paying for the habit. These reports also included accounts of children separated from their families for their own protection.

Anecdotal evidence of such experience was infrequent, but it suggested that the sample might be representative of the whole range of childhood experience if it included such extreme situations which are known to exist in society. Any such disturbing experience would affect in a major way a child’s world view, but it was clearly so sensitive and relatively unusual that items which reflected this directly could not be included. As it was, the conventional indicators chosen proved of great interest to teachers in the nine schools and they were very keen to see what their pupils had written. It was a condition of the research, however, that confidentiality would be preserved, and consequently no inquiry by teachers into what individual children revealed in their profiles would be made known to them. Occasionally teachers did see parts of responses from pupils as they completed them and on those occasions might register either surprise or disbelief, sometimes about individual pupils and occasionally about perceived general class responses. The fact that such comments were made is noted, no more, and no relevance is attached to them for the purpose of evaluating the instrument’s effectiveness. As we shall see when we come to evaluate the responses, teachers did not show themselves to be very reliable in predicting pupil responses as a whole, although they may have been right in respect of particular individuals; there is no way of telling.

One way of measuring pupils’ world views would have been to ask them to write about what they thought about life, the universe and everything. Such an open-ended approach had a number of major weaknesses in it. In the first place, many children would not have developed enough skill in writing to respond to this successfully. Second, it was such a vague notion that it might not be properly understood, and it was improbable that it would cover all the points of the paradigm to be tested. Finally, from a statistical point of view it would be extremely difficult evidence to evaluate. Reliability of response would increase with ease of understanding and ease of recording views, and reliability of interpretation and evaluation would improve with selection from ranges of defined responses.
ii) The pilot Personal Profile

One consequence of this reasoning about open questions and restricted choices was to draw up a list of ninety statements which might reflect actual experiences of children and represent the fifteen points of the paradigm. This would allow an average of six indicators for each point in the paradigm. Two important and immediate considerations had to be addressed. In the first place, what kind of data could be accumulated about people's world views from these statements, and how could they be collected so that they might be susceptible to statistical analysis? It was evident we were dealing here with something intangible and unquantifiable in absolute terms. It would also depend on what anyone said their experience or world view was, so there was a problem about bringing such self-evaluations into a common scale if comparisons were to be made. There seemed a prima facie case for dismissing as hopelessly improbable the collection of data on an interval or ratio scale. The second consideration was the extent of the profile; ninety seemed a rather large number of items to which to ask children to respond.

To try to deal with the first of these concerns, I considered that it might be possible to collect data about the frequency with which someone did something. For instance, the frequency with which someone told lies would be an indicator of how that person valued truth-telling, an important feature in anyone's world view. It would still not be possible to arrive at the number of lies a person had told, and it certainly would not be possible to predict from whatever data could be accumulated about truth-telling how an individual might respond in the future; truth-telling is a variable dependent on a number of other environmental and consequential factors. It would nonetheless be possible to devise a scale which appeared to measure frequency, from never to always, with intervals intimated by division, half the time, and subdivision, hardly ever and usually. It could be tempting to think that this meant that someone who told lies half the time told half the number of lies of someone who said they told lies all the time. Such an interpretation would be absurd. The rating that anyone would give herself on this scale would depend on at least these factors: perceived necessity to lie, opportunity to lie, awareness of lying, attitude to lying. So what might any self-rating indicate, if not a quantity? Would it have any meaning at all, and could it be susceptible to any statistical analysis? The most obvious possibility of meaning lay in its measuring the individual's perception of where they were located on the scale based on their own experience of life. This would indeed be more significant to a world view than arithmetical accuracy, which would then have to be weighted to take account of such factors as those listed above on which the number was dependent. The scale is asking for an intuitive response, which is much more likely to reflect the individual's actual world view. Further discussion of scaling and statistical analysis is contained in chapter 5.

In respect of the second area of concern, size of the test instrument, I thought it would be helpful to produce a standardised and simple format. Consequently, I put each statement
into the first person, e.g. “I am a careful person”. Below each statement was a line of five rectangular boxes with qualifying or modifying words in them e.g. “never”, “hardly ever”, “half the time”, “usually”, “always”. The right hand end of the box was closed off to form a square which the subject could mark with a tick to indicate her choice, as in Fig. 4.1.

<table>
<thead>
<tr>
<th>I am a careful person.</th>
</tr>
</thead>
<tbody>
<tr>
<td>never</td>
</tr>
</tbody>
</table>

Fig. 4.1 Personal Profile item format

There were never more than ten items to a page, and because the ninety items had been arranged into groups, some pages had fewer. The whole profile was presented to the pilot subjects in the form of an A5 booklet of eleven printed pages inside an attractive cover. Titles given to the groups of items were: “This is what I think I am like” (26 items); “These are feelings I have” (6 items); “This is what I enjoy” (14 items); “This is what I like to do” (4 items); “These are things I do” (20 items); “This is what I am willing to do” (3 items); “This is what others ask me to do” (2 items); “These things are important to me” (15 items). The subjects were also asked to consider if completing the booklet had been hard; if it had made them think; if they had learnt anything about themselves. Subjects were also asked to mark those items they had found hard to understand. This pilot was conducted using the 41 pupils in the two composite classes P5/6 and P6/7 in one primary school. This school was high on the list of advantage (201) with a 7.4% entitlement to free school lunches. This school was chosen because the headteacher was known to be sympathetic to religious education and would facilitate the pilot.

iii) Evaluation of the pilot Personal Profile

The pilot subjects' evaluations of the exercise can be summarised as follows:

<table>
<thead>
<tr>
<th></th>
<th>Answered:</th>
<th>No</th>
<th>Yes</th>
<th>No response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was it hard?</td>
<td>27 (75%)</td>
<td>9</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Did it make you think?</td>
<td>0</td>
<td>37 (100%)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Did you learn anything about yourself?</td>
<td>5</td>
<td>30 (86%)</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.4 Pilot school's evaluation of Personal Profile

Most of those who are recorded as answering “Yes” to the question about hardness answered in terms of “kind of” or “a bit”. These responses came from the older group of pupils, and only one of those who said it was “kind of hard” did not say they had learnt something from the exercise. This suggests that the hardness may have lain in the self-learning.
Some pupils took less than ten minutes to complete the booklet while even the most limited found they could complete it in less than twenty minutes. In the discussion which followed, it was clear that the subjects had not found the exercise hard although there were a few items about which they were not clear. In the course of the discussion, however, ways were suggested in which some of these items might be made simpler or clearer. What was particularly encouraging was the interest and enjoyment the subjects had taken in the exercise, with several of them saying thoughtfully that they had learnt something about themselves. There was also a positive response to the exercise from the headteacher and her staff who had kindly agreed to take part. A closer analysis of the responses showed that subjects were using the full range of options in most instances and preferences were being indicated. There were also two individuals whose patterns of responses initially suggested they might need personal support. The evidence for concern about one of these subjects is set out here:

"I hardly ever wake up in the morning feeling refreshed; My feelings are always easily hurt; I always keep my feelings to myself; I am never a contented person; Doing the right thing is always important to me; I always feel guilty when I do something I know I shouldn't; I usually wish I was a completely different person; I always feel life is pointless; I always wonder about what happens to us when we die; About half the time I think that most things happen by chance; My friends never do what I want."

This is a catalogue which seemed to indicate a degree of unhappiness. There were, however, statements from the same subject which might equally be construed as grounds for optimism:

"I usually get excited when I am successful; I am enthusiastic about life about half the time; I usually find there are lots of interesting things to do; I always like to do the same kinds of things as other people; I am usually sensible about the things I try to do; I usually stand up for myself; I get on well with my family about half the time; I find people are interested in me about half the time; I always work hard to get what I want; I always look forward to the future; I always enjoy making things."

There were several possible interpretations of these data. The first was that the subject had filled in responses without thinking about them, or without understanding them. On the other hand there was a picture here of someone anxious to please but perhaps feeling the struggle for perfection very hard. When all the responses for this individual were read together there emerged a recognisable and reasonably balanced character. A second possibility was that the items were poor indicators of what a person is like, but the large percentage (86%) claiming that they had learnt something about themselves suggested otherwise. A third possibility was that this profile was more of a snapshot than a portrait. In other words if it had been completed the following week it might have shown a different perspective. From this point on it was clear that any interpretation of data for individuals would have to be made with extreme caution. The same could also be true for
the sample as a whole, but it was more likely that temporary differences would be averaged out. It also seemed probable that the more widespread the measuring of the area of any paradigm element the more likely it was to be accurately mapped, the reason, of course, for having as detailed an instrument as possible. In other words, the average of all the measurements for one element of the paradigm was likely to be a truer reflection of its perceived value and place in the individual's world view than any single measurement which could be a consequence of highly localised circumstances.

This scrutiny of the data did raise an ethical question for me as researcher; if the information showed a child at risk, should the researcher not use the knowledge in the interests of the child concerned? Even if the information were eventually to be shown to be misleading should it not be researched more fully to eliminate the possibility of risk to a child, or to try to resolve the unhappiness that appeared to be being expressed in the responses? Problems could have arisen, however, if parents thought that their children were being exposed to a test of their happiness and that such a test could lead to further investigation. The purpose of the research was not in fact to open up this possibility but to discover where children were in relation to their world views and to ascertain whether a particular programme of religious education had any effect on these. Any other information was incidental and outside the scope of the research. The possible sensitivity of the data clearly meant the research could only be undertaken on the basis of secure confidentiality; it would not be possible to disclose the names of individual pupils to the school nor indeed to parents. There was still the prospect of my feeling frustration both because of an innate desire to care for people who seemed to be in some kind of trouble and also because it had not escaped my attention that to investigate particular findings more fully could prove a most convincing test of the efficacy of the profiling instrument. The first frustration at least could be relieved to some extent by the knowledge that teachers generally know their pupils well enough, in spite of their surprise or disagreement with pupils' self-perceptions as indicated above; teachers are trained to observe any signs of children being at risk.

iv) The redesigned Personal Profile
The success of the pilot was an encouragement. The format was generally found to be effective, and the subjects had identified a number of difficulties of language. The consequence of their having completed the profile in such a short time was to enlarge it to cover 120 items on the basis that the more measurements that were taken the more reliable any findings were likely to be; at the same time, it was important to observe the law of diminishing returns and not extend the test to the point where it became more unreliable because of loss of concentration through tiredness or stress. Some of the items which had proved difficult were nonetheless retained more or less intact because they were thought to be particularly significant, e.g. "I enjoy looking for different kinds of patterns and relationships" was changed to "I look for patterns or relationships in what I see." All the
items were checked to ensure that they were positive rather than negative values. For example, the pilot profile had contained the item “I do as little as I can for other people”. This was changed to read “I do as much as possible for other people”. This was thought to make completion of the profile simpler to understand because it would avoid double negatives. It would also mean that subjects would not be caught out when completing the profile by finding the order in which an item was valued being reversed. In other words, positive values would always increase from left to right across the page.

This decision was not without its difficulties as some popular forms of language would more usually express an idea in negative form. For instance it would be more usual for someone to say “I feel trapped” than “I feel I am a free person”, the form in which it was to appear in the personal profile. While varying the order between ascending and descending value, and administering the same items in different orders, could well have allowed the reliability of each item to be tested and the reliability of the instrument as a whole to be evaluated more fully, it would have meant having to be satisfied with a less extensive instrument; reversal of value orders might well have confused these young subjects, some of whom were not accomplished readers. Ease of completion across a wider range of indicators was thought to be a more reliable measure of values. Nonetheless, the similarity of each kind of response could lead to a halo effect, with the value of one item being more easily transferred to the next.

A major concern was to identify for which of the categories any item might be an indicator. One example which illustrates the ambiguity of statements is “I feel lonely”. Should this reflect an emotional condition or a spiritual? The decision was taken to assign this to the emotional category with some misgivings arising from loneliness frequently accompanying a spiritual condition such as despair. The term for spiritual loneliness, however, is probably more appropriately described as a sense of complete abandonment. Loneliness is an experience which most people have from time to time without its challenging their sense of fundamental meaning, value or purpose in life. A further question arose about whether loneliness was in fact a positive experience. The purpose of the profile was not simply to identify individual feelings but to determine the values people attached to their emotional lives by measuring a wide range of relevant experiences. Loneliness would appear to be, in terms of emotional values, no more or less significant than excitement or sadness. Confusion about particular emotional values would arise out of the different contexts within which emotions were felt. It would be positively good to feel sad if there were something that merited sadness. It would be equally good to laugh when amused or entertained by comic occurrences in a suitable context. It would only be negative if laughter were expressed at a moment where sadness was the appropriate feeling. Similarly, there are times when loneliness is a normal or healthy feeling.

It could be argued that there are items which might have been better assigned to other
categories than those chosen for the LivesCan Personal Profile, and it would certainly be true that there are overlaps between two and occasionally three categories. The item "I get angry when I see something unfair" has been assigned to the category of moral being. Yet anger is an emotion, and the unfairness is taking place within a context, principally of people. Anger was being used here as an indicator of moral awareness and a sense of justice. The decision was taken that it would be easier and probably a more reliable indicator for someone to say whether they got angry than to say what they felt about justice.

Many of the concepts embedded in the language of the indicators, or to which the indicators point, are difficult concepts for even adults to discuss, and the paradigm was being tested for usefulness with children. One of the advantages of the paradigm was seen to be its forcing anyone who wanted to engage in teaching in the area of religious and moral education to find the language and terms which are appropriate for different stages of cognitive, emotional and moral development. It would be a bold step to take to say that young children were incapable of experiencing all those features of life which gave it its wholeness. It is evident that there are specific physical and emotional experiences which children cannot have had by virtue of their stage of maturity, but they have had a general experience of what it means to have a body and emotions, and it was on those experiences that they were likely to have had that the indicators were based. It would be a useful extension of this research to identify other indicators which might provide greater reliability, or which would be applicable for other stages of maturity.

The final profile took the form of an A5 booklet of fifteen printed pages inside an attractive cover. The first page gave some background to the project and why subjects were being asked to complete the booklet. They were also required to complete details of name, date of birth, class and school. The following pages were set out as the pilot had been, with not more than ten items to the page. The sections of the profile were entitled "This is what I think I am like" (30 items); "These are feelings I have" (14 items); "This is what I enjoy" (10 items); "This is what I like to do" (4 items); "Things I wonder about" (6 items); "Things I am interested to do" (6 items); "Other things I do" (23 items); "This is what I am willing to do" (9 items); "This is what other people expect of me" (3 items); "These things are important to me" (15 items). Page 15 asked subjects to tick boxes to indicate if they had found the exercise hard, if it had made them think and if they had learnt anything about themselves. The Personal Profile items are listed in Tables 4.4.1, 4.4.2, 4.4.3 and 4.4.4.
LivesCan Paradigm expressed as Personal Profile

Each element is given a code for brevity in tabulations: B for Being, C for Context and D for Doing, and a number to distinguish it within its group; this is exemplified for the first item here.* The number in the left column indicates the order in which the item appeared in the Personal Profile. Items are grouped here within their respective elements for ease of comparison.

Items were created to reflect as far as possible the kinds of experiences children in the target population were thought likely to have had.

**Physical Being - B1**

- 21 I wake up in the morning feeling I have slept well *(B1 - 01)*
- 72 I brush my teeth at least twice a day
- 73 I wash my hands before eating
- 74 I eat all the right kinds of food
- 75 I take plenty of exercise
- 32 I am satisfied with my physical appearance
- 106 Being in good physical condition is important to me

**Emotional Being - B2**

- 71 I laugh
- 33 I feel sad
- 34 I feel afraid
- 20 I get annoyed
- 17 I get disappointed
- 35 I feel lonely
- 14 I get excited when I am successful
- 15 I get frustrated when things don't work out
- 36 I have feelings of panic
- 44 I feel pleased about other people's good luck or success
- 107 Being able to express my feelings is important to me

**Intellectual Being - B3**

- 6 I am good at noticing what's going on around me
- 77 I look for patterns or relationships in what I see
- 54 I enjoy trying to solve problems and puzzles
- 12 I get good ideas
- 53 I enjoy playing with words and ideas
- 108 Being able to understand things is important to me

*contd.*

Table 4.5.1 Personal Profile items
Moral Being - B4
8 I am considerate towards other people
86 I help people in trouble
82 I tell the truth
83 I keep my promises
9 I get angry when I see something unfair
37 I feel guilty when I do something I think I shouldn’t
38 I feel guilty when I don’t do something I think I should
109 Doing the right thing is important to me

Spiritual Being - B5
13 I am enthusiastic about life
11 I am a confident person
40 I feel free to do what I want
4 I look for opportunities in life
5 I look forward to the future
16 I am contented with my life
10 I find a lot of joy in life
19 I see the funny side of life
22 I really enjoy the world of nature
41 I have a sense of the beauty of life
42 I have a sense that life is deep and mysterious
43 I have a deep sense of peace
18 I bounce back quickly from disappointments
94 I am willing to keep on persevering
95 I am willing to be brave
96 I am willing to be flexible
97 I am willing to see the best in other people
98 I am willing to make sacrifices for other people
99 I am willing to do what is right even if I might get hurt
100 I am willing to forgive people who treat me badly
110 Wondering about life is important to me

contd.

Table 4.5.2 Personal Profile items
Heredity Context - C1
31 I am glad I was born the person I am
67 I am interested to hear about my family history
2 I know just how much I am able to do
39 I feel I would like to change parts of my life
111 Making the most of my life is important to me

People Context - C2
25 I get on well with my family
28 People show an interest in me
88 I try to get on well with people
87 I do as much as possible for other people
112 Knowing what others think of me is important to me

Culture Context - C3
23 I find there are lots of interesting things to do
57 I like to wear the same kinds of things as others my age
56 I like to do the same kinds of things as other people
30 I like to be different from other people
58 I like to do things which give other people pleasure
113 Knowing how other people live is important to me

Politics Context - C4
3 I am sensible about the things I try to do
103 I am encouraged to be responsible
104 I am encouraged to be independent
93 If I have to make a decision affecting others I consult them
105 I am asked for my opinion in decisions which affect me
114 Being able to make things happen is important to me

Universe Context - C5
24 I think the universe is amazing
59 I think about how big and complicated the universe is
60 I wonder how the universe came into existence
61 I wonder how we can know what is real
62 I wonder how we can know what is true
63 I wonder how we can know who is to be trusted
64 I wonder what happens to us when we die
115 Wondering about my place in the universe is important to me

Table 4.5.3 Personal Profile items

page 103
**Survive - D1**
1  I am a careful person
7  I am suspicious of strangers who approach me
68 I am interested to help out at home
79 I stand up for myself
78 I look out for danger where there is traffic
80 I work hard to get what I want
101 I am willing to break the rules to win a game
102 I am willing to tell lies to keep out of trouble
116 Being able to look after myself is important to me

**Conform - D2**
55 I like to put things in their right place
91 I do what my parent or guardian tells me
26 I look forward to family activities
92 I do what my friends want me to
84 I obey the rules if I know what they are
117 Being able to fit in with others is important to me

**Investigate - D3**
69 I am interested to find out how people lived in the past
70 I am interested to find out why people are the way they are
65 I am interested to find out how things work
66 I am interested to find out how to do new things
52 I enjoy experimenting to see what happens
118 Finding out what makes things happen is important to me

**Create - D4**
46 I enjoy repairing things
45 I enjoy making things
48 I enjoy making up stories
47 I enjoy making pictures
49 I enjoy making music
50 I enjoy growing plants
51 I enjoy looking after animals and other living creatures
81 I work at doing things as well as I can
90 I look for ways of creating a happy atmosphere
119 Being creative is important to me

**Control - D5**
27 I am good at controlling my feelings
76 I plan how I am going to spend my time
89 I try to get people to like me
29 My friends do what I want
85 I try to get animals to be obedient
120 Getting my own way is important to me

Table 4.5.4 Personal Profile items
v) Design considerations for the Religious Profile

The Religious Profile was intended to capture subjects' attitudes to religion and to ascertain whether these correlated with their experiences of religion. It would be interesting as well to determine whether there was any correlation between world views indicated in the Personal Profile and views and experiences expressed in the Religious Profile. It was anticipated that subjects might be embarrassed to reveal their experiences of religion and have some difficulty in explaining what their religious beliefs were; the problem of meaning would raise its head here as it did everywhere in religious discourse. If such young subjects were to be asked quite simply what they thought about religion and what they based their opinions on, there was the likelihood of blank responses. Inquiry had to be into very specific experiences and very specific views.

This was to be a much shorter questionnaire than the Personal Profile and to be designed to fit onto one side of A4 paper. Given that subjects would have spent some twenty to thirty minutes completing their personal profiles, the estimated completion time for the Religious Profile was to be no more than ten minutes. It was also to provide subjects with the opportunity to give free responses. Brevity can sometimes create additional difficulties, so the structure and format of the Religious Profile would need to be clear, and open rather than dense.

The experiences to be reported were divided into three parts; those which took place at home, those which took place away from home, such as in church, and those which took place in school. The questions were set out on one side of A4 paper so that when it was folded it would become two A5 pages. The other side of the sheet was printed so that when it was folded it would present as a leaflet with an attractive cover on which subjects would write their names, class, school and the current date. The pilot profile is shown as Fig. 4.2. The Religious Profile was piloted in the same school as the Personal Profile had been, on this occasion with 44 subjects. The procedure adopted was to explain to the subjects, who remained in their two classrooms, what they were being asked to do, namely to try out a form which was going to be used with pupils their age in other schools. Their opinions would be used to make sure the form was as easy to complete as possible.

It was clear from the beginning that the attempt to be inclusive in the Religious Profile by mentioning different places of worship was wholly confusing. Children, wanting to be helpful by not giving the wrong information, wanted to know what some of the religious buildings mentioned were. Also, the introduction of different parts with “Q”, “A” and “S” was confusing. Some children did not understand the idiom of using “Q” and “A” for Question and Answer. Pupils did not pick up the use of the “S” for Statement, in spite of their having corrected the researcher while piloting the Personal Profile; he had referred to the items in it as “questions” only to be told that they were statements. Finally, most children did not realise that they had religious education in school;
attention would need to be given to how this part was phrased. It was also evident from the questions subjects asked that it was too difficult to invite them to say how religious education might be improved in school, so it was decided to drop this particular item. It was apparent, however, that subjects would probably be able to complete a redesigned religious profile in approximately ten minutes.

It was evident from reading the answers to the open questions that not enough was being revealed about attitudes to religion. In redesigning the form it was decided to include more statements which would simply be ticked if the subject agreed with them. It was also decided to use the same kind of five point scale as in the Personal Profile for evaluating experiences of religious education, which were to be renamed as "projects on religious topics like festivals, or sacred books, or different religions". The visible embarrassment about writing down what religious activities they did at home meant that this part was dropped in favour of a simple tick. There were to be only two free response items, and all boxes to be ticked would be positioned to the right of their respective statements. The profile was still to be contained on one side of A4 paper folded to form a leaflet. (Fig. 4.3)
### Your experience of religion

**Q** Do you take part in religious activities outside the home?

Such as:
- going to the church or Sunday School
- going to the Gurdwara
- going to the meeting hall
- going to the mosque
- going to the spiritual assembly
- going to the synagogue
- going to the temple
- etc.

**A** If your answer was YES

<table>
<thead>
<tr>
<th>√</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

**A** If your answer was NO

<table>
<thead>
<tr>
<th>√</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

---

**Q** Do you take part in any religious activities at home?

**S** Make one statement about the Christian Bible.

**S** Make one statement about religion.

**S** Make one statement about religious education in school.

**Q** Do you think religious education is:

- useful?  
- important?

**Q** Do you think religious education in school is interesting?

**Q** How would you improve religious education in school?

---

**Fig. 4.2 Pilot Religious Profile**
Your experience of religion.

Q Away from home, do you take part in any religious activities like going to church or Sunday School, or taking part in religious festivals?

You can answer either YES or NO.

<table>
<thead>
<tr>
<th>Either</th>
<th>If your answer is YES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Read each of the following statements and if it is true for you, put a tick in the box beside it.</td>
</tr>
<tr>
<td></td>
<td>I am made to go.</td>
</tr>
<tr>
<td></td>
<td>I would rather do something else.</td>
</tr>
<tr>
<td></td>
<td>I want to go.</td>
</tr>
<tr>
<td></td>
<td>I have friends who go.</td>
</tr>
<tr>
<td></td>
<td>It is enjoyable.</td>
</tr>
<tr>
<td></td>
<td>I think it could be more useful and interesting.</td>
</tr>
<tr>
<td></td>
<td>My religion is important to me.</td>
</tr>
<tr>
<td></td>
<td>I think everybody should be religious.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Or</th>
<th>If your answer is NO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Read each of the following statements and if it is true for you, put a tick in the box beside it.</td>
</tr>
<tr>
<td></td>
<td>I am not allowed to go.</td>
</tr>
<tr>
<td></td>
<td>I have never thought about going.</td>
</tr>
<tr>
<td></td>
<td>I have friends who go.</td>
</tr>
<tr>
<td></td>
<td>I think it would be a waste of time.</td>
</tr>
<tr>
<td></td>
<td>I went once or twice, but I felt uncomfortable.</td>
</tr>
<tr>
<td></td>
<td>Religion isn't important to me.</td>
</tr>
<tr>
<td></td>
<td>I would take part in religious activities if they were useful and interesting.</td>
</tr>
<tr>
<td></td>
<td>I think the world would be better off without religion.</td>
</tr>
</tbody>
</table>

Q At home, do you ever pray, or read a religious book, such as the Bible?

<table>
<thead>
<tr>
<th>Q Write down ONE thing you know about the Christian Bible.</th>
</tr>
</thead>
</table>

Q What do you think about religion?

| Q If someone asked you, "What is your religion?", what would you answer? |

| In school, you sometimes do projects on religious topics, like festivals, or sacred books, or different religions. |

<table>
<thead>
<tr>
<th>Q Do you think these topics are interesting? Tick one box.</th>
</tr>
</thead>
</table>

| Q Do you think these topics are important? Tick one box. |

| Q Do you think these topics help you in any way? Tick one box. |

Fig. 4.3 Religious Profile

Thank you very much for your help.
Administering the Personal Profile

The initial administration of the personal profile was unsuccessful. The first school available to have the profile administered was one which had considerable social and educational problems. At the suggestion of the headteacher, and with my agreement, all the participating children had been brought together to complete the profile. This was a novel situation which caused considerable excitement amongst pupils. The class teachers were also present to ensure adequate cooperation and to help provide clarification of any items which pupils found difficult to understand. The teachers were unhappy about the arrangements and it was decided to readminister the profile to small groups of subjects.

I returned to the school to meet with small groups of eight to ten pupils. A quiet room was found where I could discuss each item to ensure it was fully understood before the subjects entered their choice. In some respects this may have been too intimate an arrangement, with a lot of scope for subjects to be aware of what everyone else was entering; the option of taking each pupil individually was not one which could be entertained given the time restrictions placed on the study. One positive consequence of this close attention, however, was the production of a list of words and expressions which were found to be difficult, as shown in Table 4.6.

<table>
<thead>
<tr>
<th>considerate</th>
<th>(as thinking about other people)</th>
</tr>
</thead>
<tbody>
<tr>
<td>confident</td>
<td>(as feeling secure and sure about what you're doing)</td>
</tr>
<tr>
<td>enthusiastic about life</td>
<td>(as feeling positive and keen to enjoy life)</td>
</tr>
<tr>
<td>frustrated</td>
<td>(as feeling upset and useless, and possibly destructive)</td>
</tr>
<tr>
<td>sense</td>
<td>(as a kind of awareness or feeling, as in a sense of peace)</td>
</tr>
<tr>
<td>consult</td>
<td>(as ask for views and opinions)</td>
</tr>
<tr>
<td>persevering</td>
<td>(as carrying on even when the going is hard)</td>
</tr>
<tr>
<td>flexible</td>
<td>(as being willing to compromise, as in approaching a problem)</td>
</tr>
<tr>
<td>sacrifice</td>
<td>(as something which you value and give up to meet someone else’s need)</td>
</tr>
<tr>
<td>independent</td>
<td>(as being able to look after yourself)</td>
</tr>
<tr>
<td>constantly</td>
<td>(as continually)</td>
</tr>
<tr>
<td>moderately</td>
<td>(as in the middle, between extremes)</td>
</tr>
<tr>
<td>extremely</td>
<td>(as couldn’t be more, as in extremely important)</td>
</tr>
<tr>
<td>opportunities in life</td>
<td>(as ways of improving your own life)</td>
</tr>
<tr>
<td>express my feelings</td>
<td>(as show how I feel)</td>
</tr>
<tr>
<td>controlling my feelings</td>
<td>(as being able to show feelings appropriately)</td>
</tr>
<tr>
<td>physical appearance</td>
<td>(as the way you look)</td>
</tr>
<tr>
<td>creating a happy atmosphere</td>
<td>(as making people around you feel good)</td>
</tr>
<tr>
<td>physical condition</td>
<td>(as fit and healthy)</td>
</tr>
</tbody>
</table>

Could you also discuss with pupils what the following statements might mean?

I look for patterns and relationships in what I see.
If I have to make a decision affecting others I consult them.

Table 4.6 Notice of difficult words

This list was sent as part of a larger information bulletin to all the other schools involved
in the study so that teachers could use them in preparing subjects prior to their completing the profile. The list shows that children had difficulty with a range of language, from what might be thought to be relatively straightforward words such as “considerate” and “confident” to more difficult terms such as “opportunities in life”. The list itself indicated that children were generally not confident with some common language relating to areas of experience important for personal and social development.

Some teachers had found the list useful and had some good discussion with their classes. Even so, when it came to completing their personal profiles children still asked for explanations. The meaning of “flexible”, for instance, was strongly influenced by its use in television advertisements for a credit card which was described as “your flexible friend” because the plastic could bend and because it could help you out in any number of commercial situations. Frequent explanations had to be offered of how flexibility in the Personal Profile related to personality or character rather than the body.

A small number of children were unable to say when their date of birth was, and of those who did a small number had difficulty in knowing how to set it down. A few children did not seem even to know when their birthday was. A very small number of children struggled with writing their own names and the name of the school. Along with their class teachers, I helped any children who had severe reading difficulties by reading aloud the items in the profile. This loss of confidentiality, however, may have led some subjects not to answer truthfully. At the same time, it was noted that there was overall interest and apparent willingness to answer truthfully. No pupil in the entire sample refused to cooperate, and those pupils whose parents had denied them a place in the research study showed considerable interest in what was going on, and some disappointment that they were excluded.

Apart from the experience in the first school, the procedure for administering the personal profile was always the same. All the participating children in a class completed the profiles in their classroom. Those who were not participating continued with normal classwork or were given another task by their teacher. I introduced myself, distributed the Personal Profile booklets and asked pupils to put the date on the outside of the front cover. I explained to the children that I was asking for their help in giving me information which would build up a picture of what children their age across Lothian Region were like, what they did and what they thought was important. The information that each person gave would be added to all the information from the other pupils taking part in making this picture, so nobody else would know what any individual had said. The only person to read their books would be me, not their parents nor their teachers, so it would be someone who did not know them. They were asked to be honest about the information they gave and to think carefully before they gave it so that they could feel that they were making a true picture. The subjects were then asked to complete the
personal information about their name, date of birth, class and school on the first page of the book.

I then took all the class participants together through the first five items to make sure that they knew what they were meant to do. At that time, and again later as subjects worked their way through the Personal Profile, they were reminded that the only correct answers were those which they believed were true for them; they were being trusted to be honest so that they would create a true picture of what children their age thought and did. Going through the first five items together also gave an opportunity to explain two items that were considered to be quite difficult. When everyone had completed the first five, they were asked to continue doing the same thing throughout the book. They were also told that if they had any difficulties with understanding anything they were to ask for help. They were also told that if they asked for an explanation and they still didn’t understand what the statement meant they were to put a cross or a question mark beside it and move on to the next one; it was better to leave an item blank than to put in information which could be inaccurate.

I always answered specific queries in a loud enough voice for everyone to hear so that children who might have been lacking in confidence to ask would also have the explanation. When about a quarter of the subjects had completed their profile, which took about twenty to twenty-five minutes, they were asked to complete the last page by ticking the boxes there and checking over their profiles. Some pupils took this opportunity of discussing together what they had said in their profiles. No pupils were observed making any changes to their profiles during this period. When everyone, with a few possible exceptions, had completed the task, after about thirty minutes, the booklets were collected. In a few classes some children were particularly slow and they were given the opportunity to complete the Personal Profile later on, and I went back later in the day to collect the completed profiles. After a short break, or in some instances after the school interval or lunch break, the Religious Profile was administered.

**Administering the Religious Profile**

The school which had first completed the Personal Profile also completed the Religious Profile in similar small groups. However, the Religious Profiles were not administered until all the groups had finished the Personal Profiles, and I returned to do this on a different day. Subsequently, however, once pupils in schools had completed their Personal Profiles they were given a short break and told they were now going to do something quite different. Those few pupils who had not completed their Personal Profiles would be allowed to complete them later. The justification for adopting this procedure was to minimise disruption to the work of the class. I explained that this was a more complicated form to complete and I would therefore take everyone through it together. Subjects were asked to complete the personal identification information on the front cover.
After everyone had done this, they were read the first question and asked to circle either the “Yes” or the “No” below it. Those who had circled the “No” were asked to put down their pencils to allow those who had answered “Yes” to complete their section. I then read each of the statements in turn adding, “If that’s true for you, tick the box at the end of the line, otherwise leave the box empty.” When this section had been completed, the same procedure was adopted for those who had answered “No”.

The next question, about religion at home, was read and subjects invited to tick either “Yes” or “No”. This question was perhaps the most sensitive for subjects of this age, and they showed that they did not want others to see what they had ticked by covering it or turning away from their neighbour. This was a behaviour which subjects displayed generally in relation to the Religious Profile, but which they had not shown during completion of the Personal Profile. Observation also suggested there was a slight tendency for subjects to agree responses with their neighbour. This was later borne out by the similarity of some responses between some subjects, particularly in relation to the free, written responses. Throughout the completion of the Religious Profile, subjects were told from time to time, “Never mind what your neighbour is doing. Remember, there are no “correct” answers to these questions; there are only answers which are true for you. And you are the only person who knows if it is true or correct. Remember that I’m trusting you to be honest about your answers so that we get a true picture of what children your age do and think.”

In respect of the written responses, there were interesting initial responses from subjects. When asked to write down one thing they knew about the Bible, there was frequent puzzlement shown on their faces. I always developed the statement in the Religious Profile by adding, “It can be anything at all you know about the Bible. I will be very surprised if you don’t know something about the Bible.” After a while, if there was still some visible bewilderment, I would add, “Well, if you really don’t know anything about the Bible, you will have to say that.” When the first group of subjects was tackling the question about what they would answer to the question “What is your religion?” they asked questions about spelling, particularly “Protestant”. Thereafter, I always advised subjects answering this question that they shouldn’t be worried about spelling, that I would be able to work out what they meant. Some subjects, however, had evidently asked their neighbour about spelling because they had made identical spelling errors. The spelling of Protestant was, almost without exception, misspelt with a “d” instead of the first “t”. This does suggest a level of awareness of the origin of the term which is rather worrying, given that so many people were willing to attach this label to themselves. Protestants in the slang of central Scotland are known as “Proddies”, hence the “d”. It also suggests a need to establish some educated awareness of religious heritage if society is to move beyond a primitive tribalism.
The final group of questions about religious education in school was read all together to point up the important differences between what looked like similar questions. Stress was placed on “interesting”, “important” and “help you” as they were read aloud, followed by the observation, “People can find things interesting but not important, or important and not interesting. And things which are important and interesting might or might not help you in any way. So these are quite different questions although they might look much the same.”

As people were finishing, they were asked to close their leaflets and leave them on their tables. I then collected them immediately, checking that the name had been entered on the front cover. The reason for this procedure was to prevent any inquisitive teacher from reading what a pupil had written. Sometimes pupils cooperated in this clear signal of preserving confidentiality by bringing their closed profiles directly to me, occasionally bringing all the closed profiles from their table. Completion of the Religious Profile took from 10 - 12 minutes.

The development of the LivesCan computer package had been progressing slowly, so there was some delay in making this available to schools. It became available to schools approximately four months after the completion of the Personal Profiles and two months before the Primary Seven pupils in the sample were due to move on to secondary school. Schools were asked to concentrate on giving their P7 pupils the opportunity to use the computer programme and to leave until the following year the P6 pupils who had completed the Profiles. Teachers were asked to consider this two month period as something of a trial period for them to become familiar with the computer and the LivesCan programme. Details of the package and the support offered teachers are given in Chapter 7.

Following their use of the computer, pupils were asked to complete evaluation pro forma (Appendix E1 p.334), and a sample of these subjects were interviewed individually using a standard schedule (Appendix E3 p.344) as were their teachers (Appendix E5 p.361). The LivesCan computer programme itself was collecting data about how it was being used, and in Chapter 8 all these are used to evaluate the LivesCan package.
Chapter 5
Reliability: the LivesCan Personal Profile and Religious Profile

One must not start from any conclusion, from any belief, from any dogma which conditions the mind, but from a mind that is free to observe, to learn, to move and act.

Krishnamurti

Summary
The Personal Profile test is examined to ascertain its degree of reliability and potential usefulness. The procedures adopted to secure reliability are described together with statistical tests which were applied to measure the success of those procedures. Difficulties with the language of the Personal Profile are identified but no modifications to it are suggested although they may be inferred. Differences between groups are identified by gender, age and social background. The conclusion is drawn that the data can be approached with a high degree of confidence that they do represent the experiences and values of the children in the sample. The reliability of the Religious Profile data is also established.

Introduction to the findings
From the Personal and Religious Profiles approximately 136,000 data were collected about the subjects, which took a very long time to enter onto a spreadsheet. Random checks for accuracy were made on 3% of the sample. Table 5.1 shows the degree of error found, which was considered to be negligible.

| Microsoft Excel was used to generate 25 random numbers from the full range of subjects (812). |
| 144 data were checked for each subject, giving a total of 3600 data checked. |
| 8 errors were found, 7 on data entry to the Personal Profile and 1 on wrong classification of free response in the Religious Profile. This gives an overall percentage error of 0.22%. The data entry error was 0.19%. |
| The total value of the Personal Profile data checked was 7734, and the overall effect of the data entry errors was +1. This gives a value error of 0.01%. |
| All errors found were corrected. |

Table 5.1 Checking for errors in entered data

1 Jiddu Krishnamurti The Wholeness of Life Victor Gollancz 1991, p.159
Some data were missing, principally dates of birth, and some questions arose about gender which was not clear from first names shared between genders, such as Lindsay and Robin; subjects had not been asked to identify themselves as male or female on the grounds that it might upset some children to think that their gender was not evident from their names. Requests for missing data were made to the originating schools, and in most cases these were supplied. Further data were acquired from the central records of the Education Department. Checks were not made on the accuracy of the dates of birth given by subjects unless they looked obviously wrong: the policy for Lothian schools was generally to keep children in their year age group. Those who had difficulty with writing their date of birth had been helped by their teachers' looking it up for them, or they had left it blank.

All data were initially entered on one spreadsheet (ClarisWorks). Because of its size it was extremely slow in completing calculations, so it was split into female and male spreadsheets, with further spreadsheets derived from these for specific calculations. Wherever possible data were entered in numerical form. Numerical values ranging from 0 to 4 were applied to all the indicators in the Personal Profile and to the items in the Religious Profile referring to experience of Religious Education in school. The two open-ended, or free response, items in the Religious Profile referring to knowledge of the Bible and religious affiliation were noted and put into categories. The remaining items were recorded as either 0, meaning "No" or "Not true", or 1, meaning "Yes" or "True".

### Analysing the Personal Profile

**i) The scope for analysis**

The scope for analysis of the data for the Personal Profile was considerable on account of the number of variables. Data could be analysed by gender, age, school, school class, year stage, distribution of values by individual, distribution of values by item, distribution of values by person for items within a cognate group of indicators, and distribution of values by person for a selected number of items. There were in addition the possibilities of factor analysis and correlation with items in the Religious Profile and with whatever was learnt from the use of the LivesCan computer package. The purpose in collecting the data was clear: it was to determine whether the Personal Profile was a useful instrument for mapping world views. The problem arose as to which of these analyses would yield the most helpful information, and how such information might be most effectively presented. The first requirement, however, was to establish that the data collected were reliable, and then, before proceeding to their interpretation, to establish that they were valid.

Before progressing further, however, something needs to be said about the procedure adopted in calculating most of the results in this study. In the Personal Profile each response was identified by 0, 1, 2, 3 or 4, depending on which box had been ticked. I have already indicated in the previous chapter that there is a problem about saying that 4 in this scale is twice the value of 2. There seems little doubt that this is an ordinal scale, but
in what sense, if any, could it be called an interval scale? All the scores from 0 to 4 are self-rated perceptions of what someone does or values. Each score depended on the individual subject's understanding and use of language. For example, most people would take never, in popular use to include the meaning "As a rule and general practice I don't do this". It can also mean that "I am currently committed to not doing this, although I may have done in the past, and, of course, I might change my view in the future". This, however, does not preclude the possibility of someone's taking the term as literally and absolutely true. The inclusion of the option hardly ever is likely to limit the range of meaning of never, but it has to be admitted that there is considerable scope for ambiguity. There is some controversy over how data of this kind are to be analysed. It is the view of some pure statisticians that it is not possible to calculate an arithmetic mean for a test scale such as this. Others maintain that human psychology is not measurable in purely mathematical terms but there is the possibility of meaningful relationships, which may be expressed usefully in arithmetic form. This latter is the view, approved by Minium, which is taken here. There is also the precedent of the Likert scale which is widely accepted as a means of measuring opinion. To illustrate the argument, subjects using a scale such as the one illustrated in Figure 5.1 are likely to see 2 as its midpoint and 1 and 3 as the midpoints of the two halves of the scale.

![Five point scale](image)

**Fig. 5.1 Five point scale**

It is clear that 3 is no more than three times the value of 1 than 30°C is three times as hot as 10°C. It is still possible to talk meaningfully of mean points on the Personal Profile scale just as it is to talk of mean temperatures. The principal difference between a temperature scale and the scale used here would appear to be the degree of precision, both on account of the kind of ambiguity already identified, and the small number of points on the scale. Claims are not being made, however, for the Profile's precision, but the ranges are, I believe, intelligible and sufficiently consistent to be viewed as quasi intervals. An attempt to reinforce this understanding was made by using the expression half the time for the point that I was to describe numerically as 2. We have to start from the position that there is no arithmetically absolute scale for measuring human perceptions, but we can detect broad ranges and approximations, which can provide the basis for comparisons. In these circumstances, and acknowledging the limitations, it would be legitimate to argue that if two subjects rated themselves at 2 and 3 respectively, they might be said to have a mean of 2.5, on what might be called the LivesCan scale.

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2 For an account of this controversy see Minium, King and Bear *Statistical Reasoning in Psychology and Education* John Wiley & Sons Inc., Third edition 1993, p.77.
This principle was applied to the whole Profile to arrive at means. In the case of the first item "I am a careful person", 8 ticked "never", 33 ticked "hardly ever", 231 ticked "half the time", 501 ticked "usually" and 34 ticked "always". In other words, of the 808 subjects whose responses were used for analysis in the study, 807 had responded to this item and one had put a question mark beside it. Thus it was turned into the arithmetical calculation: \( \frac{33 \times 1 + 231 \times 2 + 501 \times 3 + 34 \times 4}{8 + 33 + 231 + 501 + 34} \) which is 2134 / 807 which gives a mean value of 2.64 for this item. When it came to calculating the mean for an entire element, all the items for that element were calculated together instead of a mean being taken of the means for the items making up that element. In other words the values for elements were weighted averages. The calculations for each dimension, however, were taken as the mean of the elements’ means. The reason for this was to avoid biasing the dimensional figure by allowing one element which had a larger number of items in it to weight the outcome; for example, there are 21 items for the Spiritual element of Being, but only 6 for each of the Intellectual and Moral elements. By calculating in this way it was not necessary for the Personal Profile to have the same number of items for each element in the paradigm. As a rule, however, calculations were made working from the smallest units available.

<table>
<thead>
<tr>
<th>LivesCan Personal Profile</th>
<th>Number items not completed</th>
<th>Frequency Male</th>
<th>%</th>
<th>Frequency Female</th>
<th>%</th>
<th>Frequency All</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0 261</td>
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<td>160</td>
<td>19.7</td>
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<td></td>
<td></td>
<td>2 26</td>
<td>6.3</td>
<td>12</td>
<td>3</td>
<td>38</td>
<td>4.7</td>
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<td>31</td>
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<td>1</td>
<td>9</td>
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<tr>
<td></td>
<td></td>
<td>5 4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 4</td>
<td>1</td>
<td>7</td>
<td>1.8</td>
<td>11</td>
<td>1.4</td>
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<tr>
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<td></td>
<td>7 2</td>
<td>0.5</td>
<td>2</td>
<td>0.5</td>
<td>4</td>
<td>0.5</td>
</tr>
<tr>
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<td></td>
<td>8 2</td>
<td>0.5</td>
<td>1</td>
<td>0.3</td>
<td>4</td>
<td>0.5</td>
</tr>
<tr>
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<td></td>
<td>9 2</td>
<td>0.5</td>
<td>3</td>
<td>0.8</td>
<td>5</td>
<td>0.6</td>
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<tr>
<td></td>
<td></td>
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<td>0</td>
<td>3</td>
<td>0.8</td>
<td>3</td>
<td>0.4</td>
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<tr>
<td></td>
<td></td>
<td>11 0</td>
<td>0</td>
<td>3</td>
<td>0.8</td>
<td>3</td>
<td>0.4</td>
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<tr>
<td></td>
<td></td>
<td>12 0</td>
<td>0</td>
<td>1</td>
<td>0.3</td>
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<td>0.1</td>
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<tr>
<td></td>
<td></td>
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<td></td>
<td>14 3</td>
<td>0.7</td>
<td>1</td>
<td>0.3</td>
<td>4</td>
<td>0.5</td>
</tr>
<tr>
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<td>1</td>
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<td>2</td>
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<tr>
<td></td>
<td></td>
<td>32 1</td>
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<td>0</td>
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<td>0.1</td>
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<tr>
<td></td>
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<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
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<td>0</td>
<td>1</td>
<td>0.3</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>120 0</td>
<td>0</td>
<td>1</td>
<td>0.3</td>
<td>1</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Table 5.2 Numbers of items not completed by subjects
ii) Determining the distribution

The first task was to determine whether the sample could be considered to represent the population as a whole. To do this, the mean value of all the responses made by each individual was calculated and all these means were tested for normal distribution. The advantage of adopting this method of calculation, rather than score totals, lay in its not being unduly upset by subjects whose overall scores had been affected by their missing out items, possibly because they did not understand them. Table 5.2 shows the extent to which items had not been completed. Of the entire sample, 64.7% completed all 120 items, 84.4% completed at least 119 items, 89.1% at least 118 items and 92.9% at least 117 items. I decided to remove from the calculations the four subjects who had completed less than 75% of the items because they clearly had not been able to complete the profile because of interruptions, for example being called out to an instrumental music lesson. This left 808 subjects, 414 boys and 394 girls.

The results of carrying out tests for normal distribution using the raw scores are shown in Figure 5.2. Figure 5.2(a), which refers to the entire sample of 808, shows that the median and mean are almost coincident, there is an even distribution around the mean and acceptable numbers falling outside the plus or minus 3 Standard Deviations (< 1%) and 2 Standard Deviations (4.95%). The separate calculations for boys and girls show interesting variations. Although both give acceptable distributions, there is a very slight skewing in all cases. Depending on which formula is used to derive a coefficient of skewness there would appear to be more of a negative skew in the boys distribution than in the case of girls. Minium's first law of statistics is The eyeball is the statistician's most powerful instrument. Using this instrument, it would appear that the skewness is not of such magnitude that it should give cause for serious concern.

It was important to acknowledge in this calculation of distribution that means which had been arrived at on the basis of raw scores would not reflect exactly the distributions of values for each of the items in the profile. All raw scores for each item were therefore converted to standard Z scores. These Z scores were then used to recalculate mean scores for each subject in the same way as raw scores, and checked again for normal distribution. The distributions produced by this process are shown in Figures 5.3 and 5.4. It is evident that there is barely any difference between the graphs in Figures 5.2, 5.3 and 5.4, with one exception; Figure 5.4 (a) shows the bimodal effect of combining Z scores calculated for girls with Z scores calculated for boys. The Z scores in Figure 5.3 had been calculated on the combined raw scores for boys and girls.

3 The Pearson formula \( \frac{\text{mean} - \text{mode}}{\text{standard deviation}} \) gives these coefficients of skewness: \( M = -0.23; F = 0.25; \text{All} = 0.11 \). There is a variant of the Pearson formula, \( 3(\text{mean} - \text{median})/\text{standard deviation} \) which gives: \( M = -0.09; F = 0; \text{All} = -0.08 \). The Excel formula \( \frac{n}{(n-1)(n-2)} \sum (x_i - x)^3 \) gives \( M = -0.39; F = -0.11; \text{All} = -0.24 \).

4 *Statistical Reasoning in Psychology and Education* p.11
**Distribution of means of raw scores for all 808 subjects**

- Mean: 2.57
- Standard Deviation: 0.36
- Range: 1.31 - 3.72; n<1.45=2, n>3.64=1

**Fig. 5.2 (a)**

**Distribution of means of raw scores for 414 males**

- Mean: 2.53
- Standard Deviation: 0.35
- Range: 1.31 - 3.33; n<1.47=2, n>3.59=0

**Fig. 5.2 (b)**

**Distribution of means of raw scores for 394 females**

- Mean: 2.62
- Standard Deviation: 0.36
- Range: 1.45 - 3.72; n<1.55=2, n>3.69=1

**Fig. 5.2 (c)**
Distribution of means of Z scores for all 808 subjects
based on standard deviation for combined male and female scores
range = -1.335 to 1.163; \( i = 0.15 \)  \( \text{Fig. 5.3 (a)} \)

Distribution of means of Z scores for 414 males
based on standard deviation for combined male and female scores
range = -1.335 to 0.775; \( i = 0.15 \)  \( \text{Fig. 5.3 (b)} \)

Distribution of means of Z scores for 394 females
based on standard deviation for combined male and female scores
range = -1.196 to 1.163; \( i = 0.15 \)  \( \text{Fig. 5.3 (c)} \)
Distribution of means of \( Z \) scores for all 808 subjects
based on \textit{discrete} standard deviations for male and female scores
range = -1.251 to 1.130; \( i = 0.15 \)

\[ \text{Fig. 5.4 (a)} \]

Distribution of means of \( Z \) scores for 414 males
based on standard deviation for male scores only
range = -1.207 to 0.763; \( i = 0.15 \)

\[ \text{Fig. 5.4 (b)} \]

Distribution of means of \( Z \) scores for 394 females
based on standard deviation for female scores only
range = -1.251 to 1.130; \( i = 0.15 \)

\[ \text{Fig. 5.4 (c)} \]
Establishing reliability of the Personal Profile

i) Design considerations
How much confidence could be placed in these data? What factors might have contributed to producing reliable figures, and where might reliability have been prejudiced? As they were filling in the Personal Profile, subjects were frequently reminded that they should not complete an item if they did not understand what it meant; reliability would clearly have been prejudiced by requiring subjects to complete items which they did not understand. It is not certain that reliability would have been enhanced if subjects had been required to complete profiles in isolation from others. The practice in Scottish primary education is to encourage cooperative learning, and while this has the obvious danger of children sharing their ignorance or, in this case, transferring values, it is more likely to be helpful than otherwise. Subjects always had the option of clarifying with me what items meant. A second factor contributing to reliability was making the items as easily understandable as possible. If a great many items were not intelligible, or the exercise as a whole was perceived by subjects to be difficult this would be likely to bring about unreliable results. These two factors together were structurally important in trying to achieve reliability.

ii) Tests for reliability based on internal evidence
Analyses were undertaken to ascertain whether subjects’ own assessments of difficulty matched the number of uncompleted items; calculations were made to take account of age and gender differences. These analyses generated a number of tables.

In Table 5.3 are the percentage results of comparing responses to questions about the Personal Profile with numbers of items left uncompleted. This measurement shows that slightly more boys than girls found completing the Profile hard, and that age appeared to be a factor in this. The positive correlation between claims of hardness and numbers of items uncompleted is absolute for boys in respect of the oldest and youngest quarters while the same correlation for girls is absolutely negative. One is tempted to suggest that girls may have thought that the instruction to leave uncompleted an item which was not understood actually made the exercise easier, while boys may have thought that failure to complete an item reflected on the hardness of the task.

Table 5.4.1 groups the numbers of items left empty and compares the results by age, gender and subjects’ own assessments. Table 5.4.2 shows the coefficient of correlations based on this table. Together they show that the number of items left uncompleted in both male and female groups correlated positively to claims of hardness, 0.85 and 0.97 respectively. At the same time, although girls left a marginally higher proportion of items uncompleted, a lower percentage claimed it was hard. The correlations between age and percentage claiming hardness are -0.99 in the case of boys and 0.42 in the case of girls. In other words, the older that boys were, the less hard they claimed the test to be, with the reverse being the case for girls, although this latter correlation was weaker.
The information in this table comes from the subjects' own assessment of the Personal Profile. Subjects were invited to tick boxes indicating their view.

<table>
<thead>
<tr>
<th></th>
<th>Male All</th>
<th>Male Oldest quarter</th>
<th>Male Youngest quarter</th>
<th>Female All</th>
<th>Female Oldest quarter</th>
<th>Female Youngest quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject found it hard</td>
<td>16.67%</td>
<td>11.54%</td>
<td>19.23%</td>
<td>14.76%</td>
<td>11.22%</td>
<td>16.16%</td>
</tr>
<tr>
<td>Made subject think</td>
<td>76.76%</td>
<td>81.73%</td>
<td>66.99%</td>
<td>72.59%</td>
<td>84.69%</td>
<td>58.59%</td>
</tr>
<tr>
<td>Subject learnt something about self</td>
<td>49.76%</td>
<td>50.96%</td>
<td>51.92%</td>
<td>58.27%</td>
<td>43.88%</td>
<td>64.65%</td>
</tr>
</tbody>
</table>

Percentage items not completed: 0.75, 0.45, 1.03, 0.76, 0.77, 0.75

The percentage probability of any item being left uncompleted.

N. B. All figures in the table above are percentages.

n = 808 (414 Male, 394 Female)

Table 5.3 Subjects' views on Personal Profile
<table>
<thead>
<tr>
<th></th>
<th>Mean age</th>
<th>No. empty</th>
<th>Mean No.</th>
<th>No. people</th>
<th>Said hard</th>
<th>% hard</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MALES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group A (11+ items empty)</td>
<td>10.39</td>
<td>57</td>
<td>14.25</td>
<td>4</td>
<td>2</td>
<td>50.0</td>
</tr>
<tr>
<td></td>
<td>10.44</td>
<td>15</td>
<td>1</td>
<td>0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.34</td>
<td>14</td>
<td>3</td>
<td>2</td>
<td>66.7</td>
<td></td>
</tr>
<tr>
<td>Group B (6-10 items empty)</td>
<td>10.39</td>
<td>80</td>
<td>7.27</td>
<td>11</td>
<td>6</td>
<td>54.5</td>
</tr>
<tr>
<td></td>
<td>10.21</td>
<td>9</td>
<td>2</td>
<td>1</td>
<td>50.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.63</td>
<td>8</td>
<td>3</td>
<td>1</td>
<td>33.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.41</td>
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<td>2</td>
<td>1</td>
<td>50.0</td>
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<td></td>
<td>10.30</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>75.0</td>
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</tr>
<tr>
<td>Group C (1-5 items empty)</td>
<td>10.86</td>
<td>238</td>
<td>1.72</td>
<td>138</td>
<td>26</td>
<td>18.8</td>
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<tr>
<td></td>
<td>10.95</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>25.0</td>
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<tr>
<td></td>
<td>11.02</td>
<td>4</td>
<td>4</td>
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<td></td>
<td>10.60</td>
<td>3</td>
<td>23</td>
<td>5</td>
<td>21.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.95</td>
<td>2</td>
<td>26</td>
<td>7</td>
<td>26.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.80</td>
<td>1</td>
<td>81</td>
<td>13</td>
<td>16.0</td>
<td></td>
</tr>
<tr>
<td>Groups A, B and C</td>
<td>10.77</td>
<td>375</td>
<td>2.45</td>
<td>153</td>
<td>34</td>
<td>22.2</td>
</tr>
<tr>
<td>Group D (0 items empty)</td>
<td>10.85</td>
<td>0</td>
<td>261</td>
<td>35</td>
<td>13.4</td>
<td></td>
</tr>
<tr>
<td>All males</td>
<td>10.82</td>
<td>375</td>
<td>0.90</td>
<td>414</td>
<td>69</td>
<td>16.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Mean age</th>
<th>No. empty</th>
<th>Mean No.</th>
<th>No. people</th>
<th>Said hard</th>
<th>% hard</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FEMALES</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Group A (11+ items empty)</td>
<td>10.85</td>
<td>74</td>
<td>12.33</td>
<td>6</td>
<td>2</td>
<td>33.3</td>
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<tr>
<td></td>
<td>11.09</td>
<td>15</td>
<td>1</td>
<td>0</td>
<td>0.0</td>
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<td></td>
<td>9.76</td>
<td>14</td>
<td>1</td>
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<td>0.0</td>
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<tr>
<td></td>
<td>11.86</td>
<td>12</td>
<td>1</td>
<td>1</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.80</td>
<td>11</td>
<td>3</td>
<td>1</td>
<td>33.3</td>
<td></td>
</tr>
<tr>
<td>Group B (6-10 items empty)</td>
<td>10.91</td>
<td>121</td>
<td>7.56</td>
<td>16</td>
<td>4</td>
<td>25.0</td>
</tr>
<tr>
<td></td>
<td>10.73</td>
<td>10</td>
<td>3</td>
<td>1</td>
<td>33.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.87</td>
<td>9</td>
<td>3</td>
<td>0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11.71</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.51</td>
<td>7</td>
<td>2</td>
<td>0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11.00</td>
<td>6</td>
<td>7</td>
<td>3</td>
<td>42.9</td>
<td></td>
</tr>
<tr>
<td>Group C (1-5 items empty)</td>
<td>10.82</td>
<td>163</td>
<td>1.51</td>
<td>108</td>
<td>21</td>
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<td></td>
<td>11.03</td>
<td>4</td>
<td>9</td>
<td>3</td>
<td>33.3</td>
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</tr>
<tr>
<td></td>
<td>10.61</td>
<td>3</td>
<td>8</td>
<td>2</td>
<td>25.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.68</td>
<td>2</td>
<td>12</td>
<td>2</td>
<td>16.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.84</td>
<td>1</td>
<td>79</td>
<td>14</td>
<td>17.7</td>
<td></td>
</tr>
<tr>
<td>Groups A, B and C</td>
<td>10.83</td>
<td>358</td>
<td>2.75</td>
<td>130</td>
<td>27</td>
<td>20.8</td>
</tr>
<tr>
<td>Group D (0 items empty)</td>
<td>10.83</td>
<td>0</td>
<td>264</td>
<td>31</td>
<td>11.7</td>
<td></td>
</tr>
<tr>
<td>All females</td>
<td>10.83</td>
<td>358</td>
<td>0.91</td>
<td>394</td>
<td>58</td>
<td>14.7</td>
</tr>
</tbody>
</table>

*The italic figures in boxes give further details about the bold figures above them.*

**Table 5.4.1** Uncompleted items compared with subjects' own assessment of difficulty.
A similar pattern is reflected for boys in the correlation of uncompleted items to age (-0.89). One might expect that children as they got older would find fewer difficulties, but this pattern is reversed for girls, with a coefficient of 0.52. It is not simple to account for this paradoxical set of figures. The relatively low correlation coefficient for boys in respect of empty cells and % claiming hardness (0.85) can be accounted for by the small size of Group A, but it does not explain the growing claim of hardness by girls as they grow older. It is tempting to suppose that older girls were more aware of the implications of the items they were addressing. In all discussion of these figures, however, one needs to be conscious that the spread in age throughout the sample is not wide, and there are not great degrees of difference in the mean ages of any of the Groups A - D. There appears to be little here to give rise to anxiety about reliability, and some features which invite further exploration.

I thought it might also be possible to test for reliability by considering the proposition that the more an individual values something the more likely that person is to be consistent in choosing it from an assorted collection. The results of analysis based on this supposition are shown in Figures 5.5.1, 5.5.2 and 5.5.3. Here, bar charts have been generated to show for each of the elements of the paradigm the mean values of subjects who have chosen the same value repeatedly, up to the maximum number of opportunities for doing so. The numbers choosing the same value for all items referring to the same element was very small. For example, no one chose the same value for all eleven items representing the emotional element. This is not at all surprising because of the diversity of each individual’s emotional experience. The same principle holds for other elements; the items representing any element are not identical, nor are they meant to be, but the general principle might nonetheless hold true. All the bar graphs do indeed support the general proposition by illustrating in varying degrees the tendency predicted.
Numbers in brackets () indicate number of items for that element. M and F indicate male and female subjects.

Fig. 5.5.1 Changes in mean value with frequency of choosing same value for items representing individual Being elements.
Numbers in brackets ( ) indicate number of items for that element. 
M and F indicate male and female subjects.

Fig. 5.5.2 Changes in mean value with frequency of choosing same value for items representing individual Context elements.
<table>
<thead>
<tr>
<th>Element</th>
<th>M</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survive</td>
<td><img src="image" alt="Survive M" /></td>
<td><img src="image" alt="Survive F" /></td>
</tr>
<tr>
<td>Conform</td>
<td><img src="image" alt="Conform M" /></td>
<td><img src="image" alt="Conform F" /></td>
</tr>
<tr>
<td>Investigate</td>
<td><img src="image" alt="Investigate M" /></td>
<td><img src="image" alt="Investigate F" /></td>
</tr>
<tr>
<td>Create</td>
<td><img src="image" alt="Create M" /></td>
<td><img src="image" alt="Create F" /></td>
</tr>
<tr>
<td>Control</td>
<td><img src="image" alt="Control M" /></td>
<td><img src="image" alt="Control F" /></td>
</tr>
</tbody>
</table>

Numbers in brackets ( ) indicate number of items for that element. M and F indicate male and female subjects.

**Fig. 5.5.3** Changes in mean value with frequency of choosing same value for items representing individual Doing elements.
iii) **Distribution of difficulty within the Personal Profile**

Further analysis of the distribution of uncompleted items by element might throw some light on the variations between elements, and thereby identify potential difficulties leading to unreliability. The distribution of uncompleted items by element is shown in Table 5.5 and Figure 5.6, which confirm that some elements were perceived to be more difficult to complete than others. Elements relating to *Doing* appear to have been substantially the easiest group for both boys and girls. Boys managed to complete more *Doing* and *Context* items while girls completed more *Being* items. There are, however, notable variations in these tendencies when individual elements are considered. The significance of these variations would be worth further investigation because it may point to gaps in the opportunities for conceptual development in significant areas of human experience. The question remains as to whether these variations point to difficulties which are intrinsic or extrinsic to the Personal Profile. On the whole, the distribution of apparent difficulty does not challenge the reliability of the data.

<table>
<thead>
<tr>
<th>Element</th>
<th>Mean of uncompleted items per element</th>
<th>Expressed as %</th>
<th>The first two columns of figures are the result of counting the number of times items representing an element were not completed and then dividing that total by the number of items for that element. This represents the relative NIL responses of all 414 male and all 394 female subjects to the items for each element. For easier comparison raw figures were converted to percentages corrected to reflect the difference in size of the male and female samples. These figures are also shown as bar graphs in Fig. 5.6.</th>
</tr>
</thead>
<tbody>
<tr>
<td>physical</td>
<td>2.43 1.57</td>
<td>0.59 0.40</td>
<td></td>
</tr>
<tr>
<td>emotional</td>
<td>2.55 1.45</td>
<td>0.62 0.37</td>
<td></td>
</tr>
<tr>
<td>intellectual</td>
<td>4.50 3.83</td>
<td>1.09 0.97</td>
<td></td>
</tr>
<tr>
<td>moral</td>
<td>4.00 3.00</td>
<td>0.97 0.76</td>
<td></td>
</tr>
<tr>
<td>spiritual</td>
<td>5.43 5.48</td>
<td>1.31 1.39</td>
<td></td>
</tr>
<tr>
<td>BEING</td>
<td>4.11 3.57</td>
<td>0.99 0.91</td>
<td></td>
</tr>
<tr>
<td>heredity</td>
<td>2.20 1.00</td>
<td>0.53 0.25</td>
<td></td>
</tr>
<tr>
<td>people</td>
<td>2.00 1.60</td>
<td>0.48 0.41</td>
<td></td>
</tr>
<tr>
<td>culture</td>
<td>1.67 1.50</td>
<td>0.40 0.38</td>
<td></td>
</tr>
<tr>
<td>politics</td>
<td>6.17 5.83</td>
<td>1.49 1.48</td>
<td></td>
</tr>
<tr>
<td>universe</td>
<td>4.00 5.50</td>
<td>0.97 1.40</td>
<td></td>
</tr>
<tr>
<td>CONTEXT</td>
<td>3.33 3.37</td>
<td>0.81 0.85</td>
<td></td>
</tr>
<tr>
<td>survive</td>
<td>1.33 0.89</td>
<td>0.32 0.23</td>
<td></td>
</tr>
<tr>
<td>conform</td>
<td>2.00 2.00</td>
<td>0.48 0.51</td>
<td></td>
</tr>
<tr>
<td>investigate</td>
<td>1.67 3.50</td>
<td>0.40 0.89</td>
<td></td>
</tr>
<tr>
<td>create</td>
<td>1.30 1.30</td>
<td>0.31 0.33</td>
<td></td>
</tr>
<tr>
<td>control</td>
<td>1.67 2.33</td>
<td>0.40 0.59</td>
<td></td>
</tr>
<tr>
<td>DOING</td>
<td>1.54 1.84</td>
<td>0.37 0.47</td>
<td></td>
</tr>
</tbody>
</table>

This may indicate the level of difficulty of the language used or difficulty in understanding underlying concepts; the one is likely to be a correlate of the other.

Subjects appear to have had least difficulty with concepts and language dealing with action. There are interesting variations in the way individual elements are associated with male and female subjects.

**Table 5.5** Distribution of uncompleted items by element
The higher the column, the greater the proportion of uncompleted items and, by inference, the greater the difficulty with the associated element. Sample of 414 male and 394 female subjects.

**Being**

![Graph of Being](Fig. 5.6(a))

**Context**

![Graph of Context](Fig. 5.6(b))

**Doing**

![Graph of Doing](Fig. 5.6(c))

Sample of 414 male and 394 female subjects.
### Table 5.6  Top twenty uncompleted items

<table>
<thead>
<tr>
<th>Profile Element Empty</th>
<th>Rank</th>
<th>Item</th>
<th>Element</th>
<th>Rank (120)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 B5 35 4.33 1</td>
<td>I look for opportunities in life</td>
<td>2.65 (2.61)*</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>94 B5 33 4.08 2</td>
<td>I am willing to keep on persevering</td>
<td>2.66 (2.61)</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>77 B3 32 3.96 3</td>
<td>I look for patterns and relationships in what I see</td>
<td>2.10 (2.56)</td>
<td>106</td>
<td></td>
</tr>
<tr>
<td>16 B5 29 3.59 4</td>
<td>I am contented with my life</td>
<td>2.68 (2.61)</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td>8 B4 22 2.72 5</td>
<td>I am considerate towards other people</td>
<td>2.63 (2.75)</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>96 B5 21 2.60 6.5</td>
<td>I am willing to be flexible</td>
<td>2.58 (2.61)</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>93 C4 21 2.60 6.5</td>
<td>If I have to make a decision affecting others I consult them</td>
<td>2.64 (2.55)</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>13 B5 20 2.48 8</td>
<td>I am enthusiastic about life</td>
<td>2.65 (2.61)</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>104 C4 17 2.10 9</td>
<td>I am encouraged to be independent</td>
<td>2.47 (2.55)</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>105 C4 16 1.98 10</td>
<td>I am asked for my opinion in decisions which affect me</td>
<td>2.60 (2.55)</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>98 B5 15 1.86 11.5</td>
<td>I am willing to make sacrifices for other people</td>
<td>2.35 (2.61)</td>
<td>93</td>
<td></td>
</tr>
<tr>
<td>42 B5 15 1.86 11.5</td>
<td>I have a sense that life is deep and mysterious</td>
<td>2.26 (2.61)</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>60 C5 14 1.73 14</td>
<td>I wonder how the universe came into existence</td>
<td>2.37 (2.41)</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>90 D4 14 1.73 14</td>
<td>I look for ways of creating a happy atmosphere</td>
<td>2.75 (2.74)</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>85 D5 14 1.73 14</td>
<td>I try to get animals to be obedient</td>
<td>2.50 (2.23)</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td>106 B1 12 1.49 17</td>
<td>Being in good physical condition is important to me</td>
<td>2.76 (2.53)</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>103 C4 12 1.49 17</td>
<td>I am encouraged to be responsible</td>
<td>2.65 (2.55)</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>115 C5 12 1.49 17</td>
<td>Wondering about my place in the universe is important to me</td>
<td>2.14 (2.41)</td>
<td>104</td>
<td></td>
</tr>
<tr>
<td>62 C5 11 1.36 19.5</td>
<td>I wonder how we can know what is true</td>
<td>2.37 (2.41)</td>
<td>89</td>
<td></td>
</tr>
<tr>
<td>61 C5 11 1.36 19.5</td>
<td>I wonder how we can know what is real</td>
<td>2.32 (2.41)</td>
<td>95</td>
<td></td>
</tr>
</tbody>
</table>

**72 Mean**

As many items are above as below the mean value (*) for their element. **Mean 71**

*The Profile column indicates the order in which the item was presented in the Personal Profile. Empty lists the number of people not completing this item. The % is the percentage of all 808 subjects taken for establishing this rank order. Rank is the position in the order of frequency of not completing the item. The Mean Values are for the Item and the Element in which the item appears, and the Rank is the order in which the item is ranked in value by all 808 subjects. The mean value for the whole paradigm is 2.58.*
Further analysis abstracted the top twenty uncompleted items (Table 5.6). It shows that the difficulty anticipated with the item "I look for opportunities in life" was confirmed. Indeed this was the item most often left uncompleted in spite of what I thought was careful explanation of its meaning. It was also, in terms of my understanding of the purpose of religious education, a key item. The fact that it was left uncompleted, however, is in itself indicative of reliability in completing the Profile.

These top twenty uncompleted items are not evenly distributed across the range of item values, with none coming within the top 36% of valued items (Figure 5.7). This would appear to support the proposition that the more highly one values something the less likely one is to be unclear about it. The same top twenty items are shown distributed by age and gender (Table 5.7).

A further, restricted classification of uncompleted items for each element is shown in Figure 5.8 by age and gender. In the case of Figure 5.8(a) items which have been left uncompleted at least six times are charted and in 5.8(b) and 5.8(c) the focus is on those items which have been uncompleted at least twice in the oldest and youngest quarters of the sample. The charts in Figure 5.8 are a result of dividing the number of uncompleted items for an element by the number of items representing that element. This gives a value per element and thus the basis for comparison between elements. These values have been corrected for sample size differences and converted to a base of 100 subjects. The general picture remains much the same as shown in Figure 5.6; least difficulty with Doing elements is repeated, but this tighter focus on those items presenting greatest difficulty reveals some interesting features and variations. For instance, boys overall tended to complete fewer Moral items than girls, but this trend is reversed in the youngest quarter group where some items were evidently more problematic for girls. A similar reversal is apparent in the Universe context, only this time it is the youngest quarter of boys who appear to have greatest difficulty.

Fig. 5.7 Distribution of top twenty uncompleted items by value rank
<table>
<thead>
<tr>
<th>All Male and Female</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Profile Element</strong></td>
<td><strong>Empty</strong></td>
<td><strong>%</strong></td>
</tr>
<tr>
<td>4</td>
<td>B5</td>
<td>35</td>
</tr>
<tr>
<td>94</td>
<td>B5</td>
<td>33</td>
</tr>
<tr>
<td>77</td>
<td>B3</td>
<td>32</td>
</tr>
<tr>
<td>16</td>
<td>B5</td>
<td>29</td>
</tr>
<tr>
<td>8</td>
<td>B4</td>
<td>22</td>
</tr>
<tr>
<td>96</td>
<td>B5</td>
<td>21</td>
</tr>
<tr>
<td>93</td>
<td>C4</td>
<td>21</td>
</tr>
<tr>
<td>13</td>
<td>B5</td>
<td>20</td>
</tr>
<tr>
<td>104</td>
<td>C4</td>
<td>17</td>
</tr>
<tr>
<td>105</td>
<td>C4</td>
<td>16</td>
</tr>
<tr>
<td>98</td>
<td>B5</td>
<td>15</td>
</tr>
<tr>
<td>42</td>
<td>B5</td>
<td>15</td>
</tr>
<tr>
<td>60</td>
<td>C5</td>
<td>14</td>
</tr>
<tr>
<td>90</td>
<td>D4</td>
<td>14</td>
</tr>
<tr>
<td>85</td>
<td>D5</td>
<td>14</td>
</tr>
<tr>
<td>106</td>
<td>B1</td>
<td>12</td>
</tr>
<tr>
<td>103</td>
<td>C4</td>
<td>12</td>
</tr>
<tr>
<td>115</td>
<td>C5</td>
<td>12</td>
</tr>
<tr>
<td>62</td>
<td>C5</td>
<td>11</td>
</tr>
<tr>
<td>61</td>
<td>C5</td>
<td>11</td>
</tr>
</tbody>
</table>

The column marked Profile indicates the order in which the item appeared in the Personal Profile. The Element column indicates the Profile element, Empty is the number of nil responses to this particular item, and % is the nil responses in relation to the possible 808. The Rank orders show comparisons between the oldest and youngest quarters of the sample by gender. "-" indicates that no one in this category made a nil response to this item.

Table 5.7 Distribution of top twenty uncompleted items by age and gender
Distribution of most frequently uncompleted items by element.

**Fig. 5.8(a)**

Mean frequency per 100 subjects

- Items uncompleted at least six times within *either* male or female sections of sample.

Base: 19 items for M; 22 items for F

**Fig. 5.8(b)**

Mean frequency per 100 subjects

- Items uncompleted at least twice within *either* oldest male or female quarters of sample.

Base: 14 items for M; 22 items for F

**Fig. 5.8(c)**

Mean frequency per 100 subjects

- Items uncompleted at least twice within *either* youngest male or female quarters of sample.

Base: 33 items for M; 20 items for F
iv) *Statistical tests of reliability of Personal Profile*

Two decisive tests for reliability were conducted. The first of these treated schools as though they had been separate samples, which, in a sense they were. These were not equal samples, however, because of the stratified random sampling method adopted for constructing the overall sample. The second test was to conduct a split-test comparison in which all the odd items in the profile were treated as though they were one test and the even items as though they were another, and the two results compared. Summaries of both these tests are given in Tables 5.8 (males) and 5.9 (females). In the case of the schools as discrete samples, correlations were made using the Microsoft Excel correlation analysis tool. This analysis indicated a high degree of reliability, which became progressively higher as the samples reflected higher socioeconomic backgrounds, which is not a surprising statistical finding. According to the Spearman Brown Prophecy test, which uses the split test method, there is a very high degree of internal consistency.

v) *Conclusions from the analysis for reliability of Personal Profile*

As declared in the introduction to this thesis, it is beyond its scope to pursue all the interesting avenues that might be opened up by it. The purpose here is to establish a degree of confidence in the data, to show possibilities for further investigation and to establish the usefulness of the paradigm in generating a comprehensive account of the target population’s world views. In respect of the data related to the Personal Profile, it seems safe to draw the following conclusions:

- the sample represents a normal population;
- as a test, the Personal Profile appears to be reliable; there is a high level of consistency within the test itself; subjects’ own assessments of difficulty match the evidence of uncompleted items; correlations between schools taken as discrete samples are high; the split-test correlation is very high;
- variations usually reflect what could be expected in respect of age/difficulty and reliability/social background;
- areas of difficulty have been identified which might lead to an improvement of the Personal Profile;
- the data represent a wide range of experience and attitude and suggest that the Personal Profile will provide a coherent view of the beliefs and values of the target population.

In short, there does seem to be sufficient evidence to allow us to proceed to examine the data to discover what it tells us about the subjects’ world views. In the next chapter this examination will determine the degree to which the LivesCan Personal Profile is a valid test instrument.
LivesCan Personal Profile

Table 5.8 Reliability of Personal Profile for males

<table>
<thead>
<tr>
<th>School</th>
<th>Mean of coefficients</th>
<th>School 2</th>
<th>School 3</th>
<th>School 4</th>
<th>School 5</th>
<th>School 6</th>
<th>School 7</th>
<th>School 8</th>
<th>School 9</th>
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</thead>
<tbody>
<tr>
<td>School 1</td>
<td>1</td>
<td>0.62</td>
<td>0.73</td>
<td>0.55</td>
<td>0.73</td>
<td>0.71</td>
<td>0.69</td>
<td>0.58</td>
<td>0.62</td>
</tr>
<tr>
<td>School 2</td>
<td>1</td>
<td>0.73</td>
<td>0.75</td>
<td>0.73</td>
<td>0.76</td>
<td>0.72</td>
<td>0.69</td>
<td>0.67</td>
<td>0.62</td>
</tr>
<tr>
<td>School 3</td>
<td>1</td>
<td>0.77</td>
<td>0.77</td>
<td>0.77</td>
<td>0.72</td>
<td>0.76</td>
<td>0.73</td>
<td>0.71</td>
<td>0.67</td>
</tr>
<tr>
<td>School 4</td>
<td>0.89</td>
<td>0.77</td>
<td>0.72</td>
<td>0.85</td>
<td>0.85</td>
<td>0.84</td>
<td>0.83</td>
<td>0.88</td>
<td>0.87</td>
</tr>
<tr>
<td>School 5</td>
<td>0.90</td>
<td>0.89</td>
<td>0.76</td>
<td>0.85</td>
<td>0.84</td>
<td>0.84</td>
<td>0.88</td>
<td>0.88</td>
<td>0.88</td>
</tr>
<tr>
<td>School 6</td>
<td>1</td>
<td>0.89</td>
<td>0.76</td>
<td>0.85</td>
<td>0.84</td>
<td>0.84</td>
<td>0.88</td>
<td>0.88</td>
<td>0.88</td>
</tr>
<tr>
<td>School 7</td>
<td>1</td>
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<td>0.76</td>
<td>0.85</td>
<td>0.84</td>
<td>0.84</td>
<td>0.88</td>
<td>0.88</td>
<td>0.88</td>
</tr>
<tr>
<td>School 8</td>
<td>0.77</td>
<td>0.89</td>
<td>0.76</td>
<td>0.85</td>
<td>0.84</td>
<td>0.84</td>
<td>0.88</td>
<td>0.88</td>
<td>0.88</td>
</tr>
<tr>
<td>School 9</td>
<td>0.92</td>
<td>0.89</td>
<td>0.76</td>
<td>0.85</td>
<td>0.84</td>
<td>0.84</td>
<td>0.88</td>
<td>0.88</td>
<td>0.88</td>
</tr>
</tbody>
</table>

Correlation coefficient for males when test split between even and odd items = 0.87

Spearman Brown Prophecy Formula for reliability of whole test using split test: 2 x coeff / (1 + coeff)

Reliability of test for males = 0.93

Schools are ranked in descending order of proportion of pupils receiving free school meals i.e. School 1 has highest % of free school meals.

Mean of coefficients = 0.77
LivesCan Personal Profile

Correlation coefficients for females by schools

<table>
<thead>
<tr>
<th>School 1 (n = 23)</th>
<th>School 2 (n = 22)</th>
<th>School 3 (n = 29)</th>
<th>School 4 (n = 48)</th>
<th>School 5 (n = 65)</th>
<th>School 6 (n = 31)</th>
<th>School 7 (n = 39)</th>
<th>School 8 (n = 73)</th>
<th>School 9 (n = 64)</th>
</tr>
</thead>
<tbody>
<tr>
<td>School 1 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School 2 0.74 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School 3 0.78 0.76 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>School 4 0.78 0.81 0.88 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School 5 0.77 0.82 0.85 0.89 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School 6 0.72 0.75 0.79 0.84 0.90 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School 7 0.78 0.77 0.82 0.85 0.88 0.89 0.86 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School 8 0.73 0.78 0.81 0.87 0.92 0.84 0.86 0.86 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School 9 0.78 0.80 0.87 0.91 0.93 0.91 0.91 0.92 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mean of coefficients = 0.83

Correlation coefficient for females when test split between even and odd items = 0.91

Spearman Brown Prophecy formula for reliability of whole test using split-test: $2 \times \text{coeff} / (1 + \text{coeff})$

Reliability of test for females = 0.95

Table 5.9  Reliability of Personal Profile for females
Analysing the Religious Profile for reliability

The Religious Profile sought to collect important data about subjects' experiences of religion and attitudes towards religion. As with the more important Personal Profile, these data required testing for reliability. In chapter four I indicated how, in the administration of the Religious Profile, there appeared to be some embarrassment amongst some subjects as they entered their responses. This did raise doubts about the reliability of the data; it wasn’t clear if subjects were embarrassed because they did not want to reveal to others what they were disclosing about themselves, or embarrassed because they were entering what they knew not to be true. The general impression I formed as observer was that subjects were entering what was true, because the tendency was to cover up what had been written. It is still possible that what was being covered was an untruth that would have been known as such to the subject’s neighbours, but if this last was the case, why should there have been embarrassment about declaring what was already known? The responses to the statement I tell the truth, item B4-03 in the Personal Profile, were not particularly helpful because they could be interpreted as either supporting or rejecting the claim of truthfulness in the Religious Profile. Subjects did, however, show a strong tendency to want to do the right thing, item B4-08.

Because of its design, the Religious Profile was not amenable to the split-test of reliability; it contained a variety of unequal stimuli to which responses were to be made, sometimes by different groups. We have already seen with the Personal Profile how responses varied according to social class as measured by frequency of free school lunches. It seemed probable that the data about experience of religion and attitude to religion might be even more strongly conditioned by social class than are personal world views, so I considered it inappropriate to treat individual schools as separate samples. Within the Religious Profile, however, there were items to which consistent responses might be expected, and which might therefore constitute an internal test of reliability. One section of the Religious Profile referred to what subjects thought about religion. Four of the statements in this section, which were to be ticked if subjects considered they were true for them, indicated either positive or negative attitudes towards religion. Scoring each appropriately as -1 or +1 generated a five-point scale of attitude to religion as set out in Table 5.10. There were also other sections of the Religious Profile which asked for responses which might reflect attitude to religion, and these items were grouped according to subjects’ scores on the Attitude to Religion scale (Table 5.10). A null hypothesis, that attitude to religion is independent of responses to school experience of religious topics, was proposed and tested using the chi-square test. The results required the null hypothesis to be rejected for $\alpha = 0.05$ (indeed it would have been rejected for $\alpha = 0.005$). There was clearly a strong association between attitude to religion and opinion about religious topics in the school curriculum. All the items in Table 5.10 were correlated against each other using Microsoft Excel’s statistical tool for correlation. The results are shown in Table 5.11.
A very high degree of correlation was found between all items, for both male and female subjects. There appeared to be greatest uncertainty about attitude to religion amongst those who took part in church-type activities and who also claimed they found religion personally important, and this was particularly true amongst females. Subjects' attitudes and responses to related items were also correlated with age and this too was generally a little weaker, also particularly amongst females (Table 5.11). Relationships between religious activities as shown in Table 5.12 also indicated consistency of response. The results did seem to provide convincing evidence of consistency and reliability, from which could be inferred similar reliability in other items in the Religious Profile. As with the Personal Profile, the data appeared highly reliable.
Subjects were asked to indicate if they thought the following statements true:

<table>
<thead>
<tr>
<th>Attitude Score</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I think religion is meant to help us lead better lives.</td>
</tr>
<tr>
<td>-1</td>
<td>I think religion causes a lot of trouble in the world.</td>
</tr>
<tr>
<td>-1</td>
<td>I don’t think we really need religion.</td>
</tr>
<tr>
<td>1</td>
<td>I would like to know more about religion.</td>
</tr>
</tbody>
</table>

If a statement was considered true it was scored as above. This meant that every subject would have one of five scores: -2, -1, 0, 1, 2. These scores were taken to indicate five levels of negative to positive attitude to religion. Subjects were then divided into five groups representing the levels, selected data collected, and the mean for each group calculated:

- **S1** Religious topics in school are interesting.
- **S2** Religious topics in school are important.
- **S3** Religious topics in school are personally helpful.
- **Y/N** Subject does (Y) or does not take (N) part in church-type activity.
- **Y7** Subject takes part and considers religion personally important.
- **N6** Subject does not take part and considers religion personally unimportant.
- **Pray** Subject takes part in religious activity at home.
- **Age** Mean age of group.
- **n** Number in group.

### MALE

<table>
<thead>
<tr>
<th>Attitude</th>
<th>n</th>
<th>S1</th>
<th>S2</th>
<th>S3</th>
<th>Y/N</th>
<th>Y7</th>
<th>N6</th>
<th>Pray</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>negative 2</strong></td>
<td>76</td>
<td>0.91</td>
<td>0.92</td>
<td>0.80</td>
<td>0.09</td>
<td>0.29</td>
<td>0.75</td>
<td>0.04</td>
<td>11.05</td>
</tr>
<tr>
<td>negative 1</td>
<td>95</td>
<td>1.44</td>
<td>1.71</td>
<td>1.48</td>
<td>0.16</td>
<td>0.20</td>
<td>0.62</td>
<td>0.13</td>
<td>10.81</td>
</tr>
<tr>
<td>neutral 0</td>
<td>88</td>
<td>1.84</td>
<td>2.17</td>
<td>1.73</td>
<td>0.26</td>
<td>0.39</td>
<td>0.47</td>
<td>0.22</td>
<td>10.85</td>
</tr>
<tr>
<td>positive 1</td>
<td>103</td>
<td>2.41</td>
<td>2.58</td>
<td>2.24</td>
<td>0.42</td>
<td>0.72</td>
<td>0.33</td>
<td>0.44</td>
<td>10.69</td>
</tr>
<tr>
<td>positive 2</td>
<td>50</td>
<td>2.50</td>
<td>2.96</td>
<td>2.68</td>
<td>0.38</td>
<td>0.68</td>
<td>0.19</td>
<td>0.44</td>
<td>10.74</td>
</tr>
</tbody>
</table>

Total **negative 44** 412
Mean -0.11

### FEMALE

<table>
<thead>
<tr>
<th>Attitude</th>
<th>n</th>
<th>S1</th>
<th>S2</th>
<th>S3</th>
<th>Y/N</th>
<th>Y7</th>
<th>N6</th>
<th>Pray</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>negative 2</td>
<td>48</td>
<td>1.12</td>
<td>1.19</td>
<td>1.10</td>
<td>0.10</td>
<td>0.20</td>
<td>0.63</td>
<td>0.15</td>
<td>10.87</td>
</tr>
<tr>
<td>negative 1</td>
<td>56</td>
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<td>1.57</td>
<td>0.21</td>
<td>0.09</td>
<td>0.60</td>
<td>0.22</td>
<td>10.94</td>
</tr>
<tr>
<td>neutral 0</td>
<td>82</td>
<td>1.93</td>
<td>2.27</td>
<td>1.88</td>
<td>0.35</td>
<td>0.52</td>
<td>0.30</td>
<td>0.32</td>
<td>10.83</td>
</tr>
<tr>
<td>positive 1</td>
<td>119</td>
<td>2.31</td>
<td>2.55</td>
<td>2.18</td>
<td>0.39</td>
<td>0.44</td>
<td>0.23</td>
<td>0.43</td>
<td>10.83</td>
</tr>
<tr>
<td>positive 2</td>
<td>88</td>
<td>2.58</td>
<td>2.88</td>
<td>2.69</td>
<td>0.45</td>
<td>0.68</td>
<td>0.08</td>
<td>0.62</td>
<td>10.74</td>
</tr>
</tbody>
</table>

Total **positive 143** 393
Mean 0.36

\[ H_0 = \text{attitude to religion is independent of scores on any of S1, S2, S3.} \]

\[ \chi^2_{crit} = 26.3 \text{ at } \alpha = .05 \text{ for } df = 16 : \]

\[ S1 = 137 \text{ (M) and 108 (F)} \]

\[ S2 = 149 \text{ (M) and 117 (F)} \]

\[ S3 = 120 \text{ (M) and 100 (F)} \]

\[ H_0 \text{ is rejected for S1, S2, S3} \]

| Table 5.10 Religious Profile Reliability | page 140 |
Each of the selected items was correlated against all the others. Consistently high correlation would indicate a high degree of reliability. Particular interest centred on the correlation of attitude to other items. The figures are correlation coefficients calculated using Microsoft Excel.

S1 Religious topics in school are interesting.
S2 Religious topics in school are important.
S3 Religious topics in school are personally helpful.
Y/N Subject does (Y) or does not take (N) part in church-type activity.
Y7 Subject takes part and considers religion personally important.
N6 Subject does not take part and considers religion personally unimportant.
Pray Subject takes part in religious activity at home.
Age Mean age of group.

### MALE

<table>
<thead>
<tr>
<th>Attitude</th>
<th>S1</th>
<th>S2</th>
<th>S3</th>
<th>Y/N</th>
<th>Y7</th>
<th>N6</th>
<th>Pray</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S1</td>
<td>0.98</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S2</td>
<td>0.99</td>
<td>0.99</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S3</td>
<td>0.99</td>
<td>0.98</td>
<td>0.99</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y/N</td>
<td>0.94</td>
<td>0.98</td>
<td>0.94</td>
<td>0.93</td>
<td>1</td>
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<td></td>
</tr>
<tr>
<td>Y7</td>
<td>0.89</td>
<td>0.89</td>
<td>0.83</td>
<td>0.85</td>
<td>0.94</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N6</td>
<td>-1.00</td>
<td>-0.98</td>
<td>-0.99</td>
<td>-0.99</td>
<td>-0.95</td>
<td>-0.90</td>
<td>1</td>
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</tr>
<tr>
<td>Pray</td>
<td>0.97</td>
<td>0.98</td>
<td>0.95</td>
<td>0.96</td>
<td>0.99</td>
<td>0.95</td>
<td>-0.97</td>
<td>1</td>
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<tr>
<td>Age</td>
<td>-0.85</td>
<td>-0.91</td>
<td>-0.91</td>
<td>-0.90</td>
<td>-0.88</td>
<td>-0.71</td>
<td>0.85</td>
<td>-0.88</td>
</tr>
</tbody>
</table>

### FEMALE

<table>
<thead>
<tr>
<th>Attitude</th>
<th>S1</th>
<th>S2</th>
<th>S3</th>
<th>Y/N</th>
<th>Y7</th>
<th>N6</th>
<th>Pray</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>0.98</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>S2</td>
<td>0.97</td>
<td>0.99</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S3</td>
<td>1.00</td>
<td>0.98</td>
<td>0.97</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y/N</td>
<td>0.98</td>
<td>0.97</td>
<td>0.98</td>
<td>0.97</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y7</td>
<td>0.86</td>
<td>0.77</td>
<td>0.78</td>
<td>0.85</td>
<td>0.87</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N6</td>
<td>-0.97</td>
<td>-0.92</td>
<td>-0.91</td>
<td>-0.95</td>
<td>-0.97</td>
<td>-0.95</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Pray</td>
<td>0.98</td>
<td>0.94</td>
<td>0.92</td>
<td>0.98</td>
<td>0.93</td>
<td>0.88</td>
<td>-0.96</td>
<td>1</td>
</tr>
<tr>
<td>Age</td>
<td>-0.82</td>
<td>-0.69</td>
<td>-0.68</td>
<td>-0.81</td>
<td>-0.77</td>
<td>-0.96</td>
<td>0.90</td>
<td>-0.88</td>
</tr>
</tbody>
</table>

The evidence points to a very high degree of consistency between those items where consistency might have been expected. The inference is that all the data are correspondingly reliable.
Subjects who don't take part in church-type activities:
13.2% pray or take part in religious activity at home
14.8% claim to know nothing about Bible

Subjects who do take part in church-type activities:
56.1% pray or take part in religious activity at home
2.8% claim to know nothing about Bible

Subjects who don't take part in religious activities at home:
15.3% take part in church-type activities
13.6% claim to know nothing about Bible

Subjects who do take part in religious activities at home:
60% take part in church-type activities
6% claim to know nothing about Bible

Using the chi-square test of distribution, comparison between involvement or non-involvement in church-type activities was made with a number of items in the Personal Profile which were thought to be particularly relevant to religious world views. Male and female subjects were examined separately. The general null hypothesis in each case was that there was no association at $\alpha = .05$ between involvement in church-type activities and these listed items:

$$\chi^2_{crit} = 9.49 \text{ at } \alpha = .05 \text{ for } df = 4$$

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am considerate towards other people</td>
<td>B4-01 1.3</td>
<td>5.8</td>
</tr>
<tr>
<td>I help people in trouble</td>
<td>B4-02 5.1</td>
<td>1.8</td>
</tr>
<tr>
<td>I am enthusiastic about life</td>
<td>B5-01 0.6</td>
<td>3.8</td>
</tr>
<tr>
<td>I am a confident person</td>
<td>B5-02 3.7</td>
<td>1.9</td>
</tr>
<tr>
<td>I am willing to make sacrifices for other people</td>
<td>B5-18 7.7</td>
<td>2.5</td>
</tr>
<tr>
<td>I am willing to do what is right even if I might get hurt</td>
<td>B5-19 5.5</td>
<td>3.1</td>
</tr>
<tr>
<td>I am willing to forgive people who treat me badly</td>
<td>B5-20 1.5</td>
<td>4.9</td>
</tr>
<tr>
<td>I wonder how the universe came into existence</td>
<td>C5-03 2.1</td>
<td>3.1</td>
</tr>
<tr>
<td>I wonder what happens to us when we die.</td>
<td>C5-07 2.5</td>
<td>1.4</td>
</tr>
</tbody>
</table>

In each case the null hypothesis was retained. It would appear that experience of church-type activities does not significantly influence any of these Personal Profile items.

Table 5.12 Relationships between religious activities
Chapter 6
The validity of the world views mapped

But the self is self only because it has a world, a structured universe, to which it belongs and from which it is separated at the same time. Self and world are correlated and so are individualization and participation.

Paul Tillich

Summary
The validity of the LivesCan Personal Profile is considered. This is approached through considering how well its results reflect key features of conclusions drawn by major contributors to the fields of moral and faith development, particularly as they relate to child development. After a statement of these benchmark positions the data are examined along with the data from the Religious Profile to determine whether there is any correspondence and, if so, how important it is. Conclusions are drawn about the validity of the Personal Profile for mapping world views and some questions raised about the benchmark positions. The findings and the issues raised by the data are discussed briefly, both in respect of the subjects in the sample and for what they suggest is required to develop religious learning amongst the population from which the sample is drawn. The evidence is held to confirm the secular context of the non-denominational school.

Criteria for validating Personal Profile results
The validity of the Personal Profile, and by inference the efficacy of the LivesCan paradigm, can be argued if the data corroborate the findings of major studies in this field. The question arises, of course, concerning what of a new nature might be added by the results of the present study? Does it bring new knowledge and new possibilities? Does it suggest new possibilities for learning, for instance through interactive computer learning, and does it provide any new insights? To begin this process of reflection, I chose to compare my findings with Erikson's conclusions about the stage of moral development in the period of latency, where the task is seen to be industry; Gilligan's comparison of female and male attitudes to morality; and Fowler's parallel conclusions for the same stage about faith development, the mythic-literal.

i) Erikson and industry
The most immediate observation in connection with Erikson is that subjects, as already noted, appeared generally to have little difficulty with items representing action. There are, however, specific items which may focus more closely on the conclusions drawn by Erikson. In his account of this age group in Childhood and Society he makes a number of

1 Paul Tillich The Courage To Be Collins Fontana 1962 (First published Nisbet & Co. Ltd., 1952) p.90.
assertions:

- the child now learns to win recognition by producing things;
- the child becomes ready to apply himself to given skills and tasks;
- the child develops a sense of industry;
- the work principle (loves Hendrick) teaches him the pleasure of work completion by steady attention and persevering diligence;
- the child's danger, at this stage, lies in a sense of inadequacy and inferiority;
- this is socially a most decisive age;
- a sense of the technological ethos of a culture develops at this time;
- danger of threat to individual and society where the schoolchild begins to feel that the colour of his skin, the background of his parents, or the fashion of his clothes, will decide his worth as an apprentice;
- danger of narrowing horizons to work. If he accepts work as his only obligation, and 'what works' as his only criterion of worthwhileness, he may become the conformist and thoughtless slave of his technology and of those who are in a position to exploit it.  

The question to be resolved was whether any of these assertions could be tested by reference to the LivesCan paradigm indicators in the Personal Profile, and if they could, whether there was any significant correlation.

ii) Gilligan and gender orientation in morality

Gilligan identified important gender differences in moral development and with Wiggins concluded that two complementary strands in moral development, a female orientation to care and a male orientation to justice, are both necessary for mature moral reasoning, and that the gender differences are particularly noticeable in childhood.

iii) Fowler, literalism and social conformity

Fowler asserts about the mythic-literal stage:

- begins to take on for him- or herself the stories, beliefs and observances that symbolize belonging to his or her community;
- beliefs are appropriated with literal interpretations, as are moral rules and attitudes;
- symbols are taken as one-dimensional and literal in meaning;
- compose a world based on reciprocal fairness and an immanent justice and reciprocity;
- excessive reliance on reciprocity as a principle for constructing an ultimate environment can result either in an overcontrolling, stilted perfectionism or 'works righteousness' or in their opposite, an abasing sense of badness embraced because of mistreatment, neglect or the apparent disfavor of significant others.

It would be too much to expect that enough evidence had been collected in the Personal and Religious Profiles to reflect all the features listed above, but what would be critically important for each? In the case of Erikson, a relatively high value attributed to industry would be necessary, as would evidence of this being a socially decisive age. For Gilligan it would be gender difference in moral orientation. For Fowler it would be literalism and

2 Childhood and Society pp. 250 - 252.
5 Stages of Faith p.149f.
conformity to peer norms. The evidence to be sought from the data, therefore, are: industry, gender moral difference, literalism and social conformity.

Industry, literalism, moral orientation and social conformity

i) Introduction

An analysis of the responses to the Personal Profile are summarised in the tables to be found in Appendix A. In the first set of tables (A1.1 - A1.6) all 120 items in the Profile have been grouped so that those which are intended to indicate the same element of the LivesCan paradigm are brought together. The order in which the item came in the Personal Profile is also indicated. The means and standard deviations of the raw scores have been calculated for each item showing gender variation and combined results. The association of male to female scores have been presented in two ways: the first shows a simple percentage difference between the means for boys and girls, and the second lists the results of using the chi-square test for distribution of frequencies on the five-point LivesCan scale. The level of significance thought appropriate for this test is $\alpha = 0.05$, but other levels of significance for the chi-square score are also indicated, those with a higher level of significance obviously being acceptable. Figure 6.1 shows the linear relationship between male and female mean scores for each item.

![Fig. 6.1 Scatter diagram showing correlation of male and female mean scores for Personal Profile items.](image)

The second set of tables (A2.1 - A2.6) shows the values for youngest and oldest quarters of the samples and their relationships. The data for the elements are summarised in Table A3. Tables A4.1 - A4.5 display the ranking of mean raw scores by age and gender, and by male/female difference.

Items were selected from the Personal Profile which were thought significant for indicating the Personal Profile's validity according to the criteria chosen for this purpose.
The relevant data are presented in Table 6.1 (industry), Table 6.2 (literalism), Table 6.3 (moral orientation) and Table 6.4 (social conformity).

ii) Industry
Ten items which seemed to provide the best indicators of whether the subjects valued industry are listed in Table 6.1. These were indeed all relatively high scoring items which did tend to suggest validity in relation to Erikson. We have already noted the relative ease with which pupils coped with items involving action.

iii) Literalism
It was more difficult to identify items which might directly indicate literalism. People who are literalist, however, are strict about conformity to rules, so the most promising items were selected from amongst those which reflected attitudes to rules and conformity. These are listed in Table 6.2. Keeping promises is a powerful indicator of literalism, where words are literally used for defining action, and the data show that this is given a very high value by both boys and girls. Doing something that you think you shouldn’t implies the breaking of a rule or explicit instruction, and guilt feelings associated with this is likewise given a high value. However, a considerably lower value is given to feeling guilty about not doing something which you think you should. It seems probable that this reflects both this particular group’s interest in completed action and an immature awareness that breaking a negative rule, “Don’t do this” is not in principle different from breaking a positive rule, “Do this”. It is easier to grasp a specific prohibition, and know when you breach it, than to understand a principle of action and exercise judgment. High values are similarly given to right action, while forgiveness, which may be seen as an optional, internal attitude which does not require positive action, scores a lower value. In other words, subjects are prepared to be hurt by doing the right thing, but when the hurt they experience has not been generated by their own direct action, they either do not see forgiveness as a rule for action or they operate a rule by which the transgressor forfeits the right to good relations with the victim. This last is the reciprocity that Fowler is concerned that people should move beyond. It is interesting to note in passing, however, the difference between boys’ and girls’ responses to the issue of forgiveness. We shall very shortly return to this in connection with Gilligan’s distinction between male and female orientations in morality. Further supporting evidence of literalism is provided in the very low responses to willingness to break rules to win a game, especially amongst girls, and to telling lies to keep out of trouble. It seems quite clear that there is a strong resistance to rule or instruction breaking, but not so strong a commitment to implementing principles. When all these results are taken together, it is reasonable to infer a form of literalism.

Fowler also saw children taking on stories that symbolised belonging to the community. When the data relating to the Religious Profile are presented, the change in attitude to religion they reveal may be a strong indicator of this characteristic, which does not in
Table 6.1 Evidence of industry

<table>
<thead>
<tr>
<th>Personal Profile</th>
<th>Male Mean Rank</th>
<th>Female Mean Rank</th>
<th>(M-F)/F% Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2-07 I get excited when I am successful</td>
<td>3.03 12</td>
<td>3.11 13</td>
<td>-2.5 47</td>
</tr>
<tr>
<td>B2-08 I get frustrated when things don't work out</td>
<td>2.72 42</td>
<td>2.73 54</td>
<td>-0.2 33</td>
</tr>
<tr>
<td>C3-01 I find there are lots of interesting things to do</td>
<td>2.82 33</td>
<td>2.81 39</td>
<td>0.2 30</td>
</tr>
<tr>
<td>D1-06 I work hard to get what I want</td>
<td>2.88 24</td>
<td>2.88 34</td>
<td>0.0 32</td>
</tr>
<tr>
<td>D3-03 I am interested to find out how things work</td>
<td>3.07 10</td>
<td>2.73 50</td>
<td>12.2 6</td>
</tr>
<tr>
<td>D3-04 I am interested to find out how to do new things</td>
<td>3.08 8</td>
<td>3.00 22</td>
<td>2.6 19</td>
</tr>
<tr>
<td>D3-05 I enjoy experimenting to see what happens</td>
<td>2.87 27</td>
<td>2.79 43</td>
<td>3.0 17</td>
</tr>
<tr>
<td>D4-01 I enjoy repairing things</td>
<td>2.75 38</td>
<td>2.25 99</td>
<td>22.2 1</td>
</tr>
<tr>
<td>D4-02 I enjoy making things</td>
<td>3.27 2</td>
<td>3.46 2</td>
<td>-5.5 81</td>
</tr>
<tr>
<td>D4-08 I work at doing things as well as I can</td>
<td>2.91 19</td>
<td>3.03 21</td>
<td>-4.2 67</td>
</tr>
</tbody>
</table>

Table 6.2 Evidence of literalism

| B4-04 I keep my promises *                          | 2.89 22        | 3.05 19          | -5.0 78       |
| B4-06 I feel guilty when I do something I think I shouldn't * | 2.85 30        | 2.96 25          | -3.8 60       |
| B4-07 I feel guilty when I don't do something I think I should | 2.34 90        | 2.58 72          | -9.2 108      |
| B4-08 Doing the right thing is important to me *    | 2.74 41        | 2.97 24          | -7.9 99       |
| B5-19 I am willing to do what is right even if I might get hurt * | 2.87 26        | 2.83 36          | 1.4 26        |
| B5-20 I am willing to forgive people who treat me badly | 2.31 92        | 2.65 63          | 12.7 114      |
| D1-07 I am willing to break the rules to win a game | 1.30 120       | 1.08 120         | 20.4 4        |
| D1-08 I am willing to tell lies to keep out of trouble | 1.72 114       | 1.41 119         | 22.2 2        |
| D2-05 I obey the rules if I know what they are *    | 2.65 50        | 2.93 29          | -9.5 109      |
iv) Moral orientation

Reference has already been made to the difference between boys and girls in respect of forgiveness and telling lies. This would tend to support Gilligan’s claim of different orientation, with girls showing a strong preference for action which maintains relationships. This evidence is further enhanced by consideration of those items, listed in Table 6.3, which are other-enhancing. The mean percentage difference between boys and girls for the whole Personal Profile is 3.2% in favour of girls. Bearing this in mind, the list provides strong evidence that orientation towards others is above average amongst girls.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>M</th>
<th>F</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2-10</td>
<td>I feel pleased about other people’s good luck or success</td>
<td>52</td>
<td>20</td>
<td>66</td>
</tr>
<tr>
<td>B4-01</td>
<td>I am considerate towards other people</td>
<td>66</td>
<td>52</td>
<td>7.5</td>
</tr>
<tr>
<td>B4-02</td>
<td>I help people in trouble</td>
<td>46</td>
<td>26</td>
<td>8.7</td>
</tr>
<tr>
<td>B5-16</td>
<td>I am willing to be flexible</td>
<td>72</td>
<td>58</td>
<td>7.9</td>
</tr>
<tr>
<td>B5-17</td>
<td>I am willing to see the best in other people</td>
<td>40</td>
<td>38</td>
<td>3.1</td>
</tr>
<tr>
<td>B5-20</td>
<td>I am willing to forgive people who treat me badly</td>
<td>92</td>
<td>63</td>
<td>12.7</td>
</tr>
<tr>
<td>C2-03</td>
<td>I try to get on well with people</td>
<td>7</td>
<td>7</td>
<td>-6.3</td>
</tr>
<tr>
<td>C2-04</td>
<td>I do as much as I can for other people</td>
<td>81</td>
<td>45</td>
<td>-12.6</td>
</tr>
<tr>
<td>C2-05</td>
<td>Knowing what others think of me is important to me</td>
<td>44</td>
<td>30</td>
<td>-7.3</td>
</tr>
<tr>
<td>C3-05</td>
<td>I like to do things which give other people pleasure</td>
<td>36</td>
<td>28</td>
<td>-5.9</td>
</tr>
<tr>
<td>D1-03</td>
<td>I am interested to help out at home</td>
<td>106</td>
<td>87</td>
<td>-14.1</td>
</tr>
<tr>
<td>D2-03</td>
<td>I look forward to family activities</td>
<td>9</td>
<td>6</td>
<td>-6.8</td>
</tr>
<tr>
<td>D2-06</td>
<td>Being able to fit in with others is important to me</td>
<td>28</td>
<td>18</td>
<td>-6.2</td>
</tr>
<tr>
<td>D2-04</td>
<td>I do what my friends want</td>
<td>113</td>
<td>113</td>
<td>-9.7</td>
</tr>
<tr>
<td>D5-04</td>
<td>My friends do what I want</td>
<td>118</td>
<td>116</td>
<td>-1.9</td>
</tr>
<tr>
<td>D3-02</td>
<td>I am interested to find out why people are the way they are (Only item in Investigate that girls score higher)</td>
<td>96</td>
<td>82</td>
<td>-6.9</td>
</tr>
</tbody>
</table>

* based on mean raw scores

Table 6.3 Orientation towards others by gender

The only item in the Create element which boys favour, massively at 22.2%, is enjoyment of repairing things. Otherwise girls give creativity a higher value, particularly music (21.7%) and growing plants (20.7%). Compared to these, Enjoying looking after animals and other living creatures scores a relatively low level of preference by girls (8.4%) but it is still high, and statistically significant at \(\alpha = 0.001\). Girls are also better at controlling their feelings (6%) an important self-discipline in the maintenance of relationships. In the Investigate element the only item where girls scored higher than boys was in expressing interest in finding out why people are the way they are. Finally, boys are much more likely to say Getting my own way is important to me (21.8%), not a recipe for maintaining caring relationships. The results do tend to support Gilligan’s contention...
about a female orientation towards caring and maintenance of relationship, but there is not immediately visible the claimed male orientation towards justice. Indeed, as we have seen, boys seem to be much more likely to cheat to win a game, to lie to keep out of trouble and to want to get their own way, although these behaviours are ranked extremely low by both genders.

If all the items in which boys score higher values than girls are put together, the image which emerges is quite startling. Relatively, boys are confident, brave, satisfied with the way they look, take plenty of exercise and want to be in good physical condition. They are glad to be born the people they are and are able stand up for themselves. They get annoyed and yet can see the funny side of life. They want their own way and feel free to do what they want. They look for opportunities in life, and are prepared to cheat and lie. The only other people they appear to be interested in finding out about are dead and in the past. They like to find out how things work and what makes things happen, and they enjoy experimenting and fixing things. They also like to find out how to do new things. They do get good ideas. They find the universe amazing and think about how big and complicated it is and wonder how it came into existence. They ponder questions of reality, truth and their place in the universe. They are prepared to get hurt in doing what is right and wonder what happens to them when they die.

What this gives us is, I think, a picture of a philosopher knight. It is a strongly male image, full of ambition for technical and intellectual power. One suspects that this philosopher knight has grand designs which take little account of the suffering that may follow in the wake of their pursuit to achieve their ambitions, and as a consequence of not attending to the immediate needs of interpersonal relationships, caring and nurturing. It does seem to mirror human history, which has been dominated by men, in a surprisingly clear way. And these are simply the behaviours boys aged approximately 10 to 12 years are more likely to exhibit than girls of the same age. If this were the whole picture, it would not offer much hope for justice with a heart as well as a hand and head. There is fortunately more to see, but the evidence of orientation to justice as a predominantly male characteristic is absent from this picture.

Consideration of the ranking of items according to the values attributed by boys and girls provides an altogether more optimistic picture. Of all the items in the Profile, the one to which both boys and girls give least support is willingness to break rules in order to win a game. Girls make telling lies to get out of trouble their next least desirable behaviour and boys make it their seventh least desirable practice. This suggests a very high degree of commitment to morality conceived as observing the letter of the law and the words we use to correspond to events in the world of human behaviour. While this ranking tends to confirm some observations about this stage of human development, it still does not support the claim of orientation to justice as characteristically male. Five items in Table 6.2
which may be taken as supporting in a positive way the idea of just action (marked with an asterisk *) have a higher mean value for males than eleven items listed in Table 6.3 which are most obviously oriented towards interest in others (marked by a bullet point •). This suggests that boys' orientation may be more towards the enactment of justice than it is towards interest in other people for their own sake. If one also considers the movement in the five justice items responses between the youngest and oldest quarters on these items, there is a perfect gender match. On the other hand, in the responses to forgiveness (B5-20) there is a movement towards forgiveness between the youngest and oldest boys, and away in the case of girls; there is a jump in the ranking of this item by boys from 98 to 75, while older girls rank it at 68 compared to younger girls who rank it at 61. These changes may reflect different rates of maturation, but it is encouraging that boys appear to be approaching the same level of forgiveness as girls as they get older. In the case of boys, this may be associated with their decline in self-confidence. Apparent in all these comparisons is the tendency towards equalising fundamental attitudes, or regression towards the mean, which suggests an emerging consensus of peer values. It nonetheless conforms to Gilligan and Wiggins' contention that gender differences are particularly noticeable in childhood. On the data here, however, girls still have a keener sense of fairness than boys, and a preparedness to act in accordance with that principle. It might be reasonable to assume that people with a more developed understanding of the possibilities of human relationships are also likely to have a more mature understanding of justice, an understanding that justice is more than the technical operation of rules. It may be necessary to examine again the assumption that justice is a male orientation, or at least it may need to be expressed in less dichotomous terms. Males may be more oriented towards justice than caring, but the males in this study are not more oriented towards justice than the females. Given that so much else of the data in the Personal Profile is consonant with what is already thought to be the situation for this age group, this deviation is particularly notable. The implications of this finding are far-reaching.

\[ v) \text{ Social conformity}\]

The final test for establishing the validity of the Personal Profile was social conformity. Seven items in the Personal Profile seemed to represent social conformity of varying degrees of seriousness and these are listed in Table 6.4. Both boys and girls give a high ranking (7) to trying to get on with people and attach high value to being able to fit in with others, ranked 28 by boys and 18 by girls. High value is given to obeying rules if they are known, especially amongst girls, who also respond much more positively to parental authority than boys. At one level, there is strong evidence of resistance to following the herd, with both genders ranking at 113 doing what their friends want them to. There does not seem to be a particularly strong desire to copy others in dress or in behaviour. The suggestion can be made that the subjects conform in those aspects of living which have deeper significance, but they do not appear to wish to conform to superficial peer norms identified by Fowler. It would suggest that it may be particularly important at this stage
<table>
<thead>
<tr>
<th>Personal Profile</th>
<th>Male</th>
<th>Female</th>
<th>(M-F)/F%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Rank</td>
<td>Mean</td>
</tr>
<tr>
<td>C2-03 I try to get on well with people</td>
<td>2.54</td>
<td>-</td>
<td>2.62</td>
</tr>
<tr>
<td>C3-02 I like to wear the same kinds of things as others my age</td>
<td>2.48</td>
<td>73</td>
<td>2.58</td>
</tr>
<tr>
<td>C3-03 I like to do the same kinds of things as other people</td>
<td>2.50</td>
<td>70</td>
<td>2.52</td>
</tr>
<tr>
<td>D2-02 I do what my parent or guardian tells me</td>
<td>2.52</td>
<td>68</td>
<td>2.75</td>
</tr>
<tr>
<td>D2-04 I do what my friends want me to</td>
<td>1.83</td>
<td>113</td>
<td>2.03</td>
</tr>
<tr>
<td>D2-05 I obey the rules if I know what they are</td>
<td>2.65</td>
<td>50</td>
<td>2.93</td>
</tr>
<tr>
<td>D2-06 Being able to fit in with others is important to me</td>
<td>2.86</td>
<td>28</td>
<td>3.05</td>
</tr>
</tbody>
</table>

Table 6.4 Evidence of social conformity
vi) Summary of findings from Personal Profile

There are strong reasons for considering the data from the Personal Profile to be valid as well as reliable. They follow a normal distribution, satisfy tests for reliability and are in many respects consistent with what is widely held to be characteristic of the age group in respect of moral and faith development. Further study and discussion might determine whether the different orientations of males and females to morality is more or less significant than the evidence that girls appear to be more oriented towards morality than boys. Consideration needs also to be given to whether boys' greater commitment to investigation and "big ideas" is likely in the long run to be more productive in terms of spiritual and moral development, for them at least, and possibly for humankind as a whole. Further study is also suggested into whether children of this age are as susceptible, at a visible level at least, to peer group pressure as some might hold.

Although not discussed in the text, the following observations are readily made from studying the tables associated with the Personal Profile. They are listed here because they provide an overall picture which is consistent with the detailed results already considered.

- In respect of mean raw scores, there is a relatively even distribution of value across the three dimensions of Being, Context and Doing: this is true for both genders and for both age quarters analysed.

The mean raw scores for elements are distributed differently by each gender:
- Boys value Investigate most highly, followed by Moral and People equally, then Heredity and Create equally. Spiritual is ranked sixth out of the fifteen elements.
- Girls value Moral and People equally most highly, followed by Create, then Conform, then Heredity, then Investigate. Spiritual is ranked seventh.

- Boys and girls rank the same five items in the same order at the top of their lists:
  
  D4-07 I enjoy looking after animals and other living creatures (1)
  D4-02 I enjoy making things (2)
  D1-05 I look out for danger where there is traffic (3)
  B2-01 I laugh (4)
  D1-09 Being able to look after myself is important to me (5)

- At the bottom of their list, boys put:
  
  B2-03 I feel afraid (116)
  D4-06 I enjoy growing plants (117)
  D5-04 My friends do what I want (118)
  B2-06 I feel lonely (119)
  D1-07 I am willing to break the rules to win a game (120)
At the bottom of their list, girls put:

- D5-04  My friends do what I want
- B2-06  I feel lonely
- D5-06  Getting my own way is important to me
- D1-08  I am willing to tell lies to keep out of trouble
- D1-07  I am willing to break the rules to win a game

Using the chi-square test and $\alpha = 0.05$ there was the following evidence of gender association:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elements</td>
<td>100% of elements</td>
</tr>
<tr>
<td>Being items</td>
<td>32% of items</td>
</tr>
<tr>
<td>Context items</td>
<td>30% of items</td>
</tr>
<tr>
<td>Doing items</td>
<td>54% of items</td>
</tr>
</tbody>
</table>

The greatest difference in raw scores between boys and girls is in Being, where girls score a mean 3.8% higher than boys. Girls score a mean 3.2% higher than boys over the whole Personal Profile.

Evaluating the Religious Profile

i) The results of the Religious Profile

The reliability of the data from the Religious Profile having been established, they were analysed according to age and gender. All the main tables relating to these data are located in Appendix B. In the following lists of salient points drawn from the data, reference is frequently made to increases and decreases or drops. These refer to changes from the youngest to the oldest quarters of the sample. The mean age of the youngest quarter (YQr) was 10.1 years and the mean age of the oldest quarter (OQr) was 11.6 years, a difference of eighteen months. Change is measured using the level of response of the youngest quarter as the base, i.e. the difference between OQr and YQr divided by YQr and expressed as a percentage.

Table B.1 deals with subjects’ experiences of religious activities away from home (church-type activities) and at home. The salient points from Table B.1 are these:

- 34% of girls compared to 26% of boys take part in church-type activities (30% overall).
- There is a significant drop in those continuing to attend church-type activities, 30% in the case of boys and 24% in the case of girls.
- Of those continuing to participate, there is a large drop in the proportion of girls who claim their religion is important to them, compared to a slight increase in boys.

- There is an overall decline in support for religion, which is most marked in those who take part in church-type activities.
• 39% of girls and 24% of boys take part in religious activities at home, such as praying or reading the Bible.
• The drop in home-based religious activities from the youngest to the oldest quarters is 4% for boys and 3.5% for girls. There is a large bulge in the intermediate year in relation to girls. This may be accounted for by girls belonging to the Brownies and working for the Quest badge, but this suggestion has not been tested.

Table B.2 summarises responses to statements which relate to subjects’ attitudes to religion and religious topics in their school’s curriculum. The salient points of Table B.2 are these:
• 26% of boys and 23% of girls claim not really to know what religion is.
• There is a drop in ignorance about religion: 29% for boys and 48% for girls.
• There is an overall loss of support for religion between the youngest and oldest quarters.
• Boys generally have a much more negative attitude to religion than girls.
• The drop in interest in knowing more about religion is more marked in girls (31%) than in boys (23%), but girls still retain a much higher interest (40% compared to 27%).

• Girls consider religious topics in the curriculum more interesting, more important and more personally helpful than boys.
• There is a marked drop in value attached to these topics: boys (interest 15%; importance 13%; helpfulness 7%) and girls (interest 6%; importance 5%; helpfulness 5%).
• There appear to be bulges in the intermediate year for boys in respect of the interest and helpfulness of religious topics; I can offer no explanation for this. Examination of particular schools, particular curricular programmes and the gender of class teachers might help to resolve this matter.

Table B3.1 and Table B3.2 summarise subjects’ responses to the request to declare how they would reply to the question “What is your religion?”. A fuller account of these responses is given in Tables B4.1 and B4.2. The salient points from Tables B3.1 and B3.2 are these:
• 27% of boys and 28% of girls would reply that they did not know.
• There is a large drop in answering “Don’t know”: 33% for boys and 52% for girls.
• 13% of boys and 11% of girls would answer that they were not religious.
• There is a marked increase in answering “Not religious”: 23% for boys and 38% for girls.
• 47% of boys and 48% of girls gave responses which might be classified as Christian.
• There was a drop in such responses: 17% for boys and 21% for girls.
• Less than 1% of all respondents indicated they belonged to a religious tradition other than Christianity.
Subjects were asked to write down one thing they knew about the Bible. Their responses are summarised in Tables B5.1 and B5.2. A more detailed account of these responses is set out in Tables B6.1, B6.2 and B6.3. The salient points of Tables B5.1 and B5.2 are these:

- 12% of boys and 8% of girls claimed to know nothing about the Bible.
- There was a large drop in claims of ignorance: 69% for boys and 72% for girls.
- 36% of boys and 39% of girls gave answers which included reference to Jesus.
- This kind of response increased for boys (32%) and decreased for girls (13%).
- 5% of boys and 3% of girls made reference to God.

- 6% of boys and 10% of girls made confessional responses.
- There was a decrease of 50% for boys and an increase of 66% for girls.
- 5% of boys and 4% of girls made statements about the value of the Bible.
- 9% of boys and 11% of girls made statements about the structure of the Bible.
- 15% of boys and 13% of girls made statements referring to non-Jesus content of the Bible.
- There was an increase in this kind of response: 137% for boys and 115% for girls.

**ii) Findings from the Religious Profile**

The results from the Religious Profile give rise to these important findings:
- Girls are generally more favourably disposed to religion than boys.
- The constituency of the non-denominational school is evidently not self-consciously religious.
- In the age range of the sample, the oldest quarter appears to know more about religion.
- In the age range of the sample, the oldest quarter appears to have a poorer opinion of religion.
- What pupils appear to be learning about religion is leading them to declare they are not religious.

While finding that those pupils who have greater knowledge of religion value it less, it cannot be assumed that there is a causal relationship. Nonetheless, some discussion of why this association exists is required. For instance, are pupils forming an inadequate concept of religion or an appropriate one? Are they right to reject the concept which it appears they are forming? Before pursuing these questions, however, further consideration must first be given to the Religious Profile’s relationship to the Personal Profile. **Tables 6.5 and 6.6** set out a number of cross-references between the two Profiles.
iii) The relationship between personal world view and attitude to religion

One particularly significant interest of this thesis was finding out whether an active involvement in religion and a positive attitude to it affected someone's personal world view. It seemed safe to assume on the evidence available that those who indicated they took part in church-type activities would be exposed to religious outcomes of joy, wonder and reflection on life, and also have a number of ethical values reinforced. A number of items in the Personal Profile were selected which represented the most prominent features of Christian witness and were therefore the most likely features of their experience of religion to be affected. Using the chi-square test to measure the distribution of scores for the selected Personal Profile items for each of the two groups, participants and non-participants in church-type activities, the result found that at $\alpha = 0.05$ there was no statistically significant association between such participation and scores on the Personal Profile items.

Using the chi-square test of distribution, comparison between involvement and non-involvement in church-type activities was made for a number of items in the Personal Profile which were thought to be particularly relevant to religious world views. Male and female subjects were examined separately. The general null hypothesis in each case was that there was no association at $\alpha = .05$ between involvement in church-type activities and these listed items:

$$\chi^2_{\text{crit}} = 9.49 \text{ at } \alpha = .05 \text{ for } df = 4$$

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am considerate towards other people</td>
<td>1.3</td>
<td>5.8</td>
</tr>
<tr>
<td>I help people in trouble</td>
<td>5.1</td>
<td>1.8</td>
</tr>
<tr>
<td>I am enthusiastic about life</td>
<td>0.6</td>
<td>3.8</td>
</tr>
<tr>
<td>I am a confident person</td>
<td>3.7</td>
<td>1.9</td>
</tr>
<tr>
<td>I am willing to make sacrifices for other people</td>
<td>7.7</td>
<td>2.5</td>
</tr>
<tr>
<td>I am willing to do what is right even if I might get hurt</td>
<td>5.5</td>
<td>3.1</td>
</tr>
<tr>
<td>I am willing to forgive people who treat me badly</td>
<td>1.5</td>
<td>4.9</td>
</tr>
<tr>
<td>I wonder how the universe came into existence</td>
<td>2.1</td>
<td>3.1</td>
</tr>
<tr>
<td>I wonder what happens to us when we die.</td>
<td>2.5</td>
<td>1.4</td>
</tr>
</tbody>
</table>

In each case the null hypothesis was retained. It would appear that experience of church-type activities does not significantly influence any of these Personal Profile items.

**Religious activities correlated to world view items**

Table 6.5

It seemed important to extend this investigation further. The Religious Profile had generated a five-point scale of attitude to religion which had correlated well within the Religious Profile itself. Would division of subjects into these five levels of attitude to religion provide a different result when associated with responses to items in the Personal Profile? The range of items was extended to provide a more comprehensive test, and the
results are shown in Table 6.6. The only items which showed any statistically significant association at $\alpha = 0.05$ with attitude to religion were those which included the word universe. This association was stronger for boys than for girls and for them included all the four items in the Personal Profile that used the word; for girls the association existed in only two instances.

The classification of subjects into five levels of attitude to religion had proved reliable. The data within the Personal Profile had similarly proved reliable. To determine whether there was any association between attitudes to religion and the world views putatively indicated by the Personal Profile, a number of hypotheses were tested.

The following items were selected from the Personal Profile for testing, on the grounds that they reflected principles and values highly prized in religious traditions, as well as religious stereotypes:

$$\chi^2_{crit} = 26.3 \text{ at } \alpha = .05 \text{ for } df = 16$$

<table>
<thead>
<tr>
<th>B4 - 01 I am considerate towards other people</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>B4 - 02 I help people in trouble</td>
<td>10.4</td>
<td>24.1</td>
</tr>
<tr>
<td>B4 - 03 I tell the truth</td>
<td>19.4</td>
<td>16.2</td>
</tr>
<tr>
<td>B4 - 04 I keep my promises</td>
<td>16.6</td>
<td>21.9</td>
</tr>
<tr>
<td>B4 - 05 I get angry when I see something unfair</td>
<td>22.3</td>
<td>17.1</td>
</tr>
<tr>
<td>B4 - 06 I feel guilty when I do something I think I shouldn't</td>
<td>13.7</td>
<td>22.4</td>
</tr>
<tr>
<td>B4 - 07 I feel guilty when I don't do something I think I should</td>
<td>21.4</td>
<td>24.6</td>
</tr>
<tr>
<td>B4 - 08 Doing the right thing is important to me</td>
<td>22.6</td>
<td>13.0</td>
</tr>
<tr>
<td>B5 - 01 I am enthusiastic about life</td>
<td>11.8</td>
<td>13.8</td>
</tr>
<tr>
<td>B5 - 02 I am a confident person</td>
<td>23.9</td>
<td>20.0</td>
</tr>
<tr>
<td>B5 - 06 I am contented with my life</td>
<td>23.6</td>
<td>14.5</td>
</tr>
<tr>
<td>B5 - 10 I have a sense of the beauty of life</td>
<td>21.5</td>
<td>15.2</td>
</tr>
<tr>
<td>B5 - 11 I have a sense that life is deep and mysterious</td>
<td>21.8</td>
<td>10.0</td>
</tr>
<tr>
<td>B5 - 12 I have a deep sense of peace</td>
<td>16.3</td>
<td>16.7</td>
</tr>
<tr>
<td>B5 - 14 I am willing to keep on persevering</td>
<td>18.7</td>
<td>19.5</td>
</tr>
<tr>
<td>B5 - 17 I am willing to see the best in other people</td>
<td>20.0</td>
<td>15.9</td>
</tr>
<tr>
<td>B5 - 18 I am willing to make sacrifices for other people</td>
<td>24.7</td>
<td>23.7</td>
</tr>
<tr>
<td>B5 - 19 I am willing to do what is right even if I might get hurt</td>
<td>8.7</td>
<td>21.6</td>
</tr>
<tr>
<td>B5 - 20 I am willing to forgive people who treat me badly</td>
<td>15.1</td>
<td>17.4</td>
</tr>
<tr>
<td>C5 - 01 I think the universe is amazing</td>
<td>*46.1</td>
<td>*27.3</td>
</tr>
<tr>
<td>C5 - 02 I think about how big and complicated the universe is</td>
<td>*36.9</td>
<td>8.7</td>
</tr>
<tr>
<td>C5 - 03 I wonder how the universe came into existence</td>
<td>*27.2</td>
<td>16.9</td>
</tr>
<tr>
<td>C5 - 05 I wonder how we can know what is true</td>
<td>24.4</td>
<td>18.4</td>
</tr>
<tr>
<td>C5 - 06 I wonder how we can know who is to be trusted</td>
<td>21.6</td>
<td>8.9</td>
</tr>
<tr>
<td>C5 - 07 I wonder what happens to us when we die</td>
<td>15.3</td>
<td>17.9</td>
</tr>
<tr>
<td>C5 - 08 Wondering about my place in the universe is important to me</td>
<td>*33.8</td>
<td>*27.7</td>
</tr>
</tbody>
</table>

Each hypothesis was expressed in its null form assuming that the distribution of scores would be the same at each level, and tested using the chi-square formula. Subjects were divided according to gender and then grouped into their five attitude levels. Each group's distribution of values for the five possible responses was computed; this gave each group sixteen degrees of freedom (df = 16). For $\alpha = .05$, the chi-square table requires a result of 26.3 to reject a null hypothesis whose df = 16.

The null hypothesis was rejected only in those few cases marked above with an asterisk *. The other results suggested no statistically significant relationship between attitude to religion and personal world view.

**Attitude to religion compared with world view items**

**Table 6.6**
The absence of association between attitude to religion and most of what is closely associated with religion in its ethical and spiritual manifestation seems clear, but what inferences may be drawn from this? Does it mean that the Personal Profile does not measure the personal world view it sets out to map? Do subjects of this age simply put religion into a box on its own, another cultural institution disconnected with the business of daily life? We know from the evidence that 60% of boys and 78% of girls who participate in church-type activities find it enjoyable. Is church-type activity, then, in terms of fashioning a world view, superfluous? Data about depth of involvement in church-type activities were not collected, and it raises the question of whether a threshold of participation has to be crossed before a significant effect is observable; on the evidence of this study this would seem improbable. Does the observation that children who appear to know more about religion but also value it less indicate here that the formal, the phenomenological, awareness of religion shows it to be personally irrelevant? Is the dichotomy between the phenomenological and the existential made apparent here? If it were, given the strongly descriptive account of religion offered in schools, it must raise serious questions about the efficacy of programmes of study of religious phenomena. Does it confirm Cantwell Smith's view that religion is not a useful concept, but a harmful one? Does it reflect a negative attitude in teachers towards this curricular area, or would the same decline be evident in other curricular subjects? This in turn raises serious questions about how learning opportunities are to be presented to pupils. Or are children inevitably at this stage incapable of the insight and understanding necessary for the moral and spiritual maturity required for religious insight?

All of these questions deserve attention. The dilemmas they raise may have been illuminated, in part at least, by the evidence of the Personal Profile, especially as it relates to the industry, literalism, moral orientation and social conformity identified earlier as key features in helping to establish its validity.

iv) Validity of Religious Profile
It is extremely difficult to validate the results arising from the application of the Religious Profile. This is due to the particularity of the timing and location of the study and the age of the subjects. The most significant studies of children's attitudes to religion in this country are those of Leslie J Francis in respect of Christianity, studies which extend over the period from 1974 at four yearly intervals, and relate to pupils in secondary schools.6 This is not especially helpful because they deal with older age groups than the one in this study, and they refer to schools in England. These studies have been shown to be very reliable, however, and they have been replicated elsewhere, including in Scotland,7

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but again with older pupils. These studies nonetheless show similar tendencies of negative attitude to religion, as expressed in its institutionalised form, both in practice and in language. The Francis studies showed a steady decline in support for Christianity amongst the secondary school population over the period 1974 to 1986, with a slight reversal in 1990. The Francis Scale of Attitude towards Christianity, however, is much more specific than my general indicators. What is perhaps more useful for my purpose is the very large study which has been carried out for the Church of Scotland and which is currently being reported to the General Assembly. Many of the findings of the Church's study coincide with those of my own, although both studies are quite different. It is not possible at this stage to scrutinise the research method and the reliability of the Church's data, but some very interesting comparisons are listed in Table 6.7. There appear to be no contradictory findings, although the conclusions drawn in the Church of Scotland report cannot be considered entirely safe. All this tends to validate the Religious Profile.

<table>
<thead>
<tr>
<th>Findings reported to General Assembly</th>
<th>Findings arising from LivesCan study</th>
</tr>
</thead>
<tbody>
<tr>
<td>More girls than boys attend Sunday School</td>
<td>Girls are more positive about religion</td>
</tr>
<tr>
<td>20% of Primary pupils attend worship on a regular basis</td>
<td>30% take part in religious activities away from home</td>
</tr>
<tr>
<td>The older the children are, the higher the incidence of loss from Sunday School</td>
<td>The proportion taking part in church-type activities drops from 35% to 25% over an eighteen month age range</td>
</tr>
<tr>
<td>The experiences of those who attend Sunday School and of those who don't showed similar lifestyles</td>
<td>The world views of those who take part in church-type activities are not significantly different from those who don't</td>
</tr>
<tr>
<td>60% school pupils replying claimed some kind of Christian affiliation</td>
<td>In response to question, “If asked ‘What is your religion?’ what would you answer?” -</td>
</tr>
<tr>
<td>34% claimed no religious affiliation</td>
<td>• 47% indicated Christianity;</td>
</tr>
<tr>
<td>Young people more open to religious ideas than to religious dogma</td>
<td>• 27% answered “Don’t know” and 13% answered “Not religious”.</td>
</tr>
</tbody>
</table>

High values given to spiritual and moral aspects of being, but negative about religion

Table 6.7 Comparisons between findings of Church of Scotland study and LivesCan study

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page 159
Summary of findings from Personal and Religious Profiles

The following emerge as clear findings from this part of the study:

- Girls are generally more favourably disposed to religion than boys.
- The constituency of the non-denominational school is evidently not self-consciously religious; the secular context required by the study has been established.
- In the age range of the sample, the oldest quarter appears to know more about religion.
- In the age range of the sample, the oldest quarter appears to have a poorer opinion of religion.
- There appears to be no statistically significant association between experience of church-type activities and the moral and spiritual values they espouse.
- There appears to be no statistically significant association between personal world views, as measured by the Personal Profile, and attitudes to religion.
- There is a statistically significant association between attitude to religion and Personal Profile items using the term universe, especially amongst boys.
- There is strong evidence of industriousness being important to this age group.
- There is a high commitment to keeping rules and not breaking one's word, and a lower commitment to acting on principles, from which may be inferred a relatively high degree of literalism.
- In respect of acting justly and caring about other people, girls attain higher scores than boys.
- There is no evidence that acting justly is a male characteristic, only that males choose acting justly above caring for others.
- Compared with the youngest quarter of the sample of boys, the oldest quarter showed a greater tendency to be forgiving and willing to fit in with others.
- There appeared to be some convergence of attitudes between boys and girls in the oldest quarter compared to the youngest quarter.

The most important questions which these findings raise for religious education are these: if children's attitudes to religion in relation to their knowledge of religion are so uncertain; if children's moral and spiritual values are not dependent on their knowledge or experience of religion; if a personal world view is formed out of the totality of personal experience; how are children to be assisted in developing more comprehensive, coherent and consistent world views, the process of religious learning proposed in this thesis? how, if at all, can study of religious traditions contribute to this process?

Part of the research study was to determine whether the LivesCan paradigm could also generate a computer aided religious learning programme. We turn now to consider whether such a product can be as effective in developing world views as the LiveCan Personal Profile has been in mapping them, and to consider whether we may have found at least provisional answers to the questions with which we leave this chapter.
Chapter 7
Developing world views: the LivesCan computer package

I will learn from myself, be my own pupil;
I will learn from myself the secret of Siddhartha.

Hesse

Summary
The construction of the LivesCan computer package is described briefly. For a detailed account of the package, reference should be made to the appendix which reproduces the Handbook prepared for teachers. A case for the use of the CD-ROM for religious learning is offered through discussion of its application in LivesCan and its openness to public accountability. Design features related to data handling and process skills are described, and issues for further development are identified.

Construction of the LivesCan package
The decision to develop an interactive learning programme based on the use of a computer was not only fundamental to the research project, it had initiated it. The original intention had been to produce a learning package, test subjects, apply the package and test the subjects again to evaluate the effects of the experience. This straightforward empirical research had to be abandoned because of the failure of schools taking part in the trials to provide pupils with enough opportunity to test the materials. The reasons for this failure are important, and some suggestions have already been made as to why it happened. More will be said about this when the evaluations of pupils and teachers are examined in the next chapter.

What the package contained and what kind of support participating schools had is fully described in Appendix C, in the form in which it appeared in a handbook for teachers. The reasons for including the handbook are threefold: it provides evidence of the degree of support which teachers received; it presents in graphic form some of the features of the computer package; it illustrates the essential difference between textual materials and interactive visual displays, and the inadequacy of attempting to transfer to print what is peculiar to the computing environment. The handbook has been redrawn and resized to fit the page dimensions required for the thesis, but it is nonetheless a faithful representation of the original textual materials. References were made within the handbook to other pages in it. It has proved too complicated to alter those page references for the thesis and I have adopted dual page numbering for the redrawn handbook. The standard page

The production of the package was a major undertaking in itself. I have recorded 1800 hours developing the materials but, aware that I have not recorded all the time spent, I am confident that well over 2000 hours were spent preparing the software. This included the purchase of hardware and software, time spent resolving technical problems which, I was assured by my technical adviser, were inevitable when “working on the front edge of technology”, time spent taking and cataloguing more than 1000 photographs of the church environment to be presented on the screen, and researching the information on that environment. I also had to learn a scripting language, HyperTalk, in order to write the programme, and how to use graphics, database and desktop publishing software packages. The hardware investment included a colour computer with expanded memory and video capture board, a reWritable optical disk drive, and a film video processor. The total cost of hardware, software and other materials for the project was in excess of £5000. I also borrowed equipment in the early stages to allow me to improve the quality of screen displays. The scale of the operation, however, was such that it should have been undertaken on more powerful computing equipment.

A disconcerting feature of the development of the package was the constant upgrading of software, with a consequent need to redo work in order to take advantage of the changes. For instance, there was a very definite improvement in the quality of captured images when SuperMac’s VideoSpigot, a low cost video capture board, came on the market, and this justified redoing all 570 photographic images. Also, when I began to develop the package using the Apple Macintosh LC computer with its 12 inch colour monitor (March 1991) I was using the first of the affordable colour machines that schools in Lothian were likely to get. By the time I had completed the package in May 1993 the standard screen size had increased to 14 inches and the power of the basic machine had increased. In October 1994, the whole range of LC machines had been phased out and the chip technology had changed completely, so that the speed of the PowerMacs which were replacing the existing range had increased by a factor of at least four, and possibly by as much as ten. If this equipment had been available at the start of the project, it would have reduced the development time very considerably, because much of the time spent was waiting for images to be captured, moved, redrawn or saved, all being operations determined by the speed of the machine. There has been no commensurate increase in the cost of these more powerful machines; indeed it does look as though there has been a decrease in costs. This would suggest that the use of increasingly effective computing equipment will become more and more affordable and on cost grounds alone justify the development of interactive learning materials.
The CD-ROM

The period from March 1991 has also seen the rapid development of CD-ROM technology. The CD-ROM is the same medium as the Compact Disc used for audio recordings, but encoded to allow computers to read the digital information stored on it. A CD-ROM can store large quantities of information (at least 550 megabytes) in the form of text (about 250,000 pages of typed A4), pictures, sound and video. During the short period of the project, this technological development has become available as part of an interactive home entertainment system, and in May 1994 a magazine called CD ROM began appearing on news stands. It reviewed equipment and CD-ROM titles which include games, feature length movies and some very sophisticated educational materials; other similar magazines are also available. It is also now within the reach of developers like myself to produce CD-ROMs using much the same technology as the optical disk drive which was part of the LivesCan development hardware. This would have seemed a very remote possibility three years earlier, when it would have been necessary to send a hard drive to a specialist who would make a master CD-ROM at a cost of approximately £1000, and then subsequent copies for about £1 each. The CD-ROM copies used in the pilot schools were “blown” in May 1993 on a Philips CDD521 recorder at a cost of about £15 each for the six copies required.

Reference has already been made to the ability of the CD-ROM to store a great deal of raw data because of the CD-ROM’s large memory store. Data which are inaccessible are of no value, and data which you do not know how to process are of limited value at best, and at worst can even be positively harmful. Data which can be accessed and processed for specific purposes have great value. For that value to be maximised, sufficient of the right kind of data have to be available, and the right kind of process has to be employed. Processes are themselves data in the form of principles, rules and instructions arranged to achieve specific outcomes. The CD-ROM has the capacity to hold all these kinds of information. The CD-ROM designer has to work from the desired outcome back through the process to the raw data.

Decisions have to be taken about the right kind of information a CD-ROM is to hold. If it is data in the form of words together with the relatively simple process of “find this word”, e.g. learning, then vast quantities of words can be accommodated, and the computer searches the CD-ROM for every instance of the word. This has a time penalty attached to it, so it may be better to arrange the data in the form of a hierarchy and have a more precise instruction: “find learning in the education section in the religion section”. The more precise the designer can be about the outcome the better the data can be classified, and the quicker it can be accessed. This simple example illustrates the importance of taking care in organising data in the compilation of the CD-ROM and knowing what effect you wish to produce; the organisation should not be more sophisticated than the intended user’s ability to know where to look. It also exemplifies the fundamental procedure in all
computer operation: retrieving data, processing it by carrying out instructions, and displaying the result. The wider the area of search, or the more data to be retrieved, or the more complex the instruction set, then the longer it takes. In the case of sound and vision, large quantities of information are required and instructions can be quite complex in order to achieve the desired outcome. The higher the quality of sound or the longer its duration, or the greater the colour fidelity or size of a picture, then the more data required to be processed. As the user’s demand for quality and scale increases, considerable pressure is placed on memory, and techniques are devised for stripping data down to its barest components with accompanying instructions (a kind of recipe) to allow for it to be reassembled correctly. This process is called compression and it carries a time penalty when the data is required because it has to be decompressed (to be prepared and cooked, to continue the analogy.) For example, the compression of pictures in LivesCan could have saved approximately 90% of the memory otherwise required, but it would have taken eleven seconds instead of three to display on the screen for my computer. Memory was not a problem for LivesCan so the choice was clear. Faster computing processors obviously reduce times. Software and hardware engineering are both advancing rapidly and speed is progressively less of an issue for the kind of operations called for in LivesCan. As speed and memory storage both increase, however, the more ambitious the designer will want to become.

The CD-ROM is simply storage. You can borrow information from it, but you cannot change it or add to it. (ROM means read only memory.) If all the design criteria for speed have been met in the compilation of the CD-ROM, it is the speed of the central processing unit of the computer, as indicated above, its operating system and any intervening software application programmes which largely determine the efficiency of the CD-ROM. CD-ROM players are themselves getting faster, but at the start of the LivesCan project transfer of video was more or less out of the question in the operational situation of the primary school classroom. Now it is becoming a standard expectation; some schools now take their own video movie images and process them in their own computers using sophisticated editing applications. All this takes place, however, outside the CD-ROM.

**Rationale for the CD-ROM in religious learning**

While it is possible temporarily to interact with the CD-ROM it has no memory of you. To maintain a record of the interaction between the user and the CD-ROM it is necessary to be able to open your own file. This is normally done using the hard disk of the computer or, where memory is limited or files need to be safeguarded, on a floppy disk. Your own file can be quite sophisticated and it can itself interact with the the CD-ROM; as it builds up a profile of you in your personal file the computer can be programmed to select for you the most appropriate information to work on. And if the LivesCan Personal Profile were to be completed using the computer instead of a separate booklet there would be the possibility of suggesting particular kinds of activities which the individual had indicated were

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particularly agreeable, and to offer support in areas which needed development. In the case of LivesCan the personal file allowed the user to return to where she had last worked and see displayed on the screen all the information that had been available then. This is a relatively simple function, but the programme was also written to offer advice to users about the need to extend the range of their inquiries if they had been pursuing one line too narrowly. It would have been possible to design the programme so that the user would be required to follow a particular course on the basis of the information contained in the personal file. In a limited way this did happen with LivesCan because users had to complete some routines before they were allowed to move on. The importance of this last facility will be evident to teachers, including parents, who are looking for a disciplined approach to carrying out procedures. The potential to provide learning support through directing pupils towards appropriate routines will also be apparent.

Built into the programme were prompts such as: "Sorry. You must complete this task before moving on."); "You have already done this task. Do you want to do it again?"; and, when registering, "You appear to have the same name as someone else. Can you add a middle name or initials? Please start again. Thank you." Such prompts are there precisely when needed, without the pupil having to wait for the teacher to come round again. What the computer is doing is responding to the experience of the user as she has expressed it through her actions within the computer environment. Within the LivesCan paradigm, learning what the user needs to do to extend her world view, and to be consistent within her application of the process it entails, is well within the capacity of the humble classroom personal computer. This interaction is the basis of dialogue. The CD-ROM provides a sufficiently broad source of information (data, principles, rules and instructions) to allow this dialogue to be effective. The computer is after all not responding to just anyone but to the person who declares herself through her personal file. As between two people, the dialogue will only be as good as those taking part, in this case the user and the programme designer. And there is in principle no reason why the programme designer cannot imprint her personal identity on the programme; we find no difficulty in recognising the mind, character and identity of some authors in the books they write. Such literary communication can be immediate and direct, and the CD-ROM offers similar possibilities.

Using the computer for interactive religious learning teaches more than facts, rules and procedures, it also teaches important principles for personal living. If you are not honest about yourself, or put another way, if you lie to the computer, the dialogue will be false; you cannot be helped if you cannot be honest about yourself, and the relationship becomes tiresome and irrelevant. The anonymity of the computer, like the confessional, should mean that as an individual you need not be embarrassed to tell the truth about yourself. Additionally, although the computer operates strictly according to given rules, these rules need not be inhuman or impersonal. There is nothing to stop the user being invited to take a
short break; to go away to a quiet place, write a poem and come back with it; to listen to some appropriate music; to “talk this over with your mum or a friend”.

Although it can provide the user with complete privacy for exploring a difficult issue, using LivesCan need not be a solitary activity. Much of the religious learning process can be undertaken within a small group where issues can be discussed and joint decisions can be reached, or joint statements made which incorporate different points of view. In other words, the computer supported by the CD-ROM can be both flexible and personally appealing. The extent to which it is either of these will be determined by the person responsible for the design of the software, but it is because of its large memory of appropriate data and its processing power that this medium can be so personal. While most people at the moment are restricted to desktop machines, the possibility already exists of using laptop machines, thus giving the computer the same degree of portability as many a book.

**LivesCan’s database**

The kind of data stored in LivesCan is not complex. LivesCan comprises six HyperCard stacks stored on the hard disk and a library of sound and picture resources on a CD-ROM. The HyperCard stacks are a mixture of text and processing information, four related to the LivesCan levels, a fifth to providing support, and the sixth which creates and holds users' personal files. There are almost 500 pictures of a church and churchyard (Visit level) with captions that can be read or listened to (Inform level). There are a further 80 pictures of events associated with the church (Encounter and Worry levels) each picture in Encounter with a short caption related to the activity or feature in the picture. Each of the 23 sections in Encounter begins with a title card which introduces the section with some background information and concludes with a card which draws attention to some of the issues raised by the section. There is text relating to choices the user may wish to make in relation to Encounter and Worry situations. There is text which provides various kinds of background information, help in dealing with technical difficulties and meanings of words (LivesCan stack). Most of the data are stored on the CD-ROM, and all of it could have been; design and development considerations suggested that some of it, less than one megabyte, should be stored on the hard disk. The data were collected and assembled over a twelve-month period. A fuller treatment of the data is given in Appendix C.

All the data built into the programme can be accessed by using the mouse to point and click. Some of the directions about what the user can do are given in the form of buttons with a key word written on them, such as “Help!” or “Go Back”. Accessing the information about the church building, whether in the form of pictures alone or pictures with captions, is achieved by pointing to where you want to go, for instance along an aisle or path, or to one side or another, and clicking. Some advice was given about the likely availability of objects to look at more closely, and it was simply then a matter of pointing to the object and
clicking on it. The information provided deals extensively with the church building and the images and symbols there. Wherever appropriate, Bible references are given so that an event portrayed in a window, say, may be read about by going to the source text. Some of the events which take place in the church (in Encounter) are dealt with more extensively than others; for example there are nine pictures showing different parts of a wedding. This was partly to determine how long pupils' interests could be sustained. When anyone entered the LivesCan levels, they added to the information relating to the project, either in the form of the pictures they had seen, how long they had taken, what they had written, and so on. All this information went into the user's personal file which had necessarily to be kept on the hard disk. Access to these personal files was restricted to me as the researcher.

**LivesCan's development of process skills**

Different kinds of skills needed to be employed in using LivesCan. Some of these could be described as generic, having relevance across the curriculum and for personal empowerment, skills such as reading and using information technology. There is one generic skill, however which it might be worth noting more fully, the ability to observe relationships.

Most children are used to the television screen which presents an unbroken stream of other people's judgments about what is of value, and there is a tendency, therefore, for the viewer to be passive, in extreme cases to become the popularly termed "couch potato". One of the advantages of the still picture is that it can be explored outside the time constraints imposed by moving images. Questions can be asked without insistent action and editing requirements changing your point of view. Moving pictures may in fact provide either too much data for some educational purposes, or so reduce visual contexts that they are experienced as the minimum necessary to support the action or story the film director or news reporter wants to present.

Part of LivesCan's contribution to skills development is the presentation of environments which frequently contain items of some interest which can be explored. Let me acknowledge immediately that these "interesting" objects have been selected by me as the programme maker and consequently the same criticism applies to me as to the film director and news reporter; there is an important element of prior selection present. Nonetheless, the possibility exists even in LivesCan for a limited amount of deconstruction, and in theory at least there is the possibility of encyclopaedic treatment of all the features of a photograph. Learning to notice what is present in real contexts can prepare the child to be critically aware of what is missing in other people's presentations of alleged reality. Such ability would seem to be a vital skill for the formation of any comprehensive and coherent world view, and the opportunity for interactivity provided by the CD-ROM can contribute significantly to the emancipation and empowerment of the user. The converse is
also true, of course, with the power of information technology just as easily used to enslave and disable. This would seem to offer a powerful ethical argument for the development of educational, non-exploitative programmes, and for media studies as an essential element in any education system committed to democratic principles.

The information which was most important in relation to the thesis, however, was not the raw data, it was the text relating to the lines of inquiry and choices in Encounter and Worry levels, and the responses pupils made to these; this represented the core of the religious learning process. The lines of inquiry into Being, Context and Doing were always indicated in Encounter by separate shapes with the initial letter displayed thus:

![Fig 7.1 Encounter icons](image)

Each shape was also a button, and by pointing and clicking on a shape the associated line of inquiry would be initiated. This revealed for the user an issue relating to an aspect of the stimulus picture with up to four options from which they could choose a response to a question about the issue. Once the user decided on an option she then pointed to the appropriately numbered button and made her choice by clicking. This presented on the screen an instruction or question, and a field in which the user could enter a response using the keyboard. The usual pattern was for the instruction to ask for a reason for the choice made. The pupil need not give a reason but move on to something else by pointing to and clicking the appropriate sequence of buttons. Anything that was written could be printed out, but if that option was not taken it disappeared into the user’s personal file not to be seen again until read by me at the end of the study. A pupil could, if wished, return to the same line of inquiry for the same item and make a different choice. Two examples of the kinds of choices available are given in Table 7.1, and Table 7.2, with a further indication of the Worry level lines of inquiry in Appendix D. Table 7.1 illustrates how it may be possible to enter reflectively into a situation of critical importance in a religious tradition. The example in Table 7.2 raises moral and spiritual concerns without being specific to a religious tradition, although in this case the situation has arisen within such a tradition. Once the user has chosen a line of inquiry, she is presented with the options depicted here in a frame. She has to choose one of the numbered items, whereupon the screen reveals a field in which she can write. A prompt reminding the user of what she has chosen also appears, and these prompts are shown here in italic.

An important skill being practised at the Encounter and Worry levels is evaluation. This is a skill required across the curriculum but it has particular significance for Religious Studies in the secondary school. At Standard and Higher Grade, examiners have repeatedly drawn attention to the difficulty examination candidates have had with evaluation. I thought that justifying choices as required by LivesCan would be a useful step in the progress towards more sustained evaluative comment. A common type of
The picture shows the minister celebrating Holy Communion. The caption reads: “The minister is asking for bread and wine to be blessed. He is remembering the last supper Jesus had with his disciples the evening before he was killed.”

**Lines of Inquiry:**

**Being. Consider how people are affected.**

Jesus knew his enemies were closing in on him, and he would be taken and killed. He was affected:

1 - physically. He suffered pain and death.
2 - emotionally. He was full of sadness and fear.
3 - morally. He kept his promises to his friends.
4 - spiritually. He trusted he was doing the right thing.

Which of these would you cope with best?

*What makes you think you can stand up to pain and the approach of death?*
*What makes you think you can cope with sadness and fear?*
*What makes you think you can cope with keeping hard promises?*
*When would you trust your own judgment even if a mistake could prove fatal?*

**Context. Consider the circumstances.**

Jesus had to decide which of these contexts was to rule his choices:

1 - His family.
2 - The customs and traditions he had grown up in.
3 - Friends, who knew he’d be a great national leader.
4 - His belief in a better world.

What context would you have decided upon?

*Why do you say that your family should determine your choices?*
*Why do you think that custom and tradition should determine your choices?*
*Do you think the judgment of your friends should determine what you choose to do?*
*Why should belief in a better world determine what you choose to do?*

**Doing. Consider what people do.**

Jesus knew his enemies were closing in on him, and he would be taken and killed. What was he to do?

1 - Escape by running away and hiding.
2 - Say he was sorry and would stop his teaching.
3 - Argue his case and plead for understanding.
4 - Remain true to his belief and accept his fate.

What would you have done?

*What are the advantages and disadvantages of running away and hiding?*
*If he said he was sorry and would stop his teaching, what would that say about his teaching, or his character?*
*His enemies were his enemies because they knew what he was teaching. What more could he do?*
*What beliefs are so important that they are worth dying for?*

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**Table 7.1 Encounter Holy Communion example**
The picture shows a harvest festival display. The caption reads: “East Lothian has some of the finest agricultural land in Scotland. Some of its produce is brought to the church and displayed in thanksgiving to God. Gifts of food are made to those who may be in need.”

Lines of inquiry:

**Being. Consider how people are affected.**
Farmers all over the world depend on the weather for a good crop, and they fear it for the disasters it can bring. Imagine you are a farmer and have spent all your money on planting crops. Describe your thoughts and feelings as you watch the weather.

1 - OK  
2 - No thanks.

What is your response?

*I am a farmer. I have spent all my money on sowing crops. These are my thoughts as I watch the weather.*  
*You don’t have to write anything.*

**Context. Consider the circumstances.**
Very few people grow the crops or rear the animals they eat. Do you think that not being involved in farming makes people less grateful for the food they buy and eat?

1 - Yes.  
2 - No.  
3 - Don’t know.

What do you think?

*What do you think people could do to show more gratitude for the food they eat? Why are people not less grateful for food even though they are not involved in farming? How can people show gratitude for the food they eat? Who all needs to be thanked?*

**Doing. Consider what people do.**
Many people in the world are dying from the lack of food. What do you think stops rich countries like our own from doing more to help?

1 - We want to make our own lives better.  
2 - We don’t really care what happens to other people.  
3 - We want to control the poor countries.  
4 - Something else.

What is your opinion?

*Do you think wanting to make good lives better is a good enough reason for the rich not helping the poor? Describe what you think life would be like if nobody cared about anybody else. What advantages do you think rich countries get from controlling poor countries? What do you think stops rich countries from doing more to help poor countries?*

| Table 7.2 Encounter harvest festival example | page 170 |
question in Religious Studies might be this: *How important do you consider the Shabbat observance is in keeping Judaism alive?* Candidates would be expected to give their opinion supported with reasons, and it is the reasons, or bits of evidence, which accrue examination marks. This part of the LivesCan training to express reasons for choices was thought to have primary significance because, in giving their reasons form by entering them into the computer, pupils would have to articulate what might have been inchoate, and make tangible what might otherwise have remained ephemeral. In this way pupils might be encouraged to become progressively more thoughtful in making their choices. Of those few pupils who did in fact get to *Encounter* and *Worry* levels only a small proportion made any entries. It would have been possible, however, to force a reply of a minimum length if the user was to progress at all, and this might be an optional device for reluctant learners.

The most important feature of *Encounter* level was to bring pupils to see: that any event can be investigated according to how the people principally involved are affected; that events take place within one or more contexts; and that there are reasons for doing something and consequences which flow from doing it. These would seem to be elementary steps in the process of understanding and interpreting events. The intention was to train young minds in an analytic procedure which would assist them in the formation of their own world views. These lines of inquiry were refined at *Worry* level, with pupils being asked to consider any of five ways in which people are affected, any of five contexts and any of five motives for action. In other words, pupils were being introduced to the full LivesCan paradigm. Simply to learn that there is this range of possibility is in itself another step along the way to a more comprehensive world view, and the possibility of comparing the reasons that one might give to each of these in relation to an event could assist in developing the skill of evaluation. A further development, once familiarity with the range is established, might be to select the aspect of Being, Context or Doing which was considered to be the most dominant factor operating in the event. This might in turn establish the importance of writing down or working out effects and reasons, because it is often, and arguably always, in going through this procedure that fresh insights, revaluations and more developed decisions can be made. A vital feature of the procedure was, in offering a variety of choices within a line of inquiry, to make clear that there are various valid positions on any issue. Offering options was a way of showing that there were in fact different points of view, and that pupils would have to find reasons for accepting one and rejecting others, the foundation of good argument. More sophisticated development could require pupils to justify their choice by saying why they rejected the others.

There is no reason why the principles underlying the process of developing skills might not be explained to pupils in advance of their engagement in LivesCan, and there are several reasons why it should: it would make the purpose clear about what was being expected of them; clarify what would be evidence of progress; it would be useful to separate the
process from the computer environment so that it could first be seen as a procedure which had prime relevance in life and for all studies. Indeed, it needs to be emphasised that the LivesCan product is but one training tool applied within the limited context of religious traditions; I do not argue that the computer is a sufficient source for religious learning, only that it can be an aid in this process. Religious learning which did not take place within the human as opposed to machine environment would be a very odd corruption. The point of religious learning is precisely to make the learner more effective in her interpersonal relationships and in her relationship with the world of nature. While the LivesCan method of world view analysis and formation is applicable, I believe, in any context, and is not necessarily dependent on religious cultural expressions, it must also be, I further believe, a major objective of religious studies to ensure that people can see the connection between a religious world view and the expression it takes in its cumulative tradition. This would mean being able to identify and interpret the religion's various symbols. It would be a very neat arrangement if pupils could develop their personal world views in the context of religious traditions thereby fulfilling the purposes of learning from and about religions.

Design evaluation

I have already indicated a number of design features which could have been extended or altered, and I shall say more about this when I come consider issues relating to the development of LivesCan as a product. Something needs to be said about the adequacy of what was available to the pupils taking part in the trial. Beginning with an overview, it has to be said that teachers considered it would be better to have had the package broken into smaller units. All four levels of LivesCan, however, were not intended to be accessed within a short period of time, and clear advice was given about trying to work through the levels. For those not familiar with a church and its churchyard there was the option of the treasure hunt without the burden of explanations of what was observed. For those not wanting to take part in the game aspect it would have been possible to go straight to an exploration of the environment. If a teacher had judged that it was not necessary or not desirable to focus on the building but instead to find out about events that took place in the church, Encounter would have been the level to start. Thus there were in fact three entry levels.

Teachers were encouraged to begin with the ballad and treasure hunt because the game element might make familiarisation with a church more fun, and it would also ensure that pupils were at least familiar with events in the life of Jesus which they would be coming across in physical features of the building and encountering in human events. It is evident from the comments of teachers and pupils that there was an unacceptably low level of knowledge about the gospel narrative and the justification of beginning at this first entry level was justified. At the same time, I am inclined to accept the view of one teacher that the ballad was "perhaps too clever" and I would want to provide a simple prose account of
the sequence of important events in the life of Jesus and perhaps a list of key items to find in the pictures. I am not now convinced that the game element is necessary at this entry level, and its elimination would certainly simplify programming. The game may in fact have been an off-putting feature.

The method of navigation around the church was found to be difficult by some people, who raised the same points, for example about getting upstairs. These particular difficulties could certainly be resolved by the inclusion of additional photographs, but most people seemed to find navigation by pointing and clicking rather slow if one compares the mean time taken to see a picture (Table 7.3) to the time taken for the computer to display a picture once it had been selected (0.05 minutes). The times in Table 7.3, however, include time taken to look at a picture and it also includes time taken to read or listen to a caption. Of those listed in the table, only five of the 47 pupils wasted more than 50% of their clicks which would initially suggest that only five pupils took an average of more than two clicks to find the next picture. Yet this is not entirely a clear picture because the column which shows the mean number of clicks per different picture indicates that only five people took less than two clicks per picture. This apparent discrepancy can be accounted for by pupils either using the Help or Go Back buttons, or viewing the same pictures a number of times. I think it has to be considered, on the whole, not an entirely satisfactory design feature. Improvements could be made by replacing certain pictures, and one suggestion from a pupil was to have a plan constantly available so that users knew where they were. This would not necessarily be a good innovation because part of the design philosophy was to get pupils to think about where they wanted to go, and to use their intelligence to find their way there; this was the reason behind having the “lost clicks” element in the treasure hunt. If a pupil had difficulty with remembering how they got to where they were, there was always the Go Back button which would allow them to retrace their steps one picture at a time to the point where they last entered that LivesCan level. Inform also had a menu laid out as a plan which meant that the user could go to any of 29 points in the church and churchyard simply by clicking on a marker spot on the plan. I think the main difficulty was that teachers had not been sufficiently familiar with the package to allow them to give their pupils useful initial advice.

It is very difficult to draw conclusions about the design for the Encounter and Worry levels because so few pupils had any experience of it, and of those who did even fewer had done much. What does seem to be desirable is the provision of a larger proportion of the screen for displaying the explanatory captions to the pictures. This would be possible in any case with a revision for the bigger screens now in use, but the written responses of pupils were so slight that the field assigned for that purpose could be reduced. At the same time, if LivesCan were to be used with older students for whom writing might present less of a problem the field would not have to be reduced by much. I think it would also be highly beneficial to add sound to the Encounter level to permit users to listen to the caption text as well as read it. There may also be a case for adding text to the pictures at Worry level.
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These figures all refer only to those users for whom there is a post trial evaluation.

The initial digit in each subject code identifies a school. Four schools here.

'F' and 'M' refer to female and male.

'Freq access' is number of times computer used.

All time is in minutes. 'Time mins' is total time spent on Visit and Inform levels.

Ave = Mean.
Averages for pictures are rounded to nearest whole number.

Data relating to all subjects who had 'some use' of the LivesCan programme and were able to evaluate it.

Table 7.3
It was a feature of the research that pupils should not be allowed access to their personal files. I would not consider this to be a desirable feature in an operational design, and the possibility of editing their own text there, before printing it out together with the text to which the pupil's writing is a response, would be an advantage.

The programme had been designed to make it deliberately a long process to get from one level to another to prevent subjects jumping about, again for research purposes. That feature was thought to be tiresome and would not be necessary in an operational model, although the option of preventing access to higher levels until the teacher considered a pupil ready might still be a useful device.

At Encounter and Worry levels there were occasions when the programme hung. These occasions happened at random and it is not clear why, although the most likely explanation is lack of memory. In an operational model this would certainly have to be eliminated, but the increased capacity and power of new machines might be sufficient to resolve this difficulty, and the absence of a need to collect so much data for research study would at the same time reduce the demand for memory and speed up the whole programme.

The most important design consideration is whether HyperCard is the best software application to use. It has many advantages but it restricts use to the Apple Macintosh operating system and is therefore not accessible to the operating systems used by the majority of personal computers. This might suggest reprogramming LivesCan using a different authoring package such as Macromedia Director or Authorware Professional. This would have to be looked at closely because it is not immediately apparent that all the features that would be desirable in the LivesCan interactive programme could be accommodated in either of these software authoring tools.

Apart from the difficulties already identified and discussed, the concept and design of the programme seemed to be satisfactory. It appeared to have the potential to satisfy the objectives of extending users' capacity to ask a wider range of relevant questions in the process of arriving at a more comprehensive and coherent world view. There were positive comments from pupils about its colourfulness and there were in fact very few difficulties which could not have been avoided if the teachers involved had been able to prepare adequately for the introduction of the programme to their classes. A closer evaluation of the operation of LivesCan and its outcomes is given in the following chapter. The immediate concern here, however, is design, and such consideration leads naturally to discussion of development possibilities for the LivesCan product.
Product development issues

The LivesCan programme ran and showed itself to have distinct, and distinctive, possibilities. At the same time, use of the LivesCan package was not sufficient to prove its efficacy in advancing the process of developing a personal world view by raising awareness of the lines of inquiry in *Encounter* and the range of paradigmatic concerns in *Worry*. Reference has already been made to comments from teachers that the product should have been simpler. This is not a view I share because it would have meant reducing the power of the product. What I think is desirable is to make the programme more powerful by building in still further possibilities which would offer simpler routines, for example guided tours of the church which would automatically show pictures with captions and spoken commentary. I also think it should be extended to include at *Encounter* and *Worry* levels issues which are not specific to a religious tradition. Some such issues were raised through the lines of inquiry in the two highest levels of LivesCan, but it would be an important feature of the religious learning process to show it to be applicable in any situation in which understanding, interpretation and decision are required. Self-evidently it could be extended to include other religious traditions, either additionally or alternatively.

There is evidently also a place for including video movie clips as well as still photographs, although, as indicated above, this can often be less effective than the still photograph, and it uses much more memory. Nonetheless, being able to observe interaction is of great value for communicating emotions and relationships; these characteristics of human behaviour are not so readily accessible through still pictures. More use of conversation and music would enhance the power of the programme from the points of view of effectiveness and popular appeal.

I have no doubt that the LivesCan software programme should be part of a wider learning environment including books, video, the natural environment and, above all else, other people. LivesCan is trying to provide a conceptual framework for action in the actual world of the user, not proposing some kind of virtual reality manufactured by the computer. It is imperative therefore that effective connections are made between LivesCan and the school environment in which it is used. This means first of all that pupils feel able to engage in dialogue with their peers and teachers about the kinds of issues that are raised by the LivesCan paradigm. This should be leading to much more interactivity, we might say democratic involvement, of pupils in their own educational development. This will only be possible if there is a staff development package to accompany LivesCan which prepares teachers for a wider learning programme as well as for operation of the computer part. There may have to be additional non-computer adjuncts to LivesCan, such as books, pictures, videos, games and personal diaries. While always wary of creating systems which might become ends in themselves, I do consider that a comprehensive system of world view development which employs as a major teaching resource the power of the
computer is more of a life support than a substitute because, in the case of LivesCan at least, it always focuses on the individual’s need to reach a decision and to act upon it. And one of the most important reasons for making the computer the core teaching resource in this formative education is the extent to which it is possible to exercise public control over its use.

**Public accountability**

One of the fears that parents and other members of society express about religious and moral education is that children are being subjected to indoctrination. While there is some justification for this fear in theory even if not in practice, there is very little evidence of religious education in schools making children draw closer to a religion. Some religious people actually fear a contrary indoctrination taking place in secular schools, and the findings of this study include evidence which might support this fear. Indeed, it is a fundamental part of the case put forward by the Roman Catholic church for separate Roman Catholic schools that they will ensure that no such anti-Christian values will be promoted. It seems almost superfluous to add that the transmission of explicit values does not constitute indoctrination, except under certain conditions. At the same time, public statements of curriculum which declare opposition to the intention and methods of indoctrination do not guarantee that the system is free of such unfree practice, for the dialogue that takes place between the teacher and the learner cannot easily be examined. Here, apparent commitment to objectivity may cloak the hidden expression of prejudice. Sometimes this prejudice goes unrecognised as such by the teacher who communicates it, but it can be still be quite damaging, as I shall illustrate in the next chapter; one may actually formally comply with positive curricular requirements and achieve a negative result. In addition, outcomes may accidentally not be at all what is intended, even for those who are solidly in favour of those outcomes. It is safe to say, for instance, that the formal intention of religious and moral education is not to have pupils become less impressed by religious traditions the more they know about them. Yet, as we have seen, it appears that there may be such an association among the sample studied. The place of assessment and reporting should thus be made secure for the purpose of satisfying public accountability. Nonetheless, whatever the visible outcomes, there is little likelihood of parents being able to discover what transactions actually take place between their child and her teachers.

A major feature of computer aided religious learning is that it is open to public inspection and approval, because of the immutability of the CD-ROM. It is not possible to alter the design of the CD-ROM once it has been cut, so there can be real confidence that what has actually been proposed and approved is in fact the basis of the learning programme. CD-ROMs can be made to achieve subsidiary aims of learning about a religious tradition, as in the case of the CD-ROM trialled in this study. In this way, Muslims, Hindus, Christians and others could elect to learn through the medium of their own religious tradition,
something which it would be impossible for even the specialist religious education teacher to achieve in one class. The only fundamental requirement of parents in participating in such a scheme would be to acknowledge that LivesCan is concerned with open inquiry and the development of more comprehensive and coherent personal world views, albeit developed against the background of the children's own religious tradition, or indeed of none. If parents insisted that their children should not take part in this kind of open religious learning which emancipates, empowers and ethicises, it would then be possible to debate with them whether they wanted their children to be educated or indoctrinated. In other words, if they expect the child to serve the needs of the religious tradition, which is indoctrination, they are frustrating the purpose of education and denying their child her right to education which develops her personal potentialities. The right of a parent to bring up a child freely within a religious tradition is not thereby being denied; there are other possibilities for the parent, such as attendance at the mosque or church, but it is the duty of a democratic government to ensure that it provides or secures forms of education which serve the best interests of the child and also society as a whole. It may be possible indeed for a government to move towards a situation where it could guarantee a religious education which helped to secure children's rights to grow up without the damaging effects of prejudice and ignorance fostered by indoctrination. As a society we do not allow such damage in other curricular areas, so why should we permit it in this area of human endeavour which is so powerful in shaping people's lives, both as individuals and as members of society?

These issues are only touched upon here, but the possibility of providing a religious education which matches more closely the religious backgrounds or wishes of parents is now within the reach of schools because of the CD-ROM. There is a growing movement for greater freedom in education, with the accent on choice and diversity, and this can now be extended to religious learning without difficulty. Behind this movement is a commitment to a world in which human values such as tolerance, trust and individual responsibility are of prime significance. These are values which most thoughtful people would support actively, and they are values which I believe are capable of informing an interactive programme such as the LivesCan CD-ROM.

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2 "There shall be freedom in education. Parents shall have the right to make provision for such education in accordance with their religious and philosophical convictions." European Parliament's Declaration of fundamental rights and freedoms (1989).

3 The European Forum for Freedom in Education was set up in 1990. It has met annually and from 5 - 8 April 1995 it convened a colloquium in Oxford, England with some 200 delegates from thirty different countries.

4 "A society based on co-operation, trust and individual responsibility needs a way of educating which encourages collaborative work, openness and shared decision-making." Leaflet published by Human Scale Education, the UK office of the European Forum for Freedom in Education, 1995.
Chapter 8
Evaluating the LivesCan package

The real is the intelligible, not the observable.
Ian G Barbour

Summary
The sources of information for evaluating the trial of the LivesCan computer package are set out. Tentative findings are made from the evidence available.

Introduction
The computer trial in schools was intended to be the most significant part of this study. As stated at the beginning of the previous chapter, this intention was not realised. This was deeply disappointing in view of the care with which the research had been designed and the effort which had gone into the production of the computer package that was to be the test instrument. I was aware that any test conducted in the field was vulnerable to various kinds of intervention, but total destruction of one school by fire, followed by flooding of the temporary accommodation, was an intervention of awesome magnitude. This school also had a problem with the memory in the computer to be used, a problem which persisted, unknown to me, for some months. No experimental work was carried out in this school, which was both the largest in the sample and the one most closely associated with the church featured in the LivesCan package. Other schools, however, did not provide pupils with sufficient time to make the experiment as a whole viable, something which I could not compel them to do. As the project was coming to a close in schools, there were frequent expressions of guilt from participating teachers and head teachers. Nonetheless, some useful information was found, as well as salutary lessons learnt, which allows tentative conclusions to be drawn from this part of the study.

Sources of information for evaluation

i) The LivesCan programme
The design of the computer package meant that each user, or group of users, had to create a personal file. This file contained a great deal of information about what the user was doing. The contents of this file could not be accessed by the user; this was in order to protect the data and to prevent others from reading anything written which could have been of a private or confidential nature. The information included the names and dates of birth of users as well as the names of their schools. It identified each date on which LivesCan was used and the length of time the programme was open on each occasion. In retrospect it would also have been useful to have had exact times because I suspect that programmes were sometimes left open unattended over interval and lunch breaks which

al ters the actual time spent working on the computer. At the same time, one cannot rely on the time of day shown on a computer being correct through intentional corruption or through the lack of knowledge of those in charge of the machine. The personal file also recorded different kinds of information for the different LivesCan levels. For the Visit and Inform levels it recorded the names of pictures seen and the number of times the user clicked the mouse. This gave information about how difficult it was for users to move around the church environment depicted in the programme. A running total of time spent and pictures seen was displayed on screen for users, and each time the user quit LivesCan all the information collected to that point was stored. When the user returned to the programme she was taken to the picture she had last seen and the information displayed again on the screen. In the case of Encounter and Worry levels the information identified time spent, cards (in the HyperCard sense) seen, choices made and any responses written, and occasions when the user went to the Help stack. Again, the screen display information was restored each time the user returned to use the machine.

\[ ii) \] Users' evaluation booklets

In the four schools where the computer was used pupils were asked to complete a detailed evaluation of the whole package. Some subjects who had used the computer were not present for the evaluation. The booklet which was used for this purpose is reproduced in Appendix E1. This evaluation covered initial impressions of embarking on the project, the response to the ballad, attitude to riddles and puzzles, use of computers in general, use of the computer for LivesCan, opinions about LivesCan, any differences they thought LivesCan had made, what they thought about religion (the same statements they had been presented with in the Religious Profile) and finally how important they thought it was to make sense of life. The method of administering this evaluation of the project was to give each participating pupil in the class a copy of the booklet on whose cover they wrote their name, class, school and date. I then read aloud each item in turn and gave subjects an opportunity to complete it and, if required, ask for clarification. Some pupils went ahead of the others in completing the booklet, but I did not consider this to be detrimental to the exercise; the important issue was to ensure that everyone had enough time and understanding to complete the booklet accurately. In all, 103 subjects returned evaluations in varying degrees of completeness according to their experience of the project. For example, some subjects had not read the ballad, and some had not used the computer. Not all had completed the Personal Profile at the beginning of the study.

\[ iii) \] Interviews with pupils

From amongst those subjects who had completed evaluation booklets, a small number were selected at random to take part in oral interviews, a total of 23 pupils. I used an interview schedule (Appendix E2) which sought to discover a number of views: general attitude to LivesCan; what they perceived the teacher's competence to be in using LivesCan, and what should have happened; what they thought the purpose of LivesCan was and
whether that purpose was worth achieving; whether they thought making sense of the whole of life was worth doing, whether that was more important than mathematics, and whether there was anything more important than making sense of life; whether they could see how LivesCan helped make sense of life; what they really hoped for in life, whether they thought this would happen and what they would need to do if it was going to happen. Subjects were also asked if they had any questions. My record of these interviews is also given in Appendix E3. Each interview lasted from 4 to 16 minutes depending on how talkative the respondent was, and whether they asked any questions. The mean time for each interview was 8.5 minutes.

iv) Interviews with teachers.
Interviews were conducted with the six teachers whose classes had used the computer. The interviews lasted from 31 to 56 minutes, with a mean of just over 41 minutes. Interviews were also conducted in the school which had been unable to provide any computer experience, with the teacher whose class was expected to be taking part (36 minutes) and six other teachers whose classes had been involved at the Personal Profile stage (mean of 15.5 minutes). An interview schedule was used and this is reproduced in Appendix E4. The teacher’s attitude to the project from the beginning was sought. There were questions about the help offered at various stages of the project and about the booklet which had been produced for use by the pupils taking part in the project. Facility with computers, the ease of use of the LivesCan computer package, its effectiveness, pupil responses, difficulties and possible improvements were all explored. Where the teacher thought Religious and Moral Education came in the priorities of a number of interests, including her own, was considered, and finally the teacher was invited to volunteer any observations of her own.

Evaluations

i) Teachers' views of the project
When interviewed about their feelings at the start of the project, five of the six participating teachers declared that they had felt they were being asked to take part in yet another task. There was strong feeling among this group that something had been imposed upon them without proper consideration of their own needs, with one teacher stating she had been slightly bothered, principally on the grounds that computerised learning was not appropriate for religious education. The remembered attitude of the seven non-participating teachers was quite different. This second group was mainly open to the prospect, with only one expressing apprehension about the use of the computer. One teacher in this second group who was responsible for special needs had thought it would be a good way of helping children with learning difficulties to join the mainstream. These more favourable responses may have been a consequence of these teachers not having to follow the project through to the computer stage.
Of the six teachers whose classes were involved in trialling the computer material, one was interested initially and became confused (teacher A); one was initially interested although annoyed at not being properly consulted, but came to the view that LivesCan was too difficult, particularly in relation to its language level (teacher B); two were initially doubtful about the appropriateness of the computer as a medium for religious education and remained so (teachers C and D); one was negative, even hostile, about the project from its first introduction and remained so throughout (teacher E); and one was initially dismayed at the thought of yet another burden ("Oh no! Not something else imposed!") and became enthusiastic about it (teacher F).

The attitudes of the teachers were reflected to a very considerable extent in the responses of pupils. It could be argued that the teachers were in fact expressing what they had observed in their pupils’ responses, but I think the evidence points the other way, both in relation to the comments made in the structured interviews and in the informal comments made during contacts throughout the course of the project. For example, teacher E, who expressed considerable hostility towards the project, showed the same hostility towards me personally. At every point teacher E raised objections. It was teacher E who had said a handbook was necessary, but when it was produced failed to use it, complaining, for instance, that the answers to the riddles should have been given in it, when they had been. When it came to my selecting pupils for interview teacher E tried to direct my selection towards pupils saying, "They’ll tell you what it’s really like.” I did in fact select one of these girls who proved to be simultaneously articulate and negative about the project. When I chose another pupil from this class, teacher E tried to dissuade me from interviewing her; this pupil declared in interview that she had started going to church after her first session on LivesCan. Teacher E also complained about the language level, yet had on the chalkboard a poem of such linguistic and conceptual difficulty that even I would have been reluctant to teach it to this age group. Teacher B, who was known to me personally, expressed guilt at not having done the project justice and so had let me down. This guilt, I believe, was covered by claims of not having been consulted by the school management and by the level of language in LivesCan being too difficult. It should be noted in this last case that pupils in this teacher’s class did not proceed to LivesCan levels where language was an issue. The two teachers who were antipathetic to the computer as an aid to religious education had only one pupil who proceeded beyond the stage of registering for the programme, so these pupils were quite incapable of offering an informed opinion about the merits of the LivesCan package. It did not, however, stop them from offering views on it.

Teacher F, who had been initially dismayed at yet another task, decided to train two girls to use the programme and have them train the rest of the class on a cascade model. This had proved extremely successful, and this class had very few problems with the computer. It is apparent from the pupils’ interviews in this class that the teacher was not
much involved after the initial training period. The teacher volunteered in the course of the interview that it was “like having another teacher in the classroom”, and expressed regret at not having started the project sooner. At the same time, this teacher was not uncritical about LivesCan and offered several valuable comments by way of improvement. This teacher was proficient and enthusiastic in the use of information technology, but more important, teacher F’s approach was open and not at all authoritarian. This raises the question of whether the pupils in this class reflected the teacher’s attitude or vice versa. I feel sure that the teacher’s general approach to learning was influential, and that what was reported was a professional response to the effect of the trial.

The conclusion I draw from the general picture of teachers’ attitudes and pupils’ responses is that the teacher is still the most powerful resource in the classroom. No matter what the learning resource, the way the teacher approaches it is likely to define pupils’ understanding of it and attitude to it; this is most true for learners who have not acquired a degree of maturity and independence of thought which together allow them to make their own value judgments and act accordingly. This raises particularly acute questions about who is to provide religious learning in secular schools, and how. There is, in this small sample of teachers, an extremely wide range of teacher attitude to religion, from negativity to the preciousness which will not allow it to be entrusted to anyone else, all mixed up with professional sensitivities. There is also the question of how much a teacher understands about religious learning, and this is especially relevant in relation to this thesis because of its emphasis on dialogue as part of the religious learning process. It would suggest that there are real problems about securing a degree of consistency and public accountability in this process. There is just a suggestion that the computer as interactive learning medium might offer a way forward.

ii) Teachers’ views of help offered
The main points arising from the interviews were the need for much more time to be given to participating teachers to acquaint them with the programme. The view was expressed more than once that I should have visited the school for a morning to introduce the pupils to LivesCan and to be on hand to answer questions. This was in fact an offer that I had made, but no one chose to ask me. The handbook was considered to have been particularly helpful, but there was clear evidence that teachers had not used it; some of the problems they encountered had been made manifest in the handbook, together with instructions about how to resolve them. In the case of one problem, registering, this had been highlighted in a written communication to the participating schools, in the in-service session at Lothian Region’s Information Technology Support Unit (ITSU), in the handbook, and on visits to schools, and still it was not picked up in two instances until explained in a phone call made in desperation to me. I did explain to teachers that one of the significant features of interactivity was the avoidance of the need for a handbook, which was why I had not produced one in the first instance. The programme had been written to be self-
contained, and apart from the problem about registration, which had developed later, there was really very little that needed to be explained once the principles of pointing and clicking had been grasped. Lothian Region's Adviser in Information Technology had been especially impressed with the degree of help available within the programme.

Teachers were evidently under some stress over major educational changes being introduced, both in curricular content and in standards of planning and recording of work and pupil attainments. Teachers frequently said that it was lack of time which had prevented them from participating more fully in the project, time for their own preparation and time in the curriculum for religious and moral education. Teacher F's unsolicited comment about it being like having another teacher in the classroom was precisely the value of building this religious learning process into an interactive computer programme. It could be argued that the programme itself was a help to the teacher, not just for religious and moral education, but for the whole curricular area because it freed the teacher from some responsibilities. This was not, however, a common view. There was, additionally, little agreement about what was most helpful: two people said the handbook; one said the in-service at ITSU; one said phoning me; one said my personal approach; and one said the pupils themselves when they had worked out what to do. I take this as an indication of lack of commitment to the project on the part of most teachers, which is reflected, as we saw in Table 7.3, in the limited time pupils spent on the machine.

iii) The pupils' booklet

I had been concerned that the LivesCan programme would not in itself prove interesting, on the grounds that children are not known for their interest in wandering inquiringly around churches. In order to make this more appealing, I had written a ballad with clues embedded in it which were first of all to be solved and then were to become the basis of a treasure hunt in the church. I also devised other riddles for solving and invited a search for the answers to these and for place-names which were to be matched to locations on a world map. These tasks and instructions about the treasure hunt and other aspects of the LivesCan were written up as a booklet for pupils. Pupils were questioned about the various parts of this booklet in their evaluations and teachers were asked for their views in the structured interviews. The pupils' written responses to questions about the ballad and riddles are summarised in Table 8.1 and responses to the open-ended questions in the booklet are given in Appendix E5. Of the 91 subjects who responded to the request to write down the main thing they remembered from the ballad, 64 said they could not remember and nine said "Nothing". Only six referred to Jesus. It would seem plain that the ballad was not at all successful. It was a frequent observation of teachers interviewed that pupils did not have sufficient knowledge of the Bible to allow them to make sense of the project, yet an important purpose of the ballad was to provide teachers and their classes with an opportunity to discuss the narrative of the life of Jesus. This observation of lack of Bible knowledge is strongly supported in the pupils' own evidence in the Religious Profile.

page 184
Pupils who read ballad in class: 8% Yes 95% 92%

<table>
<thead>
<tr>
<th>found it:</th>
<th>boring</th>
<th>interesting</th>
</tr>
</thead>
<tbody>
<tr>
<td>85%</td>
<td>45%</td>
<td>52% 55%</td>
</tr>
<tr>
<td>quite easy</td>
<td>quite hard</td>
<td></td>
</tr>
<tr>
<td>50%</td>
<td>54%</td>
<td>42% 46%</td>
</tr>
</tbody>
</table>

Note: some subjects did not complete both items.

<table>
<thead>
<tr>
<th>School</th>
<th>2</th>
<th>4</th>
<th>7a</th>
<th>7b</th>
<th>8</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>7</td>
<td>3</td>
<td>10</td>
<td>6</td>
<td>8</td>
<td>97</td>
</tr>
<tr>
<td>22</td>
<td>5</td>
<td>0</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>24</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>25</td>
<td>1</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>12</td>
<td>28</td>
</tr>
<tr>
<td>26</td>
<td>3</td>
<td>3</td>
<td>10</td>
<td>1</td>
<td>6</td>
<td>26</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>time spent discussing</th>
<th>none</th>
<th>a little</th>
<th>a lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>7</td>
<td>7</td>
<td>59</td>
</tr>
<tr>
<td>24</td>
<td>5</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>25</td>
<td>8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>26</td>
<td>1</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>27</td>
<td>3</td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>amount learnt</th>
<th>nothing</th>
<th>a little</th>
<th>a lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>19</td>
<td>20%</td>
<td>58</td>
</tr>
<tr>
<td>24</td>
<td>5</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>25</td>
<td>8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>26</td>
<td>1</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>27</td>
<td>3</td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>

| main thing learnt | 64 | 70% | could not remember |

<table>
<thead>
<tr>
<th>tried to solve riddles in ballad</th>
<th>No</th>
<th>%</th>
<th>Yes</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>14</td>
<td>15</td>
<td>79</td>
<td>85</td>
</tr>
<tr>
<td>24</td>
<td>27</td>
<td>32</td>
<td>58</td>
<td>68</td>
</tr>
<tr>
<td>25</td>
<td>18</td>
<td>24</td>
<td>56</td>
<td>66</td>
</tr>
<tr>
<td>26</td>
<td>18</td>
<td>24</td>
<td>56</td>
<td>66</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>teacher helped whole class</th>
<th>none</th>
<th>one/two</th>
<th>a few</th>
<th>most</th>
<th>all</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>18</td>
<td>21%</td>
<td>24</td>
<td>28%</td>
<td>27</td>
</tr>
<tr>
<td>24</td>
<td>11</td>
<td>13%</td>
<td>15</td>
<td>18%</td>
<td>28</td>
</tr>
<tr>
<td>25</td>
<td>11</td>
<td>13%</td>
<td>15</td>
<td>18%</td>
<td>28</td>
</tr>
<tr>
<td>26</td>
<td>11</td>
<td>13%</td>
<td>15</td>
<td>18%</td>
<td>28</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>riddles solved on own</th>
<th>v easy</th>
<th>quite easy</th>
<th>mixed</th>
<th>quite hard</th>
<th>too hard</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>3</td>
<td>4%</td>
<td>5</td>
<td>6%</td>
<td>43</td>
</tr>
<tr>
<td>24</td>
<td>11</td>
<td>13%</td>
<td>15</td>
<td>18%</td>
<td>28</td>
</tr>
<tr>
<td>25</td>
<td>11</td>
<td>13%</td>
<td>15</td>
<td>18%</td>
<td>28</td>
</tr>
<tr>
<td>26</td>
<td>11</td>
<td>13%</td>
<td>15</td>
<td>18%</td>
<td>28</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>enjoyed trying to solve riddles</th>
<th>No</th>
<th>%</th>
<th>Yes</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>28</td>
<td>32</td>
<td>59</td>
<td>68</td>
</tr>
<tr>
<td>24</td>
<td>18</td>
<td>20</td>
<td>70</td>
<td>80</td>
</tr>
<tr>
<td>25</td>
<td>49</td>
<td>64</td>
<td>28</td>
<td>36</td>
</tr>
<tr>
<td>26</td>
<td>46</td>
<td>62</td>
<td>28</td>
<td>38</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>normally enjoys riddles and puzzles</th>
<th>No</th>
<th>%</th>
<th>Yes</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>28</td>
<td>32</td>
<td>59</td>
<td>68</td>
</tr>
<tr>
<td>24</td>
<td>18</td>
<td>20</td>
<td>70</td>
<td>80</td>
</tr>
<tr>
<td>25</td>
<td>49</td>
<td>64</td>
<td>28</td>
<td>36</td>
</tr>
<tr>
<td>26</td>
<td>46</td>
<td>62</td>
<td>28</td>
<td>38</td>
</tr>
</tbody>
</table>

Table 8.1 Evaluations of ballad by 95 subjects

It is not entirely clear whether the attitude to the ballad was a consequence of not being familiar with the narrative of Jesus’ life or because the language was too difficult. I am inclined to the view that the language level in general would be beyond the reach of some pupils, and not easy for some more, but there seems little doubt that lack of knowledge of the narrative on which the ballad was based would indeed have rendered the whole exercise somewhat bewildering. Table 8.1 shows the distribution of pupils’ views as to
interest and difficulty to be relatively well balanced overall, with pupils in the highest socio-economic group (as defined by free school lunches) finding it both more interesting and easier (15-20 minutes reading followed by their own research, according to their teacher) than those in the lowest socio-economic group (who spent about ninety minutes in all with their teacher explaining it). There is evidently a need for more differentiated learning materials; teachers made suggestions about how this might be achieved. Some teachers found the ballad personally very interesting, perhaps "too clever", but on the whole beyond the scope of their pupils.

Similarly the riddles and conundrums, where they were attempted, proved too difficult, and even those pupils who were normally interested in such things found the LivesCan riddles less enjoyable and on the whole too hard (Table 8.1). No one attempted to find the place-names and complete the map. Thus, in attempting to make the computer part more interesting, I appeared to have made it more difficult by association with the ballad and riddles. It was suggested to me that a simple list of things to find would have been enough, and one teacher disapproved of the treasure hunt being a game, because some pupils appeared upset at "losing clicks". There is considerable scope, it would seem, for revision of this part of the package as well as better training of teachers in its effective use.

iv) The technical aspect of using the computer
Pupils were asked a large number of questions about the use of the computer, and these are summarised in Table 8.2. The vast majority of pupils enjoy using computers and find using them easy. Only 1 out of 101 thought that using computers could not make learning more interesting. When it came to their experience of LivesCan, however, 30% thought using the computer "quite hard" and 4% "very hard". There were quite a few complaints of the computer behaving oddly, but it is not known how often this referred to the problem associated with registration. The same is true of slowness, but there are other factors which also need to be considered here. Children are used to computer games where the press of the button brings about an instantaneous jump or change of direction. The programming for LivesCan required the transfer of a great deal of information in a medium (CD-ROM) which is relatively slow and on a machine which is similarly slow. It also carried information about the user's actions which would not normally be required but were necessary for the purposes of research.

Teachers in interview expressed frustration with the computer, but this was almost always due to the difficulty already discussed relating to registration. Those pupils who proceeded to the Encounter and Worry levels did occasionally meet with problems which were almost certainly due to lack of memory, with a picture not displaying when it should. This difficulty, however, could only have been present for a very few pupils as only 7% of users got beyond the Inform level.
### Attitudes to computers in general:

<table>
<thead>
<tr>
<th>Attitude</th>
<th>never</th>
<th>hardly ever</th>
<th>sometimes</th>
<th>often</th>
<th>a great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>enjoys using computers</td>
<td>0</td>
<td>7</td>
<td>14</td>
<td>33</td>
<td>49</td>
</tr>
<tr>
<td>finds using computers</td>
<td>very easy</td>
<td>quite easy</td>
<td>quite hard</td>
<td>very hard</td>
<td></td>
</tr>
<tr>
<td>computers can make learning more interesting</td>
<td>No</td>
<td>1</td>
<td>Yes</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

### Number of people in group:

<table>
<thead>
<tr>
<th>Number of people in group</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>number of groups</td>
<td>53</td>
<td>23</td>
<td>20</td>
<td>3</td>
</tr>
</tbody>
</table>

### Experience of using computer for LivesCan:

<table>
<thead>
<tr>
<th>Experience</th>
<th>very easy</th>
<th>quite easy</th>
<th>quite hard</th>
<th>very hard</th>
</tr>
</thead>
<tbody>
<tr>
<td>using the computer</td>
<td>12</td>
<td>53</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td>speed of computer</td>
<td>very slow</td>
<td>quite slow</td>
<td>normal</td>
<td>quite fast</td>
</tr>
<tr>
<td>computer behaved oddly</td>
<td>never</td>
<td>hardly ever</td>
<td>sometimes</td>
<td>often</td>
</tr>
<tr>
<td>the best way to work</td>
<td>on own</td>
<td>with friend</td>
<td>small group</td>
<td></td>
</tr>
<tr>
<td>time allowed</td>
<td>far too little</td>
<td>too little</td>
<td>enough</td>
<td>too much</td>
</tr>
<tr>
<td>&quot;Help!&quot; was used</td>
<td>never</td>
<td>hardly ever</td>
<td>sometimes</td>
<td>often</td>
</tr>
<tr>
<td>value of &quot;Help!&quot;</td>
<td>not needed</td>
<td>useless</td>
<td>little help</td>
<td>helpful</td>
</tr>
</tbody>
</table>

### Levels worked on:

<table>
<thead>
<tr>
<th>Level</th>
<th>Visits</th>
<th>Informations</th>
<th>Encounters</th>
<th>Worry</th>
</tr>
</thead>
<tbody>
<tr>
<td>LivesCan</td>
<td>94 (100%)</td>
<td>19 (20%)</td>
<td>7 (7%)</td>
<td>6 (6%)</td>
</tr>
</tbody>
</table>

### Feelings of 94 subjects about church explored:

<table>
<thead>
<tr>
<th>Feeling</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>bored</td>
<td>30</td>
<td>32%</td>
</tr>
<tr>
<td>surprised</td>
<td>33</td>
<td>35%</td>
</tr>
<tr>
<td>interested</td>
<td>49</td>
<td>52%</td>
</tr>
<tr>
<td>thoughtful</td>
<td>8</td>
<td>9%</td>
</tr>
<tr>
<td>excited</td>
<td>11</td>
<td>12%</td>
</tr>
</tbody>
</table>

### LivesCan shows computer is interesting way to learn:

<table>
<thead>
<tr>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### After using LivesCan, subjects found:

<table>
<thead>
<tr>
<th>Finding</th>
<th>much easier</th>
<th>easier</th>
<th>same</th>
<th>harder</th>
<th>much harder</th>
</tr>
</thead>
<tbody>
<tr>
<td>using the computer</td>
<td>15</td>
<td>16</td>
<td>62</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>knowledge of churches</td>
<td>9</td>
<td>10%</td>
<td>51</td>
<td>55%</td>
<td>27</td>
</tr>
<tr>
<td>knowledge of Christianity</td>
<td>15</td>
<td>16%</td>
<td>45</td>
<td>48%</td>
<td>28</td>
</tr>
<tr>
<td>knowledge of some words</td>
<td>9</td>
<td>10%</td>
<td>52</td>
<td>55%</td>
<td>30</td>
</tr>
<tr>
<td>knowledge of own thoughts</td>
<td>7</td>
<td>7%</td>
<td>52</td>
<td>55%</td>
<td>26</td>
</tr>
</tbody>
</table>

### Note:

Some subjects did not indicate in their evaluations that they had worked on any LivesCan level, but their names appear on the computer records. This includes people who had spent significant time on the computer.

### Table 8.2 Evaluations of the computer and LivesCan programme
Three teachers thought the computer package was extremely difficult for teachers to use, one thought it fairly difficult, one thought it average, and one thought it fairly easy to average. This was for all of them a new kind of learning medium, and one teacher declared unfamiliarity with the Apple Mac and another did not know how to open an icon. With such a limited knowledge of the computer, which had not been disclosed in the initial stages when personal demonstrations were being given, it is not surprising that some teachers found it extremely difficult. This should not, in my view, be taken as a valid reason for avoiding this medium for learning, although it might mean modifying the approach to the LivesCan package or the package itself. In spite of its difficulty, 73% of pupils thought LivesCan showed the computer was an interesting way to learn after they had had slight experience of it, and 33% of pupils found using the computer easier or much easier (Table 8.2). A frequently repeated comment from teachers was that computing equipment should have been dedicated to the LivesCan project to avoid conflicting demands. There is much wisdom in this, but in my visits to schools, computers were more often unattended than being used. I believe it also gives a clear indication of the priority schools, or their teachers, accord to the curricular area of religious and moral education.

v) LivesCan's contribution to religious learning
The most critical test of whether interactive computer aided religious learning is worthwhile is the degree to which it raises the level of knowledge and understanding of the user and advances her skill in developing a personal world view. Table 8.3 indicates what each of the teachers involved thought of the usefulness of LivesCan in relation to these criteria; it is not at all encouraging.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Usefulness in teaching about church and Christianity</th>
<th>Usefulness in teaching what it means to be religious</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Little</td>
<td>N/A</td>
</tr>
<tr>
<td>B</td>
<td>Little</td>
<td>Considerable</td>
</tr>
<tr>
<td>C</td>
<td>Little</td>
<td>Some</td>
</tr>
<tr>
<td>D</td>
<td>Not at all</td>
<td>Little</td>
</tr>
<tr>
<td>E</td>
<td>Not at all</td>
<td>None</td>
</tr>
<tr>
<td>F</td>
<td>Very (church)</td>
<td>Great</td>
</tr>
</tbody>
</table>

Table 8.3 Teachers' opinions of usefulness of LivesCan

It must be remembered, however, that in the case of two of these teachers there was a deep resistance to using the computer for religious education and their pupils did no more than register to use LivesCan. A third teacher (B) was similarly uneasy, concluding that the computer was too impersonal for helping someone to understand what it means to be religious. Teacher B had only five pupils who had had some use of the computer. This left one teacher who was implacably hostile, a second who claimed not to have had...
enough time to become familiar with the programme and a third who had delegated responsibility for the operation of the programme to the members of the class. This is a quite inadequate basis for drawing any firm conclusion about the efficacy of the computer in general and LivesCan in particular. An understanding of the religious learning process would only begin to be apparent when pupils had spent some time working at Encounter and Worry levels. As it was, there is evidence from the computer records of only five people who went beyond Inform level, contrary to the evidence of the pupil evaluations. This discrepancy may be accounted for by pupils in groups not having been identified by name on the computer file. The time spent on these advanced levels of LivesCan amounted to 107 minutes for one pupil (50 minutes on his own, 47 minutes with another boy, and 10 minutes as "Mr Help"); 47 minutes for the boy who shared with the previous subject; 19 minutes for one boy; 72 minutes for one girl; 26 minutes for one girl.

As an aside, there is evidence of other pupils working on these levels from the previous year, notably in the class of teacher E, in which school 21 pupils went beyond level Inform; some of these 21 pupils seemed to find the experience of interest judging by their responses. The mean time spent on these levels was 103 minutes for each of the 12 girls, most of that time shared with one or two others, and 76 minutes for each of the 9 boys. Unfortunately none of these pupils was available when evaluations were taken, having by that time moved on to high school. There appeared to be little evidence of the high levels of frustration and computer malfunction claimed. Whatever the case, it is clear that there is insufficient evidence to make any kind of claim about the effectiveness of the computer programme in assisting in the development of religious learning.

Nonetheless, we can say from the evidence of those who did carry out evaluations that after LivesCan, 35% or more subjects indicated increased knowledge of churches, Christianity, some words and their own thoughts (Table 8.2). It is quite clear that this includes a substantial number of subjects who had had little or no experience of using the computer, so there must be some halo effect from the ballad and related discussions. Users were put into three categories according to how much time they had spent on the computer: those who appeared to have made no use of the computer (n = 30); those who had made little use, basically only registering with LivesCan and possibly exploring the LivesCan stack (n = 20); those who made some use (n = 49). How these separate groups responded to a selection of items is set out in Tables 8.4 and 8.5. Those who had actually had some use of the computer were more likely to say that LivesCan showed that the computer is an interesting way to learn. Those who had made some use expressed twice as much interest in knowing more about religion than either those who had made no use or little use. Those who had made no use were more likely to say they thought religion was not needed and that it caused a lot of trouble in the world. However, no safe conclusion can be reached in interpreting these results because each of the groups tends to be associated with schools reflecting social class as measured by free school lunches.
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<th>Use of computer for LivesCan</th>
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<th>Little use</th>
<th>No use</th>
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</thead>
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<td>5 31</td>
<td>8 33</td>
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<tr>
<td>Wish to know more about religion unchanged</td>
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<td>9 56</td>
<td>16 67</td>
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<tr>
<td>Wish to know more about religion increased</td>
<td>7 15</td>
<td>2 13</td>
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**Effect on interest in learning about religion compared to computer use.**

**Table 8.5**
In view of the divergence between knowledge of religion and attitude to it already noted from the Personal and Religious Profiles, one might expect a similar shift in this part of the sample, which had grown about eighteen months older since they had completed their profiles, the same gap in age between the youngest and oldest quarters of the Personal Profile sample. I had included in the evaluations the same items on which the five point attitude to religion scale was based. Where possible, the attitudes of those who had completed evaluations were compared with their earlier attitudes, and these were compared with the differences in attitude between the youngest and oldest quarters of the sample completing the Religious Profile. The results coming from this analysis are shown in Table 8.6.

We saw when discussing the Religious Profile that between those subjects in the youngest quarter and those in the oldest quarter there was a growth in knowledge about religion and also a decline in favourable attitude to it. These effects are amplified amongst those who have taken part in the LivesCan project, with one notable exception: boys reversed their opinions about religion causing trouble in the world and thinking it was not needed. This may be attributable to the effect of introducing “high tech” into this field. Nonetheless, this appears to have done nothing to reduce the decline in wanting to know about religion: compared to the oldest and youngest quarters, those taking part in the trial show a 248% steeper decline. The change in attitude to religion is less easy to read, and when I conducted a chi-square test of attitude to religion in relation to the three groups of people completing evaluations (those who had not used the computer, those who had used it only to register, and those who had experienced some use of it) there was no statistically significant association between them. Table 8.6 shows the boys in the computer trial had started off with a more positive attitude to religion than those in the youngest quarter but ended up with a less positive attitude than the oldest quarter. The girls in the trial showed less volatility, but overall they too ended up with a less positive attitude to religion. At the same time as magnifying the effect of increased knowledge accompanied by poorer attitude to it, the results cannot on this evidence be said to show the LivesCan computer project as being successful in improving attitude to religion. This may be due to the strong phenomenological component in the material, and one is returned once more to Cantwell Smith’s concern about the utility of the concept religion.

Comparisons were made between mean scores for a number of items in the Personal Profile and the three categories of user, and between the same items and the separate schools, with the results displayed in Table 8.7. Between the two schools which have previously been identified as exhibiting different attitudes, one negative and the other positive, the “negative” school scores higher means on all the selected items except for perseverance and looking for opportunities in life. Between those groups who had changed their opinion about whether they wanted to know more about religion, the group which had chosen to change from wanting to not wanting to know more about religion (“negative”) only scored noticeably higher on the item which indicated they felt free to do what they want.
What do you think about religion?

Subjects who claimed these statements true:

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<th>Females</th>
<th>Males and Females</th>
</tr>
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<tr>
<td>I don't really know what religion is.</td>
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<td></td>
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<tr>
<td>I think religion is meant to help us lead better lives.</td>
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<td>I don't think we really need religion.</td>
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<tr>
<td>I would like to know more about religion.</td>
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<table>
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<th>C2 OQr</th>
<th>%diff CI YQr</th>
<th>C2 OQr</th>
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All figures are percentages

Notes:

% diff = [(C2-C1)/(C1)(OQr-YQr)/YQr]

C1 = attitude to religion from Religious Profile of those trialling LivesCan
C2 = attitude to religion from post-trial evaluation
YQr = Youngest Quarter of the sample for the Religious Profile
OQr = Oldest Quarter of the sample for the Religious Profile

Mean ages: OQr = 11.6 yrs; YQr = 10.1 yrs.

### Attitudes to religion

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### Table 8.6 Comparative changes in attitude
*4 I look for opportunities in life
5 I look forward to the future
16 I am contented with my life
94 I am willing to keep on persevering
15 I get frustrated when things don't work out
40 I feel free to do what I want
84 I obey the rules if I know what they are
90 I look for ways of creating a happy atmosphere
54 I enjoy trying to solve problems and puzzles

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School 7 (Negative attitude)

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Change in wish to know more about religion after using computer

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Table 8.7 Personal Profile items related to post trial groupings
vi) Summary of effects of the project
In the pupils' evaluations of the project, there was frequent reference to aspects of the computer experience that were enjoyed: the graphics, the sound and exploring the church and its environment. Details of subjects' free responses are listed in Appendix E5. It appeared to have increased knowledge of religion but appeared also to have produced a more negative attitude to it. These effects are far from certainly attributable to LivesCan, of course, because there was no control group against which to measure change. In view of the slightness of the trial, however, the absence of a control group cannot be seen as too serious an omission; the opportunity to use an interactive computer programme to develop pupils' skill in forming a more satisfactory world view had been almost entirely lost. Some teachers were evidently not in favour of this approach to religious and moral education and this may have had a decisive effect. Perhaps the most important outcome is the volume of information accrued about what is required for a more effective learning experience for a wider range of pupils through use of the computer. Consideration is given to these matters when the conclusions from the study are drawn in the final chapter.
Chapter 9
Conclusions

Each of us is meant to be a force and to find self-realisation through what we do in our lifetime. So why not master our weaknesses and find fulfilment - in order to save the world? This is the only answer I see for the world today.

Taraneh Kayhan, Iran

Summary
The purpose of the research study is restated and conclusions drawn in the form of simple statements of a number of cases believed to have been made. On this basis the thesis is considered to have been proved. Suggestions for further inquiry are also offered and the main conclusion of the study is declared.

i) The context for the study
In setting out to solve in a new way a problem which has been recognised in public education over several centuries, it was clear from the outset that there would be many difficulties on the way to a solution which might have relevance beyond the borders of Scotland. The study has established beyond any doubt which may have existed, that the schools in the sample are plural and cannot be considered in any conventional sense religious. Additionally, as I have tried to show, there is within the Scottish tradition a strand which may lead to a solution which does justice to all the main operational factors: the plurality of public education, essential claims of religious faiths, and the needs of the developing child. These factors are not entirely disparate and it is in their common features and interests that the balance in the equation is to be found. All these factors are human processes; they all require social as well as individual commitments; they are all capable of being brought into the public domain; they are all open to rational investigation and argument.

ii) The case for the primacy of personal development
In arguing for a form of religious learning which gives primacy to the development of the person and not preservation of the doubtful integrity of a religious tradition, I believe many of the objections to religious education in state funded institutions are removed. In serving the needs of the person, a fundamental ethical principle of religious traditions is safeguarded, namely that personal life should be protected from entrapment by the state. Through public education, both the state and religious traditions have an opportunity to serve the needs of the person in society, and this focus on the person can assist the individual to recognise her need to take responsibility for her own life, as a person in

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¹ Chris Waddy The Muslim Mind Longman 1976, p.129.
society. There is no satisfactory hiding place from yourself if you cannot blame the government or religion.

Emancipation, empowerment and ethicisation were cited as necessary for an education which treats the learner with full seriousness. These are also terms which sit easily within most religious traditions, although they may have different spins on them depending on the context. Freedom and power are moreover conditions which most people wish to have for themselves, and it is an elementary exercise of reason to recognise that these two conditions cannot be achieved simultaneously without the operation of ethical rules. These are common concepts realised in the provision of public education, in the exercise of religious freedom and in the growth of the child towards independent, adult life. The approach to religious education I am advocating is a far remove from the cult of the individual because it acknowledges and encourages personal responsibility. Without clear direction and careful support, the child will not be able to set off upon the unpredictable and frequently uncharted waters of the wider world. My contention is that it is the school’s task to teach those skills which will promote independence and responsible action, as well as the skills and knowledge whereby the individual learns how to earn a living and avoid the worst excesses of narcissism and libertarianism. Merely to accommodate others is not to take control of your life, but to leave it still in the charge of others.

We have seen from the Personal Profile that the children in the sample had little practice or skill in controlling events. Whether by age or gender, control was the element which had the lowest score of the fifteen. The highest scoring item in this element was for trying to get people to like them, which illustrates well the degree to which power is seen to lie outside of self. This raises questions of whether parents and schools are doing enough to train children to take responsibility for themselves. We have seen that action, industriousness and technical competence are significant features of latency but they do not appear to be matched with opportunity. This does not augur well for responsible decision-making and action. It is also apparent that the children in the sample attached high value to moral matters, but without the opportunity to exercise control this ethical sense is not likely to develop, and the child is likely to be entrapped in peer activities. It would seem vitally important for the child at this stage to be receiving the maximum of opportunity to act responsibly within environments which progress gradually from the secure to the uncertain. While mistakes will inevitably be made, it is better to learn to make them within a caring environment where support and direction are available than when the consequences may be much less agreeable. The options to this strategy would seem to be for children not to act, and thereby avoid mistakes, or not to care about making mistakes. In the first case, the child will not realise her potential which may lead to an unhappy and unfulfilled life. In the second case, the child will again fail to realise her potential and may actively make life for everyone else unhappy and unfulfilled.
iii) The case for world view development

There is a need to provide a means of organising intellectually the world in which we find ourselves. That world will be experienced and perceived differently for each of us. I do not think the evidence from the study supports the judgment that exploring the classic world views of religions is an appropriate approach to assisting children develop their own personal world views. I argued earlier that religious world views were to a large extent perceived to be irrelevant to the needs of children, and the subjects confirmed this opinion in their responses to the Personal and Religious Profiles. When they were exposed to a Christian world view, as presented by LivesCan, the dual response of knowing more about religion and caring less about it was accelerated. This may have something to do with the inadequacies of LivesCan or of its presentation. Whatever the inadequacies of LivesCan, however, its strengths were never engaged: children on the whole never got past the narrative and descriptive accounts of religion. It seems improbable that extending knowledge over various religious traditions will assist children quickly enough to get beyond the descriptive stage and crude stereotyping. It seems very clear that a classic world view which does not correspond to the experiences and expectations of the individual is not going to make much headway. One returns again to Bonhoeffer's appraisal of the relationships between religion, faith and the secular world.² Children evidently already had personal world views which discounted the cultural expressions of the more developed world views of religious traditions. While there is much within any religious tradition which children growing up in that tradition may enjoy with their families, it should not be forgotten that its symbolism and meaning are rich and deeply cultivated. It might help to remember how few children there are who can access other high cultural forms in the fine arts. It seems clear that future research programmes should take account of the personal world views of subjects in terms of their own experience and language, and not in terms of theories predicated by religious constructs.

iv) The case for a review of curricular practice

Perhaps the most thought provoking outcome of the study is the way in which girls appear to have a much more developed moral sense than boys, whether measured in terms of orientation towards justice or towards caring. It must be restated that both genders gave a high value to acting correctly, but much greater opportunity to engage in decision-making which affects others would seem to be required, particularly for boys, in order to nourish this clear orientation in everyday life. It suggests that if boys are not to going to continue to be disadvantaged in this way, attention must be paid to breaking down the male stereotypes which keep them from being sufficiently emancipated, empowered and ethicised. It may suggest positive action in favour of boys, differentiated tasks from which they may indeed learn to make the most of their lives (C1-05, ranked 17 by boys and 15 by girls in the Personal Profile). In this connection it should be noted that children,

² These relationships are discussed from a different viewpoint in F Oser and H Reich's "Moral Judgment, Religious Judgment, World View and Logical Thought: A Review of their Relationship" British Journal of Religious Education Vol 12 Nos. 2, 3; 1990.
whether male or female, whether in the youngest or oldest quarters, gave their highest ranking to looking after animals and other living creatures (D4-07), an activity calling for high levels of responsibility and care.

Alongside existential decision-making which affects others, however, there is a case for saying that children should learn vicariously how to identify and resolve the moral and spiritual dilemmas of living. Both genders give a high value to problem-solving (B3-03, ranked 15 by boys and 14 by girls) although there is a disappointing drop in value attached to this between the youngest and oldest quarters. One wonders if this is a consequence of problems not being made sufficiently relevant. In the case of religious and moral education could this be a consequence of focusing on religious traditions? It is also possible that insufficient attention is paid to action in the solution of problems on the one hand and not enough stimulation of the imagination on the other. Boys in particular appear at this stage to be reaching beyond the mundane to the universal, and with one exception they scored higher than girls on all items indicating this paradigmatic element; the exception was on wondering who could be trusted (C5-06). Yet the apparently broader vision of boys is only of value insofar as it helps to organise and develop personal life. The concept of developing a world view paradigm should, in this situation, have particular appeal. It may be necessary, in the light of the findings, not to attempt that through religious traditions, but to take a broader canvas, one which includes religious traditions as appropriate to the elements of the paradigm and the needs of the learner.

Whereas LivesCan demonstrated the possibility of every element being approached through one manifestation of a religious tradition, no claim is being made for this to become standard practice. LivesCan was attempting to make the point that the paradigm was useful in any event. Nevertheless, it might be much better to develop the pupil's skill in using the paradigm before launching into a full-scale study of a religious tradition. As it would appear to be the case that children bracket out religion from their world views, to confine world view development to religious traditions could be entirely counter-productive. And as children already have world views irrespective of their experience of a religious tradition, it would be absurd to conclude that the only way to develop your personal world view was through one or more religious traditions, especially if you did not adhere to any. Thus, in view of the evidence arising from this study, it would seem appropriate to draw attention to Schweitzer's observation: "For practical theology and religious education it would be of decisive importance to know more about the effects of different types of education and educational programmes. Only on the basis of such knowledge will it be possible to design educational guidelines and to improve the existing one."

v) The case for the computer in religious learning

The opposition of some teachers to using the computer in religious education was almost

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matched by the enthusiasm of those others who considered it could in fact resolve many of
the problems schools experience in this curricular area: lack of specialist knowledge;
shortage of time for teachers to become fully proficient in what is perceived to be a
difficult area; absence of consistency in approach. No one can doubt that in the time the
LivesCan project has been running there has been a rush to provide interactive learning
resources across the entire curriculum in schools. These tend to be encyclopaedic in
color, and information retrieval is a task which the computer can accomplish with
simplicity and speed. What may be much more significant is the potential of the computer
to teach procedures and thinking skills. It is a matter of deep regret that schools were
unable both to manage their classes so that they might experience the full range of the
LivesCan package, and also to see its relevance for other curricular areas. As far as
religious education is concerned, LivesCan contained the information that teachers might
not have and it provided the opportunity for pupils to make decisions and provide reasons
for them. It showed very clearly in the Encounter and Worry levels that there are
different kinds of questions that can be asked and different kinds of choices that people
can make. The potential for dialogue is there, the machine never forgetting to offer the
same range every time without getting tired or forgetful. Put in simple terms a selection of
data is presented to the user which the programme developer considers to be particularly
relevant. This selection of data has the distinct merit in this field of being open to public
scrutiny and therefore be available for public agreement. The possibility of the teacher
communicating a personal bias is eliminated because whatever bias is agreed for the
machine is constant. In respect of peer discussion, it also removes the potentially
inhibiting presence of the adult teacher.

Although LivesCan has not in this study provided all the answers it set out to find, it has
not been unsuccessful. Much has been learnt about the preparation of materials, the
preparation of teachers and the resource and planning implications for schools. The
difficulties encountered can be anticipated and negotiated away in a further trial: stricter
conditions can be laid down for the use of LivesCan; volunteers would be recruited and
fully trained rather than conscripts be engaged as was necessitated by the random
sampling approach of the study. It is also evident that a classroom needs a dedicated
machine for a learning programme of this complexity, and it needs to be used in a planned
way by the teacher. The absence of these conditions in the present trial has simply meant
that the case for effective religious learning through the use of the computer can be neither
proved nor disproved. Some of the findings nonetheless indicate strongly that the current
dimensionalist approach in schools is not effective with the sample age group, whatever
the causes may be.

vi) The case for the LivesCan paradigm
Although the computer package did not test the efficacy of the LivesCan paradigm in
achieving religious learning, it did demonstrate how it might be employed in devising a
computer aided learning programme. The paradigm has been tested in the Personal

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Profile, in which application it has proved to be a reliable and precise instrument for profiling world views. There is scope for considerable discussion about the choice of items as indicators of the elements of the paradigm, but it is refinement rather than complete overhaul that it merits. The fact that it can be administered so easily and quickly to such a young age range makes it of immediate interest. Its power to discriminate across genders and narrow age bands indicates a degree of sensitivity which suggests potential usefulness. Its ability to reveal what are essential aspects of religious world views through attending to human behaviours of children is impressive. It reveals that children have complex and patterned world views which are independent of explicitly religious influences, world views which are prior to religious traditions and may be developed holistically without reference to them. It would appear to confirm the point made by Cantwell Smith (p.26 above) that religious traditions change in order to keep up with human invention.

What the Personal and Religious Profiles between them reveal requires to be attended to with great care. There is no virtue in pursuing religious education on the basis of religious traditions if the evidence shows a strong negative association between knowledge of religions and attitude to religion, and if there is no association between attitude to religion and personal world view, even for those who participate in a religious tradition. The aim of religious traditions is to bring about fulfilment of personal life, not to enslave in the tradition. People do not as a rule abandon those who enrich them and lead them to fulfilment, yet everywhere people are moving on from the orthodoxy of their religious traditions, frequently invoking the violent reactions of those left behind.

This phenomenon is paralleled in this study. The certainties that children may have had as they moved into latency are undergoing rapid change, and they appear to be rejecting religious influences at the same time. These are characteristics which Fowler identified in the movement from one stage to another. This may well be a dialectical process and, if it is, we may have to be much more flexible in our approach to achieving religious learning than is indicated by the linear approach through the levels in Scotland's National Guidelines for Religious and Moral Education 5-14. If the paradigm has led us to recognise how complicated the process of religious learning is, and how much sensitivity is required on the part of teachers, it will have performed a useful function. Whether the public purse will provide enough resources to allow teachers to be adequately trained for this task remains doubtful. It is against this background that the case for a machine which recognises the range of needs of pupils and which can be accessed appropriately by pupils is of immense interest. The fact that it is a machine should not be disconcerting: we would not have the same difficulty with a book, which is only another technological invention to allow people to communicate with one another at depths that might be impossible in face-to-face contact. The results from the Personal Profile almost demand further research and development in computer aided religious learning.
vii) The case for further research and development

Reference has already been made to factors which acted against the interests of the LivesCan project. There is a strong argument for trialling LivesCan again after attending to the negative factors, even if for no other reason than a huge investment of time has gone into its production. I would be inclined to trial it with different age groups, from Primary 7 (age 11) to Secondary 4 (age 15). Training of teachers and the planning of its use would, as stated above, be essential requirements. There is the further reason that interactive learning programmes are set to appear across a wide range of curricular areas, and the cost-effectiveness of the CD-ROM means that education of a high quality can become more universally available, and in ways which put the learner in charge, a characteristic which has special implications for education in the developing world. A programme which is designed to make the learner’s world view more comprehensive, coherent and consistent, and which is effective in this matter, would provide the world with a powerful tool for achieving a better quality of life.

The sample in this study did not include any Roman Catholic schools. It would be very interesting to discover if the responses to the Personal and Religious Profiles there were any different from non-denominational schools. Similarly it would be of interest to sample older groups to compare their responses, and to follow groups in a longitudinal study to track their experiences, world views and attitudes to religion.

The results relating to gender orientation, especially in connection with morality, clearly merit more intensive investigation. The Personal Profile may need to be supplemented with other test items, such as case studies or discussion of real dilemmas faced by the subjects. What is notable about the Personal Profile is that the score is self-determined, and in relation to world view it is this perception which is critically important. This is not the place to debate further the relative advantages or otherwise of methods of measurement, but there is an issue here which cannot be allowed to lie without further examination.

The way in which boys, and to a lesser extent girls, responded to the word universe raises interesting possibilities of discovering the most appropriate language for building bridges between the insights of religious traditions and personal world views. More generally, the use of language in world view development calls for attention. We may have to think of developing focused language programmes which will accelerate world view development.

Much of the software developed for this project is, in technical terms, rather primitive, even if it is less so conceptually. The importance of the computer environment in the home and in the school is growing daily and can scarcely be overstated. The theological thrust of products likely to appear on the market for religious users may not always meet the educational standards advocated in this study. Much more work is required to allow more
sophisticated and wider-ranging interactive products to become available in the field of religious learning.

viii) The case for the thesis
The thesis is this: the CD-ROM opens up the possibility of a new approach to religious learning which is particularly relevant to secular contexts. In drawing a conclusion as to whether this thesis is proved, some regard should be paid to the fact that there is always in the world a struggle for the hearts and minds of people. What this thesis has proposed in general is that religious learning should be directed towards so strengthening people that they are not swept along in the wake of others' interests. If one is in possession of this strength, uncertainty is more manageable but not denied; decisions are personal, the product of thought, sensitive encounter with others, and experience carefully reflected upon. This strength, I believe, depends upon the person having a comprehensive world view which is constantly being tested for coherence and consistency.

The prime task of the religious educator is to ensure that the learner is engaged in the process of forming such a world view. This world view may draw from any source, spy on any other world view, test itself in new situations, but it remains essentially the personal property of the individual. The LivesCan CD-ROM is such a source, providing an opportunity to investigate a religious tradition and consider the issues it raises about the meaning and purpose of life. The pupil is free to inquire into areas of interest and make her own choices and offer her own reasons without fear of divine judgment. Such choices and reasons remain with the pupil and are not necessarily reinvested in Christianity. Because the beliefs and values in the LivesCan CD-ROM are in principle, and could easily be in practice, open to public scrutiny, the CD-ROM is particularly suitable for use in plural, secular schools. This is a new approach and although its trial fell short of providing firm results, the potential for advancing religious learning is plainly visible. I hold, therefore that the thesis is established in all essentials.

ix) General conclusion
In embarking on this study I felt confident that the learner's personal world view could be accessed and developed through examination of features which belong to a religious tradition. For the constituency studied this may not be an appropriate approach; it may be appropriate with other children of the same age in other circumstances, and it may be appropriate with children of a different age, but the reaction of the subjects I studied leads me to question the contribution that religious traditions can make to the kind of religious learning I have been advocating. I have argued that my approach is sound theologically and educationally, and the findings of the study tend to confirm that position. What is now unclear is where, when and how religious traditions are to feature in a programme of religious learning. The study has cast greater doubt on the usefulness of religious traditions than even I had expected. In spite of the huge investment in the progress of the dimensional approach to religious education in schools, I consider that the
sooner that decision is reviewed, and the direction changed, the better it will be for all religious learners. If this study now concluded contributes to this review it will have been immensely worthwhile, and I shall be pleased to have been associated with its emergence from the Scottish tradition.
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   A2 Age and gender differences
   A3 Summary of analysis of Profile elements
   A4 Ranking of mean raw scores by age and gender

B Tables relating to Religious Profile
   B1 Experiences of religion
   B2 Attitudes to religion
   B3 Summary of answers to “What is your religion?”
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D Worry level example

E Project evaluations
   E1 Pupil questionnaire
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Appendix A

Tables relating to Personal Profile

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### Physical Being

<table>
<thead>
<tr>
<th>Item</th>
<th>Code</th>
<th>Male</th>
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<th>All</th>
<th>Male</th>
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<tr>
<td>21 I wake up in the morning feeling I have slept well</td>
<td>B1</td>
<td>1.99</td>
<td>2.08</td>
<td>2.03</td>
<td>1.34</td>
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<tr>
<td>72 I brush my teeth at least twice a day</td>
<td>B1</td>
<td>2.66</td>
<td>3.17</td>
<td>2.90</td>
<td>1.30</td>
<td>1.05</td>
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<tr>
<td>73 I wash my hands before eating</td>
<td>B1</td>
<td>2.57</td>
<td>2.69</td>
<td>2.63</td>
<td>1.24</td>
<td>1.14</td>
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<td>74 I eat all the right kinds of food</td>
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<td>2.28</td>
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<td>75 I take plenty of exercise</td>
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<td>32 I am satisfied with my physical appearance</td>
<td>B1</td>
<td>2.57</td>
<td>2.43</td>
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<td>106 Being in good physical condition is important to me</td>
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<td>2.79</td>
<td>2.73</td>
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**ALL PHYSICAL**

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### Emotional Being

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<tbody>
<tr>
<td>71 I laugh</td>
<td>B2</td>
<td>3.22</td>
<td>3.31</td>
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<td>0.68</td>
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<td>33 I feel sad</td>
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<td>1.96</td>
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<td>34 I feel afraid</td>
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<td>1.80</td>
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<td>0.88</td>
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<td>20 I get annoyed</td>
<td>B2</td>
<td>2.56</td>
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<td>0.84</td>
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<tr>
<td>17 I get disappointed</td>
<td>B2</td>
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<td>2.43</td>
<td>2.40</td>
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<td>0.73</td>
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<td>35 I feel lonely</td>
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<td>1.50</td>
<td>1.56</td>
<td>1.53</td>
<td>1.12</td>
<td>1.01</td>
<td>1.03</td>
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<tr>
<td>14 I get excited when I am successful</td>
<td>B2</td>
<td>3.03</td>
<td>3.11</td>
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<td>1.08</td>
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<td>15 I get frustrated when things don't work out</td>
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<td>2.73</td>
<td>2.73</td>
<td>1.10</td>
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<tr>
<td>36 I have feelings of panic</td>
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<td>1.70</td>
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<td>1.77</td>
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<td>0.99</td>
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<td>44 I feel pleased about other people's good luck or success</td>
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<td>2.64</td>
<td>3.04</td>
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<td>1.00</td>
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<td>107 Being able to express my feelings is important to me</td>
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**ALL EMOTIONAL**

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### Intellectual Being

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<tr>
<td>6 I am good at noticing what's going on around me</td>
<td>B3</td>
<td>2.57</td>
<td>2.64</td>
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<td>77 I look for patterns or relationships in what I see</td>
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<td>2.09</td>
<td>2.10</td>
<td>2.10</td>
<td>1.14</td>
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<td>54 I enjoy trying to solve problems and puzzles</td>
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<td>2.99</td>
<td>3.11</td>
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<td>0.95</td>
<td>0.93</td>
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<tr>
<td>12 I get good ideas</td>
<td>B3</td>
<td>2.54</td>
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<td>0.75</td>
<td>0.76</td>
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<td>53 I enjoy playing with words and ideas</td>
<td>B3</td>
<td>2.07</td>
<td>2.32</td>
<td>2.19</td>
<td>1.22</td>
<td>1.07</td>
<td>1.06</td>
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<tr>
<td>108 Being able to understand things is important to me</td>
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<td>3.06</td>
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**ALL INTELLECTUAL**

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Table A1.1 Personal Profile Means, Standard Deviations and Gender Association
<table>
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<tr>
<th>Moral Being</th>
<th>B4 - 01</th>
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<th>2.73</th>
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<th>-7.5</th>
<th>16.0</th>
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<tbody>
<tr>
<td>8 I am considerate towards other people</td>
<td>B4 - 02</td>
<td>2.69</td>
<td>2.95</td>
<td>2.82</td>
<td>0.98</td>
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<td>-8.7</td>
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<tr>
<td>91 I help people in trouble</td>
<td>B4 - 03</td>
<td>2.47</td>
<td>2.74</td>
<td>2.60</td>
<td>0.85</td>
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<td>-9.7</td>
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<tr>
<td>32 I tell the truth</td>
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<td>1.02</td>
<td>0.95</td>
<td>0.97</td>
<td>-5.0</td>
<td>7.2</td>
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<tr>
<td>83 I keep my promises</td>
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<td>2.84</td>
<td>2.79</td>
<td>1.12</td>
<td>1.12</td>
<td>1.16</td>
<td>-3.1</td>
<td>2.6</td>
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<tr>
<td>9 I get angry when I see something unfair</td>
<td>B4 - 06</td>
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<td>2.96</td>
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<td>1.12</td>
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<td>-3.8</td>
<td>8.7</td>
<td>0.1</td>
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<tr>
<td>37 I feel guilty when I do something I think I shouldn’t</td>
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<td>2.34</td>
<td>2.58</td>
<td>2.45</td>
<td>1.17</td>
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<td>38 I feel guilty when I don’t do something I think I should</td>
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<td>1.01</td>
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<td>-7.9</td>
<td>13.9</td>
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<tr>
<td>109 Doing the right thing is important to me</td>
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<tr>
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<td>40 I feel free to do what I want</td>
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<td>4 I look for opportunities in life</td>
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<td>2.94</td>
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<td>1.14</td>
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<td>16 I am contented with my life</td>
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<td>0.89</td>
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<td>10 I find a lot of joy in life</td>
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<td>-4.5</td>
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<td>42 I have a sense that life is deep and mysterious</td>
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<td>2.8</td>
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<tr>
<td>18 I bounce back quickly from disappointments</td>
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<td>2.36</td>
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<td>99 I am willing to do what is right even if I might get hurt</td>
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<td>2.85</td>
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<td>4.1</td>
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</tr>
<tr>
<td>100 I am willing to forgive people who treat me badly</td>
<td>B5 - 20</td>
<td>2.31</td>
<td>2.65</td>
<td>2.47</td>
<td>1.18</td>
<td>1.08</td>
<td>1.08</td>
<td>-12.7</td>
<td>25.6</td>
<td>0.001</td>
</tr>
<tr>
<td>110 Wondering about life is important to me</td>
<td>B5 - 21</td>
<td>2.44</td>
<td>2.54</td>
<td>2.49</td>
<td>1.12</td>
<td>1.13</td>
<td>1.12</td>
<td>-4.1</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>ALL SPIRITUAL</td>
<td>ALL BEING</td>
<td>2.59</td>
<td>2.63</td>
<td>2.61</td>
<td>1.01</td>
<td>0.94</td>
<td>0.95</td>
<td>-1.5</td>
<td>45.4</td>
<td>0.001</td>
</tr>
<tr>
<td>Table A1.2 Personal Profile Means, Standard Deviations and Gender Association</td>
<td>2.52</td>
<td>2.62</td>
<td>2.57</td>
<td>1.04</td>
<td>0.95</td>
<td>0.96</td>
<td>-3.8</td>
<td>143.1</td>
<td>0.001</td>
<td></td>
</tr>
</tbody>
</table>
* Numbers on left refer to order in which presented to subjects.

### Heredity Context

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Male: M</th>
<th>Female: F</th>
<th>All: ( n = 808 )</th>
<th>Male to Female: ( % ) diff.</th>
<th>Chi sq.</th>
<th>( \alpha )</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>I am glad I was born the person I am</td>
<td>2.94</td>
<td>2.89</td>
<td>2.91</td>
<td>1.12 1.02 1.02</td>
<td>0.001</td>
<td>2.5 10.9 0.05</td>
</tr>
<tr>
<td>67</td>
<td>I am interested to hear about my family history</td>
<td>2.66</td>
<td>2.80</td>
<td>2.73</td>
<td>1.29 1.22 1.22</td>
<td>0.001</td>
<td>-4.9 6.0 0.05</td>
</tr>
<tr>
<td>2</td>
<td>I know just how much I am able to do</td>
<td>2.77</td>
<td>2.81</td>
<td>2.79</td>
<td>0.83 0.79 0.77</td>
<td>0.001</td>
<td>-1.4 1.4 0.05</td>
</tr>
<tr>
<td>39</td>
<td>I feel I would like to change parts of my life</td>
<td>1.92</td>
<td>2.04</td>
<td>1.98</td>
<td>1.28 1.17 1.19</td>
<td>0.001</td>
<td>-5.8 7.2 0.05</td>
</tr>
<tr>
<td>111</td>
<td>Making the most of my life is important to me</td>
<td>2.98</td>
<td>3.08</td>
<td>3.03</td>
<td>0.91 0.90 0.89</td>
<td>0.001</td>
<td>-3.3 4.4 0.05</td>
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</tbody>
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#### People Context

<table>
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<th>Description</th>
<th>Male: M</th>
<th>Female: F</th>
<th>All: ( n = 808 )</th>
<th>Male to Female: ( % ) diff.</th>
<th>Chi sq.</th>
<th>( \alpha )</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>I get on well with my family</td>
<td>3.01</td>
<td>3.15</td>
<td>3.07</td>
<td>0.97 0.88 0.89</td>
<td>0.001</td>
<td>-4.3 14.3 0.001</td>
</tr>
<tr>
<td>28</td>
<td>People show an interest in me</td>
<td>2.10</td>
<td>2.14</td>
<td>2.12</td>
<td>0.99 0.87 0.87</td>
<td>0.001</td>
<td>-1.9 9.4 0.001</td>
</tr>
<tr>
<td>88</td>
<td>I try to get on well with people</td>
<td>3.08</td>
<td>3.29</td>
<td>3.18</td>
<td>0.81 0.73 0.75</td>
<td>0.001</td>
<td>-6.3 23.8 0.001</td>
</tr>
<tr>
<td>87</td>
<td>I do as much as possible for other people</td>
<td>2.42</td>
<td>2.77</td>
<td>2.59</td>
<td>0.93 0.85 0.87</td>
<td>0.001</td>
<td>-12.6 30.8 0.001</td>
</tr>
<tr>
<td>112</td>
<td>Knowing what others think of me is important to me</td>
<td>2.71</td>
<td>2.92</td>
<td>2.81</td>
<td>1.05 0.96 0.95</td>
<td>0.001</td>
<td>-7.3 19.6 0.001</td>
</tr>
</tbody>
</table>

#### Culture Context

<table>
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<th>Description</th>
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<th>Female: F</th>
<th>All: ( n = 808 )</th>
<th>Male to Female: ( % ) diff.</th>
<th>Chi sq.</th>
<th>( \alpha )</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>I find there are lots of interesting things to do</td>
<td>2.82</td>
<td>2.81</td>
<td>2.82</td>
<td>0.93 0.84 0.82</td>
<td>0.001</td>
<td>-0.2 6.5 0.001</td>
</tr>
<tr>
<td>57</td>
<td>I like to wear the same kinds of things as others my age</td>
<td>2.48</td>
<td>2.58</td>
<td>2.53</td>
<td>1.18 1.13 1.16</td>
<td>0.001</td>
<td>-4.2 4.9 0.001</td>
</tr>
<tr>
<td>56</td>
<td>I like to do the same kinds of things as other people</td>
<td>2.50</td>
<td>2.52</td>
<td>2.51</td>
<td>1.02 1.00 1.03</td>
<td>0.001</td>
<td>-0.8 0.7 0.001</td>
</tr>
<tr>
<td>30</td>
<td>I like to be different from other people</td>
<td>2.11</td>
<td>2.22</td>
<td>2.16</td>
<td>1.32 1.26 1.27</td>
<td>0.001</td>
<td>-4.8 3.6 0.001</td>
</tr>
<tr>
<td>58</td>
<td>I like to do things which give other people pleasure</td>
<td>2.76</td>
<td>2.93</td>
<td>2.84</td>
<td>0.91 0.83 0.85</td>
<td>0.001</td>
<td>-5.9 7.5 0.001</td>
</tr>
<tr>
<td>113</td>
<td>Knowing how other people live is important to me</td>
<td>2.02</td>
<td>2.13</td>
<td>2.07</td>
<td>1.11 1.09 1.11</td>
<td>0.001</td>
<td>-5.4 15.5 0.005</td>
</tr>
</tbody>
</table>

#### Politics Context

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Male: M</th>
<th>Female: F</th>
<th>All: ( n = 808 )</th>
<th>Male to Female: ( % ) diff.</th>
<th>Chi sq.</th>
<th>( \alpha )</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>I am sensible about the things I try to do</td>
<td>2.39</td>
<td>2.61</td>
<td>2.50</td>
<td>0.93 0.79 0.81</td>
<td>0.001</td>
<td>-8.3 16.4 0.005</td>
</tr>
<tr>
<td>103</td>
<td>I am encouraged to be responsible</td>
<td>2.57</td>
<td>2.73</td>
<td>2.65</td>
<td>0.97 0.95 0.97</td>
<td>0.001</td>
<td>-5.8 6.9 0.001</td>
</tr>
<tr>
<td>104</td>
<td>I am encouraged to be independent</td>
<td>2.41</td>
<td>2.52</td>
<td>2.47</td>
<td>0.97 0.97 0.98</td>
<td>0.001</td>
<td>-4.3 6.4 0.001</td>
</tr>
<tr>
<td>93</td>
<td>I have to make a decision affecting others I consult them</td>
<td>2.55</td>
<td>2.75</td>
<td>2.64</td>
<td>0.98 0.93 0.96</td>
<td>0.001</td>
<td>-7.3 9.7 0.05</td>
</tr>
<tr>
<td>105</td>
<td>I am asked for my opinion in decisions which affect me</td>
<td>2.53</td>
<td>2.67</td>
<td>2.60</td>
<td>0.99 0.98 0.94</td>
<td>0.001</td>
<td>-5.1 4.6 0.001</td>
</tr>
<tr>
<td>114</td>
<td>Being able to make things happen is important to me</td>
<td>2.46</td>
<td>2.48</td>
<td>2.47</td>
<td>0.99 1.04 1.07</td>
<td>0.001</td>
<td>-0.6 3.0 0.001</td>
</tr>
</tbody>
</table>

### Table A1.3 Personal Profile Means, Standard Deviations and Gender Association
### Universe Context

<table>
<thead>
<tr>
<th>Item</th>
<th>Code</th>
<th>M</th>
<th>F</th>
<th>All</th>
<th>Standard deviations</th>
<th>Association</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Male to Female</td>
</tr>
<tr>
<td>I think the universe is amazing</td>
<td>C5 - 01</td>
<td>2.62</td>
<td>2.27</td>
<td>2.45</td>
<td>1.23 1.02 1.05</td>
<td>15.4 48.6 0.001</td>
</tr>
<tr>
<td>I think about how big and complicated the universe is</td>
<td>C5 - 02</td>
<td>2.31</td>
<td>2.19</td>
<td>2.25</td>
<td>1.24 1.16 1.17</td>
<td>5.1  8.8 0.1</td>
</tr>
<tr>
<td>I wonder how the universe came into existence</td>
<td>C5 - 03</td>
<td>2.46</td>
<td>2.27</td>
<td>2.37</td>
<td>1.23 1.10 1.10</td>
<td>8.4 19.8 0.001</td>
</tr>
<tr>
<td>I wonder how we can know what is real</td>
<td>C5 - 04</td>
<td>2.35</td>
<td>2.29</td>
<td>2.32</td>
<td>1.08 1.01 1.05</td>
<td>2.6  6.3 0.1</td>
</tr>
<tr>
<td>I wonder how we can know what is true</td>
<td>C5 - 05</td>
<td>2.39</td>
<td>2.35</td>
<td>2.37</td>
<td>1.05 1.01 1.05</td>
<td>1.7  0.9 0.1</td>
</tr>
<tr>
<td>I wonder how we can know who is to be trusted</td>
<td>C5 - 06</td>
<td>2.49</td>
<td>2.60</td>
<td>2.54</td>
<td>1.04 0.98 1.00</td>
<td>-4.4 4.9 0.1</td>
</tr>
<tr>
<td>I wonder what happens to us when we die</td>
<td>C5 - 07</td>
<td>2.93</td>
<td>2.83</td>
<td>2.88</td>
<td>1.23 1.18 1.17</td>
<td>3.5  7.8 0.1</td>
</tr>
<tr>
<td>Wondering about my place in the universe is important to me</td>
<td>C5 - 08</td>
<td>2.22</td>
<td>2.04</td>
<td>2.14</td>
<td>1.26 1.25 1.24</td>
<td>9.1  5.6 0.1</td>
</tr>
<tr>
<td>ALL UNIVERSE</td>
<td></td>
<td>2.47</td>
<td>2.36</td>
<td>2.41</td>
<td>1.17 1.09 1.10</td>
<td>4.9 53.3 0.001</td>
</tr>
<tr>
<td>ALL CONTEXT</td>
<td></td>
<td>2.54</td>
<td>2.62</td>
<td>2.58</td>
<td>1.05 0.99 1.00</td>
<td>-2.9 40.7 0.001</td>
</tr>
</tbody>
</table>

Table A1.4 Personal Profile Means, Standard Deviations and Gender Association
* Numbers on left refer to order in which presented to subjects.

<table>
<thead>
<tr>
<th>Means of raw scores</th>
<th>Standard deviations</th>
<th>Association</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>M</td>
<td>n = 414</td>
<td>n = 394</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Survive**

| 1 | I am a careful person | D1 - 01 | 2.55 | 2.74 | 2.64 | 0.72 | 0.61 | 0.64 | -6.8 | 15.3 | 0.005 |
| 7 | I am suspicious of strangers who approach me | D1 - 02 | 2.98 | 3.20 | 3.09 | 1.17 | 1.01 | 1.01 | -6.9 | 12.4 | 0.02  |
| 68 | I am interested to help out at home | D1 - 03 | 2.06 | 2.40 | 2.23 | 0.90 | 0.94 | 0.96 | 1.11 | 1.3  |
| 79 | I stand up for myself | D1 - 04 | 3.10 | 3.07 | 3.09 | 1.23 | 1.17 | 1.21 | -14.1 | 20.6 | 0.001 |
| 78 | I look out for danger where there is traffic | D1 - 05 | 3.26 | 3.37 | 3.31 | 0.97 | 0.85 | 0.79 | -3.1 | 8.3  | 0.1   |
| 80 | I work hard to get what I want | D1 - 06 | 2.88 | 2.88 | 2.88 | 0.92 | 0.90 | 0.92 | 0.00 | 0.0  |
| 101 | I am willing to break the rules to win a game | D1 - 07 | 1.30 | 1.08 | 1.19 | 1.36 | 1.14 | 1.15 | 20.4 | 15.0 | 0.005 |
| 102 | I am willing to tell lies to keep out of trouble | D1 - 08 | 1.72 | 1.41 | 1.57 | 0.92 | 0.83 | 0.82 | -0.28 | 7.6  |
| 116 | Being able to look after myself is important to me | D1 - 09 | 3.21 | 3.30 | 3.26 | 1.03 | 0.96 | 0.96 | -1.4 | 11.1 | 0.05  |

**Conform**

| 55 | I like to put things in their right place | D2 - 01 | 2.40 | 2.63 | 2.51 | 1.18 | 1.08 | 1.09 | -8.4 | 10.9 | 0.05  |
| 91 | I do what my parent or guardian tells me | D2 - 02 | 2.52 | 2.75 | 2.63 | 0.98 | 0.91 | 0.94 | -8.4 | 12.4 | 0.02  |
| 26 | I look forward to family activities | D2 - 03 | 3.08 | 3.30 | 3.18 | 1.04 | 0.91 | 0.91 | -6.8 | 11.0 | 0.05  |
| 92 | I do what my friends want me to | D2 - 04 | 1.83 | 2.03 | 1.92 | 1.04 | 0.99 | 1.02 | 9.71 | 22.0 | 0.001 |
| 84 | I obey the rules if I know what they are | D2 - 05 | 2.65 | 2.93 | 2.78 | 1.04 | 0.88 | 0.87 | -9.5 | 22.2 | 0.001 |
| 117 | Being able to fit in with others is important to me | D2 - 06 | 3.98 | 3.05 | 2.96 | 0.92 | 0.93 | 0.92 | -6.2 | 19.8 | 0.001 |

**Investigate**

| 69 | I am interested to find out how people lived in the past | D3 - 01 | 2.57 | 2.57 | 2.57 | 1.22 | 1.10 | 1.09 | 0.2  | 6.3  |
| 70 | I am interested to find out why people are the way they are | D3 - 02 | 2.28 | 2.45 | 2.36 | 1.22 | 1.17 | 1.19 | -6.9 | 4.0  |
| 65 | I am interested to find out how things work | D3 - 03 | 3.07 | 2.73 | 2.91 | 0.89 | 0.96 | 0.98 | 12.2 | 32.0 | 0.001 |
| 66 | I am interested to find out how to do new things | D3 - 04 | 3.08 | 3.00 | 3.04 | 0.81 | 0.84 | 0.86 | 2.6  | 2.4  |
| 52 | I enjoy experimenting to see what happens | D3 - 05 | 2.87 | 2.79 | 2.83 | 1.88 | 1.11 | 1.10 | 3.0  | 4.9  |
| 118 | Finding out what makes things happen is important to me | D3 - 06 | 2.46 | 2.41 | 2.44 | 1.04 | 1.07 | 1.09 | 1.8  | 1.0  |

**Table A1.5 Personal Profile Means, Standard Deviations and Gender Association**
### Create

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>46</td>
<td>I enjoy repairing things</td>
<td>2.75</td>
<td>2.25</td>
<td>2.51</td>
</tr>
<tr>
<td>45</td>
<td>I enjoy making things</td>
<td>3.27</td>
<td>3.46</td>
<td>3.36</td>
</tr>
<tr>
<td>48</td>
<td>I enjoy making up stories</td>
<td>2.51</td>
<td>2.73</td>
<td>2.62</td>
</tr>
<tr>
<td>47</td>
<td>I enjoy making pictures</td>
<td>2.84</td>
<td>3.12</td>
<td>2.98</td>
</tr>
<tr>
<td>49</td>
<td>I enjoy making music</td>
<td>2.10</td>
<td>2.69</td>
<td>2.39</td>
</tr>
<tr>
<td>50</td>
<td>I enjoy growing plants</td>
<td>1.65</td>
<td>2.08</td>
<td>1.86</td>
</tr>
<tr>
<td>51</td>
<td>I enjoy looking after animals and other living creatures</td>
<td>3.29</td>
<td>3.59</td>
<td>3.44</td>
</tr>
<tr>
<td>81</td>
<td>I work at doing things as well as I can</td>
<td>2.91</td>
<td>3.03</td>
<td>2.97</td>
</tr>
<tr>
<td>90</td>
<td>I look for ways of creating a happy atmosphere</td>
<td>2.71</td>
<td>2.80</td>
<td>2.75</td>
</tr>
<tr>
<td>119</td>
<td>Being creative is important to me</td>
<td>2.52</td>
<td>2.57</td>
<td>2.55</td>
</tr>
</tbody>
</table>

### Control

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>I am good at controlling my feelings</td>
<td>2.22</td>
<td>2.36</td>
<td>2.29</td>
</tr>
<tr>
<td>76</td>
<td>I plan how I am going to spend my time</td>
<td>2.35</td>
<td>2.36</td>
<td>2.36</td>
</tr>
<tr>
<td>89</td>
<td>I try to get people to like me</td>
<td>2.86</td>
<td>2.90</td>
<td>2.88</td>
</tr>
<tr>
<td>29</td>
<td>My friends do what I want</td>
<td>1.63</td>
<td>1.66</td>
<td>1.64</td>
</tr>
<tr>
<td>85</td>
<td>I try to get animals to be obedient</td>
<td>2.43</td>
<td>2.58</td>
<td>2.50</td>
</tr>
<tr>
<td>120</td>
<td>Getting my own way is important to me</td>
<td>1.86</td>
<td>1.53</td>
<td>1.70</td>
</tr>
</tbody>
</table>

### Table A1.6 Personal Profile Means, Standard Deviations and Gender Association

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Means of raw scores</strong></td>
<td><strong>Standard deviations</strong></td>
<td><strong>Association</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>F</td>
<td>All</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>ALL BEING</td>
<td>2.52</td>
<td>2.62</td>
<td>2.57</td>
<td>1.04</td>
</tr>
<tr>
<td>ALL CONTEXT</td>
<td>2.54</td>
<td>2.62</td>
<td>2.58</td>
<td>1.05</td>
</tr>
<tr>
<td>ALL DOING</td>
<td>2.54</td>
<td>2.62</td>
<td>2.58</td>
<td>1.10</td>
</tr>
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<td>2.54</td>
<td>2.62</td>
<td>2.58</td>
<td>1.06</td>
</tr>
</tbody>
</table>
*Numbers on left refer to order in which presented to subjects.

\[ OQr = \text{oldest quarter}; \quad YQr = \text{youngest quarter} \]

### Physical Being

<p>| | | | | | | | | | | | |</p>
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**ALL PHYSICAL**

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**ALL EMOTIONAL**

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**ALL INTELLECTUAL**

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**Table A2.1 Personal Profile Age & Gender Differences**
### Moral Being

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**ALL MORAL**

|                  | 2.66 | 2.64 | 2.62 | 2.85 | 2.91 | 2.89 | -6.8 | -9.3 | -9.2     |

### Spiritual Being

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<td>2.79</td>
<td>2.79</td>
<td>2.81</td>
<td>6.8</td>
<td>11.1</td>
<td>6.9</td>
<td></td>
</tr>
<tr>
<td>22 I really enjoy the world of nature</td>
<td>3.01</td>
<td>2.89</td>
<td>3.10</td>
<td>3.15</td>
<td>3.03</td>
<td>3.07</td>
<td>-4.4</td>
<td>-4.6</td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>41 I have a sense of the beauty of life</td>
<td>2.09</td>
<td>2.16</td>
<td>1.97</td>
<td>2.19</td>
<td>2.16</td>
<td>2.23</td>
<td>-4.5</td>
<td>0.1</td>
<td>-11.8</td>
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<tr>
<td>42 I have a sense that life is deep and mysterious</td>
<td>2.34</td>
<td>2.35</td>
<td>2.40</td>
<td>2.17</td>
<td>2.01</td>
<td>2.35</td>
<td>7.8</td>
<td>16.9</td>
<td>2.1</td>
<td></td>
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<tr>
<td>43 I have a deep sense of peace</td>
<td>2.05</td>
<td>1.93</td>
<td>2.13</td>
<td>2.13</td>
<td>2.14</td>
<td>2.17</td>
<td>-3.8</td>
<td>-9.6</td>
<td>-1.8</td>
<td></td>
</tr>
<tr>
<td>18 I bounce back quickly from disappointments</td>
<td>2.29</td>
<td>2.32</td>
<td>2.44</td>
<td>2.36</td>
<td>2.43</td>
<td>2.42</td>
<td>-3.0</td>
<td>-4.5</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>94 I am willing to keep on persevering</td>
<td>2.63</td>
<td>2.75</td>
<td>2.67</td>
<td>2.70</td>
<td>2.66</td>
<td>2.70</td>
<td>-2.8</td>
<td>3.3</td>
<td>-4.9</td>
<td></td>
</tr>
<tr>
<td>95 I am willing to be brave</td>
<td>3.06</td>
<td>3.07</td>
<td>3.05</td>
<td>2.98</td>
<td>2.88</td>
<td>2.99</td>
<td>2.7</td>
<td>6.6</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>96 I am willing to be flexible</td>
<td>2.48</td>
<td>2.42</td>
<td>2.45</td>
<td>2.69</td>
<td>2.59</td>
<td>2.74</td>
<td>-7.9</td>
<td>-6.6</td>
<td>-10.5</td>
<td></td>
</tr>
<tr>
<td>97 I am willing to see the best in other people</td>
<td>2.74</td>
<td>2.69</td>
<td>2.72</td>
<td>2.83</td>
<td>2.94</td>
<td>2.77</td>
<td>-3.1</td>
<td>-8.6</td>
<td>-1.7</td>
<td></td>
</tr>
<tr>
<td>98 I am willing to make sacrifices for other people</td>
<td>2.29</td>
<td>2.27</td>
<td>2.32</td>
<td>2.41</td>
<td>2.42</td>
<td>2.35</td>
<td>-4.8</td>
<td>-6.2</td>
<td>-1.2</td>
<td></td>
</tr>
<tr>
<td>99 I am willing to do what is right even if I might get hurt</td>
<td>2.87</td>
<td>2.83</td>
<td>2.88</td>
<td>2.83</td>
<td>2.76</td>
<td>2.83</td>
<td>1.4</td>
<td>2.4</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>100 I am willing to forgive people who treat me badly</td>
<td>2.31</td>
<td>2.40</td>
<td>2.16</td>
<td>2.65</td>
<td>2.57</td>
<td>2.69</td>
<td>-12.7</td>
<td>-6.6</td>
<td>-19.9</td>
<td></td>
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<tr>
<td>110 Wondering about life is important to me</td>
<td>2.44</td>
<td>2.20</td>
<td>2.61</td>
<td>2.54</td>
<td>2.35</td>
<td>2.62</td>
<td>-4.1</td>
<td>-6.4</td>
<td>-0.3</td>
<td></td>
</tr>
</tbody>
</table>

**ALL BEING**

|                  | 2.52 | 2.52 | 2.52 | 2.62 | 2.61 | 2.66 | -3.8 | -3.5 | -5.0     |

**Table A2.2 Personal Profile Age & Gender Differences**
*Numbers on left refer to order in which presented to subjects.

\(OQr = \text{oldest quarter}; \ YQr = \text{youngest quarter}\)

**Hereditry Context**

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th></th>
<th></th>
<th>Females</th>
<th></th>
<th></th>
<th>Male to Female Difference = (M-F)/F%</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>I am glad I was born the person I am</td>
<td>C1 - 01</td>
<td>2.94</td>
<td>3.01</td>
<td>2.89</td>
<td>2.89</td>
<td>2.77</td>
</tr>
<tr>
<td>37</td>
<td>I am interested to hear about my family history</td>
<td>C1 - 02</td>
<td>2.66</td>
<td>2.37</td>
<td>2.67</td>
<td>2.80</td>
<td>2.57</td>
</tr>
<tr>
<td>2</td>
<td>I know just how much I am able to do</td>
<td>C1 - 03</td>
<td>2.77</td>
<td>2.84</td>
<td>2.76</td>
<td>2.81</td>
<td>2.79</td>
</tr>
<tr>
<td>39</td>
<td>I feel I would like to change parts of my life</td>
<td>C1 - 04</td>
<td>1.92</td>
<td>1.87</td>
<td>1.90</td>
<td>2.04</td>
<td>1.98</td>
</tr>
<tr>
<td>111</td>
<td>Making the most of my life is important to me</td>
<td>C1 - 05</td>
<td>2.98</td>
<td>2.95</td>
<td>3.09</td>
<td>3.08</td>
<td>3.00</td>
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**ALL HEREDITY**

<table>
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<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td></td>
<td>n = 414</td>
<td>OQr</td>
</tr>
<tr>
<td>25</td>
<td>I get on well with my family</td>
<td>3.01</td>
</tr>
<tr>
<td>28</td>
<td>People show an interest in me</td>
<td>2.10</td>
</tr>
<tr>
<td>88</td>
<td>I try to get on well with people</td>
<td>3.08</td>
</tr>
<tr>
<td>87</td>
<td>I do as much as possible for other people</td>
<td>2.42</td>
</tr>
<tr>
<td>112</td>
<td>Knowing what others think of me is important to me</td>
<td>2.71</td>
</tr>
</tbody>
</table>

**ALL PEOPLE**

<table>
<thead>
<tr>
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<th>Male to Female Difference = (M-F)/F%</th>
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</thead>
<tbody>
<tr>
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<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td></td>
<td>n = 414</td>
<td>OQr</td>
</tr>
<tr>
<td>23</td>
<td>I find there are lots of interesting things to do</td>
<td>2.82</td>
</tr>
<tr>
<td>57</td>
<td>I like to wear the same kinds of things as others my age</td>
<td>2.48</td>
</tr>
<tr>
<td>56</td>
<td>I like to do the same kinds of things as other people</td>
<td>2.50</td>
</tr>
<tr>
<td>30</td>
<td>I like to be different from other people</td>
<td>2.11</td>
</tr>
<tr>
<td>58</td>
<td>I like to do things which give other people pleasure</td>
<td>2.02</td>
</tr>
<tr>
<td>113</td>
<td>Knowing how other people live is important to me</td>
<td>2.02</td>
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</table>

**ALL CULTURE**

<table>
<thead>
<tr>
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</thead>
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<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td></td>
<td>n = 414</td>
<td>OQr</td>
</tr>
<tr>
<td>3</td>
<td>I am sensible about the things I try to do</td>
<td>2.39</td>
</tr>
<tr>
<td>103</td>
<td>I am encouraged to be responsible</td>
<td>2.57</td>
</tr>
<tr>
<td>104</td>
<td>I am encouraged to be independent</td>
<td>2.41</td>
</tr>
<tr>
<td>93</td>
<td>If I have to make a decision affecting others I consult them</td>
<td>2.55</td>
</tr>
<tr>
<td>105</td>
<td>I am asked for my opinion in decisions which affect me</td>
<td>2.53</td>
</tr>
<tr>
<td>114</td>
<td>Being able to make things happen is important to me</td>
<td>2.46</td>
</tr>
</tbody>
</table>

**ALL POLITICS**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td></td>
<td>n = 414</td>
<td>OQr</td>
</tr>
<tr>
<td>249</td>
<td>2.49</td>
<td>2.48</td>
</tr>
</tbody>
</table>

Table A2.3 Personal Profile Age & Gender Differences
* Numbers on left refer to order in which presented to subjects.

OQr = oldest quarter; YQr = youngest quarter

* Universe Context

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Males</th>
<th>Females</th>
<th>Male to Female Difference = (M-F)/F%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n = 414 OQr</td>
<td>YQr</td>
<td>n = 394 OQr</td>
</tr>
<tr>
<td>24</td>
<td>I think the universe is amazing</td>
<td>2.62</td>
<td>2.39</td>
<td>2.87</td>
</tr>
<tr>
<td>59</td>
<td>I think about how big and complicated the universe is</td>
<td>2.31</td>
<td>2.24</td>
<td>2.31</td>
</tr>
<tr>
<td>60</td>
<td>I wonder how the universe came into existence</td>
<td>2.46</td>
<td>2.47</td>
<td>2.42</td>
</tr>
<tr>
<td>61</td>
<td>I wonder how we can know what is real</td>
<td>2.35</td>
<td>2.34</td>
<td>2.35</td>
</tr>
<tr>
<td>62</td>
<td>I wonder how we can know what is true</td>
<td>2.39</td>
<td>2.44</td>
<td>2.39</td>
</tr>
<tr>
<td>63</td>
<td>I wonder how we can know who is to be trusted</td>
<td>2.49</td>
<td>2.39</td>
<td>2.43</td>
</tr>
<tr>
<td>64</td>
<td>I wonder what happens to us when we die</td>
<td>2.93</td>
<td>3.12</td>
<td>2.89</td>
</tr>
<tr>
<td>115</td>
<td>Wondering about my place in the universe is important to me</td>
<td>2.22</td>
<td>2.18</td>
<td>2.14</td>
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</table>

**ALL UNIVERSE**

<table>
<thead>
<tr>
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<tr>
<td></td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td></td>
<td>OQr</td>
<td>YQr</td>
</tr>
<tr>
<td>2.47</td>
<td>2.44</td>
<td>2.48</td>
</tr>
<tr>
<td>2.54</td>
<td>2.52</td>
<td>2.54</td>
</tr>
</tbody>
</table>

**Table A2.4 Personal Profile Age & Gender Differences**
**Numbers on left refer to order in which presented to subjects.**

*OQr = oldest quarter; YQr = youngest quarter*

### Survive

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
<th>Male to Female Difference (M-F)/F%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OQr</td>
<td>YQr</td>
<td>OQr</td>
</tr>
<tr>
<td>1</td>
<td>I am a careful person</td>
<td>2.55</td>
<td>2.48</td>
</tr>
<tr>
<td>7</td>
<td>I am suspicious of strangers who approach me</td>
<td>2.98</td>
<td>2.84</td>
</tr>
<tr>
<td>68</td>
<td>I am interested to help out at home</td>
<td>2.06</td>
<td>1.86</td>
</tr>
<tr>
<td>79</td>
<td>I stand up for myself</td>
<td>3.10</td>
<td>3.23</td>
</tr>
<tr>
<td>78</td>
<td>I look out for danger where there is traffic</td>
<td>3.26</td>
<td>3.11</td>
</tr>
<tr>
<td>80</td>
<td>I work hard to get what I want</td>
<td>2.88</td>
<td>2.83</td>
</tr>
<tr>
<td>101</td>
<td>I am willing to break the rules to win a game</td>
<td>1.30</td>
<td>1.46</td>
</tr>
<tr>
<td>102</td>
<td>I am willing to tell lies to keep out of trouble</td>
<td>1.72</td>
<td>1.85</td>
</tr>
<tr>
<td>116</td>
<td>Being able to look after myself is important to me</td>
<td>3.21</td>
<td>3.07</td>
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</tbody>
</table>

**ALL SURVIVE**

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
<th>Male to Female Difference (M-F)/F%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OQr</td>
<td>YQr</td>
<td>OQr</td>
</tr>
<tr>
<td>55</td>
<td>I like to put things in their right place</td>
<td>2.40</td>
<td>2.39</td>
</tr>
<tr>
<td>91</td>
<td>I do what my parent or guardian tells me</td>
<td>2.52</td>
<td>2.39</td>
</tr>
<tr>
<td>26</td>
<td>I look forward to family activities</td>
<td>3.08</td>
<td>3.07</td>
</tr>
<tr>
<td>92</td>
<td>I do what my friends want me to</td>
<td>1.83</td>
<td>1.82</td>
</tr>
<tr>
<td>84</td>
<td>I obey the rules if I know what they are</td>
<td>2.65</td>
<td>2.54</td>
</tr>
<tr>
<td>117</td>
<td>Being able to fit in with others is important to me</td>
<td>2.86</td>
<td>2.87</td>
</tr>
</tbody>
</table>

**ALL CONFORM**

<table>
<thead>
<tr>
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<th>Males</th>
<th>Females</th>
<th>Male to Female Difference (M-F)/F%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OQr</td>
<td>YQr</td>
<td>OQr</td>
</tr>
<tr>
<td>69</td>
<td>I am interested to find out how people lived in the past</td>
<td>2.57</td>
<td>2.32</td>
</tr>
<tr>
<td>70</td>
<td>I am interested to find out why people are the way they are</td>
<td>2.28</td>
<td>2.31</td>
</tr>
<tr>
<td>65</td>
<td>I am interested to find out how things work</td>
<td>3.07</td>
<td>2.97</td>
</tr>
<tr>
<td>66</td>
<td>I am interested to find out how to do new things</td>
<td>3.08</td>
<td>3.06</td>
</tr>
<tr>
<td>52</td>
<td>I enjoy experimenting to see what happens</td>
<td>2.87</td>
<td>3.00</td>
</tr>
<tr>
<td>118</td>
<td>Finding out what makes things happen is important to me</td>
<td>2.46</td>
<td>2.38</td>
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</table>

**ALL INVESTIGATE**

<table>
<thead>
<tr>
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<th>Male to Female Difference (M-F)/F%</th>
</tr>
</thead>
<tbody>
<tr>
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<td>OQr</td>
<td>YQr</td>
<td>OQr</td>
</tr>
<tr>
<td>2.72</td>
<td>2.67</td>
<td>2.66</td>
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**Table A2.5 Personal Profile Age & Gender Differences**
<table>
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<th>D4 - 02</th>
<th>D4 - 03</th>
<th>D4 - 04</th>
<th>D4 - 05</th>
<th>D4 - 06</th>
<th>D4 - 07</th>
<th>D4 - 08</th>
<th>D4 - 09</th>
<th>D4 - 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>46 I enjoy repairing things</td>
<td>2.75</td>
<td>2.70</td>
<td>2.85</td>
<td>2.25</td>
<td>1.99</td>
<td>2.59</td>
<td>22.2</td>
<td>35.7</td>
<td>9.9</td>
<td></td>
</tr>
<tr>
<td>45 I enjoy making things</td>
<td>3.27</td>
<td>3.18</td>
<td>3.27</td>
<td>3.46</td>
<td>3.32</td>
<td>3.49</td>
<td>-5.5</td>
<td>-4.2</td>
<td>-6.4</td>
<td></td>
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<tr>
<td>48 I enjoy making up stories</td>
<td>2.51</td>
<td>2.64</td>
<td>2.46</td>
<td>2.73</td>
<td>2.84</td>
<td>2.89</td>
<td>-8.1</td>
<td>-7.0</td>
<td>-14.9</td>
<td></td>
</tr>
<tr>
<td>47 I enjoy making pictures</td>
<td>2.84</td>
<td>2.85</td>
<td>2.97</td>
<td>3.12</td>
<td>2.95</td>
<td>3.27</td>
<td>-8.9</td>
<td>-3.4</td>
<td>-9.2</td>
<td></td>
</tr>
<tr>
<td>49 I enjoy making music</td>
<td>2.10</td>
<td>2.11</td>
<td>2.04</td>
<td>2.69</td>
<td>2.38</td>
<td>2.85</td>
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<td>-11.4</td>
<td>-28.4</td>
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</tr>
<tr>
<td>50 I enjoy growing plants</td>
<td>1.65</td>
<td>1.31</td>
<td>1.85</td>
<td>2.08</td>
<td>1.66</td>
<td>2.38</td>
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<td>-21.1</td>
<td>-22.3</td>
<td></td>
</tr>
<tr>
<td>51 I enjoy looking after animals and other living creatures</td>
<td>3.29</td>
<td>3.36</td>
<td>3.31</td>
<td>3.59</td>
<td>3.59</td>
<td>3.55</td>
<td>-8.4</td>
<td>-6.3</td>
<td>-6.8</td>
<td></td>
</tr>
<tr>
<td>81 I work at doing things as well as I can</td>
<td>2.91</td>
<td>2.76</td>
<td>2.85</td>
<td>3.03</td>
<td>3.03</td>
<td>3.00</td>
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<td>-5.0</td>
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<th>D5 - 02</th>
<th>D5 - 03</th>
<th>D5 - 04</th>
<th>D5 - 05</th>
<th>D5 - 06</th>
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<td>1.66</td>
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| ALL CREATE                                                           | 2.65    | 2.61    | 2.67    | 2.83    | 2.71    | 2.94    | -6.5    | -3.7    | -9.2    |
| ALL CONTROL                                                         | 2.22    | 2.26    | 2.18    | 2.23    | 2.24    | 2.29    | -0.3    | 0.8     | -4.7    |
| ALL DOING                                                           | 2.54    | 2.52    | 2.51    | 2.62    | 2.59    | 2.67    | -3.0    | -2.7    | -6.0    |

**Means of raw scores**

<table>
<thead>
<tr>
<th>Male to Female Difference = (M-F)/F%</th>
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<tr>
<td>OQr</td>
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<tr>
<td>YQr</td>
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<td>ALL</td>
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**Table A2.6 Personal Profile Age & Gender Differences**
### Means of raw scores on 5-point scale from 0 to 4

<table>
<thead>
<tr>
<th>OQr = oldest quarter</th>
<th>Whole Males: n = 414</th>
<th>Females: n = 394</th>
<th>Standard Deviations</th>
<th>Chi-square results*</th>
<th>Differences</th>
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<td>YQr</td>
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* \(\chi^2_{\text{crit}} = 9.49\) at \(\alpha = 0.05\)

### Mean ages in years

10.90 10.82 11.64 10.08 10.83 11.58 10.13

### Age Ranges in years

Males: All 8.98-12.27; OQr 11.33-12.27; YQr 8.98-10.32.
Females: All 9.76-12.18; OQr 11.28-12.18; YQr 9.76-10.35.

---

Table A3 Personal Profile elements: summary of analysis

---
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<thead>
<tr>
<th>Physical</th>
<th>All (n = 808)</th>
<th>Male (n = 414)</th>
<th>Female (n = 394)</th>
<th>Male/female difference = (M-F)/F%</th>
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<td>2.79 34</td>
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<td>2.15 102</td>
<td>2.10 104</td>
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<td>3.05 13</td>
<td>2.99 15</td>
<td>2.85 28</td>
<td>3.02 11</td>
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<td>1.99 106</td>
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<td>2.94 21</td>
<td>2.75 42</td>
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Table A4.1 Ranking of mean raw scores by age and gender
<table>
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<tr>
<th>Moral</th>
<th>All (n = 808) Mean Rank</th>
<th>Male (n = 414) Mean Rank</th>
<th>Female (n = 394) Mean Rank</th>
<th>Male/female difference = (M-F)/F% Mean Rank</th>
</tr>
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<tbody>
<tr>
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<td>2.53 66 2.52 64 2.54 67</td>
<td>2.73 52 2.66 56 2.85 39</td>
<td>-1.0 39 1.5 37 -3.3 49 B5 - 01</td>
</tr>
<tr>
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<td>2.69 74 2.60 56 2.65 52</td>
<td>2.95 26 3.00 23 2.94 31</td>
<td>-8.7 106 -13.3 114 -9.9 95 B4 - 02</td>
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<td>-9.7 111 -10.9 102 -13.5 111 B4 - 03</td>
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<td>3.05 19 3.06 17 2.98 26</td>
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**Table A4.2 Ranking of mean raw scores by age and gender**
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<th>Female (n = 394)</th>
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<tbody>
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<td>OMr Rank</td>
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<td>2.53 65</td>
<td>2.59 58</td>
<td>2.54 66</td>
</tr>
<tr>
<td>C4 - 06</td>
<td>2.47 80</td>
<td>2.46 76</td>
<td>2.41 74</td>
<td>2.58 60</td>
</tr>
</tbody>
</table>

|       |              |               |                  |                    |           |           |           |           |

Table A4.3  Ranking of mean raw scores by age and gender
<table>
<thead>
<tr>
<th>Universe</th>
<th>Male (n = 414)</th>
<th>Female (n = 394)</th>
<th>Male/female difference = (M-F)/F%</th>
</tr>
</thead>
<tbody>
<tr>
<td>C5 - 01</td>
<td>Mean Rank</td>
<td>OQr Rank</td>
<td>YQr Rank</td>
</tr>
<tr>
<td>C5 - 02</td>
<td>2.45</td>
<td>5</td>
<td>2.39</td>
</tr>
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<td>C5 - 03</td>
<td>2.25</td>
<td>9</td>
<td>2.31</td>
</tr>
<tr>
<td>C5 - 04</td>
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<td>2.46</td>
</tr>
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<td>C5 - 05</td>
<td>2.32</td>
<td>95</td>
<td>2.35</td>
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<tr>
<td>C5 - 06</td>
<td>2.37</td>
<td>89</td>
<td>2.39</td>
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<tr>
<td>C5 - 07</td>
<td>2.54</td>
<td>69</td>
<td>2.49</td>
</tr>
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<td>C5 - 08</td>
<td>2.88</td>
<td>27</td>
<td>2.93</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Survive</th>
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<tbody>
<tr>
<td>D1 - 01</td>
<td>2.64</td>
<td>54</td>
<td>2.55</td>
<td>62</td>
<td>2.48</td>
<td>67</td>
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<tr>
<td>D1 - 02</td>
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<td>16</td>
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<tr>
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<td>106</td>
<td>1.86</td>
<td>111</td>
</tr>
<tr>
<td>D1 - 04</td>
<td>3.09</td>
<td>9</td>
<td>3.10</td>
<td>6</td>
<td>3.23</td>
<td>3</td>
</tr>
<tr>
<td>D1 - 05</td>
<td>3.31</td>
<td>3</td>
<td>3.26</td>
<td>3</td>
<td>3.11</td>
<td>7</td>
</tr>
<tr>
<td>D1 - 06</td>
<td>2.88</td>
<td>31</td>
<td>2.88</td>
<td>24</td>
<td>2.83</td>
<td>31</td>
</tr>
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<td>D1 - 07</td>
<td>1.19</td>
<td>120</td>
<td>1.30</td>
<td>120</td>
<td>1.46</td>
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<td>D1 - 08</td>
<td>1.57</td>
<td>118</td>
<td>1.72</td>
<td>114</td>
<td>1.85</td>
<td>112</td>
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<td>D1 - 09</td>
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<td>3.21</td>
<td>5</td>
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<tr>
<th>Conform</th>
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<td>D2 - 01</td>
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<td>71</td>
<td>2.40</td>
<td>84</td>
<td>2.39</td>
<td>78</td>
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<tr>
<td>D2 - 02</td>
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<td>57</td>
<td>2.52</td>
<td>68</td>
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<td>77</td>
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<td>D2 - 03</td>
<td>3.18</td>
<td>6</td>
<td>3.08</td>
<td>9</td>
<td>3.07</td>
<td>11</td>
</tr>
<tr>
<td>D2 - 04</td>
<td>1.92</td>
<td>112</td>
<td>1.83</td>
<td>113</td>
<td>1.82</td>
<td>114</td>
</tr>
<tr>
<td>D2 - 05</td>
<td>2.78</td>
<td>42</td>
<td>2.65</td>
<td>50</td>
<td>2.54</td>
<td>63</td>
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<tr>
<td>D2 - 06</td>
<td>2.95</td>
<td>21</td>
<td>2.86</td>
<td>28</td>
<td>2.87</td>
<td>26</td>
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Table A4.4 Ranking of mean raw scores by age and gender
<table>
<thead>
<tr>
<th>Investigate</th>
<th>All (n = 808)</th>
<th>Male (n = 414)</th>
<th>Female (n = 394)</th>
<th>Male/female difference = (M-F)/F%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean Rank</td>
<td>All Rank YQr Rank</td>
<td>All Rank YQr Rank</td>
<td>All% Rank OQr% Rank YQr% Rank</td>
</tr>
<tr>
<td>D3 - 01</td>
<td>2.57 67</td>
<td>2.57 56 2.32 87 2.68 46</td>
<td>2.57 75 2.36 87 2.61 71</td>
<td>0.2 31 -1.7 52 2.7 15 D3 - 01</td>
</tr>
<tr>
<td>D3 - 02</td>
<td>2.36 91</td>
<td>2.28 96 2.31 89 2.11 102</td>
<td>2.45 82 2.47 78 2.55 79</td>
<td>-6.9 94 -6.4 82 -17.3 115 D3 - 02</td>
</tr>
<tr>
<td>D3 - 03</td>
<td>2.91 24</td>
<td>3.07 10 2.97 18 3.06 8</td>
<td>2.73 50 2.64 61 2.83 41</td>
<td>12.2 6 12.5 14 8.0 6 D3 - 03</td>
</tr>
<tr>
<td>D3 - 04</td>
<td>3.04 14</td>
<td>3.08 8 3.06 13 2.93 19</td>
<td>3.00 22 3.05 18 2.99 24</td>
<td>2.6 19 0.3 40 -1.8 46 D3 - 04</td>
</tr>
<tr>
<td>D3 - 05</td>
<td>2.83 36</td>
<td>2.87 27 3.00 16 2.82 33</td>
<td>2.79 43 2.65 60 3.01 20</td>
<td>3.0 17 13.1 13 -6.3 72 D3 - 05</td>
</tr>
<tr>
<td>D3 - 06</td>
<td>2.44 85</td>
<td>2.46 78 2.38 80 2.34 86</td>
<td>2.41 85 2.26 92 2.58 75</td>
<td>1.8 23 5.3 24 -9.5 90 D3 - 06</td>
</tr>
<tr>
<td>Create</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>D4 - 01</td>
<td>2.51 72</td>
<td>2.75 38 2.70 42 2.85 30</td>
<td>2.25 99 1.99 108 2.59 74</td>
<td>22.2 1 35.7 1 9.9 5 D4 - 01</td>
</tr>
<tr>
<td>D4 - 02</td>
<td>3.36 2</td>
<td>3.27 2 3.18 5 3.27 3</td>
<td>3.46 2 3.32 3 3.49 2</td>
<td>-5.5 81 -4.2 63 -6.4 74 D4 - 02</td>
</tr>
<tr>
<td>D4 - 03</td>
<td>2.62 60</td>
<td>2.51 69 2.64 49 2.46 73</td>
<td>2.73 53 2.84 35 2.89 35</td>
<td>-8.1 101 -7.0 86 -14.9 112 D4 - 03</td>
</tr>
<tr>
<td>D4 - 04</td>
<td>2.98 17</td>
<td>2.84 31 2.85 27 2.97 17</td>
<td>3.12 12 2.95 28 3.27 7</td>
<td>-8.9 107 -3.4 61 -9.2 89 D4 - 04</td>
</tr>
<tr>
<td>D4 - 05</td>
<td>2.39 88</td>
<td>2.10 101 2.11 103 2.04 108</td>
<td>2.69 59 2.38 83 2.85 40</td>
<td>-21.7 120 -11.4 106 -28.4 120 D4 - 05</td>
</tr>
<tr>
<td>D4 - 06</td>
<td>1.86 113</td>
<td>1.65 117 1.31 119 1.85 114</td>
<td>2.08 108 1.66 114 2.38 94</td>
<td>-20.7 119 -21.1 119 -22.3 119 D4 - 06</td>
</tr>
<tr>
<td>D4 - 07</td>
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<td>3.29 1 3.36 1 3.31 1</td>
<td>3.59 1 3.59 1 3.59 1</td>
<td>-8.4 103 -6.3 79 -6.8 77 D4 - 07</td>
</tr>
<tr>
<td>D4 - 08</td>
<td>2.97 19</td>
<td>2.91 21 2.76 38 2.85 28</td>
<td>3.03 21 3.03 20 3.00 22</td>
<td>-4.2 67 -9.0 92 -5.0 62 D4 - 08</td>
</tr>
<tr>
<td>D4 - 09</td>
<td>2.75 45</td>
<td>2.71 45 2.68 46 2.68 45</td>
<td>2.89 41 2.82 39 2.81 44</td>
<td>-3.3 58 -5.0 67 -4.5 55 D4 - 09</td>
</tr>
<tr>
<td>D4 - 10</td>
<td>2.55 68</td>
<td>2.52 67 2.55 62 2.48 71</td>
<td>2.57 73 2.56 70 2.58 76</td>
<td>-2.0 46 -0.4 44 -4.0 54 D4 - 10</td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D5 - 01</td>
<td>2.29 96</td>
<td>2.22 98 2.19 98 2.21 94</td>
<td>2.36 91 2.31 89 2.46 89</td>
<td>-6.0 87 -5.1 70 -10.1 96 D5 - 01</td>
</tr>
<tr>
<td>D5 - 02</td>
<td>2.36 92</td>
<td>2.35 89 2.45 71 2.19 95</td>
<td>2.36 89 2.40 81 2.36 96</td>
<td>-0.6 35 2.0 34 -7.2 79 D5 - 02</td>
</tr>
<tr>
<td>D5 - 03</td>
<td>2.88 30</td>
<td>2.86 29 2.85 24 2.78 36</td>
<td>2.90 32 2.85 34 2.98 25</td>
<td>-1.4 40 1.6 36 -6.7 75 D5 - 03</td>
</tr>
<tr>
<td>D5 - 04</td>
<td>1.64 117</td>
<td>1.63 118 1.83 113 1.51 119</td>
<td>1.66 116 1.61 118 1.68 117</td>
<td>-1.9 45 13.7 10 -9.9 94 D5 - 04</td>
</tr>
<tr>
<td>D5 - 05</td>
<td>2.50 76</td>
<td>2.43 80 2.26 95 2.29 90</td>
<td>2.58 71 2.67 53 2.59 73</td>
<td>-5.8 85 -15.4 115 -11.6 102 D5 - 05</td>
</tr>
<tr>
<td>D5 - 06</td>
<td>1.70 116</td>
<td>1.86 112 1.95 108 2.10 103</td>
<td>1.53 118 1.63 116 1.66 118</td>
<td>21.8 3 19.6 4 26.5 2 D5 - 06</td>
</tr>
</tbody>
</table>

Table A4.5 Ranking of mean raw scores by age and gender
Appendix B

Tables relating to Religious Profile

B1 Experiences of religion 235
B2 Attitudes to religion 236
B3 Summary of answers to “What is your religion?” 237
B4 Details of answers to “What is your religion?” 239
B5 Summary of one thing known about Bible 241
B6 Details of one thing known about Bible 243
Away from home, do you take part in any religious activities like going to church or Sunday School, or taking part in religious festivals?

<table>
<thead>
<tr>
<th>Subjects who answered &quot;Yes&quot;.</th>
<th>Males (412)</th>
<th>Females (393)</th>
<th>All (805)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% OQr YQr</td>
<td>% OQr YQr</td>
<td>% OQr YQr</td>
</tr>
<tr>
<td>Yes, I am made to go.</td>
<td>44 41 54 35</td>
<td>27 20 11 22</td>
<td>71 30 31 29</td>
</tr>
<tr>
<td>Yes, I would rather do something else.</td>
<td>33 31 33 26</td>
<td>24 18 7 19</td>
<td>57 24 20 23</td>
</tr>
<tr>
<td>Yes, I want to go.</td>
<td>59 55 54 59</td>
<td>98 74 74 75</td>
<td>157 65 65 67</td>
</tr>
<tr>
<td>Yes, I have friends who go.</td>
<td>77 72 54 76</td>
<td>111 83 63 89</td>
<td>188 78 59 83</td>
</tr>
<tr>
<td>Yes, it is enjoyable.</td>
<td>64 60 50 62</td>
<td>104 78 81 81</td>
<td>168 70 67 71</td>
</tr>
<tr>
<td>Yes, I think it could be more useful and interesting.</td>
<td>55 51 54 44</td>
<td>62 47 48 42</td>
<td>117 49 51 43</td>
</tr>
<tr>
<td>Yes, my religion is important to me.</td>
<td>53 54 58 56</td>
<td>65 49 33 56</td>
<td>123 51 45 56</td>
</tr>
<tr>
<td>Yes, I think everybody should be religious.</td>
<td>22 21 21 18</td>
<td>29 22 7 31</td>
<td>51 21 14 24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subjects who answered &quot;No&quot;.</th>
<th>Males (796)</th>
<th>Females (796)</th>
<th>All (796)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% OQr YQr</td>
<td>% OQr YQr</td>
<td>% OQr YQr</td>
</tr>
<tr>
<td>No, I am not allowed to go.</td>
<td>41 13 8 19</td>
<td>27 10 6 18</td>
<td>68 12 7 18</td>
</tr>
<tr>
<td>No, I have never thought of going.</td>
<td>158 52 46 64</td>
<td>148 57 58 65</td>
<td>306 54 51 64</td>
</tr>
<tr>
<td>No, I have friends who go.</td>
<td>160 62 57 67</td>
<td>171 66 52 69</td>
<td>361 64 55 68</td>
</tr>
<tr>
<td>No, I think it would be a waste of time.</td>
<td>164 54 59 57</td>
<td>80 31 31 35</td>
<td>244 43 46 47</td>
</tr>
<tr>
<td>No, I went once or twice but I felt uncomfortable.</td>
<td>144 47 46 49</td>
<td>129 50 55 50</td>
<td>273 48 50 50</td>
</tr>
<tr>
<td>No, religion isn't important to me.</td>
<td>157 52 61 58</td>
<td>90 35 44 32</td>
<td>247 44 53 46</td>
</tr>
<tr>
<td>No, I would take part in religious activities if they were useful and interesting.</td>
<td>152 50 38 48</td>
<td>133 51 42 60</td>
<td>285 51 40 53</td>
</tr>
<tr>
<td>No, I think the world would be better off without religion.</td>
<td>104 34 39 38</td>
<td>52 20 25 21</td>
<td>156 28 33 30</td>
</tr>
</tbody>
</table>

Notes: OQr = oldest quarter; YQr = youngest quarter; figures are %s. Mean ages: M, F = 10.8 yrs; OQr = 11.6 yrs; YQr = 10.1 yrs.

At home, do you ever pray or read a religious book, such as the Bible?

<table>
<thead>
<tr>
<th>Subjects who answered &quot;Yes&quot;.</th>
<th>Males (412)</th>
<th>Females (384)</th>
<th>All (796)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% OQr YQr</td>
<td>% OQr YQr</td>
<td>% OQr YQr</td>
</tr>
</tbody>
</table>

Table B1 LivesCan Religious Profile: Experiences
What do you think about religion?

Subjects who claimed these statements true:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Males (412) %</th>
<th>Females (393) %</th>
<th>All (805) %</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don't really know what religion is.</td>
<td>109 26 20 28</td>
<td>89 23 15 29</td>
<td>198 25 18 28</td>
</tr>
<tr>
<td>I think religion is meant to help us lead better lives.</td>
<td>231 56 50 63</td>
<td>244 62 58 59</td>
<td>475 59 54 61</td>
</tr>
<tr>
<td>I think religion causes a lot of trouble in the world.</td>
<td>278 67 76 56</td>
<td>208 53 58 53</td>
<td>486 60 67 55</td>
</tr>
<tr>
<td>I don't think we really need religion.</td>
<td>157 38 50 31</td>
<td>91 23 26 24</td>
<td>248 31 38 28</td>
</tr>
<tr>
<td>I would like to know more about religion.</td>
<td>160 39 27 35</td>
<td>198 50 40 58</td>
<td>358 44 33 46</td>
</tr>
</tbody>
</table>

Notes: OQr = oldest quarter; YQr = youngest quarter; figures are %. Mean ages: M, F = 10.8 yrs; OQr = 11.6 yrs; YQr = 10.1 yrs.

In school, you sometimes do projects on religious topics, like festivals, or sacred books, or different religions:

<table>
<thead>
<tr>
<th>Males</th>
<th>Females</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Always</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ave</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Do you think these topics are interesting?</td>
<td>71</td>
<td>73</td>
</tr>
<tr>
<td>Do you think these topics are important?</td>
<td>61</td>
<td>75</td>
</tr>
<tr>
<td>Do you think these topics help you in any way?</td>
<td>83</td>
<td>82</td>
</tr>
</tbody>
</table>

Notes: OQr = oldest quarter; YQr = youngest quarter; figures are %. Mean ages: M, F = 10.8 yrs; OQr = 11.6 yrs; YQr = 10.1 yrs.

Table B2  LivesCan Religious Profile: Attitudes
Responses to instruction:
If someone asked you "What is your religion?", what would you answer?

<table>
<thead>
<tr>
<th>Subject Does Not Answer</th>
<th>Male (412)</th>
<th>Female (393)</th>
<th>M + F (805)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>OQR</td>
<td>YQR</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Ref.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Matter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 My own business</td>
<td>2.9</td>
<td>2.9</td>
<td>3.8</td>
</tr>
<tr>
<td>4 States would not answer</td>
<td>1.7</td>
<td>1.9</td>
<td>2.9</td>
</tr>
<tr>
<td>Subtotal</td>
<td>4.6</td>
<td>4.8</td>
<td>6.8</td>
</tr>
<tr>
<td>10 Nothing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 Does Not Know</td>
<td>0.7</td>
<td>1.0</td>
<td>0.0</td>
</tr>
<tr>
<td>1 Not Religious</td>
<td>13.1</td>
<td>12.6</td>
<td>9.7</td>
</tr>
<tr>
<td>36 Doesn't go to church</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2 Atheist</td>
<td>0.5</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Christian Reference</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Christian</td>
<td>24.5</td>
<td>22.3</td>
<td>26.2</td>
</tr>
<tr>
<td>7 Protestant</td>
<td>17.0</td>
<td>24.3</td>
<td>12.6</td>
</tr>
<tr>
<td>6 Roman Catholic</td>
<td>2.4</td>
<td>2.9</td>
<td>1.0</td>
</tr>
<tr>
<td>34 Church of Scotland</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>45 Episcopal</td>
<td>0.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>29 God</td>
<td>0.5</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>17 Jesus</td>
<td>0.7</td>
<td>0.0</td>
<td>1.9</td>
</tr>
<tr>
<td>38 Mum Prodistat and Dad Christian</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>21 Sunday School</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>54 Protestant cathilac/Church of Scot.</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>33 Finding out about Jesus at Church or reading the Bible</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>48 Church?</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>31 Mum Protestant and Dad Catholic</td>
<td>0.2</td>
<td>1.0</td>
<td>0.0</td>
</tr>
<tr>
<td>30 Not church-goer, thinks a Christian</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>32 Going to Guides in the church</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>19 My dad is a Catholic</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>8 Mormon</td>
<td>0.2</td>
<td>1.0</td>
<td>0.0</td>
</tr>
<tr>
<td>40 I am half a Christian</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>22 Religion is about Joseph and God</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Subtotal</td>
<td>46.6</td>
<td>51.5</td>
<td>42.7</td>
</tr>
</tbody>
</table>

Notes:
OQR = oldest quarter; YQR = youngest quarter.
Mean ages: Male, Female = 10.8 yrs; OQR = 11.6 yrs; YQR = 10.1 yrs.
Reference numbers in left column relate to lists in Table B4.

Table B3.1 LivesCan Religious Profile: Religion Data
Responses to instruction:
If someone asked you "What is your religion?”, what would you answer?

<table>
<thead>
<tr>
<th>Ref. NON-CHRISTIAN RELIGION</th>
<th>Male (412)</th>
<th>Female (393)</th>
<th>M+F (805)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qr Yqr</td>
<td>All</td>
<td>Qr Yqr</td>
</tr>
<tr>
<td></td>
<td>% %</td>
<td>% %</td>
<td>% %</td>
</tr>
<tr>
<td>9 Sikh</td>
<td>0.2</td>
<td>1.0</td>
<td>0.0</td>
</tr>
<tr>
<td>37 Spiritualist</td>
<td>0.0</td>
<td>0.0</td>
<td>0.3</td>
</tr>
<tr>
<td>49 Chinese god</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>25 I have no religion in Britain</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>43 not Christian but would like to be</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>27 I am religious</td>
<td>0.0</td>
<td>0.0</td>
<td>0.3</td>
</tr>
</tbody>
</table>

**SUBTOTAL** 0.7        1.0        0.9          0.0        1.0        0.7        0.5        0.5

| 51 DESCRIBED AS VALUABLE | 0.5        | 0.0          | 1.0        |
| 47 a friend              | 0.0        | 0.0          | 0.3        |
| 26 my religion is boring | 0.0        | 0.0          | 0.3        |
| 44 DEFINITION OFFERED    | 0.2        | 0.0          | 0.3        |
| 42 it's about coming together | 0.2   | 0.0          | 0.3        |
| 46 to think about other people | 0.2 | 0.0          | 0.0        |
| 28 it helps us have a peaceful world | 0.0 | 0.0          | 0.3       |

**MISCELLANEOUS**

| 20 If you were a Prodiston or Cathlec | 0.5        | 1.9          | 0.0        |
| 55 I would say Neither              | 0.0        | 0.0          | 0.5        |
| 56 non-denominational                | 0.0        | 0.0          | 0.3        |
| 55 I am half and half                | 0.2        | 0.0          | 0.0        |
| 16 my mum's and my dad's            | 0.0        | 0.0          | 0.3        |
| 15 I have two                       | 0.2        | 0.0          | 0.0        |
| 53 not sure; wants to know about Jews | 0.0    | 0.0          | 0.3        |
| 23 nationality                      | 0.2        | 0.0          | 1.0        |
| 24 living in Haddington             | 0.2        | 1.0          | 0.0        |
| 11 replied with a question          | 0.5        | 1.0          | 1.0        |
| 35 why don't you ask someone in my family, | 0.0    | 0.0          | 0.3        |
| like my mum, for instance?          | 0.0        | 0.0          | 0.3        |
| 39 unclear because not christened   | 0.0        | 0.0          | 0.5        |
| 18 parent left it up to me when older | 0.0     | 0.0          | 0.3        |
| 57 being me                         | 0.0        | 0.0          | 1.0        |
| 52 my mum blevis in it and say just blevie | 0.0   | 0.0          | 0.3        |
| what you want to blevie             | 0.0        | 0.0          | 1.0        |
| 41 does it really matter, I may not even be human for all you know | 0.0 | 0.0          | 0.3        |
| 12 helping my Mum                   | 0.0        | 0.0          | 0.0        |
| 13 I like my dog                    | 0.0        | 0.0          | 0.0        |
| 14 I play football                  | 0.0        | 1.0          | 0.0        |

**SUBTOTAL** 2.7        3.9          2.0        4.4        7.0        3.0        3.4        5.5        2.5

**TOTAL** 100 100 100 101 100 100 100 100

Notes:
OQr = oldest quarter; Yqr = youngest quarter.
Mean ages: Male, Female = 10.8 yrs; OQr = 11.6 yrs; Yqr = 10.1 yrs.
Reference numbers in left column relate to lists in Table B4.

Table B3.2 LivesCan Religious Profile: Religion Data
Illustration of responses summarised in Table B3.

<table>
<thead>
<tr>
<th>Question asked</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What if you not got a religion? Why do you want to know?</td>
<td>Helping my Mum.</td>
</tr>
<tr>
<td>I like my dog.</td>
<td></td>
</tr>
<tr>
<td>I play football.</td>
<td></td>
</tr>
<tr>
<td>I have two.</td>
<td></td>
</tr>
<tr>
<td>My mum’s and my dad’s.</td>
<td></td>
</tr>
<tr>
<td>To know more about Jesus. I think it’s Jesus.</td>
<td></td>
</tr>
<tr>
<td>My parent left up to me when I am older.</td>
<td></td>
</tr>
<tr>
<td>My dad is a Catholic.</td>
<td></td>
</tr>
<tr>
<td>If you were a Prodiston or Cathlec.</td>
<td></td>
</tr>
<tr>
<td>Religion is about Joseph and God.</td>
<td></td>
</tr>
<tr>
<td>I am Scottish. British. Scotland.</td>
<td></td>
</tr>
<tr>
<td>Living in Haddington.</td>
<td></td>
</tr>
<tr>
<td>I have no religion in Britain.</td>
<td></td>
</tr>
<tr>
<td>My religion is boring.</td>
<td></td>
</tr>
<tr>
<td>I am religious.</td>
<td></td>
</tr>
<tr>
<td>It’s something to help us have a peaceful world.</td>
<td></td>
</tr>
<tr>
<td>My religion is God. I believe in God. Beliveing in god and god’s kingdom.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>30</td>
<td>Well I don't go to church and I'm not really sure but I think I'm a cristian.</td>
</tr>
<tr>
<td>31</td>
<td>My mum is a Prodestant and my dad is a catholic.</td>
</tr>
<tr>
<td>32</td>
<td>Going to Guides in the Church.</td>
</tr>
<tr>
<td>33</td>
<td>It is finding out about Jesus at Church or reading the bible.</td>
</tr>
<tr>
<td>34</td>
<td>Church of Scotland</td>
</tr>
<tr>
<td>35</td>
<td>Why don't you ask someone in my family, like my mum for instance?</td>
</tr>
<tr>
<td>36</td>
<td>If you mean like either I go to church or not I don't go.</td>
</tr>
<tr>
<td>37</td>
<td>Spiritualist</td>
</tr>
<tr>
<td>38</td>
<td>My mum is a prodistat and my dad is Christian.</td>
</tr>
<tr>
<td>39</td>
<td>I was not cristend so I don't think I am part of a scerton religion.</td>
</tr>
<tr>
<td>40</td>
<td>I am half a Christian.</td>
</tr>
<tr>
<td>41</td>
<td>Does it really matter, I may not even be human for all you know.</td>
</tr>
<tr>
<td>42</td>
<td>It's about coming together.</td>
</tr>
<tr>
<td>43</td>
<td>I'm not a Christian but I would like to be.</td>
</tr>
<tr>
<td>44</td>
<td>Definition</td>
</tr>
<tr>
<td>45</td>
<td>Episcopalian</td>
</tr>
<tr>
<td>46</td>
<td>To think about other people.</td>
</tr>
<tr>
<td>47</td>
<td>A friend.</td>
</tr>
<tr>
<td>48</td>
<td>Church?</td>
</tr>
<tr>
<td>49</td>
<td>Chinese god.</td>
</tr>
<tr>
<td>50</td>
<td>Non-denominational.</td>
</tr>
<tr>
<td>51</td>
<td>Value</td>
</tr>
<tr>
<td>52</td>
<td>My mum blevis in it and say just blevie what you want to belie.</td>
</tr>
<tr>
<td>53</td>
<td>I'm not very sure, but I would like to know about Jewish people.</td>
</tr>
<tr>
<td>54</td>
<td>&quot;Protestent cathilac/Church of Scotland.&quot;</td>
</tr>
<tr>
<td>55</td>
<td>I would say Neither.</td>
</tr>
<tr>
<td>56</td>
<td>I am half and half.</td>
</tr>
<tr>
<td>57</td>
<td>Being me.</td>
</tr>
</tbody>
</table>

**Note:** spelling as written.

**Table B4.2 Subjects' own religion**
Responses to instruction: "Write down ONE thing you know about the Christian Bible."

<table>
<thead>
<tr>
<th>References to Instruction</th>
<th>Male (412)</th>
<th>Female (393)</th>
<th>M + F (805)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>OQr</td>
<td>YQr</td>
</tr>
<tr>
<td>Subject does not answer</td>
<td>2.9</td>
<td>4.9</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Ref.

- **0 CLAIMS TO KNOW NOTHING**
  - Male: 11.7% OQr, 5.8% YQr, 17.5% Total
  - Female: 7.9% OQr, 3.1% YQr, 11.2% Total
  - Total: 9.8% OQr, 4.5% YQr, 14.4% Total

- **14 not interested**
  - Male: 0.2% OQr, 0.0% YQr, 0.1% Total
  - Female: 0.0% OQr, 0.0% YQr, 0.0% Total
  - Total: 0.1% OQr, 0.0% YQr, 0.1% Total

- **25 have not read Bible**
  - Male: 0.2% OQr, 1.0% YQr, 0.2% Total
  - Female: 0.0% OQr, 0.0% YQr, 0.0% Total
  - Total: 0.1% OQr, 0.0% YQr, 0.1% Total

**SUBTOTAL**

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>OQr</th>
<th>YQr</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12.1</td>
<td>5.8</td>
<td>18.5</td>
</tr>
</tbody>
</table>

**REFERENCES TO JESUS**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Jesus</td>
<td>31.6</td>
<td>33.0</td>
<td>26.2</td>
</tr>
<tr>
<td>16 God and Jesus linked</td>
<td>1.7</td>
<td>2.9</td>
<td>1.0</td>
</tr>
<tr>
<td>9 Jesus and miracle</td>
<td>1.7</td>
<td>3.9</td>
<td>1.0</td>
</tr>
<tr>
<td>21 Jesus healing</td>
<td>0.2</td>
<td>0.0</td>
<td>0.3</td>
</tr>
<tr>
<td>34 Jews killed Jesus</td>
<td>0.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>48 parentage of Jesus</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>49 John the Baptist came before Jesus</td>
<td>0.0</td>
<td>0.0</td>
<td>0.3</td>
</tr>
<tr>
<td>44 Noah and Jesus</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL**

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>OQr</th>
<th>YQr</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>36.2</td>
<td>39.8</td>
<td>30.2</td>
</tr>
</tbody>
</table>

**REFERENCES TO GOD**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 God</td>
<td>4.9</td>
<td>1.9</td>
<td>6.8</td>
</tr>
<tr>
<td>39 Trinity</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL**

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>OQr</th>
<th>YQr</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.1</td>
<td>1.9</td>
<td>6.8</td>
</tr>
</tbody>
</table>

**CONFESSIONAL STATEMENTS**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>6.1</td>
<td>2.9</td>
<td>5.8</td>
</tr>
<tr>
<td>35 heaven</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL**

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>OQr</th>
<th>YQr</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.1</td>
<td>2.9</td>
<td>5.8</td>
</tr>
</tbody>
</table>

**VALUE STATEMENTS**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 value of Bible</td>
<td>3.9</td>
<td>1.9</td>
<td>7.8</td>
</tr>
<tr>
<td>8 message of love</td>
<td>1.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>15 value - helping</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>30 entertaining book</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL**

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>OQr</th>
<th>YQr</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.9</td>
<td>1.9</td>
<td>7.8</td>
</tr>
</tbody>
</table>

**STATEMENTS OF STRUCTURE**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 general structure of Bible</td>
<td>8.0</td>
<td>5.8</td>
<td>7.8</td>
</tr>
<tr>
<td>33 some books written by disciples</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>43 chapters named after men</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>41 people's names and passages</td>
<td>0.2</td>
<td>1.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL**

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>OQr</th>
<th>YQr</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8.5</td>
<td>6.8</td>
<td>7.8</td>
</tr>
</tbody>
</table>

Notes:
- OQr = oldest quarter; YQr = youngest quarter.
- Mean ages: Male, Female = 10.8 yrs; OQr = 11.6 yrs; YQr = 10.1 yrs.
- Reference numbers in left column relate to lists in Table B6.

Table B5.1 LivesCan Religious Profile: Bible Data
Responses to instruction: "Write down ONE thing you know about the Christian Bible."

<table>
<thead>
<tr>
<th>Ref. CONTENTS OF BIBLE</th>
<th>Male (412)</th>
<th>Female (393)</th>
<th>M + F (805)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All %</td>
<td>OQr %</td>
<td>YQr %</td>
<td>All %</td>
</tr>
<tr>
<td>1 story and myth</td>
<td>5.1</td>
<td>6.8</td>
<td>6.8</td>
</tr>
<tr>
<td>28 stories non-specific</td>
<td>1.9</td>
<td>3.9</td>
<td>1.0</td>
</tr>
<tr>
<td>5 people by name</td>
<td>2.4</td>
<td>2.9</td>
<td>0.0</td>
</tr>
<tr>
<td>13 statements of Biblical fact</td>
<td>2.4</td>
<td>4.9</td>
<td>0.0</td>
</tr>
<tr>
<td>3 Biblical teaching</td>
<td>1.5</td>
<td>4.9</td>
<td>0.0</td>
</tr>
<tr>
<td>20 miracles</td>
<td>0.5</td>
<td>0.0</td>
<td>1.9</td>
</tr>
<tr>
<td>36 Moses crossed Red Sea with Israel</td>
<td>0.5</td>
<td>1.0</td>
<td>0.0</td>
</tr>
<tr>
<td>46 the red sea</td>
<td>0.2</td>
<td>1.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2 parable</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>51 prayers</td>
<td>0.2</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>52 songs</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>SUBTOTAL</td>
<td>15.0</td>
<td>25.4</td>
<td>10.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KIND OF BOOK</th>
<th>Male (412)</th>
<th>Female (393)</th>
<th>M + F (805)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All %</td>
<td>OQr %</td>
<td>YQr %</td>
<td>All %</td>
</tr>
<tr>
<td>26 a book</td>
<td>0.5</td>
<td>1.0</td>
<td>0.0</td>
</tr>
<tr>
<td>19 religious book</td>
<td>1.9</td>
<td>1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>12 Christian's Holy Book</td>
<td>0.5</td>
<td>1.0</td>
<td>0.0</td>
</tr>
<tr>
<td>22 Holy Book 1000s years old</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>23 very old</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>37 difficult book</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>SUBTOTAL</td>
<td>2.9</td>
<td>3.9</td>
<td>1.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ERROR</th>
<th>Male (412)</th>
<th>Female (393)</th>
<th>M + F (805)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All %</td>
<td>OQr %</td>
<td>YQr %</td>
<td>All %</td>
</tr>
<tr>
<td>24 about Bible in general</td>
<td>0.7</td>
<td>1.9</td>
<td>1.0</td>
</tr>
<tr>
<td>17 book about Christians</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>18 concerning content</td>
<td>3.2</td>
<td>2.9</td>
<td>2.9</td>
</tr>
<tr>
<td>47 there's a talking donkey in it</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>50 unintelligible response</td>
<td>0.2</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>SUBTOTAL</td>
<td>4.4</td>
<td>4.8</td>
<td>4.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MISCELLANEOUS</th>
<th>Male (412)</th>
<th>Female (393)</th>
<th>M + F (805)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All %</td>
<td>OQr %</td>
<td>YQr %</td>
<td>All %</td>
</tr>
<tr>
<td>38 people named after Biblical character</td>
<td>0.7</td>
<td>0.0</td>
<td>1.9</td>
</tr>
<tr>
<td>29 all the books by heart</td>
<td>0.2</td>
<td>1.0</td>
<td>0.0</td>
</tr>
<tr>
<td>31 read at church</td>
<td>0.2</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>42 water is important</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>45 my teacher has read some to me</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>SUBTOTAL</td>
<td>1.2</td>
<td>1.0</td>
<td>2.9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Notes:
OQr = oldest quarter; YQr = youngest quarter.
Mean ages: Male, Female = 10.8 yrs; OQr = 11.6 yrs; YQr = 10.1 yrs.
Reference numbers in left column relate to lists in Table B6.

Table B5.2 LivesCan Religious Profile: Bible Data
<table>
<thead>
<tr>
<th>Bible Illustrations for Table B5.</th>
</tr>
</thead>
</table>
| **0** 
Don’t know anything
I don’t not a lot about it. I have been told but I have forgotten. I don’t know because I don’t know a lot about religion. |
| **1** 
Content - story; myth
| **2** 
Content - parable |
| **3** 
Content - teaching
10 Commandments. It has a lot of important lessons to learn. If someone hits you you don’t hit them back. The ten commins. |
| **4** 
People - Jesus
Christ the Lord. Jesus on the Cross. Jesus who tried to make the world a better place. Jesus got pind to a cross at Easter. geas was gurusified. Jesus born at Christmas. Jesus was born and a while after he was crucified. |
| **5** 
People - others
| **6** 
God
It has stories about God. It has songs about God. |
| **7** 
Structure of book
66 people wrote it. There are 2 Testaments. Large book made up of small books. I know there are different parts in the bible. There are 4 Gospels, MMLJ. |
| **8** 
Message of love
Meaking love. |
| **9** 
Jesus and miracle
Jesus turned water into wine. Loaves and fishes. Jesus walked on water towards Simon Peter. Jesus came back to life in it. I know Jesus made miracles happen to make life better. |
| **10** 
Value
It’s true. I think that Jesus is important. It’s interesting. It is not good. It doesn’t tell lies. Jesus is the main part. I know it is important to me and my family. It has stories witch could help people. “It’s not fiction. It’s true.” . . It has got real stories. Jesus was religious and very special. It is a good book. I know the Bible is a very important item because it tells us what Jesus means to us. I know that it is all true. |
| **11** 
Faith statement
Jesus rose from the dead. Jesus loves us. God keeps his promise. God loves us. God loves everyone. It tells you about the power of God. Jesus died for us. One God. It is about how life and man began. Saviour of world. Jesus is the saviour of the world. God always wins. That my name came from the bible and also when we die there will be a new Jerusalem. God wrote it. It is God’s word. God sent Jesus down to earth. God made the world. God sent his son Jesus to die, for God loved me and everyone else. Jesus will cure you if you believe in him. Christmas God’s gift. (God as Creator). Jesus sacrificed himself for others. It’s special to me, Jesus is God’s son. Jesus was sent down to earth to teach us how to lead a better way of life. Jesus is the lord of all. When we die we go to the Lord if you believe in him! Jesus died for the world. God sacrificed his son for the world. Jesus is the son of God. It is important - it tells you how the world began. God cerated the Earth in 7 days. Jesus came alive on easter day. When Jesus was sacrificed. It’s about the Lord. It is about the lord, peace and love. |

*contd.*

**Table B6.1** Bible knowledge
12 Christian’s Holy Book
“It’s a book of the holly Christians. Christmas”.

13 Content - fact
There were 12 disciples. John the Baptist and Jesus are cousins.

14 Not interested.

15 Value - helping

16 God and Jesus linked
It’s about God and Jesus. - and how the world was and God wanted it to be. - and how they would like life to be.

17 It’s a book about Christians.

18 Error - content
Jesus was born on 25 Dec, that is why it is called Christmas. It’s all good people in it. Nice and helpful people in it. It was wrote juring Jesus’s life. The first person was Eve. Jesus wrote it in God’s Word. Jesus is in most of the stories. It is Jesus’s words. Mary and Joseph had Jesus. Jesus said he was king and had a crown of thorns on his head. Jesus wrote the Bible. Jesus had a coloured coat and fed people fish and bread. Jesus and his 13 Disiples. It was written by Jesus’s Desiples. The bible is about Jesuses time. One story is called Numbers. Adam was made from a stone and Eve was made from dust. Jesus shadow was on the wall and nobody could have a shadow like it. Mary and Joseph is Jesuses mother. Jesus came of the cross on christmas day and went behind a rock till easter.

19 Religious book
It is religiose. It’s an enjoyable book about religion. It has lots of religis stories in it. It is a holy book. It is the holy book which tell you about religis Records. It tells you about religious things that happened in the past.

20 Content - miracles
It has lots of miricals in it.

21 Jesus healing

22 Holy Book 1000s of years old.

23 It’s very old.

24 Error - general
It has got a cross on it. The Chriatm Bible is written in English. It is split in pslams. The Bible is divided into so many parts called parables. That they pray and get the holy water.

25 I have not read the Bible.

26 It’s a book.

27 Comment
Religious people think it will answer their questions. They belive in live after die. I don’t really no much but I now people like it. It is supposed to be true. I know that some people are not really sure that the stories are true. That the christians belive that God created the world in seven days. It says that Jesus died for us.

28 Stories
Stories from the past. Different stories. It has nice stories. *[I now same tales and streys. I know some stories.] *transferred from 32.

29 “All the books by heart.” The names of the chapters.

30 Entertainment
It’s full of mystery, fun, murders, spys and miracles.

31 The Bible is a book people read at Church.

32 *Transferred to 28.

33 Some of the books were written by Disapals.

34 The Jews killed/crucified Jesus.

35 Heaven.

Table B6.2 Bible knowledge
<table>
<thead>
<tr>
<th>36</th>
<th>Moses crossed the red sea with the Israelites.</th>
<th>44</th>
<th>I know about Noah and Jesus.</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td><strong>Difficult book</strong>&lt;br&gt;It is a thick book and hard to read. I think it's quite hard to understand, but when I understand it can be amazing.</td>
<td>45</td>
<td>My teacher has read some to me.</td>
</tr>
<tr>
<td>38</td>
<td><strong>Names</strong>&lt;br&gt;My pal has a name from it. I know that my name is in it. &quot;Names&quot;.</td>
<td>46</td>
<td>the red sea</td>
</tr>
<tr>
<td>39</td>
<td><strong>Trinity</strong>&lt;br&gt;It's about God, Jesus and the holy spirit.</td>
<td>47</td>
<td>There's a donkey that's talk's in it.</td>
</tr>
<tr>
<td>40</td>
<td><strong>- Not used -</strong></td>
<td>48</td>
<td><strong>Parentage of Jesus</strong>&lt;br&gt;Mary and Joseph. Jesus's mum and dad's name is Mary and Joseph.</td>
</tr>
<tr>
<td>41</td>
<td><strong>It has peoples names and it has passages about them.</strong></td>
<td>49</td>
<td>John the Baptist came before Jesus.</td>
</tr>
<tr>
<td>42</td>
<td><strong>Water is important.</strong></td>
<td>50</td>
<td><strong>Incomprehensible</strong>&lt;br&gt;It has a lot of hifs.</td>
</tr>
<tr>
<td>43</td>
<td><strong>It has chapters named after men. That there is names for chapters.</strong></td>
<td>51</td>
<td><strong>Prayers.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>52</td>
<td><strong>It has songs in it.</strong></td>
</tr>
</tbody>
</table>

**Note:** spelling as written.

**Table B6.3 Bible knowledge**
Appendix C

LivesCan Teachers' Handbook
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Title Screen</td>
<td>1</td>
</tr>
<tr>
<td>What you need to use LivesCan</td>
<td>2</td>
</tr>
<tr>
<td>How you start using LivesCan</td>
<td>3</td>
</tr>
<tr>
<td>The LivesCan Treasure Hunt</td>
<td>4</td>
</tr>
<tr>
<td>The Ballad of LivesCan</td>
<td>6</td>
</tr>
<tr>
<td>Answers to riddles and puzzles</td>
<td>12</td>
</tr>
<tr>
<td>How LivesCan has been built</td>
<td>13</td>
</tr>
<tr>
<td>Using the machine</td>
<td>13</td>
</tr>
<tr>
<td>The LivesCan stack</td>
<td>15</td>
</tr>
<tr>
<td>Logging Screen</td>
<td>16</td>
</tr>
<tr>
<td>Invitation Screen</td>
<td>17</td>
</tr>
<tr>
<td>LivesCan Menu</td>
<td>18</td>
</tr>
<tr>
<td>More Information</td>
<td>19</td>
</tr>
<tr>
<td>Registration Screen</td>
<td>20</td>
</tr>
<tr>
<td>Purpose Menu</td>
<td>21</td>
</tr>
<tr>
<td>Structure Menu</td>
<td>25</td>
</tr>
<tr>
<td>Structure Using LivesCan Menu</td>
<td>26</td>
</tr>
<tr>
<td>Structure Visit Level Menu</td>
<td>30</td>
</tr>
<tr>
<td>Structure Inform Level</td>
<td>32</td>
</tr>
<tr>
<td>Structure Encounter Level Menu</td>
<td>32</td>
</tr>
<tr>
<td>Structure Worry Level Menu</td>
<td>34</td>
</tr>
<tr>
<td>Support for LivesCan users</td>
<td>40</td>
</tr>
<tr>
<td>Security Menu</td>
<td>45</td>
</tr>
<tr>
<td>Password</td>
<td>46</td>
</tr>
<tr>
<td>LivesCan skills</td>
<td>47</td>
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<tr>
<td>Answers to riddles and puzzles</td>
<td>48</td>
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<td>Word List</td>
<td>48</td>
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<tr>
<td>Information Menu</td>
<td>57</td>
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<td>Christianity</td>
<td>58</td>
</tr>
<tr>
<td>St Mary's</td>
<td>62</td>
</tr>
<tr>
<td>Haddington</td>
<td>65</td>
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<tr>
<td>Change Level</td>
<td>67</td>
</tr>
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<td>Help Cards</td>
<td>69</td>
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<tr>
<td>Visit Help Menu</td>
<td>69</td>
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<tr>
<td>Inform Help Menu</td>
<td>70</td>
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<tr>
<td>Encounter Help Menu</td>
<td>70</td>
</tr>
<tr>
<td>Worry Help Menu</td>
<td>70</td>
</tr>
<tr>
<td>Contact address</td>
<td>78</td>
</tr>
<tr>
<td>Level Menus</td>
<td>79</td>
</tr>
<tr>
<td>LivesCan Map</td>
<td>80</td>
</tr>
</tbody>
</table>
Introduction
This handbook has been written at the request of teachers taking part in the LivesCan research project. It contains some of the information on the computer and CD-ROM, along with explanations.
Teachers have found it difficult to get to know LivesCan because of a lack of computer equipment. The handbook allows them to become familiar with the project at home, and without needing to rely entirely on the availability of computer equipment.

It is impossible to repeat here all that has been written for LivesCan. Neither, of course, are the photos available, nor the colour graphics. This is in itself an indication of the power and versatility of the computer, which is now preparing this document.

The Handbook
This handbook explains:
- what you need for LivesCan
- how you start using it
- how LivesCan was built
- how LivesCan works
- what it sets out to do
- problems you may meet
- computer related terms
- religious education terms.

Many of the most important screens have been redrawn for printing. Below these drawings are explanations of features of those screens.

All screens have areas on them which are active. That means that if you place the pointer on that area and click the mouse, something will happen. These active areas are usually referred to as buttons. Some buttons are indicated by a or a box with the relevant word in it.

Title Screen
Above is the screen you see when you open up LivesCan. You also see this screen after someone has finished working. When you see this you know no one else is using the computer.

When this screen comes up two things happen:
• You see a ball rotating. This means that the stack in which this card is located is being compressed. In other words, the changes which were made to the stack when it was last used, and which don't need to be kept, are being removed. This tidies up the stack and saves memory.
• After compression, you hear a blackbird singing in a dawn chorus. This audio cue lets others know the machine is now ready for use.
What You Need To Use LivesCan

**HARDWARE**

LivesCan is essentially a computer based project. For it you require the following hardware:

- **Apple Macintosh computer with 8 bit colour card, sound generator and at least 4 Mb RAM.**
  If your machine is as good or better than the LC, you should have no problems.

- **Hard disc with at least 2 Mb free storage.**
  The installed software needs 1 Mb, and compressing needs the equivalent. Creation of users’ files requires further storage, but this does not require large amounts of memory unless used by a large number of people over a long period.

- **12", 13" or 14" colour monitor (512 x 384 or 640 x 480 pixels)**

- **CD-ROM player with caddy**

- **Connecting cables**

- **Printer (not essential)**

**SOFTWARE**

LivesCan uses HyperCard, a software application of Apple Computers. The LivesCan programme is on a floppy disc which you copy to your hard disc. Picture and sound resources are stored on a CD-ROM.

In addition to the LivesCan software you need:

- **System 7**
- **HyperCard 2.1 or HyperCard Player**
- **CD-ROM player**
- **Times (TrueType)**
- **Geneva (TrueType)**

**NOTE:**

You need to set the memory for HyperCard ®, or HyperCard Player ®, to 2048.

- Find the application icon for HyperCard on the hard disc.
- Click on it once.
- Choose Get Info from the File menu. You will now see a window which tells you about the application. At the foot is a box labelled Memory. Use the pointer to select the current size number and type in 2048.
- Close window.

This amount of memory is required because of the heavy demands made by pictures and sounds. If you find there are still problems, consider:

- adjusting the memory of other applications
- increasing the memory still further
- installing additional memory using SIMMS.

**PAPERWARE**

The first level of LivesCan is a treasure hunt based on a ballad. The ballad has riddles embedded in it. When these riddles have been solved the user searches for their visual representation in the LivesCan programme. There are also some free-standing riddles which can be solved by searching the first two levels.

A world map accompanies the project with unnamed places marked on it. Users have to find the names from their search of the LivesCan environment and enter them in their booklet.

All this material, apart from the world map, is printed in a booklet for pupils. This is essential to get the full benefit of the LivesCan project.

**NOTE:**

LivesCan is part of a research project at Edinburgh University investigating children’s religious learning. For this, other documentation has been prepared: a personal profile and a religious profile have been applied to pupils in advance of their use of the computer. There is also a post-test which is intended to measure the effect of working through LivesCan.

None of these items is essential for LivesCan although they are vital for the research side of this development.
How You Start Using LivesCan

### Planning
There is scope within the LivesCan project to permit pupils to use it as the basis of their entire religious and moral education for one or two years, supplemented to include study of religions other than Christianity. As the national recommendation for this curricular area is 10% of available time you will readily appreciate that this is an extensive project.

LivesCan has been built on four different levels, ranging from a game through to a very demanding level of inquiry. These levels are described on pages 30 - 40.

**You will need to decide:**
- how much time LivesCan is to be allocated and over how long a period
- how time on the computer is to be allocated.
- what kinds of groups are to work together
- when pupils will begin to work individually

**If you play the game,** you will need to spend quite some time on the ballad. This will familiarise children with the story of Jesus. Almost all the references can be found easily in *The Bible Story* by Philip Turner (Oxford University Press) or you may wish to use a version such as the *Good News Bible* or *International Children's Bible*.

If children are to get the most out of LivesCan it is essential they know the story of Jesus. Learning about Christianity is one of the requirements of the National Guidelines.

### Preparation
- First read the handbook. You will find here a great deal of information to help you. There is, however, no substitute for working on the computer itself.
- Become familiar with the Bible narrative on which the ballad is based.
- Learn to find your way around the Help stacks.
- Note any problems pupils are likely to have. These are most likely to be linguistic.
- Examine the *Encounter* menu (p.79) and decide if there are any topics you might wish to have explored at certain times, for example at Christmas or Easter.
- Decide if there are any additional activities you want pupils to engage in, such as:
  - making a wall display
  - researching a related topic
  - visiting a church
  - studying the Bible
  - talking with a minister
  - attending a service
  - undertaking an environmental studies project on a graveyard.
- Discuss LivesCan with other teachers involved in the project. This may help to show its potential and clarify important issues in religious and moral education.
- Let the RE adviser know your needs, and ask for further suggestions. The address and telephone number are on page 78 of the Handbook.

### Supporting research
LivesCan is part of a research project. As such it is dependent on participating teachers doing what they can to get pupils to work through the computer package.

**There are some inherent difficulties:**
- As a teacher you are being asked to do something which is new and very different from the usual.
- The researcher is engaged in developing something new and different.
- There are problems about the contents of the package.

**You are asked to note any difficulties as they arise and, if possible, to suggest solutions.**

Already much has been learnt which will be useful to teachers in the future. The researcher thinks that LivesCan can be developed as a useful resource for primary teachers, and not just for their secondary colleagues.

There are clear advantages to getting LivesCan to work effectively: it will provide teachers with an individualised learning programme for pupils which runs largely by itself, with less preparation, easier delivery and automatic recording of attainments for assessment and reporting. This is an end worth working towards, particularly in an area of the curriculum which is known to raise so many issues and concerns.

[HB p. 3]  
[page 250]
The LivesCan Treasure Hunt

Sequence of play

A story is told in the form of a ballad. The first thing that needs to be identified by the pupils is what they think the story refers to. The second task is to try to identify what each verse of the ballad refers to in the original story. Pupils will need some help with this. The third stage is to try to solve the particular references which are marked with an asterisk *. Some of these are deliberately obscure to make the exercise more of a game. You may wish to refer to them as riddles. Once a pupil is confident about what most of the riddles refer to, he or she is then expected, fourth, to find the visual references by exploring the church. When the visual reference is found, the pupil finally describes it or draws it on paper, and identifies it by the verse number in the ballad.

Organisation

You may decide to teach from the ballad as a class activity. Perhaps this is best done by first reading all of it through to the class. After that, comments and suggestions can be invited as to what pupils think the ballad is about. Good discussion of these points would get the class off to a good start together, and clarify the story of Jesus’ life.

For more detailed work, children may work in groups or as individuals to identify what the verses and riddles refer to, or you may choose to do this as a class activity as well.

Playing the Game

The search on the computer is intended to be a game. You may choose to have pupils do this as individuals or as groups. Whichever method you use, it is necessary for the individual or group to register, so the group will have to have a name by which it can be identified. (For the purposes of the research programme it will be necessary to have a list of names of group members.) The search is timed, and there are penalties points.

Children conduct the search by pointing and clicking. Moving around is normally done by clicking on paths or aisles; clicking on the far end takes you along the path, while clicking on the near end will normally turn you round to face the other way.

There is information on the screen about how many options there are. A small circle contains a number. If it contains 1, that usually means that you can click anywhere in the picture and you will be taken to the next point. In other words, you have no option! If it contains 2 and you are on a path or aisle, that probably means that you can go either forward or backward. If you click off the path or aisle you could lose a point, (a lost click). If the number is larger than 2 and you do not see that number of pathway options, it means that there are objects in the picture that you are being invited to look at more closely.

Before clicking on objects, you need to think about what are the most likely options. If you don’t get this right you will lose points. In most pictures it is fairly obvious what you have to do, but there are some which are deliberately difficult and obscure, again to make it more of a game.

The purpose of the treasure hunt is to find all the visual references. The winner is the one who has completed this task in the least time and with fewest penalty points.

There is considerable scope for collaborative work if this game is played by groups:

- deciding where to look
- deciding how to get there
- deciding where to click
- deciding if the correct item has been found
- deciding who is to describe or draw the item

You may also wish to suggest to the class that they can create a wall display of the visual references to illustrate the ballad.

It would also be useful to discuss what formula could be arrived at for determining the relationship between time taken and accuracy, so that there is no disagreement about who has the winning score.
Instructions from pupils' booklet

Getting organised
You may work as an individual or as a member of a team. Your teacher will decide how you work. If you work as a team you will have to decide on an appropriate team name. You might like to do this after studying the ballad.

What you have to do
1. Read the ballad and decide what it is about.
2. Match verses with details of the original story.
3. Pay particular attention to the *items (starred items).
4. Use the computer to find pictures for the *items.
5. Describe in writing or draw the pictures you find.

How you use the computer
1. You first have to register as an individual or team. This will take you to Visit level and start the game for you.
2. The pictures help you to explore a church and churchyard. You move around this environment by pointing to paths and aisles and then clicking the mouse. Sometimes there are no pathways, and then you may be able to move by clicking near an edge of the picture.
3. You can look at some objects more closely by clicking on them. Not all objects, however, are available for looking at in this way.
4. There is information in a small circle on the screen which tells you how many choices you have for clicking on.

For example, if the circle contains 1, that usually means you can click anywhere in the picture and you will go to the next one. If the circle contains 2, and you are on a path or aisle, it probably means that if you click at one end of the path you will go one way, and if you click at the other end you will go the other way. If the circle contains more than 2, it probably means there is at least one object in the picture which you are being invited to look at more closely, unless there are various choices of paths.

You can usually work out how many objects there are to look at by first deciding how many options there are likely to be for moving around, and then subtracting that number from the number in the circle. You then have to decide what are the most likely objects for closer examination. There are some objects which are deliberately difficult to find, and some ways of moving which are not immediately obvious. The secret is to think before you click.

5. When you find a *item you have to draw it or describe it in writing so that it is clearly distinguishable from other similar items.

Scoring
Before clicking you need to think about what are the most likely options. If you don't get this right you will lose points. These lost points (really lost clicks) are counted up on the screen. There is also a time factor, and the number of minutes you spend searching is also shown on the screen. The winner is the person or team that finds all the *items in the shortest time and with least lost clicks.

The class has to decide on the scoring system. The lost clicks are counted for you, but how do you decide on time penalty points, and how do they relate to lost clicks? You will have to decide how many points a minute is worth. Then you could start with a large number, say 10,000, for each team and subtract time points and lost clicks from that. Or you could work out another system.

NOTE for thesis
This was an example to show how LivesCan could be a cross-curricular activity, with the opportunity here of engaging in a practical and very relevant mathematical problem. It could also show how some mathematical concerns are essentially social and moral. The failure of any class to begin to look at this as a possible activity is disappointing.
Introduction

1. The story that you're going to read
   Is true in different ways,
   It's lasted for two thousand years,
   But will it add your days?

2. The story is a puzzle deep
   And you must solve its clues
   If you are keen to be aware
   And thoughtful in your views.

3. Some people hate the story,
   They say it's full of lies,
   But making up your own mind
   Will start to make you wise.

4. Science and technology
   Have won a lot of fame,
   But how I tell this story
   Makes both of them a game.

5. You see, the world's not on the screen
   Nor on the printed page,
   The world's the life we lead today
   And share from age to age.

6. I must reveal another fact,
   I've made this tale my own
   Through electronic images
   Of wood and glass and stone.

7. And there is where you'll need to look
   To read my riddle true.
   Be warned, the sum of all you find
   Is simply your first clue.

8. I tell the story as another,
   Although it might be me.
   Again, it might be you yourself,
   The truth you'll come to see.

Teachers' Notes

1. This verse raises the question of how things can be true in more than one way. The point about "adding your days" is to wonder if "you" will keep this story alive.

2. The story is presented as a puzzle with clues.

3. The story is a controversial one. Pupils are invited to make up their own minds about its meaning and value. The issue of how you know that something is true is raised.

4. The idea of playing a game is introduced.

5. A contrast is made between the game that is played on the screen and on paper, and the experiences people have from day to day. The issue of how we can know what is real is raised.

6. The storyteller admits to taking over the story and retelling it twice removed; using electronics to communicate the story as it has been retold in material objects.

7. The reader will have to look at these images in order to make proper sense of the ballad, which is described as a riddle. It is also stated that even when the riddle is read correctly, it is still only itself a clue, to the meaning of life.

8. The storyteller pretends to be someone else telling the story. The nature of the story is such, however, that it could be about the experiences of the storyteller or anyone else. It is suggested that it is up to the reader to form a judgment about this.
The Story

9. My birth seemed just like any other,  
A child of working folk.  
But mystery mingled with the joy  
As word of Christmas broke.

10. Not on the radio nor TV  
Did the news appear.  
Still it came over the airwaves,*  
Bringing hope and fear.

11. Wise ones came with precious gifts*  
But there were only three.  
And children died and parents grieved,  
Because of them and me.

12. They fashioned me in living wood*  
And now I look ahead,  
While earls gaze heavenwards,*  
Carved in stone, and dead upon their bed.

13. I have a special gift for seeing  
A meaning to our life.  
Even as a child my teachers thought*  
My mind was like a knife.

14. It is my mind that leads me  
Down by the riverside,  
Where, bathing in the water,*  
My will is freed from pride.

15. Two kingdoms claim me as their own  
And only I can choose.  
I know wherever I belong  
My life I’m bound to lose.

16. I’m tempted in the wilderness  
To go for worldly power,  
But I recall the statues  
Of those who’ve had their hour.

Teachers’ Notes

9. A connection is made between Christmas and the storyteller’s birth. The natural joy of a successful birth is tinged with mystery. This clue and the "seemed" suggest who the story is about.

10. A birth might not be on TV because there was none at the time, or because it is just another ordinary event. Coming over the airwaves refers to the angel. This birth brought fear to Herod.

11. The wise ones are the magi. The children dying refers to the massacre said to have been ordered by Herod to get rid of the threat of a future rival.

12. A contrast is made between the organic and the mineral, the living and the dead. Jesus is portrayed as looking to the future and the earls as looking upwards, in the wrong direction.

13. More is said about the significance of Jesus. The reference is to Jesus conversing in the Temple, when the elders were astonished at his learning.

14. Jesus did not submit to baptism irrationally. Submission to a greater will is a wholly rational act.

15. The two kingdoms are those of worldly power and spiritual power. This is a choice which each person makes individually and, whatever the choice, there is a sacrifice to be made.

16. Reference is made to the temptations of Jesus in the wilderness. The statues, really effigies, of the earls are used as a reminder that the future does not lie with the spiritually dead.
17. Life in all its fullness
That's free from hate and war,
And lasts forever and a day,
Is what I'm looking for.

18. I want to turn things upside down
And make blind people see
That coming back to life again
Makes sense for them and me.

19. I know this is a mystery,
But you should learn it too,
That hope is always open
For the hopeless to pursue.

20. The powerful are so wealthy
Because they are so few.
They lead their life at our expense
Controlling what we do.

21. Let them take the money then,
My riches are not here.
Money doesn't conquer death,
Which even tyrants fear.

22. A vision of the Lord of life
Comes flooding through my mind,
A word spring tumbles from my lips
Refreshing humankind.

23. From many backgrounds they have come
To drink this cool, sweet water.
It makes no difference who they are,
Soldier's son or teacher's daughter.

24. Twelve I pick to go with me
Upon the road I've chosen
Even though the heart of one I know
Will soon be cold and frozen.

17. The theme of the spiritually fulfilled life is continued. The suggestion is that earthly power brutalises and has no eternal quality.

18. To believe in spiritual power is to want to turn the world upside down. Spiritual power is a paradox, and this is expressed in the idea of making blind people see. Spiritual awakening is like coming back to life.

19. The difficulty of understanding this teaching is acknowledged. A further illustration of the paradox of spiritual power is offered; it belongs to everyone, even those who don't have it.

20. A contrast is made with worldly power, which is about acquiring rather than giving. Unlike worldly resources, there is no limit to spiritual growth, which never diminishes other people.

21. The question of what is of ultimate value is raised. Jesus rejects worldly power because it is mortal. There is a suggestion that it is the fear of death which drives people to power.

22. Jesus opts for the full life, which is symbolised as water. The idea of the full life is the basis of the teaching of Jesus.

23. The full life that Jesus has in mind is not restricted to a few people. It is open to all, and those who opt for it are refreshed.

24. The twelve are the first disciples. An early reference is made to Judas Iscariot who becomes disillusioned and betrays Jesus.
25. I meet a woman at a well. Who knows she’s not mistaken. She sees at once from what I say the world is not forsaken.

26. Five people struggle with the deep. Fearing they are lost. Yet when I walk to meet them you'd think they'd seen a ghost.

27. "Be not afraid," I tell them. "It's only me you see." So taking me on board they find they're where they want to be.

28. And yet some words I speak are hard for them to take on board: To "love your enemies as friends" means giving up your sword.

29. I also walk across the land to show them who I am, as one who holds them safely like a shepherd with a lamb.

30. But closer still I have to come if we are to be free. So shepherd now becomes the lamb to pay the ransom fee.

31. A meal is set for us to eat, the last that I shall see. "When eating bread and drinking wine," I say, "Remember me."

32. I tell them I shall be betrayed, the traitor I can name, but everyone protests aloud that none of them's to blame.

25. To illustrate the point, reference is made to Jesus meeting the Samaritan woman, where discussion centres on water. She recognises the power of spiritual water.

26. The theme of water continues. Setting out on the spiritual deep can be a terrifying experience. Jesus is able to walk over the spiritual deep without being drawn down.

27. The disciples' fear is overcome, and by taking Jesus on board they find that they are immediately at their destination. This is a metaphor for having arrived spiritually.

28. It is not easy to shake off the thoughts and practices of the earthly world. Some of the teaching of Jesus is extremely hard to follow.

29. The confidence which Jesus brought his disciples in the boat is spread across the land through his teaching. The metaphor of the good shepherd who dies for his sheep is introduced.

30. Jesus recognises that teaching by words is not enough, and that beliefs need to be put into action. Jesus prepares to pay the price of the freedom to do what you believe. The good shepherd becomes the sacrificial lamb.

31. The last supper Jesus shared with his disciples is linked to the Feast of Passover, when a lamb is killed. The bread and wine of this meal become a memorial of Jesus.

32. The immediate cause of Jesus' death is identified as betrayal by a close disciple. This illustrates how hard the struggle is between worldly power and spiritual fulfilment.
33. My words come back to test me,
They do for everyone.
For everything you say returns
To judge what you have done.

34. And when I need my friends the most
They cannot stay awake.*
And all my years of teaching make
A promise I can't break.

35. I do not want to do this now*
Yet know I really must,
For if I don't go through with it
Who is there left to trust?

36. Security forces are alerted*
And, so they will not miss,
The traitor says, "Arrest the one
To whom I give a kiss."

37. So I'm taken and I'm beaten
By those who hate my claims,
Which undermine the mighty
As they play their power games.

38. They're out to break my story,
But hard as they may try
I am compelled to tell the truth,
Although they say I'll die.

39. So soldiers take me to my death*
Upon a wooden frame.
The end is slow and full of pain,
A sign of worldly shame.

40. I wonder now if I've been wrong
And made a big mistake.
But then I see that death has struck
The whispering, tempting snake.*

33. The full realisation of his teaching about the cost to be paid for rejecting worldly power hits Jesus. Integrity requires that you act as you believe, and you are judged by what you say you believe.

34. The fear of accepting the consequences of your actions is not diminished because you have opted for what you believe is right and best. Jesus was fully human, and he knew no one else could take his place.

35. Jesus could not go back on his word. Those who had believed his teachings could not now find the teacher deficient. This would have been to destroy any credibility in spiritual power.

36. The security forces are the most obvious manifestation of worldly power, and the supreme token of earthly love, the kiss, becomes a betrayal of another kind of love.

37. The response of worldly power to any threat is to use force and inflict pain. Jesus presented a threat to established power bases, for those who follow the way of the exalted spirit are not bound by worldly authority.

38. In spite of emotional and physical suffering, Jesus had the moral strength to stick to what he believed was true.

39. The outcome is inevitable.

40. The power of Jesus' actions lies not in his knowing that "it would come all right in the end" but that it was entirely a matter of trust. The snake, from the Garden of Eden story, is a symbol of corrupting worldly power.
41. The kingdom that I chose from two
Has triumphed at the last.
The suffering and the hardship
Are behind me in the past.

42. My story hasn't ended yet
For you can meet me still,
Walking on the roadway*
Or comforting the ill.

43. The pain that you may suffer
And the grief that you will bear
Are easier in my kingdom,
Now that I've been there.

---

41. However terrible his suffering may have been,
it belonged to the world and was therefore bound
to end. Jesus had used his death as a way of
exalting the power of the human spirit.

42. The spirit which flowed through Jesus did not
end with his earthly existence, and it is still to be
found. The meeting on the road to Emmaus
exemplifies this.

43. Jesus is saying that those who want to follow
his choice of the spiritual kingdom will find it
easier to put up with sacrifice and death because
someone has been there before them.
Answers to riddles and puzzles

The Ballad

Initial numbers refer to the verse of the ballad in which a riddle appears. A Bible reference is also given where relevant.

10. The angel announcing the birth of Jesus. Window in north wall of nave.

11. The magi visited Jesus. The chapel of the three kings (Lauderdale Aisle) has a picture of this visit. There are also three carved figures representing the wise men on the wall of Lauderdale Aisle.
Bible: Matthew 2: 1-18

12. There is a carved wooden figure of the infant Jesus in the Lauderdale Aisle. Also alabaster prostrate figures of earls.

13. As a boy, Jesus went with his parents to Jerusalem and visited the Temple. Religious teachers were amazed at his insight. There is a picture of this event at the foot of the window showing the Crucifixion in the south transept. It is also depicted in the memorial window to John Brown.
Bible: Luke 2: 41-52

14. Jesus is baptised. This is shown at the foot of the Crucifixion window in the south transept.
Bible: Mark 1: 1-13

25. Jesus met a Samaritan woman at a well. This is depicted in the John Brown window in the south aisle wall, and also in a window in the wall of the north aisle.
Bible: John 4: 1-30

26. The disciples are crossing the Sea of Galilee when Jesus comes to them across the water. Great west window.
Bible: John 6: 15-21

27. At the foot of the west window there is a scroll which reads "Be not afraid".
Bible: John 6: 15-21

29. Jesus is sometimes called the Good Shepherd. This is depicted in a window on the wall of the north aisle.
Bible: John 10: 1-21

30. At the Last Supper, Jesus asks to be remembered. There is a picture of Jesus with the bread and cup in the Bible on John Brown's pulpit.
Bible: Luke 22: 14-20

34. When Jesus is praying in Gethsemane his disciples fall asleep. Window, north aisle wall.

35. Jesus doesn't want to go through with his ordeal but he submits his will to God. The Agony of Jesus in Gethsemane is in a window on north aisle wall.
Bible: Mark 14: 35-36

36. Jesus is betrayed by one of his disciples who tells the Temple guard where he can be found. Window on north aisle wall.
Bible: John 18: 1-3

39. Jesus is crucified. The Crucifixion is the main window on south wall of south transept.
Bible: Mark 15: 21-37

40. Jesus is tempted to believe that God has left him alone to die and cries out on the cross. The snake is the serpent that tempted Eve, and it can be found at the foot of the window of the Crucifixion. Artistic licence.

Conundrums

1. Jane Welsh Carlyle

2. Gargoyle (water spout) on parapet of south choir wall

3. Cross

4. John Brown

5. Stone figure behind parapet on south aisle wall

6. Eagle lectern carrying Bible

7. Pilgrim's scallop shell carved on pillar inside west end of nave.

8. Insignia carved in stone above west door showing crown of thorns surrounding heart and pierced hands and feet.

Place names

These are numbered going from west to east on Mercator map. Pupils may find Queen's County and Sarwekai. Both are now historical placenames, but Sarwekai has been included as Sarawak.

1. Denver, Colorado
2. North Carolina
3. Westport, Ireland
4. Santiago de Compostella
5. London
6. Somme
7. Aubigny-sur-Nère
8. Oberammergau
9. Mount Athos
10. Ladysmith, South Africa
11. St Petersburg (Leningrad)
12. Smolensk
13. Sudan
14. Blantyre, Malawi
15. Bombay
16. Lahore
17. Madras
18. Benares
19. Rangoon
20. Sarwekai (Sarawak)
How LivesCan Has Been Built

HyperCard®

LivesCan comprises a number of HyperCard stacks, and picture and sound resources.

HyperCard is the name of a software application created for Apple Computers. It operates in a user friendly way. It has Card in its name because it is like having stacks of catalogue cards, and it has Hyper because the cards can do amazing things like show you pictures, let you hear sounds, and take you to other cards and other stacks.

The HyperCard application icon looks like this on your Hard Disk. You will need HyperCard 2.1 this to check you have enough memory for using LivesCan. See Note in middle column of page 2.

A stack looks similar, but it does not show a hand.

However, a special icon has been created for the LivesCan stack.

Other stacks have been created for LivesCan, but you should not open them, because they will get you into a mess. All these stacks have been installed on your hard disk in a folder:

Resources

The sounds and pictures are on the CD-ROM. The pictures consist of some 570 photographs and 1400 graphic drawings and paintings. All the photographs were taken by the author, converted to video and digitised on the computer. The graphics were all done by the author on the computer.

Most of the graphics contain text; this was the only standard way colour could be introduced to HyperCard for general use. It was thought children would respond more readily to colour than monochrome.

Sounds were first tape recorded by the author then digitised and compressed using the standard hardware and software installed in a Macintosh LC. These sounds became stacks and were copied to the CD-ROM along with the picture files.

Using the machine

Assume all the hardware is correctly connected and the software has been correctly installed.

1. Switch on the CD-ROM player first.

2. Switch on the computer and monitor.

3. When the Hard Disk icon appears on the screen, insert caddy carrying CD-ROM into CD-ROM player.

4. When the LivesCan CD-ROM icon appears on the screen, double-click on Hard Disk icon. The name of the Hard Disk will vary from machine to machine.

5. Double-click on the LivesCan Project folder. This should open up this window:

   ![LivesCan Project Folder]

   This is the only stack in this folder that should be opened. The other six stacks are deliberately hidden to discourage children from interfering with them.

6. Double-click on LivesCan icon. This will take you to the screen shown on page 1 of this handbook.

Acknowledgment

The advice to use HyperCard came from Ian Glen, Lothian Region’s Adviser for Information Technology and Educational Computing. In spite of being extraordinarily busy, Ian gave freely of his own time for practical help with the inescapable technical problems of development in this field, and moral support and affectionate encouragement when the author just wanted to die.
The LivesCan Stack

The LivesCan stack is the one you come to first when you open the programme.

Don't worry if you are not sure what to do. The programme has been designed to give you reminders to make you feel more confident. These reminders appear in the form of dialogue boxes. Sometimes they offer you a choice, but normally they explain why something you tried to do hasn't happened. You have to click in a box inside the dialogue box before you can go on. They are obviously called dialogue boxes because they make a statement to which you have to give a response.

This is the nerve centre of LivesCan.

- you register here
- you create your own file
- you log on here
- you create a password
- you choose a work level
- you come here for help
- you let it look after you

• you register here
• you create your own file
• you log on here
• you create a password
• you choose a work level
• you come here for help
• you let it look after you

It is a very large stack.

- it has 130 cards
- it carries a lot of text

Because it is so big, it takes a little time to compress at the end of each occasion you work on LivesCan.

It has been designed to be as simple as possible to use.

If you try to use keyboard or menu commands to take you somewhere else, the following dialogue box will appear:

You must let the mouse lead you, because only the mouse knows all the safe ways of getting around. The mouse is in charge.

If you try to change the type style this will appear:

You cannot change the style in this stack.

If you try to change the font this will appear:

You cannot change the font in this stack.

If you try to delete any of the cards this appears:

Cards in this stack cannot be deleted.

All you need to do is:

- use the mouse to point and click
- use the keyboard to type

All other keyboard commands have been disabled along with a number of menu items. This should reduce problems in use.
Click here if you want to find out more about LivesCan.

Logging Screen
This is the screen you come to after the title screen. This is where you log on.

If you have registered, all you do is type your name using the keyboard and then click in the mousebox in the bottom right hand corner.

If you type an unregistered name you will get dialogue box 1. If you have added unnecessary spaces you will get dialogue box 2.

If you have a password, you will get dialogue box 3 after you have entered your name and clicked the mousebox. Click OK and the cursor will automatically flash at the right place, above the mousebox. Type your password and click the mousebox again.

If you make a mistake typing the password you will get dialogue box 4.

There is no file with this name. 1 - Have you spelt your name exactly as you registered it? 2 - Have you registered yet? 3 - Do you want to find out more first?

1 Try again 2 Register 3 Explore

You have added unnecessary spaces to your name. The blackbird finds this confusing. Please type your name again. Make sure you have no extra spaces at the beginning or end, or in the middle. Thanks.

OK

You must enter the correct password.

OK

This is not the correct password. Try again.

OK
Accept this invitation to LivesCan
and you will be able to make your own decisions
and express your own point of view.

Tell me more ...

Invitation Screen

Anyone clicking on the circle on the logging screen will come to this card. It invites the user to explore LivesCan where they will have an opportunity to make choices and express opinions.

This card would normally be seen only by those who have not yet registered, or if they have not logged on.

Clicking in the mouse-box takes you to a card from where you can find out everything there is to know about LivesCan.

A NOTE ON SPEED

When you have clicked, there may be a short delay before anything happens. There are two interconnected reasons for this. When you select a new card the computer needs to get the picture for it from the CD-ROM. Each picture is made up of a lot of information. The transfer of this information from the CD-ROM is relatively slow, and that is the first reason for the delay. A second reason may be that you may need to assign more memory to HyperCard, or there is another application or a window open which is slowing down the transfer of information.

Try to be patient.

The computer is actually transferring several million instructions per second. LivesCan is a sophisticated programme processing and recording masses of data.
LivesCan Menu

This is the user's first introduction to the general menu of what LivesCan has to offer.

Throughout this stack you will see this general menu on the left side of the screen.

There are always seven boxes, and they are always in the same order. The box at the bottom is different from those above, which contain the headings for the main sections in the stack. The box which contains QUIT will take you back to the Title Screen unless you have logged on. In this case you will get the dialogue box shown at the top of the next column.

Although you will come across many menus in LivesCan, this is the only one which is called the LivesCan Menu.

Before you can quit, you must first go back to the level where you were working.

Stay here  LEVEL

This gives you the option of staying where you are in case you didn't mean to click QUIT. If you click LEVEL you will return to where you were working on one of the four levels of LivesCan.

If you have logged on you can only quit from the level where you are working.

LivesCan sections explained

<table>
<thead>
<tr>
<th>Purpose</th>
<th>page 21</th>
<th>Skills</th>
<th>page 47</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure</td>
<td>page 25</td>
<td>Word list</td>
<td>page 48</td>
</tr>
<tr>
<td>Security</td>
<td>page 45</td>
<td>Information</td>
<td>page 57</td>
</tr>
</tbody>
</table>

more information ..
More Information

This screen summarises the user's relationship with LivesCan. It is important to emphasise that the choices and views expressed by users should be kept confidential unless they themselves choose to make them known.

The invitation to explore LivesCan without being committed to it is repeated.

If the decision to register is taken then you click in the bottom right mousebox.

The other mousebox takes you to the previous card. You can also explore using the LivesCan menu.

Why the blackbird?

This member of the thrush family has the most glorious song. It symbolises very well the potential suggested in the title of the project, Lives Can.

Religious and Moral Education is concerned not only with the potential of individual learners but also with the songs humankind has sung throughout time. Song has been used as a metaphor for the beauty of the exalted language of religion. Like religion, the blackbird does not sing so well all the year round.

The winter scene with a weak sun behind bare trees, when the blackbird utters only alarm calls seems to represent our times. We know from experience, however, that the potentialities of sun, trees and bird will again be realised in the summer. The message of the entire scene is intended to be one of hope.
You register below this card.

First type your full name.
Then press the key called "tab".
Then type your date of birth.
Press "tab" again.
Type the name of your school.

<table>
<thead>
<tr>
<th>First name and surname</th>
<th>&quot;tab&quot;</th>
<th>Date of birth</th>
<th>&quot;tab&quot;</th>
<th>School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bruce Wallace</td>
<td></td>
<td>12/3/45</td>
<td></td>
<td>This Primary School</td>
</tr>
</tbody>
</table>

If you make a mistake click here to start again.

If everything is correct click here to register.

Registration Screen
You register here.

BUT the instructions are incorrect.

After LivesCan had been in use in school it became apparent that it would be necessary to disable the keyboard to prevent problems elsewhere in the programme. Consequently the tab key does not work.

Instead of using the tab move the pointer to the white space below "Date of birth" and click, and then do the same for "School". When the cursor flashes you can start typing in the information.

The dialogue boxes also include one reminding you to enter the name of your school.
Purpose Menu

This section tells you about the purpose behind LivesCan. It is of more interest to teachers than pupils. You may want to know what this project is for and want to explain it to parents who may ask.

You will note on this screen the pointer changes from an arrow over the coloured menu panel to a pointing finger. This is called the browse tool. It does the same as the arrow pointer in pictures.

You can print the contents of the card by clicking the Print box.

On the card are three lines with a mouse beside each. This is a visual reminder that clicking on a line will take you to a card dealing with that aspect of LivesCan's purpose. This is the Purpose Menu as opposed to the LivesCan Menu, which is on the panel to the left.

You can choose an item from the LivesCan Menu whenever it is showing.

The LivesCan Menu panel no longer shows Purpose but LEVEL. As you have now selected the Purpose section there is no need to show it.

Clicking on LEVEL will take you back to where you were working or to the LivesCan Menu card. If you have not logged on and click on this card you will be presented with the dialogue box shown at the foot of the page.

You can only go to a level if you have logged on to work there.
**Purpose**

To explore religion in an open way means suspending your own opinions and prejudices. It means the explorer has to be open. Openness is a critically important feature of any inquiry that claims to be trying to find the truth.

Being open means that the explorer has to be prepared to exercise her or his skills in critical thinking.

LivesCan invites openness from the inquirer by presenting a factual record of some of the events in a religious tradition.

LivesCan challenges inquirers to think critically about what they see, and to extend the range of their reflective questioning.

---

**Purpose 1**

When you were at the Purpose Menu, if you had clicked on the first mouse or line, the one shown with the pointing finger, you would have come to this screen.

Here there is text which deals with the LivesCan purpose of exploring religion in an open way.

All the text dealing with this chosen aspect is not showing, and to read more you should click on the button which says More.

When the text for this choice is finished, the More button disappears. You can then choose to Return to start of the Purpose section (the Purpose Menu) or select from the LiveCan Menu. There are nine cards in this section.

**The contents of the remaining Purpose cards are set out below and on the following page.**

The steps LivesCan encourages inquirers to take towards greater skill in critical thinking are:

- **in observation**
  - noticing and mapping what they see
  - thinking about what they see
  - remembering what they see

- **in inquiry**
  - applying questions
  - researching and interpreting evidence

- **in evaluation**
  - making and justifying choices
  - expressing a point of view
Learning from religious traditions is possible if they are approached with openness.

Religious traditions are the accumulation of human experiences of:

reflecting upon the experience of life
trying to make sense of life
trying to improve the quality of life
trying to realise human potentialities for good

These are the kinds of activities which all thoughtful people engage in, whether or not they think they are religious.

Religions are storehouses of human wisdom to which LivesCan believes everyone should have access.

Examining a religion does not mean that you have to adopt what you find. It doesn't even mean that you have to agree with it or find it acceptable.

But it is worth listening to what others think is valuable even if you disagree with them, because it should help you to define better your own thoughts and values.

If you enter into a dialogue about worldviews you will need to have strong arguments and convincing evidence. Don't expect religions to retreat before your arguments and opinions. They are just as free to examine and challenge your world view as you are to examine and challenge theirs!

LivesCan tries to help you to develop your own world view by a process of investigating other worldviews to see where their strengths and weaknesses lie.

Where did this religious world view come from?
How is it expressed?
Does it take account of the whole of human experience?
How adequate is it?
Does it help me in forming my own world view?
Courses in religious and moral education are required by law for all pupils in Scottish public schools. These courses are expected to meet specific criteria:

Scotland is to be seen as a society of many different beliefs and attitudes, although Christianity has been particularly significant in shaping Scottish history and life today.

Discussion of religious and moral issues should be open.

Pupils should be encouraged to express and develop their own views, values and attitudes.

Pupils should investigate and understand the questions and answers that religions can offer about the nature and meaning of life.

These criteria call for careful and reasonably objective treatment by Scottish teachers. LivesCan sets out to provide them with this.

LivesCan sets out to provide a resource which will cater for a wide age range, from 10 years upward. It is essentially an interactive self-study course, but it does provide many opportunities for discussion and other social interaction.

The content of the course is intended to allow children to meet the national attainment targets set for this curricular area.

If the aims of LivesCan are realised, there should be considerable benefit to pupils in their work in other curricular areas.

LivesCan is concentrating its attention on extending the range and depth of children's questioning in order to help them form more comprehensive, coherent and consistent world views. This process clearly requires development of skills of inquiry, research, analysis, interpretation, problem solving and evaluation, all of which are also required in other curricular areas.
Structure menu

Choose a topic by clicking on it

- Using LIVESCAN
- VISIT level described
- INFORM level described
- ENCOUNTER level described
- WORRY level described
- Choosing a LEVEL
- SUPPORT provided with programme

Structure Menu

This is the card you come to if you click on Structure in the LivesCan Menu.

The first item takes you to some important information about using LivesCan. This information is printed on pages 26 - 29.

The four LivesCan levels are described and explained separately. The information for each level is reprinted as follows:

Visit pp 30 - 31
Inform p 32
Encounter pp 32 - 34
Worry pp 34 - 40

If at any time you want to change from one level to another, you must either come to this card and choose Changing level or go to Information Menu and make a similar choice there. In either case you will be taken to the Change level card (pages 67 - 68).

You might consider that changing level should be a lot simpler than it seems to be, but the intention is to discourage young users from jumping about from level to level.

The details of Support provided with programme are printed on pages 40 - 44. A brief account of each of the main LivesCan Menu items is also given in this section and printed on pages 41 - 43.

The structure of LivesCan...
...is intended to provide a study of Christianity which will encourage users to develop in a progressive way those basic skills needed for the formation of their own world views. This is a new and complex idea, which is why the structure is in levels, and why there is so much support for both teachers and learners.

This research project sets out to ascertain how effective this mode of learning is. It recognises that LivesCan can be extended over a longer and older age span than that of the present research subjects.

HB p. 25 page 272
Using LivesCan

Menu

Above is the card which you come to if you click on the first item of the Structure Menu. It provides you with a menu of all the items in this section.

You will notice that Structure in the LivesCan Menu has changed to Menu. This indicates that you are, of course, in the Structure section, and clicking in this box will take you back to the section menu.

The contents of the remaining Using LivesCan cards is set out below and on the following three pages.

***VERY IMPORTANT NOTICE***

LivesCan is part of a research project which is collecting information which could be of a personally sensitive nature. All reasonable steps have been taken to preserve confidentiality, but the cooperation of teaching staff is required to ensure that personal files remain secure.

Computers attract different kinds of unwelcome attention. They also contain sensitive information. Copying of any part of LivesCan is not allowed. It is vital for us all to try to protect one another from the various abuses that are associated with computers.

*PLEASE FOLLOW SECURITY PROCEDURES*

Clicking in the More box takes you to the next card without having to go back to the Using LivesCan menu.

[HB p.26] page 273
The issue of trust is a particularly important one for Religious and Moral Education, and for LivesCan. More is said about this on page 45 under Fostering Attitudes.

LivesCan Users

Only children whose parents have given their permission may become LivesCan users.

Teaching staff in the pilot schools are also, of course, free to open their own personal files. Any such adult users are protected by the same standards of confidentiality as the children. Adult files are not required to be used in the research data and will be destroyed at the end of the trial.

Schools are asked not to permit other casual use.

Preserving Confidentiality

Only pupils whose parents gave their permission may take part in the LivesCan project. This permission was given on the understanding that no information will be made public which could identify a child.

Much of what happens in schools is confidential in character, and professional trust is high.

*But it must be stressed that copying any part of this programme is strictly forbidden.* Failure to comply with this instruction could lead to parents pressing legal charges.

Personal Files

All you ever see of your personal file is the title card with your name on it. This is to prevent anyone else in school seeing it.

Personal files contain two kinds of information:

what you have put into it.
This includes your name, date of birth and school and anything you may have written at Encounter or Worry levels.

a record of what you have done.
This includes the dates and times you have spent on the programme, pictures you have looked at, and any choices you made at Encounter or Worry levels.
LivesCan Information

The information collected from the LivesCan project will be used to write a research thesis at Edinburgh University on Computer Aided Religious Education in a Secular Context.

Information will be transferred to a database where it will be subjected to statistical analysis. This database will be made secure and once compiled will remove any personal details such as names.

None of the information used will identify individual children, individual teachers or individual schools. Schools and parents of participating pupils will be given a report of the general findings.

Beginning to use LivesCan

To use LivesCan you must first register as a user. Registering opens a personal file in your name.

When you register you are also logging on.

When you register you are taken immediately to the start of Visit, which is a game involving a treasure hunt. To take part in the treasure hunt you need to have the pupil's booklet which contains a ballad with clues to what you have to look for in Visit level. The treasure hunt is a way of familiarising the user with a church environment while providing some fun.

Taking part in the Treasure Hunt

You can find details about how to use the computer by selecting VISIT level described in Structure Menu. The information needed for the game is stored in your personal file each time you QUIT.

Missing out the Treasure Hunt

You can miss out the treasure hunt and go to Inform level. You do this by selecting Choosing a LEVEL in the Structure Menu. Once you choose another level you will not be able to go back to Visit level. You find out what you can do at Inform level by selecting INFORM level described in the Structure Menu.
Finishing your turn on LivesCan

When you have finished working on LivesCan, you click on QUIT. This puts information into your personal file so that the next time you log on you will be able to carry on where you left off.

Going back for another turn

When you want to return to where you left off you have to log on. You do this by typing your name in the place provided. You then click where it tells you and this takes you to your personal file to get the information stored there. You are immediately taken back to where you last worked and all the relevant information is put into place.

Changing level

When your teacher decides that you can change level, you should change from Visit to Inform, from Inform to Encounter, and from Encounter to Worry.

Become familiar with the level you are moving to by selecting it first in the Structure Menu.

Then go to the card where you can change level. You must have logged on before you can change level.

Changing level takes you to the Menu card for the level you have selected, and you make your choice there about what to do next.

Getting Help

You can get help at any time while you are working. Details of the kind of help available are given in SUPPORT provided with programme in the Structure Menu.
Structure
Visit Menu
This is the card you come to when you choose Visit level described in the Structure Menu. The other cards are printed here with their text but not supporting graphics.

There is a severe limit to how much you can learn about this level from this representation of it on paper. It does depend on the kind of interactivity which cannot be experienced on paper.

The graphics are also too complicated for this publication, and the explanations of the various screen displays on this and the other three LivesCan levels depend on pointing to what you want to know about and clicking on it. This brings an explanation to the screen. There is no substitute for trying out the computer itself.

With the exception of the screen display cards, all the cards explaining the structure of LivesCan are printed here, beginning with the card you go to if you choose the first line of Structure Visit Menu.

Moving around the place.
There are no moving pictures so you have to make your own way around.

You do this by using the mouse to point to where you want to go, and then you click.

There are some simple rules:
If there is a path or corridor you are expected to go along it. Point and click at the end of the path you want to go along. There are usually two ends.
If there is no obvious pathway, point and click near the edge of the picture, at the right if you want to turn right, and at the left if you want to turn left.

Sometimes you can look up by pointing and clicking near the top edge. In one or two places you can turn around by pointing and clicking near the bottom edge.

If you want to retrace your steps, you should use the "Go Back" mousebox.

There are one or two moves which are deliberately puzzling. The secret is to think about what it is you want to do, and do that!

Looking more closely at objects along the way is possible by pointing and clicking on them.

Not everything can be examined this way, but you get a clue to how many objects you might be able to see from the number displayed in the circle.

Remember to think about what you're looking at before you click.

One of the important skills you are developing is observation. That means noticing what you see.

The rules for the LivesCan Treasure Hunt
How to play the game is set out in the pupil booklet which contains the ballad. The game cannot be played without the booklet.

LivesCan also provides several riddles.
In the pupil booklet there are two pages of riddles. These riddles refer to objects in pictures. You have to find the answers to these riddles.

Note the names of any places you find.
LivesCan also provides a map which links the place to other parts of the world and you have to fill in the missing names. As you find the names of places, note them in your booklet and follow the instructions there.
Note
This is the card you come to if you choose Inform level described in the Structure Menu.

Inform Level
This level uses the same picture material as Visit level. You move around using the same technique.

Each picture has a caption which you can read or listen to. This is why this level is called Inform.

The Inform menu is a plan of St Mary's and its churchyard. From it you can choose where you go.

There is no game associated with this level, although some of the puzzles in the pupil booklet can only be solved by using Inform level.

Click here to examine the Inform screen.

Note
This is the card you come to if you choose Encounter level described in the Structure Menu.

The screen displays are not shown in the Handbook because they are graphically too complicated.

Encounter Level
This level is called Encounter because you meet, or encounter, the people who use St Mary's church. It is organised quite differently from Visit and Inform.

For more information, click a line below.

What you can do at Encounter level
What screen display 1 looks like
What screen display 2 looks like
What screen display 3 looks like

Encounter Level
What you can do
All the people and events in Encounter level are shown in pictures with captions. Some events have a number of pictures associated with them.

You select a topic from the Encounter menu card. This takes you to a title card for the topic which gives you some general information about it.

You then move on to a picture and caption. This is the point at which the interactive property of LivesCan begins to help you develop your WorldView.
The purpose of Encounter is to provide you with the opportunity to follow three lines of inquiry. You are invited to consider:

- how people are affected
- what the circumstances are
- what people do

These have to do with Being, Context and Doing. These are the basic ideas around which LivesCan is constructed. They are interrelated, and together provide the basis for considering every aspect of human experience.

Lines of inquiry are selected by clicking on icons which have been given distinctive shapes.

You click on one of these shapes to trigger a line of inquiry into the picture which is showing at the time. This presents you with some possibilities about the picture in relation to how it affects people, what their circumstances are or what they are doing.

You have to choose one of the options presented to you. After you have made your selection you are then given the opportunity to write about your choice. You don’t have to write anything, but you should always take the chance to practise giving reasons for your choices. Being able to do this is increasingly important as you grow into adulthood and have to make more and more decisions which affect you, your circumstances and what you do.

Justifying your decisions, or choices, also becomes increasingly important as you progress with your studies in school and beyond.

You can print anything you write at Encounter level.

More
You can find out more about how Encounter level works by looking at the three examples of how the screen appears at different stages of the process.

There is also help available while you work:

You can go for help by clicking on the Help button. This gives you access to information that may help you with problems, things you don’t understand or words whose meaning you don’t know.

If you try to do something which isn’t possible, you may get a message saying why you can’t do this.

Use SUPPORT provided with programme in Structure Menu for more details of help available.

Note

This is the card you come to if you choose Worry level described in Structure Menu.

WORRY LEVEL

At Worry level, the LivesCan user is introduced to a range of detailed inquiries that are needed for forming a satisfactory WorldView. This is a complex task, which is why this level has been called Worry.

For more information, click on a line below

* What you can do at Worry level
* What screen display 1 looks like
* What screen display 2 looks like
* What screen display 3 looks like

What you can do at Worry level

At Worry level, you work much the same way as at Encounter level. There are fewer items to investigate, and each item is a single picture. The main difference is that each of the three lines of inquiry is enlarged to show five strands, so there are in fact fifteen kinds of question you can ask. Your investigation can therefore be more detailed and precise.

The Worry Menu card shows small versions of the pictures you can inquire into more closely. There are no captions to the pictures, and no text with them. After all, life doesn’t come with a set of instructions.

You start a line of inquiry by clicking on an icon.
There are fifteen icons, and you can see from their shapes that they are developed from the three lines of inquiry at Encounter level.

To find out more about an icon, click on it.

Please note:
The descriptions offered here are more suitable for teachers than for pupils.

Worry level illustrates factors involved in forming a WorldView:
- awareness of the range of human experience
- the interrelatedness of being, context and action
- commitment to investigation
- reflective thinking
- making decisions
- commitment to action
- accepting responsibility for decisions

Being Physical

Consider how people are affected physically.

The body is the most obvious sign of a person's presence. It is because of the body that life as we know it is possible, and without a body a person is said not to exist.

Your body, however, can only be in one place at any one time, and because of its biological structure it only lasts for a limited time and ends with death.

Biological continuity of parents may be said to continue in their children.
Being Emotional

Consider how people are affected emotionally.

Emotional responses are usually called feelings. Feelings can be immediate and basic, such as surprise, fear, desire and anger. Feelings can grow, however, like resentment, affection, trust and respect.

Feelings are your responses to stimuli from outside. They can change quickly as contexts change or as your mind takes control. Uncontrolled emotions can cause severe difficulties for yourself and for other people, even to the point of destruction.
Being Spiritual

Consider how people are affected spiritually.

The human spirit is the power which keeps you whole when other forces threaten to break in and undermine your existence. The human spirit is often thought to be independent of the body because it can lead people to rise above, or transcend, pain. Pain is what you experience when aspects of your being are attacked.

Religions have a particular interest in the human spirit because of its transcendent quality. They consider that the spirit is the bridge to aspects of reality which are above, or transcend, even Creation.

Context Heredity

Consider the context of heredity.

Heredity is the context which contains all those features of the person which are decided before birth. The symbol used for this context is the unborn baby.

It is this context which determines whether you are a boy or a girl, what colour your eyes are, how able you will be physically and mentally, and how well your body will cope with disease. It defines your limits and your possibilities for development.

This context makes you unique before you are born.

Context People

Consider the context of people.

People form the most significant context for each person. It is people who are responsible for your hereditary, cultural and political contexts. It is people who help you to understand yourself and the world you inhabit.

People are also particularly interesting because they share the same human nature as yourself. You are part of other people's contexts.

Because people are social animals, the human context is essential for personal development.
Context Culture

Consider the context of culture.

Culture is the way people organise their lives. This context includes the language you speak, the way you dress, the kind of home you live in, what you do for entertainment, the way you prepare food and the way you travel from place to place.

Culture also includes rules about how people should relate to each other and how they should treat the universe they inhabit. These rules are often part of religious, social and political systems.

Context Politics

Consider the context of politics.

Politics is concerned with how power is used to manage society. It includes defence of vital interests such as security, the economy and the welfare of members of society. There are different political systems. Political power can be in the control of one person or a few, or be the responsibility of all members of society.

Politics reminds us of how difficult it is to survive and progress on this planet, but the only way to achieve a better world for us all is through political development.

Context Universe

Consider the context of the universe.

The physical universe, which is symbolised here by the world, is often referred to as Creation.

Creation is the universe of energy, matter, space and time. It is the natural world we inhabit, and upon which all life depends. Creation is so important that much effort goes into investigating it and finding out the rules which operate throughout it.
Doing Survive

Consider the will to survive.

People are programmed to survive. Heredity or instinct leads people to take basic actions which will allow them to function as human beings. Without food and water, life cannot be supported, so the head of wheat is used here to symbolise the will to survive.

Some bodily systems are automatic, like breathing, maintaining the right temperature, healing wounds and fighting disease. Survival can mean defending yourself from human and natural forces which threaten life. But simply keeping alive is not enough.

Doing Conform

Consider the will to conform.

In order to lead an ordered existence, indeed in order to survive, you are required to conform to certain rules. There are natural laws which demand conformity. You must eat and drink and remain in an environment which does not threaten life. You cannot, without artificial help, defy gravity.

There are social laws and rules which require your conformity. Breaking some of these, like the Highway Code, can be fatal, while others can lose you friends or land you in jail.

Doing Investigate

Consider the will to investigate.

When people ask questions, they have begun to investigate. Investigation is the most important activity for improving the quality of life for others as well as ourselves. All aspects of life are worth investigating.

As a consequence of investigation, our understanding of the world and ourselves can change. This can change contexts and lead to a change in some laws and rules which have required our conformity.

When you investigate you recreate yourself.
Doing Create

Consider the will to create.

The ability to create is the ability to produce or make something which did not exist before. A product or creation usually comes after investigation or thought, but sometimes it just seems to happen. Having thoughts or carrying out investigations is also being creative.

When you create something, you change the world and you also change yourself. Everyone has the power to create, and the challenge you face is to create in such a way that the world is changed for the better.

Doing Control

Consider the will to control.

To control is to limit freedom of action. Being in control means having power over people and events, and being able to make things happen as you choose.

Being able to control means you can do good or evil, prevent other people from being destructive or creative. In extreme cases, control can make you a bully, or even a tyrant. People who strive to be all-powerful, however, deceive themselves, for they too will die.

The human spirit is the best defence against control.

SUPPORT FOR LIVESCAN USERS

LivesCan is an entirely new approach to Religious and Moral Education. As such it presents a number of difficulties, both for its author and school users, whether these are teachers or pupils. Support of three kinds is freely available:

- Information included in the LivesCan CD-ROM
- Staff Development opportunities
- Consultation with the LivesCan author

Note

This is the Support Menu. You come here when you choose Support in the Structure Menu.
This is the CD-ROM Support Menu. You come here if you click on CD-ROM Support in the Support Menu. Clicking on a word beside a mouse takes you to one of the cards which is printed here.

**Note**

More details about Purpose can be found beginning on page 21.

**Note**

The Structure Menu can be found on page 25. You will get details there of where you can find out more about all the items in that menu, which is also listed in this card.

**Note**

There are various sections of support, most of which are visible in the panel to the left. Click below on the item which you want to learn more about.

- Purpose
- Structure
- Security
- Skills
- Word List
- Information
- Help
- Dialogue boxes

**Purpose**

This section tells you what the purpose of LivesCan is. It is intended mainly for teachers who wish to learn more about the rationale of the programme. It is also a useful source of information for parents who may want to know more about the work their children are doing in Religious and Moral Education.

The purpose is divided into three parts:

- To explore religion in an open way
- To learn from religious traditions
- To provide schools with a course

**Structure**

Structure is the section you are currently in. Because LivesCan is wide-ranging and complex, this section tries to explain how it all fits together. It is part of SUPPORT provided with programme.

This section is divided into seven parts:

- Using LIVESCAN
- VISIT level described
- INFORM level described
- ENCOUNTER level described
- WORRY level described
- Choosing a LEVEL
- SUPPORT provided with programme
Note

Security Menu and related information is on page 45.

More details about the Password on page 46.

Note

More details about Skills can be found on page 47.

On page 44.

Note

More details about the Word List can be found on page 48.

Security

One of the difficulties for any programme which is shared by a lot of people is to make sure that it doesn’t get damaged through misuse or wanton interference.

The section on Security provides:

brief general advice about:
how to look after the equipment and
good practice to follow.

the means to create a secret password.
To safeguard their work, LivesCan users can create a secret password, but they will have to use it every time they log on to open their personal files.

Skills

This section lists the skills which are important for forming a comprehensive and coherent WorldView. These are the skills LivesCan is designed to develop.

This is a section which requires development. LivesCan users are invited to make suggestions about how this section might be developed.

See Consultation with Author for details of how to do this.

Word List

There are many words in the LivesCan programme which are likely to be new to pupils. Some of them may be new to teachers. The Word List is an attempt to provide within the LivesCan programme meanings to many of these words.

The process of finding the meaning to a word requires the user to type it correctly spelt. The reason for this is to reinforce spelling and word recognition.

Users are invited to keep a note of words they think should be included in the Word List, and to suggest how some of the explanations might be improved.
Information

The background information included in this section is divided into four parts:

- Christianity
- St Mary's
- Haddington
- Heraldry

The first three parts have lists of keywords. You can also find out how to change levels in this section.

There is scope for further development here, either of the items included or by adding other items.

Teachers are invited to suggest improvements.

Note

Send suggestions to address on next page.

Help

Each level of LivesCan has Help cards. Users have the opportunity to go to these when they are working on a level. They cannot be accessed by someone who has not registered and logged on to use LivesCan.

These cards cover a range of topics. They include explanations and suggest solutions to some of the problems pupils may find. They include the cards which show you what each level looks like, and which you can also access within the Structure section.

When you go to Help, you also have access to all the other support available on the CD-ROM.

Note

You can learn what is contained on Help cards by turning to page 69. The cards showing and explaining screen displays are not included.

Dialogue Boxes

As you use LivesCan, you may attempt to do things which really aren't possible. In such circumstances you may find a message popping up on the screen explaining why you can't do what you have just tried to do. Or you may be presented with choices, for example asking whether you want to print or not.

These messages appear in what are called Dialogue boxes. They are called this because they appear to be the computer responding to you with words, and inviting a further response from you, usually to click the OK button.

Note

There are examples of dialogue boxes throughout the text of the Handbook.

More | HB p.43
page 290
Staff Development Opportunities

The author of LivesCan is Bruce Wallace, who is also Lothian Region's Adviser for Religious, Moral and Multicultural Education.

Schools participating in the pilot project during 1993 are able to call on him for support, either to deal with issues as they arise or to plan meetings and courses for planned activity time. These courses may deal with background knowledge about religion and morality, or they may deal specifically with aspects of the LivesCan programme.

Contact: Bruce Wallace, Advisory Service, Westwood House, 498 Gorgie Road, Edinburgh EH11 3AF. Tel. 031-469 5792

Consultation with LivesCan author

Teachers are invited to get in touch with me if they have difficulties, questions or comments. I would also welcome thoughts about how to improve LivesCan.

You may feel that LivesCan is too demanding for most pupils in the 10 - 12 age range, where it is currently being piloted. I think this still has to be established, and I hope you will persevere with it. I am sure you will give it your best shot. Many thanks.

Bruce Wallace
26 King's Park
LONGNIDDRY
East Lothian EH32 0QL Phone: 0875 852058
Security Menu

This is the card you come to if you click on Security in the LivesCan Menu. You are given two simple pieces of advice, one about protecting the computer and the other about protecting your work.

You are also given the option to proceed to creating a secret password, together with the caution that you should only do so if you really need a secret password. There are all kinds of difficulties associated with having a password, but the option is there for extreme circumstances.

Security is an important concept which should be developed on all possible occasions. It is the point at which people are most aware of their vulnerability in the world we inhabit.

Fostering Attitudes

The focus of LivesCan is on developing cognitive skills so that LivesCan users will form more comprehensive and coherent world views. Cognitive skills, however, are not in themselves enough; LivesCan analysis itself makes that clear.

The affective domain is familiar to teachers, but the conative domain may not be. Both have to do with attitudes, but what distinguishes the conative is its concern essentially for educating the will. It is no good simply feeling good or bad about something; it is necessary to respond with action. It is the will which prompts action and not just intentions. Moral development depends on educating the will to do what you believe to be right. In difficult circumstances this requires careful thought and frequently calls for courage on the part of the agent.

Two important attitudes are suggested by the Security aspect of LivesCan. One is taking care of your work and the tools you use. The other reaches deep into the human condition, trust. Having to use a password should be seen as a kind of failure. We know that human relationships are not always safe and reliable, and that is why the option is there. However, it could be helpful to make trusting one another not to interfere in other people's work and personal thoughts a matter of class honour.
Creating a password.
This may not be a good idea!
What if you forget it?
* You will need to use it every time you want to work.

Do you really think someone will interfere with your work?

REMEMBER
* You must be absolutely accurate
* Spaces count, even though you don't see them
* You can use numbers and symbols as well as letters

keep it simple
Type your password below. Note it. Then <click here.>

Password

This is the card you come to if you need to create a password. You will note that a password is discouraged; there are too many potential difficulties.

Only a registered user can create a password, and you must also have logged on.

If you decide not to enter a password, leave this card by using the LivesCan menu.

When you have created your password, you will be asked if you want to change it. **This is the only occasion when you will be able to change it.** When you accept your password you will be taken to the logging card where your password will appear where you will have to type it in future. You will then return to the Level you left to come here.
Skills

This is the card you come to if you choose Skills on the LivesCan menu. You cannot go from here to get any more detail, although much might be said about the skills listed on this card. It is apparent that there is a wide range of skill development taking place.

The skill heading the list is the most distinctive for LivesCan. The entire project is intended to test whether the computer can assist in the development of world views. The remaining four skills are essential in the formation of world views, but these cognitive skills are important for other studies and for life in general.

Alongside are five key skills for religious and moral education which LivesCan is trying to serve.

Five key skills for religious and moral education

* identify the spiritual dimension of life
* interpret religious language
* identify the moral dimension of life
* argue a moral case
* evaluate spiritual & moral responses to events

These skills require the development of many other important skills in the cognitive, affective and conative domains. In relation to world view formation, however, these might be described as contributory or subsidiary skills. World view formation, of course, also requires extending personal and social experience as well as conceptual understanding.
Word list

This is the card you come to if you choose Word list from the LivesCan menu. The word list is not complete, but it does contain many of the words that users of LivesCan will come across.

You start typing the word you want and it appears in the space where the cursor is flashing. When you have finished typing you click in the box which asks the mouse to look for the word.

If the word is not found a dialogue box appears asking you to confirm that the spelling is correct. Check the spelling and change it if necessary. If you can confirm that the spelling is correct you will get another dialogue box telling you it is not in the list and you will need to use a dictionary.

Pupils are asked to spell the word as a way of helping them to become familiar with it.

If the word is found it will automatically appear in the window below, together with its meaning.

If the explanation is longer than can be shown in the window, use the scroll bar in the usual way.

You can use the scroll bar to read through the word list. Underlined words have their own entry in the word list.

All the words contained in the word list are reprinted here on pages 49 to 56.

Pupils are encouraged to keep their own notes and vocabulary list.
Achievement
Something which you have managed to do for the first time is a personal achievement. In heraldry, achievement means the same as "coat of arms".

Advent
This word means "coming". Advent is the name for the period which begins four Sundays before Christmas, when Christians wait for the coming of Jesus Christ. It is a time when Christians are expected to prepare themselves by admitting to the wrong things they have done, asking for forgiveness and trying to make amends.

Affection, affectionate, affectionately
To express affection is to show a warm and kindly feeling towards someone or an animal.

Agony
Severe and lasting pain. The experience Jesus had in the Garden of Gethsemane before he was arrested is referred to as the Agony in the Garden.

Agriculture, agricultural
Agriculture is farming. Land which is farmed is called agricultural land.

Aisle
This was originally a wing added on to the side of a church to allow the clergy or monks to process freely. People now use it to refer to a passage between rows of seats.

Angel
Today we have an image of an angel as a winged person who waits upon God in heaven. Angel comes from the Greek word for messenger, and originally referred to anyone who bore a message from God. See also prophet.

Anoint, anointed
Anointing is a religious ceremony in which oil or ointment is placed on someone's head. This is done when someone becomes a monarch or priest. In some churches this is also done at baptism or when someone is ill or about to die.

Apostle, apostles
An apostle is a messenger, and the Apostles are those disciples Jesus sent out to preach the Gospel. Although not one of the original twelve disciples, Paul is considered one of the Apostles.

Architecture, architect
The term used to describe the design, structure and appearance of buildings.

Armistice
Agreement to stop fighting.

Aroma
A fragrant smell, usually food.

Attractive, attraction
An attraction draws you towards it. An attractive person is someone you are drawn towards.

Attribute, attributed
An attribute is a quality someone or something has. If something is attributed to someone, it belongs to that person or was caused by her or him.

Baptism, baptise
The ceremony carried out when someone becomes a Christian. In this ceremony water is sprinkled on the person's head. Some Churches require the person being baptised to be completely immersed in water.

Beatitudes
This normally refers to the states of blessedness pronounced by Jesus in Matthew chapter 5 verses 3 to 11.

Beckon
To signal someone to come.

Belief, believe
A belief is something you hold to be true. If you really believe something you will act on it.

Bible
For Christians this is the collection of books which make up the Old Testament and New Testament. It comes from Greek meaning the books. It is now used, somewhat inaccurately, to refer to any collection of sacred writings.

Blessing
A divine favour.

Calm
Not disturbed. A person can be calm. Water or the weather can be calm.

Caption
The words attached to an illustration, usually below it. Encounter Level has caption cards at the beginning and end of a series of pictures which give additional information about the subject.

Casualty, casualties
The victim of an accident or fighting. A casualty can be either injured or dead.

Catechism, catechise, catechetical
A series of questions and answers which cover all the essential teachings of a Church. If you are catechised, it means that you are able to answer all the questions with the answers in the catechism.

Catholic, Catholicism
Catholic means universal. However, it has come to be used as an abbreviation for Roman Catholic. Some Protestant Christians object to this because it suggests that they, as Protestants, do not belong to the universal Church of Christ. People who feel this way often refer to Roman Catholics as Romans. The Roman Catholic Church is the largest Christian Church, and it is centred in Rome.

Cause
This is something which produces an effect. It is not always possible to tell what a
cause is by looking at an effect. For example, someone may be rich because she has won the football pools, or because she has been a successful businesswoman, or because she was left the money by wealthy parents, or because of something else.

Celt, Celtic
The Celts were ancient peoples of Western Europe. They settled in the British Isles. Celtic means belonging to the Celts, and is often used of their language.

Cemetery
A place for burying the dead. Strictly speaking it is not a churchyard.

Ceremony
This is a special event in which people often dress up in their best clothes and go through a series of actions. It is often held in public, and accompanied by music and singing. It marks something important to the people present, like a wedding.

Christ
This is a title given by Christians to Jesus of Nazareth. It means anointed one in the Greek language. It is the same as Messiah in Hebrew.

Christian, Christianity
Christians take their name from their belief that Jesus of Nazareth was the Christ. Christianity is the name of the religion to which Christians belong.

Churchyard
The enclosed ground around a church. It usually includes a burial ground.

Cherub
A childlike angel with a special gift of knowledge.

Colours
The flag of a regiment is referred to as its colours.

Commemorate, commemorated
To preserve the memory of someone or something.

Communicant
Someone who has taken classes which confirm her or him in the Christian faith, and which admits that person to full membership of the particular Church. The communicant is allowed to take Holy Communion in that Church.

Communion
Holy Communion is the most important ritual in Christian worship. During this ritual Christians remember the Last Supper Jesus had with his disciples. On that occasion he asked them to think of bread and wine as his body and blood, and to think of him each time they ate and drank.

Consecrate
To set aside for a sacred purpose.

Consequence
This is what follows from some other action. If you eat too many sweets and don't brush your teeth, the probable consequences are that you will get fat and your teeth will rot. Other words which mean much the same are outcome and effect.

Cornucopia
Horn of plenty. This is a goat's horn overflowing with fresh produce.

Corpse
The body of a dead person.

Covenant
This word means agreement, or contract. It is used in the Bible to refer to agreements between God and people. It is one of the most important ideas in the Bible. Christians believe that God made a new agreement with humankind through the sacrifice of Jesus of Nazareth. Another word used to refer to this kind of agreement is testament, so Christians divide the Bible into the Old and New Testaments. The Old Testament, however, contains several covenants.

Creed
A formal statement of beliefs. The Nicene Creed is a universal creed of the Christian Church.

Crest
In heraldry, this is the part of a coat of arms, or achievement, which is above the helmet.

Crucifixion, crucify
This term is used when someone has been executed by being tied or nailed to a cross and left to die. This form of execution was practised by some governments in the ancient world. It was seen to be a particularly horrible death. It was normally slaves and troublemakers who died this way. Jesus was crucified.

Cursor
The small vertical line marking where text will be added.

Deceased
Dead. Someone who is dead.

Dedicate
To set aside for a special purpose.

Depict
If you depict an event you describe it in vivid detail, usually in the form of a picture.

Deteriorate, deteriorating
To get worse.

Device
Something designed for a special purpose. Can refer to a heraldic design.

Devise, devised
To invent or fashion.

Disciple, disciples
A disciple is someone who follows the teaching of someone else. Jesus called twelve men to be his closest disciples.
They are also called the Apostles.

Divine
Coming from, or belonging to, a god or God.

Ecumenical
Representing all Christian Churches.

Effect
This is the result of something happening. What produces an effect is a cause. Similar words are outcome and consequence.

Elevation
View of a building from the ground up.

Embellish, embellishing, embellished
To preserve a corpse from rotting away by replacing body fluids with aromatic spices and oils.

Emblem
Symbol or heraldic device, often a badge.

Emigrate, emigrated, emigration
To leave your country of birth to live in another country.

Employment
Work you do for payment.

Era
A period of time. It usually refers to a period of time which has a distinctive character, such as Christian era, or Elizabethan era. Age is another word used to mean much the same thing.

Erode, eroded, erosion
To wear away, usually caused by weather.

Esteepl
To think highly of. If you think highly of someone you hold that person in high esteem.

Etch, etched, etching
To draw or write by a process of cutting into the surface. There are different processes for metal, glass and stone. Most often, etchings refer to prints on paper which have been made from etched metal.

Eternal, eternity
Without beginning or end. Always existing.

Eucharist
Another term for Holy Communion. It refers particularly to the elements of bread and wine which represent the willing sacrifice by Jesus of his body and blood. The eucharist is the focus of most Christian worship.

Evangel, evangelist, evangelical
This is from Greek for good news. An evangelist is someone who brings good news, usually about a belief that Jesus Christ saved humanity through his life, death and resurrection. The Four Evangelists are the four gospel writers, Matthew, Mark, Luke and John.

Excavate, excavation
To dig out. Something which involves digging out.

Faith, faithful
To have faith in someone means you trust that person. More generally, your faith is all your beliefs about the meaning, value and purpose of life.

Fall
The term used to describe the cloth which hangs from the reading shelf of a pulpit.

Foreground
The part of a picture nearest the observer.

Forgive, forgiveness
If someone has done something deliberately to hurt you and you let them off, you are forgiving them. Forgiveness is considered to be one of the highest qualities of Christian life.

Fundamental
Basic and essential.

Funeral
The ceremony held on the death of someone.

Gild, gilt
To cover with a fine layer of gold. Gilt describes something which has had this done to it.

Glory, glorious
Magnificent display, or fame. The circle of light shown around the head of a god or saint.

God, god, goddess
A god or goddess is a superhuman being with supernatural powers. Written with a capital G, God refers to the supreme being, that some people believe created and rules the universe.

Gospel
This is from an Old English word which means good news. It normally refers to one of the four books written about the life of Jesus of Nazareth: Matthew, Mark, Luke and John. Another word meaning the same is evangel.

Granite
Very hard rock used in building. Does not erode easily.

Graveyard
Place where dead bodies are buried. Burial ground.

Guilt, guilty
Guilt is the fact of having done something wrong. It is more often used to refer to the kind of feeling a guilty person should have.

Heaven, heavens
Where God or gods are said to live, usually a place beyond the sky. The sky, particularly at night, is sometimes referred to as the heavens.

Hebrew, Hebrews
Hebrew is the national language of Israel. It is based on the ancient language of the Hebrews. The Hebrews are the descendents of Abraham. Hebrew means one from the
other side and refers to Abraham's family who came from the other side of the river.

Herald, heraldry, heraldic
Heralds are responsible for state proclamations and for keeping a record of armorial bearings. Heraldry is the work done by heralds.

Historic
Belonging to the past. If an event is historic it will stand out in people's memories long after the people involved in the event have died.

Holy, holiness
If something is holy it has been set apart for special use in religious worship. It comes from the idea that God is holy, or morally and spiritually perfect, and so set apart from ordinary events. It is from this word that we get Holyday. A word which has a similar meaning is sacred.

Humanity, humankind
All people. It is less sexist to say humanity or people instead of man or mankind.

Incarnation, incarnate, incarnated
Incarnate means embodied in flesh. The Incarnation in Christian terms means the embodiment of God in the flesh of Jesus Christ.

Incident
Something which has happened.

Influence, influential
If you are persuaded to do something you can be said to have been influenced. People can be influenced by expecting to get money, or by believing they are doing something good, or because they trust the person persuading them. Influence is pressure to get a particular effect.

Inscribe, inscribed, inscription
To write words on or in. An inscription is usually words written on a monument.

Insignia
Badges or emblems which distinguish someone's rank or office.

Inspire, inspired, inspiration
To give someone the feeling to do something, usually worthwhile. Being inspired or having inspiration means having the idea and motivation to do something you are excited or pleased about.

Interred
Buried, usually of a dead body.

Jew, Jews, Jewish, Judaism
A Jew is originally a person descended from the ancient family of Judah and the kingdom named after him. Judah is now part of modern day Israel. Jews are now all those people who look back to Abraham, Isaac and Jacob as the founders of their people. Jacob was renamed Israel and was the father of the twelve families or tribes of Israel, which included Judah. The modern term for the religious practices and way of life of Jews is Judaism.

Judgment, judgment, judgement
To form an opinion about. Any judgment should be on the basis of examining the evidence, both for and against the opinion you finally reach.

Junction
Point at which at least two lines or paths meet.

Justice
Justice is the consequence of dealing justly. This is an important principle in the conduct of human affairs. It includes a number of other principles, such as valuing all people equally, and not using power to take advantage of the weakness of others. In Christianity, justice is linked closely with righteousness, doing what is right as far as God is concerned.

Knotwork
This usually refers to ornamental work which looks like cords woven and knotted together. It is often associated with Celtic design.

Lammermuirs
The range of hills to the south of Haddington.

Lectern
Reading desk big enough to hold an open book, usually at a height to allow the reader to stand.

Legend, legendary
A story told about someone to display admirable qualities. A legend may not be true to fact, but may be typical of that person. Legends are often pure fiction, but may stem from a fact.

Lord
This is a title used for God and for Jesus Christ. They are usually referred to as The Lord.

Lord's Prayer
Jesus taught his followers to pray in a certain way and he gave them a prayer as an example. This example is called the Lord's Prayer and it is usually recited at some point in a Christian service. You can read it in the book of Matthew, Chapter 6.

Martyr, martyrdom
Someone who dies or suffers greatly for their beliefs is a martyr. If you are martyred, you achieve martyrdom.

Mass
Before the Reformation, Mass was the term used to refer to the Eucharist or Holy Communion. Since the Reformation, it is principally associated with the Eucharist in the Roman Catholic Church.

Memorial
Something used to remember a person or event.

Messiah
The Hebrew people, or Jews.
expect someone to come who will deliver them from their troubles and establish God's rule on Earth. This expected deliverer is called the Messiah, which means the anointed one in Hebrew. In Biblical times, kings were anointed to do God's will. Jews still wait for the Messiah, but Christians believe that Jesus Christ is the Messiah.

Militia
Armed forces, often made up of civilians.

Miracle
A wonderful event. Often unexpected and often unable to be explained in a natural way.

Mission, missionary, missionaries
In church terms, mission is sending people out to spread the Christian gospel. The mission, or mission station, can also be the place where these missionaries are stationed.

Monarch
This is the name for a single ruler who is a king or queen. The monarch in Britain has handed down the responsibility for government to parliament.

Monastery, monastic
A monastery is a place where monks live. The way of life of monks is described as monastic.

Monogram
A design made up of two or more letters interwoven. It is often someone's initials.

Monument
Something which is created or erected to commemorate a person or event.

Moral, morality, morally
Morality is concerned with the differences between right and wrong, and good and bad. People who do what is right or good are said to be moral, and those who do what is wrong or bad are immoral. If something has no moral aspect to it, it is said to be amoral.

Mortal, mortality
Mortal means that it dies or causes death. Everything that dies is mortal, and a mortal wound is one which causes death. Mortality is the noun declaring the fact that we die.

Motto
This is a short inscription which says something thought to be appropriate.

Mural
On a wall or of a wall. It can also refer to a painting on a wall.

Nave
The main part of a church from the west end to the crossing. It comes from the Latin for a ship.

Occupy, occupied, occupation
To take possession of something. This can be anything from a chair to a country. Palestine was occupied by the Romans at the time of Jesus. This was, like most occupations, achieved by military conquest.

Obelisk
This is a tall four-sided pillar of stone which tapers towards the top. It is used as a monument.

Orb
A sphere or globe.

Orthodox
Usually means that it is correct according to beliefs and practices. The Orthodox Church refers to the four ancient Churches which did not recognise the bishop of Rome as their head. These four Churches were centred on Constantinople, Antioch, Jerusalem and Alexandria. The main Churches of Russia and Greece are Orthodox.

Outcome
This is what has come out of some action. Similar words are consequence and effect.

Pagan
Pagans were originally people who were neither Jewish nor Christian, and who, according to Christians, did not believe in the one true God.

Passion
Normally an overpowering feeling. In Christian terms the Passion refers to the sufferings of Jesus, principally on the Cross, but also his Agony in Gethsemane. The week before Easter is referred to as Passion Week, or Holy Week.

Passover
An important Jewish festival celebrated in Spring each year. During this festival Jews remember when their ancestors were saved from slavery in Egypt about 3,200 years ago. The name comes from that part of the story in which the angel of death passed over Jewish homes without harming them.

Pilgrim, pilgrimage
A person who makes a journey to a place, as is called a pilgrim, and the journey is called a pilgrimage.

Piscina
This is a stone basin set into the wall of a church in which the priest washed his hands and the vessels used in the Eucharist.

Praise
To express the value of someone or something. Singing hymns to God is often simply called praise.

Pray, prayer
When people express their deepest or most earnest thoughts, they are said to be praying. People usually say they are praying to God. What they express is called a prayer. For Christians the most important prayer is called the Lord's Prayer.
Preach, preacher
As part of a religious service there is usually a time when a Bible passage is explained, or advice about how to live a good life is given. This is called the sermon, and to preach is to give a sermon.

Priest
Priests are seen in their religious community to be specially prepared to bring God to ordinary people through performing certain rites. There are no priests in the Church of Scotland.

Principle, principled
A basic truth or rule. Principles such as being honest and keeping promises should guide our actions. A person whose actions are guided by such fundamental principles is said to be principled.

Prophet, prophecy, prophetic, prophesy
A person who speaks for God. Prophets reveal what God intends when they prophesy. Prophecies need not be about the future but may reveal the present situation. Prophets are usually associated with God’s judgment on human affairs. They are very important in religious traditions.

Protestant
This refers to any Church which broke away from the Roman Catholic Church at the Reformation or since. Protestants are members of such Churches.

Pulpit
The pulpit is where a minister preaches the sermon from. It is usually raised high enough for everyone to see the preacher, and enclosed for safety.

Redeem, Redeemer, redemption
To buy back something. In Christianity, Jesus is described as the Redeemer because he bought back the sinfulness of people and so saved them from the consequence of sin. The price of this redemption was the Crucifixion of Jesus who, Christians believe, is the Son of God.

Reform, Reformation, Reformer
To change into a new shape. In Christianity, the Reformation was the period in the sixteenth century when a number of leading churchmen in Europe set about changing the Roman Catholic Church. The Reformers did not succeed and broke away to establish the Reformed Churches. The Church of Scotland is a Reformed Church.

Resign, resigned, resignation
To give up. Being resigned to the will of God means giving up your own will. This is an act of resignation.

Restore, restored, restoration
To put back into good condition. This process of repair is called restoration.

Resurrection
Christians believe that after Jesus died he came back to life again. That is what is meant by resurrection. This is a central belief of Christianity. The Bible says that Jesus rose from death on the third day, a Sunday, after he was crucified. The Bible suggests that this miracle can be understood in different ways. Some Christians believe that Jesus rose with the same body, and that after they die they will also be restored to their bodies. Others think that the new life of the resurrection is seen in the lives of people who are prepared to follow the life that Jesus led.

Reveal, revealed, revelation
To make known something which was hidden. Revelation is one of the most important ideas in religion. Christianity is called a revealed religion because it depends on God being made known in Jesus Christ through divine action.

Righteousness, righteous
Righteousness is living according to the standards of divine or moral laws. A righteous person is also said to be upright. Righteousness is one of the most important ideas in Christian life.

Ritual, rite
This is a series of actions which is carried out in the same way each time they are performed. For example, a wedding ceremony is a ritual or rite. Rituals are usually religious events, although other less important activities are sometimes called rituals.

Ruffled
Where something smooth is slightly disturbed. People and water can both be ruffled.

Sacred
If something is set aside for worship it is said to be sacred. Places, books, paintings, music and anything especially for a religious purpose can be described as sacred.

Sacrifice
When you give up something you really want or value. You can make sacrifices for other people or for something which you value more highly, such as a principle or religious belief.

Saint
Someone who is considered to have led a particularly holy life.

Sarcophagus
A stone coffin, often with grand carving on it. The ancient Greeks thought a particular kind of stone could consume flesh, and this led to its being used for coffins.

Save, saves, saved
In religion, save has a special meaning. We often do wrong things, even when we don't
want to. Some people believe that the person who does something wrong is always harmed as well, and that we need to be saved from the bad effects of our actions. Christians believe that Jesus saves people from all bad effects.

**Saviour**
This is a title which Christians often give to Jesus because they believe he has saved humankind from all its bad effects.

**Scallop**
A shell-fish with a distinctive shape. The Shell petrol sign looks like a scallop-shell.

**Sceptre**
An ornamental rod used to show power and majesty. It often goes with an orb. A monarch often has a sceptre as part of her or his regalia.

**Scroll, scroll bar**
A roll of parchment or paper with writing on it. The first five books of the Hebrew Bible are normally written on scrolls for use in the synagogue. Because a scroll unrolls rather than having pages which you turn over, the term scroll is used to describe a lot of text like this word list. The scroll bar is on the right.

**Security**
You will feel secure if you feel safe. Security is what you have when everything is safe.

**Sepulchre**
A tomb or burial place.

**Sermon**
This is the part of a religious service when the preacher explains an important aspect of religious belief or practice, such as a Bible passage or how to lead a good life.

**Serviceman, servicemen**
The name given to someone in the armed forces.

**Shrine**
A sacred place where worship is offered to a god or saint. It can be a grand building or a small box.

**Sin, sinful, sinner**
This word is used in different ways. A sin can be doing something bad. It is also used to describe human nature, which is weak and causes pain and misery. Christians believe that the sinful nature of humankind is a consequence of people disobeying God. Some Christians talk about people as sinners.

**Solace**
Comfort.

**Sovereign**
Ruler. Person with supreme power. Often a monarch.

**Spire**
A tall, tapering steeple on top of a tower, usually on a church.

**Spirit, spiritual, spiritually**
The quality of people and animals which is their vitality and personality. The human spirit is sometimes called the soul. The Holy Spirit is one of the three aspects of God which Christians call the Trinity. It is the active and essential power of God.

**Stained glass**
Glass which has been coloured and used for making pictures or creating lighting effects inside buildings.

**Structure**
The way something is put together or assembled.

**Supernatural**
Above or outside normal natural events.

**Symbol**
Something which stands for something else. A crown is a symbol of the power of kings and queens.

**Tablestone**
A flat gravestone that looks like a table.

**Tablet**
A small slab of hard material like stone. It usually has an inscription on it.

**Tapestry**
A piece of fabric which has had designs or pictures woven or embroidered into it.

**Testament**
A formal agreement. In Christian terms it refers to agreements between God and people. The Bible comprises the Old Testament and the New Testament. Christians believe the New Testament is the covenant God made with people to redeem them through the life and death of Jesus Christ.

**Theology, theologian, theologise**
The science of talking about God. It is sometimes used to refer to the kind of language that is used in the study and explanation of any religious matters.

**Transept**
The part of a cross-shaped church which is at right angles to the nave.

**Trinity, trinitarian**
Trinity means threefold. In Christianity it refers to the threeness of the one God. This is God the Father, Son and Holy Spirit. Teachings based on the belief in these three aspects of God are called trinitarian.

**Trust, trustworthy, trustworthiness**
Trustworthiness is one of the most valuable qualities we can possess. It means we are reliable and will not let others down. Most of life depends on our being able to trust other people. This applies, for example, to people feeding us as children, to making sure our water supply is safe and to driving on the correct side of the road.

**Unique, uniquely**
There is only one of its kind.
Universe, universal
The universe is everything that exists. Universal is used to mean including everything or everyone or everywhere. The universal Church means all Christians.

Vandal, vandalism
A vandal is someone who destroys, damages or spoils something for no good reason. Vandalism is usually directed against other people’s property, and often spoils beautiful or useful objects.

Veer, veers
To go off at a gradual angle.

Vessel, vessels
A container, usually for liquids, and usually round. It is often used in connection with food and drink. Ships are also called vessels.

Vestibule
A small entrance hall, usually between the main door and the main part of a building.

Vestry
The room in a church where the minister puts on her or his robes (vestments) before taking a service. It is also an office and the minister may meet people there on business.

Viaduct
This is a high structure like a bridge which carries a road, railway or canal across a valley.

Vital, vitality
Essential, especially for life. Someone with vitality is full of life.

Watch-night
This term is used to describe a religious service which begins just before midnight on New Year's Eve and lasts long enough to watch the arrival of New Year's Day. It is also now applied to a service where you can watch the arrival of Christmas Day.

Worship
When you set aside time to show how much you value something this is an act of worship. Worship is most correctly used for occasions which show reverence for God. Acts of worship are usually religious services attended by a number of people.
Information Menu

This is the card you come to when you choose Information from the LivesCan Menu.

The information provided is of a background nature. You choose by clicking on the appropriate word in the main list.

The information is very limited, and is as much for the teacher's benefit as it is for the pupils'. Because of its brevity the language is quite difficult. The section on heraldry is simply the Maitland achievement with parts named and is not reprinted here.

You might wish to use this information for environmental studies project work.

You can also go from this card to change LivesCan levels.

Cross-curricular links

One of the learning outcomes LivesCan is most concerned to promote is the ability to locate whatever is being studied in its various contexts. St Mary's is part of the Christian tradition and consequently shares in its history. It also has a geographical location which has contributed to that history and the activities of the church today. It is also part of a culture which is varied and which does not acknowledge the place of the Church in the same way as in the past.

Cross-curricular projects could start from or include:

- a river study (the Tyne)
- the development of a town (Haddington)
- the churchyard environment
- heraldry
- community
Christianity

This is the card you come to if you choose Christianity from the Information Menu card.

You can read through all the background information provided in this section by using the scrollbar or by clicking on the keywords beside the panel.

In the small panel to the left is a list of key words. If you point to one of these and click on it you will go to the part of the text in the scroll box which deals with it. Some words in the text which are thought to be important and worth further consideration or research have been printed in bold.

This version of LivesCan has been restricted to Christianity, but the same approach could be adopted and used for other religions.

Theological assumptions of LivesCan

No treatment of any religion is free from theological presuppositions. The selections any author makes and the language he or she uses all disclose assumptions. LivesCan is no different, even though it sets out to achieve educational goals. Here are a few of the more important assumptions of the LivesCan author.

Each of us has a faith by which we live. LivesCan calls this your world view. Your world view can be measured in terms of its comprehensiveness, coherence and consistency.

Faith should not discard reason. Faith should incorporate reason, develop it and build upon it.

Religious language requires to be interpreted because it is not simply descriptive. LivesCan promotes necessary skills.

Christianity discloses what it means both to live with God and to live without God. This is represented by acceptance or rejection of Jesus as personally formative. This does not mean that there are no other ways of coming to know what it means to live with God.

All our perceptions of the meaning, value and purpose of life are provisional and in principle falsifiable. They are simply the best we have at the time.

Beginnings
Founder
Sacred Writings
Key figures
Sacred places
Beliefs
Moral Values
Worship
Festivals
Celebrations

Beginnings
Christianity began about 2,000 years ago in the part of the world which is called Israel today. At that time, Israel was under Roman occupation and was called Palestine.

Christianity is a religion which grew out of the religion of the Jews (Judaism).

It was some time before Christianity...
Beginnings

Christianity began about 2,000 years ago in the part of the world which today is called Israel. At that time, Israel was under Roman occupation and was called Palestine.

Christianity is a religion which grew out of the religion of the Jews (Judaism). It was some time before Christianity was seen as a separate religion. The earliest Christians were all Jews.

There were two main features which separated Christianity from Judaism. The most important of these was the claim of early Christians that Jesus of Nazareth was the Messiah who was awaited by Jews. The Messiah would be anointed by God and bring in a new era of rule by God. The Greek language which was widely used at the time translated Messiah as Christ. Jews still await the Messiah, but Christians believe Jesus is not only the Messiah but call him also the Son of God. This claim is deeply offensive to Jews.

The second cause for separation was the claim of Christians that the Christ did not belong only to Jews, who call themselves the Chosen People of God, but to all people in the world. Anyone could become a Christian by believing that Jesus was the Christ who was bringing in a new era, which they called the Kingdom of God.

Christians went through a period of savage persecution and martyrdom for their beliefs but eventually their message was very successful. They called this message Good News, or evangel, which is the Greek for good news. The word used by English-speaking people is Gospel, which is Old English for good news.

Eventually, so many people, including the Roman Emperor Constantine, believed the Gospel that it became the official religion of the Roman Empire. The calendar we use dates from the year people thought Jesus was born. The year 1993 is actually 1993 CE. CE stands for Christian Era. CE is beginning to replace AD, which is Latin for Anno Domini which means Year of Our Lord. The reason for changing to CE is because not everyone is prepared to say that Jesus is their Lord.

To understand the beginnings of Christianity you need to study what was happening in Palestine 2,000 years ago, especially in Judaism.

Founder

All Christians centre their religious faith on the person of Jesus of Nazareth, but to Christians Jesus is more than the founder of their religion. They think of Jesus as God uniquely showing that he loves the world enough to save it from despair. They believe God came into the world as Jesus and was prepared to die at the hands of its people.

Most of what we know about Jesus is a mixture of what probably took place and what Christians believe this shows about the purpose God has for people. It is always difficult to separate history from theology. Events are always interpreted. This is what makes up the religious tradition. You will have to use your thinking and inquiry skills to make up your own mind about the truth.

The date of Jesus' birth is unknown but it was probably around 7 - 11 BCE. The 25th December is almost certainly not his birthday.

Almost nothing is known about the childhood of Jesus, but he probably grew up in the small town of Nazareth in the district of Galilee in the north of Palestine. Tradition says that his father was a carpenter and that Jesus learnt this trade. Being a carpenter then meant being involved in house building. It was hard physical work, and there is a suggestion that Jesus grew to become a big and powerful man.

Jesus was known as a religious teacher, or rabbi, and as a healer. He gathered around him followers who learnt from him and passed on his teaching. The closest of these followers are called the disciples or apostles of Jesus. Tradition says that one of these disciples betrayed Jesus to the authorities.

Because Palestine was occupied by Roman forces there were many Jews who wanted to be rid of them. They were looking for a military leader who would lead a successful resistance against the Romans. Some hoped that Jesus would be this kind of leader. Tradition says that Jesus was betrayed because he did not include resistance to the Romans in his teaching. Jesus was eventually crucified by the Romans.

Sacred writings

Because Jesus was a Jew, the sacred writings of Jews at the time are also sacred to Christianity. They are collected in the part of the Christian's Bible called the Old Testament.

The part of the Bible which describes the beginnings of Christianity is called the New Testament. Christians give the New Testament greater importance as sacred writings, but they also love the Old Testament.

[HB p.59] page 306
Of much lesser importance are the thoughts and writings of Christians down the centuries. Some Church documents have become very important too, such as those of the various Creeds and Catechisms. Some writings have become Christian classics, e.g. Bunyan's Pilgrim's Progress.

Key Figures ...

Although they came before Christianity, the Old Testament prophets are key figures for Christians. Christians believe that God's involvement in history grew over this period with the prophets making clear what God wanted of people. Probably the greatest prophet was Moses, who freed the Hebrews from slavery in Egypt. He is also credited with passing down the Ten Commandments. These are rules about what people must do if they are to follow God's will. There were other prophets who raged against injustice in society and warned people that they would be destroyed if they continued in this way. Two important themes of the Old Testament are righteousness and justice. Christians also believe that prophets predicted the life of Jesus, but this raises problems of interpretation.

The next group of key figures are those associated with Christianity when it was being founded. The most important of these is probably St. Paul, who did much to spread Christianity in the Roman Empire. There were also a number of influential churchmen who became known as the Early Church Fathers, who did much to set the Christian Church on the way it has developed over the next sixteen centuries.

There has been a succession of leading figures, such as St Benedict (c480 - 550) whose Rule became the standard practice for monasteries in the West. St Francis of Assisi (1182-1226) following his vow of poverty did much to show the meaning of the Gospel in practice. Other figures have been thinkers, teachers and missionaries.

... in Scotland

St Ninian is reputed to have built the first church in Scotland at Whithorn where he was active from 397-431. St Columba (521 -597) founded a monastery on the island of Iona which became an important centre for the spread of Christianity throughout Scotland.

St Margaret (c1046 - 1093) was married to King Malcolm Canmore, and as Queen of Scotland she gave a wonderful example of Christian life to the people.

Duns Scotus (1264 - 1308) was an important Scottish scholar who taught in Europe. It was from him that the word dunce came. He was anything but a dunce!

The Reformers of the sixteenth century are very important. For Scotland, perhaps the best known is John Knox (1514 - 1572) who came from Haddington.

The Covenanters of the seventeenth century provide a fascinating chapter in Scotland's religious story.

The Disruption in 1843 saw the formation of the Free Church of Scotland led by righteous men like Thomas Chalmers (1780 - 1847) who gave up their livings as ministers for the principle of religious freedom.

In the twentieth century there have been many notable church leaders in Scotland, but perhaps the best known is George MacLeod (1895-1991), later Lord MacLeod of Ruinard, who founded the Iona Community.

Sacred Places

The most sacred places for Christianity are all to be found in the land which is now under the government of the modern State of Israel. It is in this land that the events of the Bible took place.

Jerusalem was where the events of the last week of Jesus' life took place. The Church of the Holy Sepulchre was built where Jesus is thought to have been crucified and buried. The Temple, which was central to Jewish religion, is also in Jerusalem.

Bethlehem, which is in the Occupied Territories of the West Bank, was where tradition says Jesus was born.

Nazareth in Galilee is where Jesus grew up, and the Mount of Beatitudes on the shores of Lake Galilee is where Jesus is said to have preached the Sermon on the Mount. There are many other Biblical sites which are special to Christians.

For many Christians the Vatican in Rome has special significance. It is from here that the Roman Catholic Church is governed.

There are many other places which have special significance for Christians. In Scotland, Iona is one such place.

Beliefs

The fundamental beliefs of Christians are these:

1. There is only one God, who created everything and is Lord of the Universe.
2. God is interested in people as individuals and loves them.
3. God wants people to be righteous and to conform to his will.
4. God has created people with their own wills and they are free not to do God's will.
5. People have failed to listen to the prophets who have told them what God's will is. Not doing God's will is called sinning. Because no one can follow God's will perfectly, everyone is a sinner.
6. God finally showed how much he cares about people by taking the form of the person of Jesus. As Jesus, he taught, suffered and died as a human being. He brought himself back to life to show that he was also God.

7. By the life, death and resurrection of Jesus Christ, people have been saved from their sinfulness.

These are reasonably straightforward statements, but there is much disagreement about whether they are true, or even make sense. Christians believe them to be true, but even they do not always agree about what they mean.

Moral Values

Christian morality is based on Jewish moral values. Christians accept the Ten Commandments as a true moral code. You can read the Ten Commandments in chapter 20 of the Book of Exodus. Jesus also taught the Old Testament morality that you should love God and love your neighbour as yourself.

Christians give high moral value to love, forgiveness, honesty, truth, justice, righteousness and keeping promises.

Worship

The central act of worship in Christianity is celebration of Holy Communion. This is based on the Last Supper, when Jesus commanded his disciples to remember him each time they ate bread and drank wine. In Protestant Churches, Holy Communion is often called the Lord’s Supper.

Prayer is also an important part of worship. Reading the Bible and preaching based on it are regular features of Christian worship. Many acts of worship also include singing praise to God.

Festivals

The most important festival is Easter. That is the day Christians remember the Resurrection of Jesus and all that this event means. Holy Week, which leads up to Easter, provides many occasions for remembering the Passion of Jesus.

Christmas is the Christian festival which is most celebrated, even by people who are not members of the Christian Church. At Christmas, the birth of Jesus is remembered. This is particularly important because it is an essential feature of Christian belief that Jesus was a real person.

Whitsun is the third great Christian festival. It is celebrated seven weeks after Easter. It coincides with the Jewish festival of Pentecost. It was on this occasion that the first disciples were visited by the Holy Spirit. It is sometimes referred to as the birthday of the Church and has been a popular time for baptisms. People wore white for baptism, which is where the term Whitsun comes from.

Celebrations

The first celebration in Christian life is baptism. This is a ritual in which someone becomes a member of the Church. Parents can have their babies baptised into the Church, or adults can choose to be baptised if they decide to become Christians. You can only be baptised once.

Confirmation is the occasion when a person becomes a full communicant member of the Church. When you have been confirmed, you may take part in Holy Communion.

A marriage ceremony is probably the next celebration that most Christians enjoy. At this celebration solemn vows are exchanged binding the couple together for life. The final celebration of a Christian life is the funeral service. On this occasion the deceased person’s life is remembered and celebrated. It is a sad occasion for those who have lost someone precious to them. Christians believe the deceased is now in a better place.

Symbols

Christianity has many symbols. The most powerful of these is the cross which represents the death and resurrection of Jesus. Next in importance is probably the bread and wine used in the Eucharist. Many of the events in the life of Jesus have been symbolised, as well as his teaching.

World Religion

Christianity is a world religion. What this means is that it has spread across the world. About a quarter of the world’s population is said to be Christian in some form or other. Christianity has spread because it has been prepared to adapt to local customs and practices. The celebration of Christmas is a good example of this. This does not mean that Christianity has altered its basic beliefs. Christians believe these are available to anyone who wishes to accept them as the basis for life.

In its two thousand year history, Christianity has been the cause of great suffering as well as the source of enlightenment. This is a consequence of people greedy for power, and a failure to see and practise the true teachings of Jesus. People everywhere take their religious beliefs seriously and have shown that they are prepared to die and to kill for them. The example Jesus gave was of dying for your beliefs, but not of killing for them.

There is clearly a great deal still to be done by Christians to make the world the kind of place that Jesus would have wished, and which might be called the Kingdom of God.
St Mary's

Read about the church in the panel below. You can read the whole section by using the scrollbar, or you can find some information quickly by clicking on the keywords beside the panel.

Denomination
Ecumenical
Events
History
Windows
Churchyard
Location
Congregation
Sources

Denomination
St Mary's is part of the Church of Scotland. The Church of Scotland is a presbyterian, Reformed Church. Presbyterian means that it is governed by its members and not just by bishops and priests. Reformed means that it began in the sixteenth century in opposition to the Roman Catholic Church. The Church of Scotland is

St Mary's

This is the card you come to if you choose St Mary's in the Information Menu. It leads you to background information about the church which provides the religious environment for this version of LivesCan.

You can read through all the background information by scrolling the text in the main box. In the smaller box to the left is a list of key words. If you point and click on any of these words you will go straight to that part of the background information.

All the background information on St Mary's included in LivesCan is printed on pages 63 - 64. Inform Level provides most of the detail about St Mary's in picture captions.

Click on Menu to return to the Information Menu.

Acknowledgments

When the author first approached the minister and Kirk Session of St Mary's to embark on this research project he had not anticipated how long and difficult the project was going to be. Without the generous and gracious support of everyone at St Mary's this project could not have been completed.

The minister at that time, the Rev Alasdair Macdonell, was particularly helpful and encouraging when the project more than once was in danger of being abandoned. Alasdair's energy, humour and breadth of vision were infectious. Shortly after the last pictures for this version of LivesCan were taken Alasdair suffered a heart attack which soon led to his retirement and major heart surgery. In the improved version of LivesCan there will be pictorial evidence of the esteem in which the congregation of St Mary's held him and which was reflected in the very moving service marking his retirement. The author hopes that LivesCan will prove to be a suitable recognition of the work of a fine minister, a representative of the best in the Church of Scotland tradition.

One of the real bonuses of the entire project has been sharing in the inspirational worship of the congregation. These memories will be held specially dear.
Denomination

St Mary’s is part of the Church of Scotland. The Church of Scotland is a Presbyterian, Reformed Church. Presbyterian means that it is governed by its members and not by bishops and priests. Reformed means that it began in the sixteenth century in opposition to the Roman Catholic Church. The Church of Scotland is the national Church. It is often referred to as the national Kirk, which is a Scottish word for Church.

Ecumenical

St Mary’s is working hard to build bridges between Christians of all denominations. This is called having an ecumenical outlook. There are various aspects of the church building and the events it holds which show that it is ecumenical.

Events

St Mary’s holds the normal Christian events, for example celebrating Christmas and Easter. In addition, on the second Saturday of May each year there is a pilgrimage to St Mary’s from Whitekirk church, which is also a Church of Scotland building. Both St Mary’s and Whitekirk are what are called pre-Reformation churches. This means that they were functioning as churches before the Reformation. In those distant days, therefore, they were part of the Roman Catholic church. Most of the pilgrims going today from Whitekirk to Haddington are Roman Catholic. The fact that the Roman Catholic Mass is celebrated in these now Reformed churches doesn’t please everybody. Included in the afternoon activities in St Mary’s is a service of blessing the sick. This is one of the main pilgrimage events in Britain, and it attracts thousands of people.

St Mary’s has acquired the title of Lamp of Lothian, because it is associated with a very early Franciscan church nearby which provided Christian enlightenment to East Lothian. It is also thought to have been a very light and airy building. This Franciscan church, the Lamp of the Lothians, was destroyed in 1356 by English armies.

The Lamp of Lothian is now a trust which works to improve both Christian worship and develop the cultural life of Haddington and district. Throughout the summer months, musical concerts and other events are held in St Mary’s.

History

After the destruction of the Franciscan friary in 1356, a new church was begun. This was in approximately 1380. By 1486, St Mary’s was completed. It was a Collegiate church, which means that a number of priests and ministers were attached to it. Their main purpose was to revitalise worship.

In 1547-8, Haddington was occupied by the English and besieged by the French and Scots. The roof of the choir and transepts of St Mary’s was destroyed. In 1561, a barrier wall was built across the end of the nave and a greatly shortened church came into use. For four centuries the church was this length, although modifications took place in 1810.

In the 1960s a decision was taken to restore the ruined transepts and choir. The restoration was completed in 1973, and the church returned to its original length, making it the longest parish church in Scotland.

Built on to the side of St Mary’s in the early sixteenth century was the Lauderdale Aisle. Here are entombed a number of Maitlands, some of them amongst the most powerful people in Scotland in the seventeenth century. In 1978 the Lauderdale Aisle was reconsecrated and dedicated to the Virgin Mary and Christ Child, and to the Three Kings. It is most often referred to as The Chapel of the Three Kings or the Lauderdale Aisle. It is available for worship by any Trinitarian Church.

Two very important Reformers are associated with St Mary’s, George Wishart and John Knox. In 1545, before the siege, John Knox heard George Wishart preach his last sermon from the pulpit in St Mary’s. The following year Wishart was burned at the stake in St Andrews. John Knox worked for the building of the barrier wall in 1561. John Knox was the leading figure in the Scottish Reformation.

Inside the church is the grave of Jane Welsh Carlyle (1801 - 66) one of Haddington’s most illustrious daughters. She was a very clever woman. She married Thomas Carlyle who was one of the great writers and thinkers of the nineteenth century.
Windows

The windows in St Mary's are worth close study. There are examples of the work of some eminent artists and designers, such as Sir Edward Burne-Jones (1833-1898), and most recently Sax Shaw, a present-day artist working in Edinburgh. Many of the events of the life of Jesus are recorded in the windows.

Churchyard

The churchyard surrounding St Mary's has many old and fascinating stones and monuments. One of the noteworthy Christians buried there is the Rev John Brown (1722-1787) who contributed a great deal to Christian education. He was never the minister of St Mary's, but he was a minister in Haddington.

Location

St Mary's is on the north bank of the river Tyne on the road out of Haddington to the south. Its closeness to the river has meant that it has been subject to flooding, which has damaged the foundations of the choir, and also the coffins below the Lauderdale Aisle. A large concrete raft was laid below the choir in the 1920s to stabilise the building.

Congregation

St Mary's congregation has more than 1,000 communicant members. They don't all go to church every Sunday, although some do. The membership tends to be middle-aged to elderly, so there is considerable scope for young people to take an active part in the life of the church.

The Kirk Session has 54 elders who share with the minister the responsibility for keeping the church alive and active.

The Woman's Guild is an organization for women in the Church of Scotland. It provides a Christian meeting place for women, with a regular programme of events. These meetings are concerned with the general life of the Church, in Scotland and overseas. The Woman's Guild is often described as the backbone of the church because it is deeply involved in the practical matters of raising money and providing hospitality. St Mary's has an active Woman's Guild.

The Sunday School is quite small, only 30 members, which reflects the general age of the congregation. There are signs, however, that young families are beginning to join the congregation.

Sources

Because of its prominence in Scottish history, St Mary's is frequently referred to in general works. St Mary's has published its own attractive booklet called St Mary's Collegiate Church, Haddington. This publication is available from the church itself.

The church is also open for visitors from April 1 to September 30, from 10.00 until 16.00 Monday to Saturday, and from 13.00 to 16.00 on Sundays. You can have a guided tour, and children can learn about the church by using a specially prepared Work Sheet. They can also arrange in advance to do brass rubbing. Refreshments and toilets are available for visitors. There is a gift shop. School parties should book in advance. The Church Administrator is Janet Jenson (Tel 062 082 5111).

Further Notes
Haddington

This is the card you come to if you choose Haddington in the Information Menu. It provides a little background information about the town.

You can read everything written in this section by scrolling the text in the main box.

In the panel to the left there is a list of key words. If you point and click on any of these it takes you to the part of the text dealing with that topic.

There is much of interest to learn about Haddington and the reader is encouraged to go to a number of sources for further information. East Lothian District Council's Library Service is particularly helpful. There are some details about Haddington accompanying pictures in the Inform Level of LivesCan.

Location
Haddington is the county town of East Lothian. It is situated in a valley between the Lammermuir hills to the south and the Garleton hills to the north. It is approximately 17 miles to the east of Edinburgh.

Population
The census of 1991 revealed the population of Haddington to be more than 8,400.

Industry
The main employers in Haddington are East Lothian District Council and Mitsubishi, which assembles television sets. There are two hospitals in Haddington which employ a considerable number of people. Lothian Regional Council employs all the people associated with the Haddington schools. Until the coming of the railway in the nineteenth century, Haddington had the largest grain market in Scotland. Associated with this was the maltings, which is still a significant employer. As well as the normal range of building trades, there is a full range of service industries in Haddington: garages, financial services, legal services, medical services, hotels and restaurants and, of course, many different kinds of retailers. Haddington also has a sheriff court, police station and fire station. A significant number of people living in Haddington commute to Edinburgh each day for work, but they have to travel by road as the town has no railway now.
Buildings

Haddington was built as a royal burgh in the twelfth century. Because of its importance as a trading centre over the following centuries, it could afford some fine buildings. In all, Haddington has some 130 buildings listed as having special architectural or historic interest.

The most immediately striking building is the Town House with its tall steeple. The Town House was originally designed by William Adam in 1748, and the steeple was added to it in 1830-31.

In the vicinity of the Town House are the fine buildings of Carlyle House, the Bank of Scotland, the County Buildings, Corn Exchange, Post Office and Police Station.

Kinloch House, Haddington House, St Mary's Church and Poldrate Mill, all to the other side of the town centre, are also particularly notable.

Features

The Lamp of Lothian Trust is doing a great deal to stimulate the cultural life of Haddington. Its work includes arranging a series of classical musical concerts with well-known performers. There are also many classes held for arts and crafts.

There is an annual Haddington Fair which provides considerable interest and entertainment.

There are many historic features worth examining, apart from the buildings already mentioned, such as the Mercat Cross and the Nunn gate bridge, where hangings took place in former times.

There are many pleasant walks around Haddington, along the Tyne or gently strolling round Haddington House Gardens.

There are several excellent places for eating.

Countryside

The countryside around Haddington has some of the finest agricultural land in Scotland. This is what led to the prominence of Haddington as a grain market. The river Tyne provided the water power for mills.

Aberlady on the Firth of Forth was the Port of Haddington. It is only five miles to the north across the Garleton hills and was the focus of considerable foreign trade. At one time, the whole area was known as Haddingtonshire.

Sources

There are many references to Haddington in general books about Scotland and the Lothians. East Lothian District Council can provide much information through its Library Service. (Tel. 062 082 2531)

It also has an interesting booklet called A Walk Around Haddington, first published by East Lothian County Council. You may also find particularly attractive a publication called East Lothian - The coast, the countryside, the towns & villages around Haddington as seen by Doris Ann Goodchild. It was first published in 1980. Its ISBN is 0 9506561 3 5 for the paperback version, printed by D&J Croal Ltd of Haddington.
Change level

This is the card you come to if you want to change from one level of LivesCan to another. You can come here either from the Structure Menu card or, as in this case, from the Information Menu card. You can tell it was Information Menu because Menu replaces Information in the LivesCan Menu.

This is one of the most complex cards in the LivesCan stack, with consequently a lot of scope for things to go wrong. There is therefore considerable help in the form of additional dialogue boxes.

Should you try to get to Visit level without logging on, for example when exploring the potential of LivesCan, you get the dialogue box shown at the top of the next column:
If you forget to log on and go straight to change level, you get this dialogue box.

If you choose "LOG ON" you will be taken to the Logging Screen.

If you have been working on a level, the only way you can quit LivesCan is by going back to where you were working and quitting from there. That is in order to collect all the information you left there and put it away in your personal file. It also tidies up for the next user. So you get this dialogue box if you try to quit from here.

This principle also applies if you are changing level. This is the dialogue box you get when everything is correct for changing level:

If the answer is "Yes", you are taken back to where you were working and you choose QUIT from the panel on the right of the workplace screen.

If you left your work unfinished, you are asked to return to complete it before you choose QUIT.

There is always the possibility of children playing about and jumping from level to level. To prevent that happening this dialogue box will appear requiring the user to work on the level they have chosen.

If you decide at the last minute that you don't want to change after all, you get another chance after you have put your information away in your Personal File. Instead of going to the Title Screen as you would normally, you go to the Logging Screen where you are presented with this dialogue box. If you choose "Yes", you then go back to your Personal File and proceed to the new level. If you choose "No" you go to the Title Screen.

You cannot change levels until you have logged on.

Before you can quit, you must first go back to the level where you were working.

To change level you must 'QUIT' from where you were working. Are you sure you want to change level?

First you must complete the task you are working on. Then, when you 'QUIT' from there you will be able to change level.

Sorry! You changed your mind too quickly. You must first work on the level you chose before you can leave it. Think, then click!

Are you sure you want to change level?
Help Cards

For each of the LivesCan levels there are several Help cards in addition to all the support already covered in the Handbook. In the interests of brevity they are not included here in their graphical form. They all, however, follow the pattern of other cards you have been looking at in the LivesCan support stack.

- Each level has its own Help Menu.
- Each Help card has the LivesCan Menu on the left of the screen.
- The principle of pointing and clicking on what you want is maintained.
- Help cards are always green.

With the exception of screen display, the text of all the items listed in the Visit Help menu are reprinted on pages 71 - 73.

You will note that QUIT in the LivesCan Menu has been replaced by Visit. You can only come to Help cards from a level, and if you are on a level you can only quit from where you are working.

There is a mousebox you can click in to take you back to where you were working.

On the Help cards themselves, QUIT in the LivesCan Menu is replaced by Menu.

Other help available to LivesCan users is outlined on pp 40 - 44.
The numbers below refer to the numbered Help cards on pages 71 - 78. They relate to the items in the corresponding position in the menu card beside them.

### Inform Help Menu

<table>
<thead>
<tr>
<th>explanations</th>
<th>problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>screen display</td>
<td>nothing happens</td>
</tr>
<tr>
<td>what you can do</td>
<td>wrong time</td>
</tr>
<tr>
<td>menu card</td>
<td>no sound</td>
</tr>
<tr>
<td>personal file</td>
<td>power failure</td>
</tr>
<tr>
<td>writing</td>
<td>anything else</td>
</tr>
</tbody>
</table>

### Encounter Help Menu

<table>
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<tr>
<th>explanations</th>
<th>problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>screen display 1</td>
<td>nothing happens</td>
</tr>
<tr>
<td>screen display 2</td>
<td>wrong time</td>
</tr>
<tr>
<td>screen display 3</td>
<td>will not time</td>
</tr>
<tr>
<td>what you can do</td>
<td>writing has gone</td>
</tr>
<tr>
<td>menu card</td>
<td>power failure</td>
</tr>
<tr>
<td>personal file</td>
<td>anything else</td>
</tr>
<tr>
<td>writing</td>
<td></td>
</tr>
<tr>
<td>printing</td>
<td></td>
</tr>
</tbody>
</table>

### Worry Help Menu

<table>
<thead>
<tr>
<th>explanations</th>
<th>problems</th>
</tr>
</thead>
<tbody>
<tr>
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<td>nothing happens</td>
</tr>
<tr>
<td>screen display 2</td>
<td>wrong time</td>
</tr>
<tr>
<td>screen display 3</td>
<td>will not print</td>
</tr>
<tr>
<td>what you can do</td>
<td>writing has gone</td>
</tr>
<tr>
<td>menu card</td>
<td>power failure</td>
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<tr>
<td>personal file</td>
<td>anything else</td>
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<tr>
<td>writing</td>
<td></td>
</tr>
<tr>
<td>printing</td>
<td></td>
</tr>
</tbody>
</table>
What you have to do.

You have to search the pictures for objects:

* which illustrate the answers to the riddles in the LivesCan ballad
* which will solve other LivesCan riddles
* which mention the names of places that you may need to know to complete the LivesCan map.

Ask your teacher for the ballad, riddles and map.

The menu card.

Each level of LivesCan has its own menu. Visit Help is the menu card for this level.

You left the Visit menu card to get help.

You must return to the Visit menu card to get back to work on the Visit level.

Once you have left a level you can only go back to it by going through the menu card.

It is called a menu because it offers choices.

Your personal file.

Every LivesCan user has a personal file.

In your file is contained information about everything you do when you are working on the LivesCan levels.

This information is needed and used only for agreed research purposes.

So, to make sure that your file remains totally confidential, no user has access to any personal file.
Nothing happens.

You wouldn't be here if nothing happens!

The most obvious reason why nothing appears to be happening is that you are clicking on the screen where it is not active, so it will not do anything.

Check the numbers in the Clicks row.
If they change when you click, the answer to your problem is to click somewhere else.
If the numbers don't change, report this to your teacher.

Wrong time shows.

This is easily corrected, when you know how!

Tell your teacher, who will adjust the time in the Control Panels in the Apple Menu.

There are detailed instructions in the reference manual which came with the computer.

It is best if pupils don't interfere with the Control Panels.

Can't find items.

Some of the items are hard to find.
You will just have to persevere.

You can always discuss your search with other people in your group.

Think where these items might be, Could they be in windows? Or on wall plaques or gravestones?

Are you finding all the active areas in the pictures?
**Power failure.**

If the power to the computer is switched off or cut off while it is working, some or all of your work could be lost.

The LivesCan programme could be damaged.

*** Always check carefully to see ***
what is plugged in and switched on
before you switch off at the wall, and before you remove plugs.

**Anything else.**

You should have few problems, but there may be bugs lurking somewhere, and equipment does break down.

If you do have difficulties report them to your teacher.

*** Please treat the computer with care. ***
*** Handle the CD-ROM with care. ***
*** Follow the rules for using with care. ***

If you and others do these things you should be free of troubles.

**What you can do.**

At Inform level you can get a guided tour around St Mary's and its churchyard.

You move around exactly as you did at Visit level.

Each picture you look at has a caption which tells you something about it.

You can listen to the caption as well as read it.
The menu card.
Each level of LivesCan has its own menu. This Help section also has a menu.

You left the Inform menu card to get help.

You must return to the Inform menu card to get back to work on the Inform level.

Once you have left a level you can only get back to it by going through the menu card.

It is called a menu because it offers choices.

Nothing happens.

You wouldn't be here if nothing happens!

The most obvious reason why nothing appears to be happening is that you are clicking on the screen where it is not active, so it will not do anything.

Go back to where you were working and try listening to the caption.
You do this by clicking on the acrobatic mouse.

If you hear nothing, and it still won't work, tell your teacher.

No sound.

Being able to listen to the captions is one of the most important features of Inform level.

If you cannot hear any sound it is probably because someone has turned off the computer's sound system.

Report this problem to your teacher who will be able to adjust the sound volume in the Control Panels in the Apple menu.

It is best if pupils don't interfere with the Control Panels.
What you can do.

Encounter level is where you meet people who use St Mary's church.
The menu card gives you a list of topics which you can choose from.

Some topics have several picture cards.
You have the opportunity to inquire into each picture in three ways:

you can consider how people are affected,
you can consider the circumstances,
you can consider what people do.

The menu card.

Each level of LivesCan has its own menu. This Help section also has a menu.

You left the Encounter menu card to get help.

You must return to the Encounter menu card to get back to work on the Encounter level.

Once you have left a level you can only get back to it by going through the menu card.

It is called a menu because it offers choices.

Writing

You write by typing on the keyboard. The longest key at the front, the space bar, types a space.
When one line is full, the writing goes on to the next line by itself.
You can start a new line by pressing return.
If you press return twice you leave a clear line before you start typing again.

You create CAPITAL letters by pressing shift as you type the letters you want.

You can remove a mistake by pressing delete, which removes the letter or space to the left of the cursor.
You can insert the cursor anywhere; you use the mouse to move the J to where you want, and then you click.
Printing

You can print what you write to the screen. First, however, you have to have a printer connected to the computer, switched on and with paper in place.

After you have finished your writing and clicked in the mousebox, you will be asked if you want to print what you have written. If you do not print, you will not see again what you have written. This prevents other people from reading it.

Nothing happens.

You wouldn't be here if nothing happens!

Remember that clicking on the picture has no effect at Encounter level. You must click on the blue boxes and other shapes to get anything to happen.

Go back to the Help menu and select screen display 1. You will be able to practice there before you return to where you were working.

If you still can't get anything to happen, tell your teacher.

Will not print.

The three most likely reasons are:

the printer is not connected,
the printer is not switched on,
the paper is not in place.

Of course, if there is nothing in your scroll box when you command Print, nothing will be printed.
Writing has gone.

The three most likely reasons for your text disappearing are:

- your text has been deleted accidentally
- you clicked the finished your answer mousebox
- you have QUIT since you were last there.

If you leave your workplace to go anywhere except to HELP, the computer assumes you have finished with this line of inquiry.

What you can do.

At Worry level you develop your inquiry skills.

Each of the three lines of inquiry which you followed at Encounter level is now enlarged to show five elements. You now select from a panel of fifteen options. Each option is shown as an icon.

Life is very complicated but LivesCan offers you a way of making sense of it all.

More detail on other Help cards: screen display 1,2, and 3.

The menu card.

Each level of LivesCan has its own menu. This Help section also has a menu.

You left the Worry menu card to get help.

You must return to the Worry menu card to get back to work on the Worry level.

Once you have left a level you can only get back to it by going through the menu card.

It is called a menu because it offers choices.
Nothing happens.

You wouldn't be here if nothing happens!

Remember that clicking on the picture has no effect at Worry level.
You must click on the icons and blue boxes to get anything to happen.

Go back to the Help menu and select screen display 1.
You will be able to practise there before you return to where you were working.

If you still can't get anything to happen, tell your teacher.

You have now had as full an account of the LivesCan support stack as it is possible to give in a handbook.

It remains only for you to explore the stack using the computer.

On the opposite page are the menus for the LivesCan levels. A copy of the LivesCan map is on page 80.

All queries and comments are welcome.
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Level Menus

Each level has its own menu with the exception of Visit. The Visit Help Menu serves as the menu for this level. Each level menu card also displays the full LivesCan menu.

Note

Each item in the menu has two caption cards and at least one picture card which can be inquired into. The number of picture cards is indicated in brackets after each item. This number does not appear on the computer screen. Each picture card allows the user to follow any or all of three lines of inquiry into how people are affected, what their circumstances are, and what the causes and effects of their actions might be.

Note

The full LivesCan analysis consists of fifteen lines of inquiry represented by icons. These icons are shown on page 35 and explained on pages 35 - 40.

Inform Level Menu

You are provided with a plan of St Mary's church and churchyard. On the plan are 29 spots at strategic points. Clicking on any spot takes you to a picture showing what you can see from that point. There is a caption to the picture. You can then navigate from that place as you would at Visit level.

When you click on Help while exploring Inform level, you are taken to this Menu card, and you have to click on the Help box again. This is because the plan requires the whole screen, leaving no room for the LivesCan menu.

When you enter Inform level there is always a short delay while sound stacks are loaded.

Encounter Level Menu

<table>
<thead>
<tr>
<th>Bible (1)</th>
<th>Symbols (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian rites</td>
<td>People</td>
</tr>
<tr>
<td>baptism (4)</td>
<td>minister (2)</td>
</tr>
<tr>
<td>wedding (9)</td>
<td>Kirk Session (1)</td>
</tr>
<tr>
<td>funeral (1)</td>
<td>congregation (2)</td>
</tr>
<tr>
<td>Holy Communion (4)</td>
<td>Sunday School (3)</td>
</tr>
<tr>
<td>Special Days</td>
<td>beadle and guardians (2)</td>
</tr>
<tr>
<td>Christmas (6)</td>
<td>musicians (1)</td>
</tr>
<tr>
<td>Palm Sunday (1)</td>
<td>protesters (1)</td>
</tr>
<tr>
<td>Good Friday (1)</td>
<td>different Christians (1)</td>
</tr>
<tr>
<td>Easter (1)</td>
<td>visitors (1)</td>
</tr>
<tr>
<td>Whitsun (1)</td>
<td></td>
</tr>
<tr>
<td>Pilgrimage (1)</td>
<td></td>
</tr>
<tr>
<td>Harvest (2)</td>
<td></td>
</tr>
<tr>
<td>Remembrance Sunday (2)</td>
<td></td>
</tr>
</tbody>
</table>

Worry Level Menu

You are given nine pictures. You choose one by clicking on it. In the case of six pictures, this takes you to a larger version of the picture and the opportunity to inquire into it using the full LivesCan analysis. The remaining three have no lines of inquiry worked out; users are encouraged, when they have gone through other pictures, to devise their own questions and possible responses.
When you find a placename as you explore St Mary's note it and check a map to learn where it is.
If it matches one of the points or areas numbered on this map write the number into your book with the name of the place beside it. The place is at the other end of the line from the number.
They are all towns or cities except for three states marked by a box.
Appendix D

Worry level example
The picture shows a churchyard monument to a baby who lived for only one day. There is no caption.

Lines of inquiry relate to specific elements

**Being. Consider how people are affected physically.**
We don’t know why the baby died, but we do know he had a body and lived. He had a body before he was born. What difference would it have made if the baby had died before being born?

1 - No difference.
2 - Some difference.
3 - It depends.

What is your opinion?

**Why do you think it would have made no difference whether the baby had been alive or dead?**

**What difference do you think it would have made if the baby had been born dead?**

**What would any difference between this baby being born alive or dead depend on?**

**Being. Consider how people are affected emotionally.**
What kinds of feelings do you think any brothers or sisters would have had when their baby brother died?

1 - They probably wouldn’t have noticed much.
2 - They would have been upset.
3 - Secretly glad they didn’t have to put up with a baby.
4 - Something else.

What do you think?

**Being. Consider how people are affected intellectually.**
If you lose someone you longed for, your ability to think straight can be badly upset. Who do you think was likely to have been most seriously affected in this way?

1 - The mother.
2 - The father.
3 - Other members of the family.
4 - It depends.

What do you think?

**Being. Consider how people are affected morally.**
The child’s parents believed the right thing to do was to name the baby and record his life. Do you think they were right to do this?

1 - They were right.
2 - They were not right.
3 - It doesn’t matter either way.

What do you think?

**Table D1.1 Worry level example**
Being. Consider how people are affected spiritually.
How would you expect a Christian family to respond to this death?

1 - Accept that it is God’s will.
2 - Be bewildered and despairing at their loss.
3 - Look for someone to blame.
4 - A mixture of these or something else.

What do you think?

Context. Consider the context of heredity.
The same baby born today, in a more developed medical context, would probably have survived. Babies who may have genetic weaknesses can be saved. Do you think it is a good idea to interfere with nature this way?

1 - Yes.
2 - No.
3 - Don’t know.

What do you think?

Context. Consider the context of people.
Make a list of all the people who might have been involved in the picture you are looking at.

1 - OK.
2 - No thanks.

What is your response?

Context. Consider the context of culture
Doctors work hard to save babies and to help couples to have children when they find this difficult. At the same time doctors carry out many abortions. What do you think about this?

1 - Adults who want children should get help.
2 - Children should only be born if they are wanted.
3 - Adults are selfish and don’t think of children’s rights.

What is your opinion?

Context. Consider the context of politics
Politics is about trying to make things possible. What do you think governments should put as their top priority?

1 - Medicine and health.
2 - Education and schools.
3 - Making money.
4 - Happiness.

What do you think?

Table D1.2 Worry level example
Context. Consider the context of the universe.
Do you think that all human life has a special place in the universe, no matter how brief that life is?
1 - Yes.
2 - No.
3 - Don’t know.
What are your thoughts about human life?

Doing. Consider why people have the will to survive.
A baby has to depend on others to survive. Do you think a baby has a right to be given the best possible care? Even if it means giving less care to others?
1 - Yes.
2 - No.
3 - Don’t know.
What do you think?

Doing. Consider why people have the will to conform.
People have to follow rules about the disposal of a body. Today, most people are cremated rather than buried. As a consequence, there are few new monuments like this one. What are your thoughts about the best way to respect the memories of those who have died?
1 - I don’t have any thoughts about this.
2 - I can tell you my thoughts.
What is your response?

Doing. Consider why people have the will to investigate.
The causes of infant mortality (the deaths of very young people) are investigated very closely. The main causes of infant mortality around the world are lack of food and curable diseases. Can you offer some thoughts on why people should want to investigate new causes rather than remove known causes?
1 - No.
2 - Yes.
What is your response?

Doing. Consider why people have the will to create.
Skill and time have gone into creating this monument. Why do you think people want to use their money this way, and how would you have spent the money?
1 - On this monument to the importance of life.
2 - On helping the poor and homeless.
3 - On medical research.
4 - On something else.
What do you think, and how would you spend the money?

Table D1.3 Worry level example
Doing. Consider why people have the will to control. There is great interest in controlling population growth (limiting the numbers of new people alive). Why do you think most families in this country today are small?

1 - People are worried about world population growth.
2 - Adults want to spend more money on themselves.
3 - Marriages don’t last so long.
4 - Some other reason.

What is your opinion?

Note: It was not thought necessary to reproduce the prompts except for the first element of Being: the prompts are in italic. If there is difficulty in understanding the content of this table, it may help to refer to the explanation on page 168 of the Encounter level example in Table 7.1.

Table D1.4 Worry level example
Appendix E

Project evaluations

E1 Pupil questionnaire 334
E2 Pupil questionnaire responses 337
E3 Pupil interview schedule 344
E4 Pupil interview responses 346
E5 Teacher interview schedule 361
The LivesCan Project

1 FIRST IMPRESSIONS
Can you remember how you felt when you were first told you were going to use the computer for the LivesCan project?

If you answered NO, go to section 2.

If you answered YES, which one of these statements fits you best?
I felt worried
I thought "Oh no!"
I wasn’t bothered
I was quite interested
I was excited

2 THE BALLAD OF LIVESCAN
Did you read the ballad of LivesCan in class? YES ☐ NO ☐

If you answered NO go to section 3.

If you answered YES, continue here.
I found the ballad... boring ☐ interesting ☐
I found the ballad... quite easy ☐ quite difficult ☐

How much time did you spend discussing the ballad?
none ☐ a little ☐ a lot ☐

How much did you learn from the ballad?
nothing ☐ a little ☐ a lot ☐
Write down the main thing you learned from the ballad.

Did you try to solve the riddles in the ballad?  YES  NO

If you answered NO go to section 3

Did the teacher help the whole class?  YES  NO

Did the teacher help some people in the class?  YES  NO

How many riddles did you manage to solve on your own?

How many riddles did you manage to solve as a group?

I thought the riddles were...

Did you enjoy trying to solve the riddles?  YES  NO

Do you normally enjoy riddles and puzzles?  YES  NO

Did the class try solving the other riddles in the book?  YES  NO

Was the class successful?  YES  NO

3  YOU AND COMPUTERS

I enjoy using computers.

I find using computers...

Do you think computers could make learning more interesting?  YES  NO

4  USING THE COMPUTER FOR LIVESCAN

How many people did you normally work with on the computer?

I found using the computer for LivesCan...

I found the speed of the computer...

I found the computer behaved oddly.

In my opinion, the best way to work on LivesCan is...

The time I got on the computer was...

page 335
When I was at the computer, "Help!" was used.

<table>
<thead>
<tr>
<th>never</th>
<th>hardly ever</th>
<th>sometimes</th>
<th>often</th>
<th>a great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>because:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I found "Help!"...

<table>
<thead>
<tr>
<th>unnecessary</th>
<th>useless</th>
<th>little help</th>
<th>helpful</th>
<th>essential</th>
</tr>
</thead>
</table>

What did you most want help with?

Tick all the LivesCan levels you worked on.
- Visit Level
- Inform Level
- Encounter Level
- Worry Level

5 OPINIONS ABOUT LIVESCAN
What was the most interesting thing about LivesCan?

What was the most boring thing about LivesCan?

What was the most difficult thing about LivesCan?

Tick any words which describe how you feel about the church you explored:
- bored
- surprised
- interested
- thoughtful
- excited

Do you think LivesCan shows how the computer can be used to make learning more interesting? **YES** | **NO**

6 DIFFERENCES LIVESCAN MAY HAVE MADE
Tick one box for each statement.
After using LivesCan I find using the computer...
- much easier
- easier
- the same
- harder
- much harder

After using LivesCan what I know about churches is...
- confused
- the same
- greater
- much greater

After using LivesCan what I know about Christianity is...
- confused
- the same
- greater
- much greater

After using LivesCan what I know about some words is...
- confused
- the same
- greater
- much greater

After using LivesCan what I know about my own thoughts is...
- confused
- the same
- greater
- much greater

7 WHAT I THINK ABOUT RELIGION
Read each of the following statements and if you agree with it, tick the box beside it.
I don't really know what religion is. **********
I think religion is meant to help us lead better lives.
I think religion causes a lot of trouble in the world.
I don't think we really need religion. **********
I would like to know more about religion. ********

8 MAKING SENSE OF LIFE
How important do you think it is to try to make sense of life?
- not at all
- slightly
- moderately
- very
- extremely

That's all Folks! Many thanks for your help.
E2 Research Project evaluation by pupil subjects

The following is the full list of written responses from all 103 subjects who returned evaluations. It includes those who only partially completed their evaluation booklets, those who had not completed a Personal Profile or Religious Profile at the start of the project and those for whom there is no computer record of their using the computer. The absence of a named computer record does not mean that the person did not use the computer as a member of a group which had not registered all their names. The number in brackets after each response is the number of times it was made in the whole sample. The number not answering the item is stated after each item heading.

Item 8  (12 did not answer)
Subjects had to write down the main thing they learned from the ballad.
0  can't remember  (64)
1  you had to find clues  (1)
2  what LivesCan was about  (2)
3  well it was quite hard at the start  (1)
4  learnt more on Lifescan than what I knew  (1)
5  how to figure out the riddles  (1)
6  it give me an idea of what happened in Jesus time  (1)
7  I learnt about god and Jesus  (1)
8  I learnt the way Jesus would have described his life  (1)
9  learned what to look for in the churchyard and how to use livescan  (2)
10  some things on churches. Jesus and about him.  (1)
11  it was very religious  (1)
12  how to use Livescan  (1)
13  that it was about Jesus's birth  (1)
14  I learned a lot  (1)
15  nothing  (9)
16  I learned a lot like Jesus.  (1)
17  I learned about the church  (1)

Item 27  (5 did not answer)
Subject has to choose the best way to work on LivesCan (on own; with a friend; in a small group) and say why.
1  two people to solve something / to help, help each other  (17)
2  you all take turns  (1)
3  get through it quicker / get the riddles faster  (5)
4  get more done  (2)
5  don't want to be on my own  (1)
6  it is easy / it is easier to use / it's a bit hard for you on your own  (4)
7  you could talk about it / discuss things  (17)
8  you can share the answers / work together  (2)
9  you get all crowded in a group  (1)
10  there are a lot more good brains  (1)
11  you can say yes or no to a decision  (1)
12  it makes things easier if you don't understand things / if you don't know what to do he or she might  (4)
13  your friend might know a lot more about it than you  (1)
14  you can fit round the computer and see what's happening  (1)
15  then you get more of a opinion of your choice  (1)
16  you should always get a second opinion  (1)
17  you can find more clues  (1)
18  one can work on it and one can do the writing  (1)
19  you will not make any disagreements [with friend] / you get on well with friends (or you should)  (2)
20  you can find out more with a friend  (1)
21  I didn't have anyone to argue with  (2)
you can both put in your ideas and put them together (1)
you get more shots because you're only sharing with one person (2)
because it's hard and quite boring (1)
in a group everyone has different ideas; more suggestions (4)
you have more fun (1)
I won't be able to solve them on my own (1)
more brains solve more riddles (1)
it makes it more interesting (1)
you don't get crowded and you work better (1)
if you got stuck someone else can help and more fun (1)
better fun (1)
there is lot of bits to choose from (1)
you can blame the other person if anything goes wrong (1)
your other friends may have some extra info that can help you (2)
it is hard and with a friend you have more of a chance (1)
It's more exciting (1)
you can work by yourslef solve riddles by yourslef that is why. (1)
don't know (1)
a lot of people get learn [rather] than one at a time (1)
[ no response with this numbered heading]  
you can think better on your own (1)
you don't get enough time to give everyone a shot (1)
you can work with each other (2)
you get more shots on your own (1)
you don't need to do it all on your own (1)
you both no what to do (1)

Item 29 (13 did not answer)
Subjects had to say why the time they got on the computer was: far too little; too little; enough; too much; far too much.
1 too many groups (6)
2 too big a group / bell went. (1)
3 taken off in five minutes (4)
4 there was work to be done / other work and had to hurry up (2)
5 it was only 15 minutes (1)
6 it was too fast (1)
7 you had to think about the problems (1)
8 I had more time to work on / had a lot of time to work things out (2)
9 we didn't get it finished / didn't get some things done (6)
you didn't spend a lot of time working out an answer (1)
i can't stay on computers long because my eyes go blurry (1)
boring after a while / any longer and I would probably have been bored (5)
we needed a lot of time to try to complete (1)
we had enough time to work things out and explore different parts (1)
we got time to explore and still give others a shot (1)
I never got chosen (1)
17 people were getting more shots (1)
18 I found most things (1)
19 we only had 4 - 5 minutes and other people had all day (1)
20 other people wanted to get on it (1)
21 I like a lot of time (1)
22 we only had 40 minutes (1)
23 I just got into the computer and I had to give it some ells (1)
24 if you spent to much time you would get boured (1)
25 I didn't get much time to solve LiveScan (1)
26 other people could get a shot / other people could get on as well (2)
27 I got quite far (1)
28 sometimes you can't find the answer and it gets a bit boring (1)
29 it was hard (3)
30 it was a big class and everyone was working in pairs and every pair had to get a shot (1)
31 it was boring (2)
32 because it's hard and quite boring (1)
33 the bell was just about to ring in 15 minutes (1)
34 because it was enough (1)
35 there was so many things to look at / so much to do (3)
36 when our time was up we were finished (1)
37 the time I got can't be more than 30 minutes (1)
38 you didn't get enough time to see everything (3)
39 I was on once for half an hour (1)
40 I went on for two minutes before the bell and didn't get back on after the break (1)
41 we have a big class and there was other people wanting on it (1)
42 it was too hard to carry on but at least I gave it a shot (1)
43 I didn't go on (1)
44 I found it far too confusing (1)
45 I hardly got any time on it (1)
46 it's a bit hard sometimes and some got to find things (1)
47 the group had enough time to discuss any problems or better ways in the program (1)
48 it is hard and we got hardly enough time to work out how to get into the programme (1)
49 it gave us enough time to look through all the parts (1)
50 don't know (1)
51 we were in groups and had enough time (1)
52 when you found some details it was time to come of (1)
53 you would be in the middle of something and got told that's time up (1)
54 I only got ten minutes (1)
55 there was groups to go on the computer / so many people needing to go on (2)
56 there is a lot to do and you can get lost quiet easy (1)
57 you could get a lot of things done (1)
58 you couldn't get enough time to work on the riddles on the computer (1)
59 I only got one shot (1)
60 it was quite easy and quick (1)
61 it was good but if you got stuck you kept going over the same thing (1)
62 so people done it (1)

Item 31 (16 did not answer)
Subjects were asked to say why “Help!” on the computer was used: never; hardly ever; sometimes; often; a great deal
1 it doesn't help much (1)
2 it doesn't explain good / anything (5)
3 we were stuck sometimes (8)
4 I could not get things (1)
5 it says help on the menu (1)
6 computer all funny and useless (1)
7 it was very easy (2)
8 the game was crashing (1)
9 I didn't know what to do & I wasn't trying (1)
10 People helped us (1)
11 we got lost sometimes (1)
12 most of the time we knew what we were doing (2)
13 some things I didn't understand (2)
14 it told you how to use the computer in the book (1)
15 we did not need to use it / knew what to do (14)
16 we tried to work things out on our own (1)
17 it could be used to change level (1)
18 everything was well explained / the teacher had explained it to us clearly (2)
19 my friend had already been on LivesCan (1)
we never need all the time (1)
I wanted to see what was available (1)
I never now what to do (2)
I found it easy (2)
the computer was not working that well / behaved oddly sometimes (2)
it helped me to become first to change level (1)
it was useful (1)
we needed it (1)
it's hard (8)
I was sometimes never stuck. And if I got stuck the teacher was there to help me (1)
I got stuck in the church (1)
can't remember (1)
we went into the church and came back out and then we couldn't get back in (1)
I couldn't get out the church (1)
we kept on going round in circles (1)
we did not need to use it because the teacher helped us (1)
I didn't know it was there (1)
we could not get pasted putting in our names (1)
everything was far too hard (1)
at the start it was too complicated (1)
we found the livescan program hard to follow and rather confusing (1)
we could not get into the programme so the teacher help us with that (1)
it would have spoiled it (1)
when I clicked on the mouse nothing happened (1)
sometimes the computer went funny and stopped going on (1)
to figure the clues out (1)
I ask the teacher (1)
I didn't know where to go (1)
some of it was hard but most of it was easy (1)
it was quite hard (1)
I only needed it to get into the church (1)
it would keep going back to the same one again (1)

**Subjects were asked what they most wanted help with.**
1 questions (queusrins) (2)
2 find the clues and getting into it (2)
3 to get into it / getting started / the start / putting your name in / getting into the programme (12)
4 all (1)
5 in the graveyard (1)
6 to get there (1)
7 there was no help (1)
8 getting around places / knowing where to go / finding places / going around the church / how to get to things (10)
9 wanted most with the beginning (? as 3) (1)
10 we used it because we got lost (3)
11 to get into the church (4)
12 where we could go on Inform level (1)
13 nothing / I didn't use "Help" (10)
14 getting up stairs (1)
15 finding my way out the church (3)
16 were you need to find out some clues (1)
17 if the answer was right (1)
18 solving puzzles, getting out of something (1)
19 how to change level (1)
20 can't remember (8)
21 Livescan obbussionly [? obviously] & Getting into the bit where you entered your

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name (1)
22 getting back into the church (1)
23 in the church (1)
24 I did not use it but other people needed it (1)
25 the parts that never made sense (1)
26 everything (2)
27 finding out more about a certain object (1)
28 finding out what some stuff was (1)
29 when you were stuck somewhere (1)
30 in the church because I kept getting lost (1)
31 the statues lying down (3)
32 to get into other rooms (1)

Item 38 (9 did not answer)
Subjects were asked to say what was the most interesting thing about LivesCan.
1 Getting away from it (3)
2 seeing the picture / all the photos / the pictures (5)
3 the graphics (4)
4 nothing (6)
5 to get into it / the starting (2)
6 I learned things (1)
7 don't know / can't remember (3)
8 brilliant / it was good to learn on LivesCan (2)
9 when we got into the graveyard / the grave stones (5)
10 the sound / the speech caption / how the person speaks (3)
11 visiting the grave (1)
12 seeing that you could read the Bible (1)
13 when I was in the church / seeing things in the church / searching round the church (10)
14 discovering things / finding the close (2)
15 the writing was interesting (1)
16 being able to explore everything (1)
17 trying to solve the riddles / the clues (5)
18 the difficulty (1)
19 you learned lot about church / it told you a lot round the church (2)
20 the objects inside the church (2)
21 the close up pictures (1)
22 the illustrations and how LivesCan tells you about them (1)
23 changing levels (1)
24 the pictures and the riddles (1)
25 in the church and looking at the gravestones (1)
26 the trip round Haddington (1)
27 reading the grave stones (1)
28 code name (1)
29 the pictures and the graphics (1)
30 having your own password and the Visit level (1)
31 the wee bird tweeting at the introduction (1)
32 St Mary's church / the church (5)
33 learning about religion (1)
34 [unintelligible] (1)
35 the computer looked interesting (1)
36 the computer programme / working the computer (9)
37 that you could look around and in the church (1)
38 the bible and the photographs (1)
39 inside the church where you could read memorials (1)
40 finding out about the church and graveyard (1)
41 moving about and reading (1)
42 when you were outside the church (1)
Item 39 (17 did not answer)
Subjects were asked to say what was the most boring thing about LivesCan.

1. turning it on / waiting for it to load (8)
2. something about Jesus story / the ballad (10)
3. nothing (12)
4. it was too fast (1)
5. clicking the mouse all the time (1)
6. everything (2)
7. waiting for it (1)
8. waiting for the picture to change (3)
9. working out the clues / riddles (3)
10. trying to find the church / get into the church
11. going round the graveyard / just walking about the paths / outside the church (4)
12. wandering around in Inform level (1)
13. there was no sound (1)
14. the birds singing (1)
15. you never went (normally) where you wanted to go (1)
16. the signs (1)
17. trying to get out of the church / going round the church all the time (4)
18. how you had to click on the corner (1)
19. when you couldn’t get how you wanted to (1)
20. when you got stuck and didn’t know what to do (2)
21. don’t know (3)
22. keeping walking around, losing clicks and ending up where you began (1)
23. we always got stuck in the same place (1)
24. nearly everything / the rest (3)
25. the end (2)
26. the Visit level (1)
27. getting into it (1)
28. having to go through all the questions (1)
29. writing in your name for the file (1)
30. looking about / looking for things (2)
31. the movement (1)
32. when you wanted to do something it always went back (1)
33. not finding the clouse cwick enof (1)
34. when you get lost (1)
35. it was boring after a while (1)
36. [no response against this numbered item]
37. there wasn’t enough to do (1)

Item 40 (16 did not answer)
Subjects were asked to say what was the most difficult thing about LivesCan.

1. turning it off (9)
2. getting into it / getting it on (6)
3. understanding the Jesus story (1)
4. can’t remember / ? (4)
5. trying to get out of the church (7)
6. trying to move about / getting about (4)
7. getting your name to register (1)
8. trying to find the door into the church / get into the church (7)
9. trying to find different information on different levels (3)
10. walking round the church / getting around the church (2)
11. solving the riddles / the clues / puzzles (8)
12. sometimes getting lost and getting out (1)
13. finding all the things / getting to the clouse (5)
14. nothing / none of it (5)
15. finding the stairs to the balconie (1)
16. clicking on things (1)
17. changing level before we new how (1)
getting started and getting into the church (1)
don't know (4)
you don't expect me to answer that now (1)
everything (2)
trying to get back into the church (1)
the church (1)
finding the bits and getting into the program (1)
the computer looked really hard (1)
the computer programme (1)
looking about and the start (1)
trying to find the end (1)
getting lost (1)
trying to read the books (1)
you didn't know where to go / next (2)
reading the passages - the writing was too small (1)
going into different rooms (1)

Note:
The assistance pupils seemed to want most was with finding the answers to the clues. It is not clear if this is a consequence of a desire to find answers by any means. Magazines for computer games publish what are known as cheats which provide solutions to the problems for the games. This does raise an interesting issue: does providing guidance to understanding constitute cheating, or is it only cheating if you are in competition with other people? One has to wonder if the use of the term cheat in such a fashionable way can possibly help children to understand that help is not cheating, and that cheating is something which is not desirable even if it may be common practice.
Preliminary advice to respondent:

I want to talk to you about your experience of LivesCan. Is that OK?

I would like you to be honest about your thoughts and feelings. Do you think you can manage that?

I'm going to make some notes as we go along so that I don't get confused and forget important things you say. But whatever you say will be in confidence. Do you know what that means?

That's right, the information you give me won't be traceable back to you. Is that OK?

1. I wonder if you can tell me first of all what you think about LivesCan?

2. Do you think your teacher knew how to use LivesCan? Why do you say that?

3. What do you think should have happened?

4. What do you think LivesCan is for? What do you think I was hoping LivesCan would achieve?

5. Do you think that's something worth doing? Why is that?
If I said LivesCan is about trying to help you make sense of the whole of life, would you say that was worth doing? Why is that?

Do you think that's more important than doing maths? Why is that?

Is there anything (else) more important than making sense of life?

Can you see how LivesCan might help you make sense of life?

Can you tell me what you really hope and long for in life?

Do you think that will happen?

What will you need to do if it is going to happen?

Thank you very much for being so helpful. Is there anything you would like to ask me?

Time completed: ..............................
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<tr>
<td>24081F</td>
<td>Quite interested.</td>
<td>Sometimes.</td>
<td>Don't know.</td>
<td>Don't know. If you go to church you'll know more about it.</td>
<td>Yes. I go to church and I like to know more about it.</td>
</tr>
<tr>
<td>23068M</td>
<td>Good. It's interesting.</td>
<td>Yes.</td>
<td>Just the way it happened.</td>
<td>Help you learn more about religion.</td>
<td>Yes. When you grow up you could be in a religion.</td>
</tr>
<tr>
<td>23075M</td>
<td>OK. Didn't really like the way you had to wait for it to go on. Stuff happened to the computer.</td>
<td>No. My teacher's not very good at computers.</td>
<td>Teacher should have let us get on with it.</td>
<td>Get people more interested in religious things.</td>
<td>Yes. It gets you off your work. It's interesting, it gets you working on the computer.</td>
</tr>
<tr>
<td>24094M</td>
<td>All right. It's good for learning about people.</td>
<td>Don't know, because never seen her doing it with us.</td>
<td>Not sure.</td>
<td>Teach you.</td>
<td>If you enjoy it, I suppose it would be quite good.</td>
</tr>
<tr>
<td>44214F</td>
<td>Thought really interested when first started, along with others in group. Still interested.</td>
<td>Yes, could give help.</td>
<td>N/A</td>
<td>Finding out about the church and graveyard.</td>
<td>Yes. I think it's a really good thing to do.</td>
</tr>
<tr>
<td>44220F</td>
<td>A good thing to do on the computer. You can learn a lot about Christianity.</td>
<td>I think so - explained it to us - phoned in.</td>
<td>N/A</td>
<td>Don't know. Learning about churches.</td>
<td>Worth doing, but don't know why.</td>
</tr>
<tr>
<td>44221F</td>
<td>It's all right. Sometimes you get to help, but you get stuck.</td>
<td>Well, a wee bit. Had done it once, but wasn't really sure.</td>
<td>We should have done it ourselves - teacher not helping.</td>
<td>For religious studies.</td>
<td>Yes. You should get to know and talk to people from different countries.</td>
</tr>
</tbody>
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<td>44228M</td>
<td>We never done much - ten minutes both times. Quite good in P6. Passages on screen small.</td>
<td>Yes; did give quite a lot of help. Taking a lot of time explaining.</td>
<td>N/A</td>
<td>Helping someone in their research.</td>
<td>LivesCan research worth doing.</td>
</tr>
<tr>
<td>44229F</td>
<td>Quite interesting because we did it in P6 and P7.</td>
<td>Yes.</td>
<td>N/A</td>
<td>Learning about religion.</td>
<td>Yes. Not sure why.</td>
</tr>
<tr>
<td>M</td>
<td>Quite interesting, because of all the things you learn.</td>
<td>Yes. Helped us. Works on the computer all the time.</td>
<td>N/A</td>
<td>Learning about Christianity.</td>
<td>Yes. It's important that you learn about religions.</td>
</tr>
<tr>
<td>73496F</td>
<td>A good idea. Some bits a little hard to understand. It's good getting to choose your own paths.</td>
<td>No. Was ten times trying to get into it.</td>
<td>Teacher didn't read it right.</td>
<td>Just to make you think. Not just to let things pass you by.</td>
<td>Yes. If you let things pass you by, you won't know what's happening in the world.</td>
</tr>
<tr>
<td>73514F</td>
<td>I think it's a good idea. I started going to church after doing first session. I enjoy church.</td>
<td>Not at first, but does now. Got help from another teacher.</td>
<td>N/A</td>
<td>To teach children about religion and show how computers can help.</td>
<td>Certainly. It's something people need to know about.</td>
</tr>
<tr>
<td>74529M</td>
<td>It was a good thing using the computer but I can't say it was interesting, because in the church we couldn't really get anywhere.</td>
<td>Yes, knew where going on it.</td>
<td>N/A</td>
<td>To educate people in RE, to teach them about religion.</td>
<td>Yes because there's not enough programmes like that about, and there's no other way they're going to learn about it.</td>
</tr>
</tbody>
</table>

**E4 Part 1.2**
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<tr>
<td>F</td>
<td>It's interesting. I like how you get into the church.</td>
<td>Not really, because helped by another teacher.</td>
<td>The right thing was done.</td>
<td>Teaching about Christianity and other religions.</td>
<td>Yes. NAME is a Christian and you're not, so she can't be friends, but I think that's nonsense.</td>
</tr>
<tr>
<td>73497F</td>
<td>Some bits were quite good: going into church, treasure hunt. Some bits boring: trying to get into church, registering.</td>
<td>Yes. Had the book and spent 20 minutes going through it.</td>
<td>N/A</td>
<td>Teaching about religion and Christianity. Told you bits about the church.</td>
<td>Not really. That's weird.</td>
</tr>
<tr>
<td>73502F</td>
<td>The computer was confusing. Never really knew what ballad was about. If teacher hadn't explained it I wouldn't have known. Ballad more helpful.</td>
<td>Yes, but got confused with it, and it didn't make much sense to her.</td>
<td>N/A</td>
<td>To let children know more about the range of religions and what they believe in.</td>
<td>Yes, but I'm not really interested because I don't think about that kind of thing. Some children might get confused about these things - they can pass on what they know.</td>
</tr>
<tr>
<td>73503F</td>
<td>All right. Not very sure about it at first. Quite good when you get to see the bits in the church.</td>
<td>No. We worked in twos.</td>
<td>N/A</td>
<td>To make people find out about Jesus and make sense of life. It's a wee bit confusing, all about Jesus in the ballad and then going into the church.</td>
<td>Don't know.</td>
</tr>
</tbody>
</table>

E4 Part 1.3
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<tr>
<td>73509M</td>
<td>Quite good. Liked how you went round church. Difficult to get registered.</td>
<td>Not really. She just took it by chance. When asked didn't look as though she knew what she was doing.</td>
<td>Two or three introductory programmes leading up to it.</td>
<td>Teaching you about religion.</td>
<td>I don't know. It depends if you like religion or not.</td>
</tr>
<tr>
<td>83594F</td>
<td>Really good. Made it fun to learn about RE.</td>
<td>We were learning it together.</td>
<td>This was a good way of doing it.</td>
<td>To teach children, and to make it fun to learn. Not to be racist and things.</td>
<td>Yes. Children should learn about these things so they know a bit about it when they're older.</td>
</tr>
<tr>
<td>83595M</td>
<td>A good idea. It's very good - takes a bit of getting used to. Can be a bit complicated but Visit level easy to understand.</td>
<td>Sort of.</td>
<td>Can be a bit of a pain if teacher can't answer/solve a question.</td>
<td>Teaching RE in a new and interesting way. RE is finding out about customs, ornaments and worship.</td>
<td>I think so. Good to understand what some people believe so you can appreciate what they're saying, understand other people better.</td>
</tr>
<tr>
<td>84618F</td>
<td>Very good. Very interesting. Put a new light on exploring church. A challenge to find answers to ballad. A good idea.</td>
<td>Had an idea. We learned together.</td>
<td>As it happened.</td>
<td>Help children to see that religion can be looked at in lots of different ways with the different levels. To understand religion is not just about going to church and reading the Bible, but what you think and feel, and the way others think and feel.</td>
<td>Yes. There are people in the world who think that people who go to church are different. People start wars because of what they think and feel.</td>
</tr>
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</tr>
<tr>
<td>85664M</td>
<td>It's good. We discovered you could change the level yourself.</td>
<td>Yes, a wee bit.</td>
<td>N/A</td>
<td>Teach you about the church.</td>
<td>Yes, because hardly anyone knows anything about it.</td>
</tr>
<tr>
<td>85665M</td>
<td>I thought it was helpful to find out more about churches and graveyards. It might have been more helpful to have had map on paper.</td>
<td>No. I had a couple of problems: couldn't get out of one of levels.</td>
<td>I think what we did was just right. We tried different things.</td>
<td>It helps children learn about Christianity and churches in a more interesting way.</td>
<td>Yes. More interesting than having worksheets to do. You've got to find out where people worship, because people believe in it cf. N. Ireland. You've got to understand different religions otherwise you won't be able to make peace.</td>
</tr>
<tr>
<td>Subject</td>
<td>Is making sense of the whole of life worth doing?</td>
<td>Is making sense of life more important than maths?</td>
<td>Is anything more important than making sense of life?</td>
<td>Can you see how LivesCan helps make sense of life?</td>
<td></td>
</tr>
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<td></td>
</tr>
<tr>
<td>24081F</td>
<td>Yes, so you will know more about people in other countries.</td>
<td>Sometimes, because about life is more, because you have to learn about yourself, more than in maths.</td>
<td>No.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>23068M</td>
<td>Yes. You don't want to be messed up. You want a good life.</td>
<td>Yes. You only get one chance at making sense of life.</td>
<td>No.</td>
<td>Yes, if you read and learn about it</td>
<td></td>
</tr>
<tr>
<td>23075M</td>
<td>Yes. As you get older you'll understand more. Help you get on with your life. You can tell your children.</td>
<td>Yes. Maths doesn't really get you anywhere in life, but religion does.</td>
<td>No.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>44214F</td>
<td>Yes, a bit.</td>
<td>No. Maths is more for high school.</td>
<td>All other work, like spelling.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>44220F</td>
<td>Yes, but don't know why.</td>
<td>Yes. If you don't have a sense of life you can't do anything.</td>
<td>Not really.</td>
<td>No. Can't remember what it was like.</td>
<td></td>
</tr>
<tr>
<td>44221F</td>
<td>Sort of - people either do or don't like doing LivesCan. But yes.</td>
<td>It's part of school work.</td>
<td>Not really.</td>
<td>Well, if we keep doing it, it might.</td>
<td></td>
</tr>
</tbody>
</table>

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<th>Is anything more important than making sense of life?</th>
<th>Can you see how LivesCan helps make sense of life?</th>
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<tr>
<td>44228M</td>
<td>Yes. There are lots of different reasons for life.</td>
<td>No. Maths could help you get on better in life, e.g. becoming an accountant.</td>
<td>Health.</td>
<td>It could because people are answering questions.</td>
</tr>
<tr>
<td>M</td>
<td>Yes, I think so, but don't know why.</td>
<td>Yes. You've got to know these things.</td>
<td>Don't really know.</td>
<td>Haven't seen enough of it.</td>
</tr>
<tr>
<td>73496F</td>
<td>Yes, because you're here and you'd want to know why you're here.</td>
<td>Yes. It matters if you get a job, but you always need to know why you're here.</td>
<td>No.</td>
<td>Yes. It asks you questions, but everyone has different answers.</td>
</tr>
<tr>
<td>73514F</td>
<td>Yes. If you know what life's about you can go through life with fewer mistakes.</td>
<td>I'm not sure about that. Maths can help you make sense of life.</td>
<td>Not really. If you know what makes sense then things would not go wrong.</td>
<td>Yes. Teaches religion, about God and beliefs in God.</td>
</tr>
<tr>
<td>74529M</td>
<td>Yes. To help people get a good life all their life.</td>
<td>Yes, because people have to have a good attitude towards their life.</td>
<td>Keeping yourself safe.</td>
<td>No.</td>
</tr>
</tbody>
</table>

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<th>Can you see how LivesCan helps make sense of life?</th>
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<tbody>
<tr>
<td>F</td>
<td>Not that much. I don’t really pay attention to religious stuff. Religion is about making sense of life.</td>
<td>Yes, but can’t explain why.</td>
<td>No.</td>
<td>Not really.</td>
</tr>
<tr>
<td>73497F</td>
<td>Yes. We’re going to be in the world for quite a long time, so we’ve got to know about it.</td>
<td>About the same. You’ve got to know maths to help you through your life, because you’re doing maths all the time.</td>
<td>No.</td>
<td>Not really, not the part we did.</td>
</tr>
<tr>
<td>73502F</td>
<td>Yes. There’s a purpose in living but I don’t see what the purpose is in life. It doesn’t worry me. I don’t think they’re really important.</td>
<td>No, because it’s not really important.</td>
<td>N/A</td>
<td>No.</td>
</tr>
<tr>
<td>73503F</td>
<td>Yes. If you don’t make sense of life you could muck up your life, if you don’t have the right lifestyle.</td>
<td>Yes. Maths is only important if you’ve got that kind of job.</td>
<td>No.</td>
<td>Not very sure.</td>
</tr>
<tr>
<td>Subject</td>
<td>Is making sense of the whole of life worth doing?</td>
<td>Is making sense of life more important than maths?</td>
<td>Is anything more important than making sense of life?</td>
<td>Can you see how LivesCan helps make sense of life?</td>
</tr>
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<td>-------------------------------------------------</td>
</tr>
<tr>
<td>73509M</td>
<td>Yes. It makes you feel you know where you've come from, and what's happening around you.</td>
<td>No. Maths can help you get a job and give you qualifications, but making sense of life is something you want to do.</td>
<td>Most of the stuff at school.</td>
<td>Some of it shows what happened to Jesus.</td>
</tr>
<tr>
<td>83594F</td>
<td>Yes. Too hard to explain why.</td>
<td>Both equal. You've got to learn other things, not just maths.</td>
<td>I don't think so.</td>
<td>A bit. It shows you things, tells you things about the Bible and stuff.</td>
</tr>
<tr>
<td>83595M</td>
<td>Yes. You're living, so you should learn why, and do it better.</td>
<td>Maths is also about helping people to live better. It's about getting things done. No, it's all the same.</td>
<td>There can't really be if that's all you're doing. It's one of the most important things.</td>
<td>Yes, I suppose. It's teaching you, and being taught is a way of making sense of life.</td>
</tr>
<tr>
<td>84618F</td>
<td>Yes.</td>
<td>Yes. Life is more important than maths. You could spend lots of time on maths, but it would not help you solve problems of life.</td>
<td>Apart from life itself, there isn't anything more important.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Subject</td>
<td>Is making sense of the whole of life worth doing?</td>
<td>Is making sense of life more important than maths?</td>
<td>Is anything more important than making sense of life?</td>
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</tr>
<tr>
<td>85664M</td>
<td>Yes, but not really sure why.</td>
<td>Yes, because if you believe in yourself you can do anything.</td>
<td>No.</td>
<td>It would help you decide if you believe in religious stuff.</td>
</tr>
<tr>
<td>85665M</td>
<td>Yes, so you know what you believe in. You might just follow your parents, but if you don't know why you believe there is no point in believing it.</td>
<td>You've got to have a balance. No point in making sense of life and not having any qualifications to do anything with it. It's half and half.</td>
<td>Not more important but same: being able to enjoy yourself; having a good job, something you enjoy doing.</td>
<td>Yes, because it will help you understand what there is to believe in.</td>
</tr>
<tr>
<td>Subject</td>
<td>What do you really hope and long for in life?</td>
<td>Do you think that will happen?</td>
<td>What will you need to do if it is going to happen?</td>
<td>Is there anything you would like to ask me?</td>
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<td>-------------------------------</td>
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<td>---------------------------------------------</td>
</tr>
<tr>
<td>24081F</td>
<td>Long life.</td>
<td>Don't know.</td>
<td>Keep healthy and get a job.</td>
<td></td>
</tr>
<tr>
<td>23075M</td>
<td>Have a happy life.</td>
<td>Yes.</td>
<td>If you keep thinking about it. Don't do anything you would regret, anything bad.</td>
<td></td>
</tr>
<tr>
<td>24094M</td>
<td>A happy life.</td>
<td>Yes, if you get a job.</td>
<td>Work hard at school. Don't get into trouble with the police.</td>
<td></td>
</tr>
<tr>
<td>44214F</td>
<td>A really good job.</td>
<td>Hopefully, yes.</td>
<td>Stick in at school and work really hard.</td>
<td></td>
</tr>
<tr>
<td>44220F</td>
<td>A good job.</td>
<td>Don't know.</td>
<td>Don't know.</td>
<td></td>
</tr>
<tr>
<td>44221F</td>
<td>Grow up, get a good job and money.</td>
<td>I don't know, it depends on a lot of things.</td>
<td>Have to stay on at school and get good marks.</td>
<td></td>
</tr>
</tbody>
</table>

**E4 Part 3.1**
<table>
<thead>
<tr>
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<th>Is there anything you would like to ask me?</th>
</tr>
</thead>
<tbody>
<tr>
<td>44228M</td>
<td>To be happy.</td>
<td>Yes.</td>
<td>Happy just now.</td>
<td>What is LivesCan for?</td>
</tr>
<tr>
<td>44229F</td>
<td>Not sure.</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>To have own family, home, get a good job, go to university.</td>
<td>If I try.</td>
<td>I’ll have to work hard.</td>
<td></td>
</tr>
<tr>
<td>73496F</td>
<td>To be happy, to enjoy what you’re doing. If I get to be a lawyer and get a lot of money, not to let it go to my head, and just be normal.</td>
<td>I hope so.</td>
<td>If I work hard enough.</td>
<td></td>
</tr>
<tr>
<td>74529M</td>
<td>That I don’t have any accidents or anything. That I don’t become unemployed.</td>
<td>Yes.</td>
<td>Keep myself safe. Not do anything stupid. Go and get a degree at university.</td>
<td></td>
</tr>
</tbody>
</table>

**E4 Part 3.2**
<table>
<thead>
<tr>
<th>Subject</th>
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<th>Is there anything you would like to ask me?</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>A good job. I want to be a lawyer.</td>
<td>No, because I'm not that clever.</td>
<td>Work really hard.</td>
<td></td>
</tr>
<tr>
<td>73497F</td>
<td>Peace, for everybody. That's more a wish.</td>
<td>No. Wars in Ireland because of everybody's different religions.</td>
<td>Petitions to stop conflicts.</td>
<td></td>
</tr>
<tr>
<td>73502F</td>
<td>Be successful, have a good life, a good job. Basically a nice life - I don't want to be poor.</td>
<td>Yes, but not as successful as I would like to be.</td>
<td>Work hard and concentrate on your studies.</td>
<td></td>
</tr>
</tbody>
</table>

**E4 Part 3.3**
<table>
<thead>
<tr>
<th>Subject</th>
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</tr>
</thead>
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<tr>
<td>73509M</td>
<td>Get a good job. Have loving wife and some children. Have a lot of animals.</td>
<td>I can only hope.</td>
<td>Get a lot of qualifications and work hard.</td>
<td></td>
</tr>
<tr>
<td>83594F</td>
<td>Not very sure.</td>
<td>Not sure.</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>83595M</td>
<td>Not really. I would need time to think about that. I'm still not really sure what's best for me.</td>
<td>N/A</td>
<td>N/A</td>
<td>Technical details. Had been inspired to make own at home.</td>
</tr>
<tr>
<td>84618F</td>
<td>Do well through school, university, writing career, good job and family. Feel that I've achieved a goal in life.</td>
<td>I hope it would happen. If I didn't get a good job I'd still be happy. Happiness is if you've got people that love you, and if you've got something to love.</td>
<td>Work hard.</td>
<td>Enjoyed showing LivesCan to other people in class. Liked dictionary in it. Being able to explore it. Feel it's helped during the Christianity project. Helped with understanding.</td>
</tr>
</tbody>
</table>

E4 Part 3.4
<table>
<thead>
<tr>
<th>Subject</th>
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<th>Is there anything you would like to ask me?</th>
</tr>
</thead>
<tbody>
<tr>
<td>85664M</td>
<td>A good job.</td>
<td>Maybe.</td>
<td>Get better at what you want to do.</td>
<td>Would like to learn more about the people.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Inform level map.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Would like to go upstairs in church.</td>
</tr>
<tr>
<td>85665M</td>
<td>Just to get a good job and enjoy myself.</td>
<td>Yes.</td>
<td>If you do all the things in class.</td>
<td>How to work Worry level.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Helpful if researcher had demonstrated to group.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Couldn't write in answers on Worry level.</td>
</tr>
</tbody>
</table>

E4 Part 3.5
Preliminary advice to respondent:

Thank you for agreeing to this interview. I know how busy you are. It should only take about fifteen minutes if you haven't used the computer part of the LivesCan project, and a little longer if you have. But I don't want to rush you if you have more you want to say.

Before we begin, can I assure you that everything you say will be in strictest confidence. What you say will be absorbed into a general statement about teachers' experiences of the LivesCan project. You will not be identifiable.

I hope you won't mind me taking notes, and I hope it won't interfere too much with our discussion.

Now, you're to feel free to say anything you wish about the project, whether it's about any of the materials or the way in which the project has been handled. You won't upset me at all, and I won't take it personally. This is just a research project, but it is trying to find out what is actually going on.

Does that seem OK to you?

Do you want to say anything before we begin?

Preliminary remarks of respondent:
1. Can you remember how you first heard about the LivesCan research project?

2. a) Can you remember how you felt when you realised you were being asked to get involved?

   b) Why was that?

3. a) Did your attitude change at all as you learnt more about the project?

   b) How do you feel about it now?

4. I'd like your reaction to the help offered at various stages. (show items where relevant)

   a) I said at the beginning that I'd be willing to come to school to explain the project; any comment?

   b) I sent explanatory notes before administering the personal profiles;

   c) there was an in-service at ITSU;

   d) there were visits to debug problems;

   e) help was built into the LivesCan programme itself;

   f) I was asked to compile a handbook.

   g) Which of all these was most helpful?

   h) What help would you suggest for another time?
I've got some questions about the pupil's booklet. (show booklet)

a) Have you used the ballad at all? If NO, go to g)

b) How much time did you spend on it?

c) Did you attempt to answer the riddles embedded in the ballad?

d) NO - Why was that? / YES - How did you go about that?

e) How did the pupils respond to the ballad?

f) What general comments do you have on the ballad?

g) Did you use anything else in the booklet?

h) How did that go?

i) Overall, what did you think of the booklet?

I want to move to the LivesCan computer package itself.

a) Do you think it is easy for teachers to use?
   very easy  fairly easy  average  fairly difficult  extremely difficult

b) Did you use it with pupils? If NO, miss Question 7

c) How much time were you able to spend becoming familiar with it?
   (Number of hours over how long?)

d) How confident are you about using computers in the classroom in general?
   not at all  slightly  fairly  very  completely

e) How do you think this affected your involvement in the project?
7 a) How did you set about using the computer package with pupils?

b) What obstacles or problems did you meet?

c) How did you deal with them?

d) How would you describe the responses of pupils to the LivesCan package?

e) How useful has it been in helping pupils learn about Church and Christianity?
Not at all  Little  Quite  Very
What do you think the potential for this is?
None  Little  Some  Considerable  Great

f) Do you think it's helped make them clearer about what it means to be religious?
Not at all  A little  Quite a bit  A great deal
What do you think the potential for this is?
None  Little  Some  Considerable  Great

8 Would you consider using this package or anything like it again? Why?

9 What changes would you want to see?

10 What advice would you give me about doing this again?
Finally, I'd like to ask you about your perception of Religious and Moral Education in relation to the other curricular areas. Where do you think RME comes in the list of educational priorities for:

a) **the school**
very low  quite low  middle  quite high  very high

b) **parents**
very low  quite low  middle  quite high  very high

c) **the Authority**
very low  quite low  middle  quite high  very high

d) **the Government**
very low  quite low  middle  quite high  very high

e) **you personally**
very low  quite low  middle  quite high  very high

That's all I have to ask. Is there anything you would like to say before we finish off?

Then, just let me thank you very much for your support throughout the project and for your help in completing this interview.

Time completed: 

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