The development of first-year university students' approaches to studying.

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A thesis presented in fulfilment of the requirements for the degree of Doctor of Philosophy.

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September, 2000.
I certify that this thesis has been written by me and is my own work.

Velda McCune
ABSTRACT

Findings are presented from a longitudinal study of first year psychology students' approaches to studying. Detailed qualitative analysis of the semi-structured interview data suggested that the majority of the participants made relatively minor changes to their learning during their first year at university. Case studies are presented to provide a fuller understanding of the learning of those students who differed from this typical pattern. The students' experiences of essay writing were also considered in detail, as this task provided the clearest indication of their development. The findings suggest that, to fully understand students' development, it is important to see them as individuals with idiosyncratic needs which interact in complex ways with the fine-grained details of a particular context. There were many potential barriers to development for these students, including the difficulties inherent in providing advice about learning which would provoke substantial change. The findings have important implications for the provision of learning support for students.
ACKNOWLEDGEMENTS

I am greatly indebted to my supervisors, Professor Noel Entwistle and Dr Hilary Tait, for their kind guidance and excellent advice throughout my studies. Despite the considerable demands on their time, they have always been ready to provide me with the help that I have needed. I would also like to express my gratitude to the students and staff who participated in this study, and in particular to those students who took the time to return for three interviews, this study would not have been possible without their help. I would like to thank my colleagues at the Centre for Research on Learning and Instruction, and more recently at the Department of Higher and Further Education, for their interest and concern. My partner, Bruce, has been a constant support throughout this work and I would also like to thank my Mother and my friends for listening to my ideas and worries. Finally, I would like to acknowledge that this research was made possible by a studentship provided by the Economic and Social Research Council.
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CHAPTER 1 - INTRODUCTION

Introduction

This thesis reports a longitudinal qualitative study of first year students’ approaches to studying. This first chapter begins by setting the research in its wider context, explaining why it was important to carry out a study of this kind. This includes a short introduction to the literature on approaches to studying. A description is also given of the course in which the students in this study were engaged, as this is necessary to contextualise the later chapters. The chapter ends with a summary of the structure and content of the rest of the thesis.

The research in context

In the UK there has been increasing concern about the problems that students may have in coping with learning in higher education. These problems were brought to the fore by increasing student numbers, and the broadening diversity of backgrounds from which students are continuing to enter higher education (Wall et al., 1991; NCIHE, 1997). Further, it seems that schools do not necessarily provide advice to students regarding studying in higher education, yet higher education institutions tend to assume that students arrive with the skills that they will need (Wall et al., 1991). Academic and related staff in the UK are working under increasing pressure, as staff numbers have not increased in proportion to the increase in student numbers, and there have been additional demands, for example, in terms of the volume of research carried out (NCIHE, 1997). This means that staff have less time to devote to supporting students with difficulties. These problems are likely to be particularly significant in the first year, when students are adapting to the demands of higher education. Poor study skills in first year have been related to significant problems and failure (Entwistle et al., 1989).

In order to support students effectively with limited resources, it seems crucial to understand the nature of their learning and their difficulties in coping with academic study. Over the past twenty-five years, a body of research has developed which has focused on understanding learning from the perspective of the student, aiming to develop an empathic understanding of their perspectives (Entwistle, 1997a;
Laurillard, 1997). This focus has added considerably to our understanding of how students learn in higher education. One of the most important themes to arise from this research has been the concept of approaches to studying. Research into these approaches originated in studies of academic reading carried out by Marton and Säljö in Gothenburg in the 1970s but has since been extended considerably into students' day-to-day studying across a range of contexts (Marton and Säljö, 1976; Entwistle and Ramsden, 1983; Biggs, 1987, 1993a; Tait and Entwistle, 1996; Entwistle, 1997a).

Briefly, three main approaches to studying have been identified through this research – deep, surface-apathetic, and strategic. Each approach involves a characteristic intention related to particular learning processes, and to certain aspects of motive and affect. The deep approach is typically characterised by an intention to develop a personal understanding, active interest, and related learning processes – such as critical use of evidence. Conceptualisations of the strategic approach have been more varied, but it is generally seen as involving an intention to excel academically, related to organised studying, good time management, and alertness to assessment requirements. The surface-apathetic approach brings together an intention to cope minimally with course requirements by reproducing content, with learning processes such as rote memorisation. This approach is often associated with anxiety or fear of failure. The approaches are analytic categories designed to encapsulate the main variations in students' learning; they are not labels which can be applied to individual students. Students often show combinations of approaches and, while they may have a preferred or habitual approach, they will also adjust those approaches to the perceived demands of the teaching-learning environment (Entwistle and Ramsden, 1983; Marton and Säljö, 1984; Entwistle, 1984; Tait and Entwistle, 1996; Entwistle, 1997a).

The value of the approaches to studying for understanding students' learning in higher education can be seen when one considers the nature of the learning required

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1 As will be explained in the literature review, the terminology used to describe the approaches varies between different research groups. The approaches to studying are also known as 'approaches to learning' and have previously been described in terms of 'orientations to studying' and 'levels of processing'.

in that context. Understanding is seen as central and students are expected to develop the ability to engage critically and actively with their subject area. This then requires facility with the language, norms, and values, of at least one discipline, and ideally the ability to critique these perspectives (Entwistle, 1984; NCIHE, 1997). It will become clear in later chapters of this thesis, that detailed analysis of the deep approach to studying provides an important perspective on these issues. Learning in higher education generally involves much less contact and support with staff than will have been the case in students’ prior learning experiences. This puts considerable demands on students to organise and regulate their own learning; the deep, and especially the strategic, approaches encompass those skills. The literature review which follows illustrates the valuable insights which the idea of approaches to studying has provided into the ways in which students learn, and into their responses to the teaching-learning context. ‘Approaches’ also help to explain the outcomes of students’ learning. Of course, approaches are not the only relevant concepts in relation to these issues, and others will be introduced as the thesis progresses, but no other conceptualisation of students’ learning has been so fully developed within the UK higher education system.

Based on this background, it seemed that an understanding of the development of students’ approaches to studying during their first year could provide important insights into how they adapt, or struggle to adapt, to learning in higher education. To date, there has been little detailed research into the development of students’ approaches in general, and even less in the specific time-frame of the first year. It appears that it is possible, but not inevitable, for students’ approaches to develop during this time, but we still know very little about the nature of this development, or about what can cause or hinder it. There is an extensive literature on what may influence the approaches which students choose at a given time, but this does not generally extend to influences specifically on development. The overall aim of the research reported in this thesis was therefore to begin to fill these important gaps in the literature.

A first year psychology course was chosen as the context within which to explore the development of students’ approaches. The reasons for choosing this course are set out later, but a brief outline of the context is necessary here as a background to the
later chapters. The basic structure of the course was that students attended three lectures each week together with one tutorial group every second week. The students were required to submit three essays during the year and to sit a multiple-choice class examination. Students who performed sufficiently well on these assessments did not have to sit the degree examination, which consisted of both multiple-choice questions and essays. The students did not generally receive any in-depth support with learning or study skills, although some information was made available, for example, from individual tutors and through a series of lectures on student learning.

**Structure of the thesis**

The second chapter of this thesis is the literature review which performs several functions, as we shall see later. Chapters 3 and 4 — ‘Design, Context and Methodology’ and ‘Methods of Analysis’ — discuss how the findings of the study were derived. Chapter 3 explains why a longitudinal design based on semi-structured interviews was considered most appropriate for this study, and gives an account of how the pilot and main studies were carried out. Twenty-six students and three tutors were involved in the main studies; Chapter 3 gives the details of the student samples, illustrating their representativeness in relation to the year group as a whole. Chapter 3 also provides a more detailed account of the first-year psychology course context. Chapter 4 discusses how the data were analysed. The overall aim was to provide an analysis which was suitable in relation to the researcher’s perspective and the research questions, rather than to follow a particular tradition; the chapter provides a rationale for these decisions. As it was important to provide a very thorough and detailed account of students’ development, analysis was carried out at a range of levels. This included comparisons across and within categories of description, and tasks; consideration of less structured themes; and the use of detailed case studies. Chapter 4 also explains the detailed checks that were made on the conclusions drawn from the analysis.

Chapters 5 to 7 report the findings of the study. Chapter 5 begins with an account of the nature of the approaches to studying specific to the students in this study, there was considerable similarity with the previous literature. The chapter continues by giving an overview of how the students’ deep and strategic approaches changed, both
over time and in relation to the learning tasks with which they were engaged.² It seemed that most of the students' made only minor changes to their learning during the course of the study, although there were some notable exceptions. Finally, this chapter includes a discussion of general themes which seemed to explain what might hinder or aid students' development. Chapter 6 focuses more specifically on essay writing as it was through this work that the development of students' approaches could most clearly be seen. Even so, that development was still problematic, partly due to the problems inherent in providing advice which provokes change in students' learning. Chapter 7 reports the case studies of five students who illustrated particular aspects of the more general findings. Rich, detailed, accounts provide a more holistic perspective on the research questions.

The final chapter of the thesis evaluates the findings of the research in relation to the design and methodology of the study, and with respect to the wider literature. The discussion also takes up the issue of the strengths and limitations of different analytic perspectives for understanding students' learning and development. For example, abstract categories - such as the approaches - have proved very useful, but the case studies also illustrated their weaknesses in accounting for individual students' learning and development. More centrally, the final chapter explores the implications of the findings for supporting first-year students in a context where staff have decreasing time and resources available.

The following chapter, as already indicated, provides a review of the literature. It explores, firstly, how the approaches to studying can best be conceptualised, in order to provide a comparison with the learning of the students involved in this study. The review goes on to explore other aspects of students' learning which seem important in understanding why they take particular approaches. Students' ability to monitor and regulate their learning; their wider aims and goals; and their beliefs in relation to learning and knowledge are all of interest in this regard. The next section considers research into the interaction between students' learning and their perceptions of the teaching-learning environment. These issues are considered in general, followed by a

² The surface-apathetic approach was not included in this report since, for these students, most of its elements could be seen as the absence of aspects of the deep approach, and those aspects which were unique to this approach did not seem to show any evidence of development.
more focused discussion of essay writing, as students' repeated efforts on this task would provide an important insight into their development. Next, an account is given of longitudinal research into students' learning, including what little research there is into the development of students' approaches to studying during the first year. The review ends with a more detailed outline of the aims of the research.
CHAPTER 2 - REVIEW OF THE LITERATURE

Introduction

The main sections of this review of the literature are set out in Table 2.1. The first section provides an account of the research which has contributed to the conceptualisation of approaches to studying. It provides a background against which to view the approaches taken by the students involved in this research and therefore necessitates a more detailed account of the findings than is given in some of the later sections. The section explores whether a coherent picture of the approaches can be drawn from a diverse body of literature, which involves research from a range of perspectives by a number of independent research teams. The differing perspectives and overlapping concepts involved in this body of literature have meant that the approaches have been described using a confusing range of terminology. In order to avoid this problem, the term ‘approaches to studying’ is used throughout this review, although in other reports the terms ‘levels of processing’, ‘orientations to studying’, or ‘approaches to learning’ have been used to describe closely similar concepts.

Table 2.1: Sections of the review

| 1) Approaches to studying - an overview |
| 2) Concepts related to approaches – aims, beliefs, monitoring and regulation |
| 3) Influences on approaches I – aims, beliefs, monitoring and regulation |
| 4) Influences on approaches II – teaching-learning environment |
| 5) Essay writing and approaches to studying |
| 6) Research into students’ development I – beliefs and regulation |
| 7) Research into students’ development II – approaches to studying |

There is a range of other aspects of students’ learning relevant to understanding approaches to studying. These include students’ aims or goals in relation to higher education; their beliefs about learning, knowledge, and their learning tasks; and the ways in which they monitor and regulate their learning. The second section of the review thus explores how these aspects have been conceptualised in higher education, and how they overlap, or are distinguished from, approaches to studying. Having dealt with these issues, the third section provides an account of research which shows how these aspects of students’ learning may influence their approaches to studying.
The fourth section of the review considers the effects of the teaching-learning environment in general on the approaches which students choose to adopt. As there has been little research looking directly at what might influence the development of students’ approaches, the research considered in this section takes on added importance. It is clear from these findings that context is important in understanding students’ approaches, but that its effects are not straightforward. It is students’ perceptions of the environment which most directly influence their approaches, and these perceptions in turn are influenced by their typical approach and beliefs about learning. This general section is followed by a more detailed account of research into one aspect of the learning context - essay-writing tasks. Essay writing is of particular interest in this study because the students wrote three essays over the course of the study, providing a consistent context against which to assess development. Further, it seems that essay writing is particularly relevant to understanding the development of the deep approach.

The final two sections of the review consider, directly, research which has explored students’ development, with an emphasis on longitudinal studies. Studies which consider change in students’ beliefs and regulations suggest that there is a developmental progression from the student seeing the source of knowledge and responsibility for learning as located externally to themselves, towards locating these more internally - in other words, a shift from passive absorption of knowledge to being an active, self-regulated, constructor of meaning. Based on this pattern, it might be expected that students’ approaches to studying would become deeper and more strategic over time, but the studies reported in the final section suggest that this does not necessarily happen. Overall, the research into the development of students’ approaches is quite limited and the aims of this study, set out in the conclusion of this chapter, seek to address some of the gaps in this literature.

A number of additional themes recur throughout the sections of the review. The first is the importance of the approaches to studying as a means of understanding students’ learning, which gives the justification for choosing ‘approaches’ as the focus of this study. The review illustrates how the conceptualisation of approaches is grounded in students’ experiences of their day-to-day learning. It also shows how
approaches encompass important differences in students' learning which have been related to their grades and other learning outcomes across a range of contexts and educational systems. Further, the approaches have proved a valuable tool for understanding students' reactions to aspects of the teaching-learning environment.

Intertwined with understanding the development of students' learning are questions about how that learning, and its interaction with the teaching-learning environment, can best be understood and described. Although the conceptualisation of the approaches is the focus of the first section, this issue is revisited in subsequent sections of the review. For example, there is a discussion of how the approaches are defined and delimited in relation to other concepts. The ways in which students' approaches change in relation to the learning environment help us to understand the contextualised nature of these concepts. The review explores the complexity of these interactions, suggesting that approaches can be seen as part of an interacting system of influences. The importance of both macro and micro elements of the context and the tacit or hidden nature of some elements are also considered.1

Approaches to studying - an overview

Introduction

This section introduces approaches to studying, giving an account of how their conceptualisation has developed. The review begins with an account of the interview studies carried out in Gothenburg, which was the origin of research in this area. Then a discussion is given of more recent interview studies which have contributed to the conceptualisation of the approaches. Inventory research into approaches is considered next, and this is followed by a more general discussion of the conceptualisation of approaches. Finally, a brief overview is given of studies which relate students' approaches to studying to their learning outcomes.

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1 The review generally focuses on literature published up until 1997, as the second phase of data collection began towards the end of this year, after which the nature of the study could not be much influenced by additional findings. There are some exceptions, for example, papers are included in which the author was involved and to which she therefore had access before the publication date. Further, some authors kindly provided copies of papers in advance of publication and a few additional studies were brought into the review retrospectively to clarify particular points.
The Gothenburg studies

The origins of research into approaches to studying lie in studies carried out in Gothenburg which looked, firstly, at students reading academic articles. In these studies, students were asked to read a relatively short article and were then interviewed about its meaning and about how they read it. In these interviews, the researchers also asked the students about their everyday studying in the social sciences, focusing to a large extent on their reading for their courses. It was clear from the research that there were qualitative differences in the students’ understanding of the meaning of the article which they were given by the experimenter; not all of the students had fully grasped the author’s message and some had completely misunderstood. These qualitative differences in outcome were shown to be related to qualitative differences in the ways in which students went about reading the texts (Marton, 1976; Marton and Säljö, 1976; Marton and Säljö, 1997).

Table 2.2a: Deep approach to studying from the Gothenburg studies
(based on Marton, 1976; Marton and Säljö, 1976; Marton and Säljö, 1997)

<table>
<thead>
<tr>
<th>Intention/focus of attention</th>
<th>Learning processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on the meaning behind the learning task, for example, seeking the central point, the basic idea, or a complete picture of the topic.</td>
<td>Looking for relationships within topics, and between topics and the students’ prior knowledge.</td>
</tr>
<tr>
<td>Intention to understand.</td>
<td>Building structures and outlines.</td>
</tr>
<tr>
<td></td>
<td>Drawing conclusions.</td>
</tr>
<tr>
<td></td>
<td>Questioning conclusions and statements.</td>
</tr>
<tr>
<td></td>
<td>Reflecting on the logic of arguments.</td>
</tr>
<tr>
<td></td>
<td>Identifying points that are unclear.</td>
</tr>
<tr>
<td></td>
<td>Making what is learned part of yourself, relating it to your wider life.</td>
</tr>
</tbody>
</table>

Table 2.2b: Surface approach to studying from the Gothenburg studies

<table>
<thead>
<tr>
<th>Intention/focus of attention</th>
<th>Learning processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not focused on the meaning behind the learning materials. Instead focused, for example, on the surface features of the learning materials.</td>
<td>Rote memorisation.</td>
</tr>
<tr>
<td>Intention to reproduce.</td>
<td></td>
</tr>
</tbody>
</table>

The differences were originally referred to as ‘levels of processing’ but are now more commonly referred to as ‘approaches to learning’ or ‘approaches to studying’,

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following the suggestion made by Entwistle, Hanley and Hounsell (1979) that the term ‘processing’ did not capture the intentional component of the students’ ways of learning. The characteristics of approaches suggested by both the reading studies and the questions about students’ day-to-day learning are summarised in Table 2.2. A surface approach occurred where students directed their efforts towards reproducing learning materials, without attempting to understand the meaning. In the deep approach, by contrast, the students were focused on the underlying meaning and this was reflected in their learning processes. Students who took a deep approach were far more likely to have a better understanding of the text that they had read in the reading studies and also gained better grades for their courses (Marton, 1976; Marton and Säljö, 1976; Marton and Säljö, 1997).

The categories describing deep and surface levels of processing were derived using a method of analysis which has since become common in research in this area (Marton and Säljö, 1997). The process began by searching for comments in the interviews which seemed in any way relevant to the research question (Marton and Säljö, 1997). The analysis then progressed by grouping extracts based on their similarity and by articulating the differences between the groups of extracts. The definitions of the final groupings were made explicit, and they were characterised in terms of their core meaning and borderline cases. During this analysis, each quote was considered in the context of the interview from which it was derived - as this context was considered necessary to understand the meaning of the quotes - but also in the context of the ‘pool of meanings’ which brought together all of the extracts from all of the interviews (Marton and Säljö, 1997). The outcome of this process is a set of categories which can be used to understand the variation in students’ learning, but which do not necessarily characterise the learning of individual students.

More recent research into approaches to studying

The studies carried out by Marton and Säljö stimulated a considerable body of research across three decades in a number of different countries. The attention these authors gave to the students’ perspectives, their methods of analysis, and the ‘approaches to studying’ categories have all had an important influence on research in this area. More recent research into approaches to studying has developed further
the interview methodology and forms of analysis adopted by Marton and Säljö and research of this kind has come to be known as ‘phenomenographic’. Extensive use has also been made of inventories which assess students’ typical ways of learning and studying. This inclusion of inventory research has allowed approaches to be explored with large numbers of students across a wide range of subject areas. The contribution of these qualitative and quantitative studies to the conceptualisation of the approaches is described in the following sections.

**Qualitative research into approaches to studying**

As part of a large-scale study of students’ learning, Entwistle and Ramsden (1983) extended the findings of the Gothenburg studies by interviewing 57 second and third year students from a variety of departments about different tasks in their everyday academic work. The analysis of the interviews was carried out in a similar manner to the phenomenographic analyses employed by Marton and Säljö, but was less inductive as it was guided by categories derived from previous research into approaches to studying (Marton, 1975; Laurillard, 1979). Miller and Parlett’s (1974) work on cue conscious behaviour also influenced the analysis; this research had explored the extent to which students sought hints from staff to help them cope with assessment requirements.

An overview of the main aspects of the approaches drawn from Entwistle and Ramsden’s interview research is given in Table 2.3. The strategic approach was introduced to give a more general account of students’ responses to assessment, as cue-seeking only characterised reactions in certain subject areas. The strategic approach involved focusing effort on doing well in assessed tasks and a competitive form of motivation. In some subject areas, students also tried to write for particular markers and to make a positive impression on staff; this was sometimes linked to cynicism about the assessment system, seeing it as a game to be played. The descriptions of the deep and surface approaches given here encompass much of Marton and Säljö’s original conceptualisation, but adapt it to better describe students’ day-to-day studying in a range of tasks.
Table 2.3: Approaches to studying as characterised by the interview studies carried out by Entwistle and Ramsden (1983).
(Adapted from Entwistle and Ramsden, 1983, pp 137 - 141 and 154-164)

<table>
<thead>
<tr>
<th>Approach</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal experience</td>
<td>Attempts to engage with material studied on a personal level. May include attempting to relate the task to personal or real life situations or seeing a task as part of oneself or one's personal development.</td>
</tr>
<tr>
<td>Relationships</td>
<td>Active attempts to see inter-relationships, or to integrate parts into a whole. May include relating evidence to conclusions and relating what is being learned to previous knowledge.</td>
</tr>
<tr>
<td>Meaning</td>
<td>Efforts to see the meaning or purpose of what is learnt, to gain an overview of the whole learning task. To see the intention of the task or to see it in a wider perspective.</td>
</tr>
<tr>
<td>Unrelatedness</td>
<td>Treat tasks, ideas or materials as isolated phenomena. Focusing on the elements of a task and not the whole.</td>
</tr>
<tr>
<td>Memorisation</td>
<td>Defining the learning task as a memory task, or indicating the intention to memorise the material.</td>
</tr>
<tr>
<td>Unreflectiveness</td>
<td>Seeing the subject matter as external, or indicate a lack of reflection about the meaning of a task. Taking a passive approach to the task. Students indicate that they do not intend to extract meaning from the material.</td>
</tr>
<tr>
<td>Selective effort</td>
<td>Active attempts to direct effort selectively to doing well on assessed tasks.</td>
</tr>
<tr>
<td>Cue seeking*</td>
<td>Trying to make a good impression on staff or aiming to write for a particular marker.</td>
</tr>
<tr>
<td>Playing the game</td>
<td>Cynicism about assessed work, seeing it as a game to be played.</td>
</tr>
<tr>
<td>Competitiveness</td>
<td>An extrinsic, achievement-related, form of motivation.</td>
</tr>
</tbody>
</table>

*only in certain subject areas.

With the exception of the research reported by Entwistle and Ramsden (1983), there has been very little qualitative research into the nature of the strategic approach to studying, although Entwistle and Entwistle (1991, 1992) discuss some elements of this approach. There have, however, been a range of qualitative studies which have explored the nature of the deep and surface approaches. These studies suggest that the basic conceptualisation of the approaches is valid across a range of settings although there are some variations between contexts (Morgan, Gibbs and Taylor, 1980; Morgan, Taylor and Gibbs, 1982; Van Rossum and Schenck, 1984; Laurillard, 1997).
Other studies suggest the possibility of differences between students within a particular approach to studying (Svensson, 1984; Entwistle and Entwistle, 1991, 1992; Entwistle, 1995). For example, this has been illustrated in two small scale studies - based on semi-structured interviews and written comments - which explored students' preparation for their final examinations and course-work essays (Entwistle and Entwistle, 1991, 1992; Entwistle, 1995, 1998a). The students involved in these studies generally seemed to be showing an intention to understand, which is characteristic of a deep approach to studying, but they differed markedly in the depth, breadth, and structure of the understandings sought. For these students, a fully developed deep approach was characterised, firstly, by the origins of the structure of their understandings. Some students explained that they had developed the structure of their understanding for themselves, or that they had developed an individual understanding of the discipline, rather than being more reliant on lecture notes or examination questions to provide a structure. The students also differed in the breadth of their understanding, with only a subset of the group working to form an understanding of the discipline as a whole, based on extensive reading. A more developed deep approach can also be characterised in terms of the depth of understanding sought, with deeper understandings involving more detail and more effort directed towards making connections between themes or ideas (Entwistle and Entwistle, 1991, 1992; Entwistle, 1995).

In relation to developing their understandings, the students talked about the importance of active engagement with the material. This sometimes involved internal debate about a topic, although some students also emphasised the importance of discussion and debate with others, including their peers and tutors. Students' engagement with the content of their courses often included efforts to relate what they were learning to their previous knowledge or experience in order to support their understanding (Entwistle and Entwistle, 1992). All of these findings are of interest in relation to the research reported in this thesis, because they give a sense of the nature of a fully developed deep approach to studying from students nearing the end of their undergraduate years, and so provide a point of comparison for the development of the first year students involved in this study.
The Approaches to Studying Inventory

In the United Kingdom, most of the inventory studies exploring students' approaches have been carried out using versions of the Approaches to Studying Inventory (ASI, Entwistle and Ramsden, 1983). Items in the original ASI came from a range of sources, some were taken from earlier research in which students' study habits and motivation had been assessed with the aim of predicting academic success. To these were added items intended to measure deep and surface approaches, as described by Marton and Säljö, and the strategic approach to assessment identified by Ramsden (1979) during the interview studies described in the previous section. Items were also included to assess the comprehension and operation learning styles described by Pask (1976) and their related learning pathologies - globetrotting and improvidence. These items were dropped from later versions of the inventory, due to their overlap with other scales (Tait and Entwistle, 1996).

The ASI has been successively refined and developed initially during Entwistle and Ramsdens' original work and then in more recent studies. The changes have been based partly on factor patterns and other psychometric concerns, including the stability of these properties across contexts, but conceptual considerations were also important in developing the inventory, including links to the developing literature in student learning. Finally, the relationships of the scales with students' grades have been taken into account (Entwistle and Ramsden, 1983; Tait and Entwistle, 1996; Tait, Entwistle and McCune, 1998; and Entwistle, Tait & McCune, 2000). The most recent version of the ASI is summarised in Table 2.4, the items are listed in Appendix 2.1. This version of the inventory makes the link between interest and the deep approach more explicit but otherwise describes a deep approach which accords closely to the interview accounts. The surface-apatheitic approach in the inventory - which was developed by merging two scales from an earlier version - is broader than the surface approach described in the interviews but includes many of the same elements. The inventory version of the strategic approach is also broader than the description taken from the interviews. Further, the most recent version of the inventory almost eliminates the sense of cynically playing the assessment game, the
only hint of this being in the ‘alertness to assessment’ scale, but that does not seem to be cynical.

**Table 2.4: Scales and sub-scales from the most recent version of the ASI**  
(ASSIST, Entwistle, Tait and McCune, 1999)

<table>
<thead>
<tr>
<th><strong>Deep</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeking meaning</td>
<td>Covers the intention to understand course material and also items about looking for the meaning behind learning tasks.</td>
</tr>
<tr>
<td>Relating ideas</td>
<td>Relating ideas within and between topics. Developing or playing around with personal ideas about the topic.</td>
</tr>
<tr>
<td>Use of evidence</td>
<td>Critically checking the evidence for arguments or conclusions.</td>
</tr>
<tr>
<td>Interest in ideas</td>
<td>Showing strong interest in, and engagement with, academic topics.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Surface-Apathetic</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of purpose</td>
<td>Lack of motivation, lack of interest, or lack of a sense of the relevance of course work.</td>
</tr>
<tr>
<td>Unrelated memorising</td>
<td>Memorising without understanding.</td>
</tr>
<tr>
<td>Syllabus-boundness</td>
<td>Focusing only on the work needed to pass the course.</td>
</tr>
<tr>
<td>Fear of failure</td>
<td>Anxiety about ability to cope with academic work.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Strategic</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Organised studying</td>
<td>Finding suitable conditions for studying; studying in a systematic and organised manner.</td>
</tr>
<tr>
<td>Time management</td>
<td>Organising time carefully; working steadily rather than leaving things to the last minute.</td>
</tr>
<tr>
<td>Alertness to assessment</td>
<td>Bearing in mind what markers are looking for.</td>
</tr>
<tr>
<td>Monitoring effectiveness</td>
<td>Checking work carefully, reflecting on how best to approach assessed work.</td>
</tr>
<tr>
<td>Achieving motive</td>
<td>Putting in effort due to determination to do well academically.</td>
</tr>
</tbody>
</table>

The monitoring effectiveness sub-scale listed in the strategic approach was intended to measure aspects of students’ metacognitive activity, as the literature suggested the importance of such skills, it typically also loads on the ‘deep’ factor. Conceptualisations of the deep and strategic approaches have always implicitly included metacognitive activity; for example, the deep approach implies that students monitor and regulate their understanding, and this process overlaps definitions of metacognition from the literature (McKeachie, 1990; Vermunt, 1996; Entwistle, 1997b; Vermunt, 1998). This was the first time, however, that this connection had been made so explicit.
The Study Process Questionnaire

The conceptualisation of approaches to studying has also been informed by research using the Study Process Questionnaire (SPQ, Biggs, 1987). For example, Entwistle and Ramsden took the findings from early research with the SPQ into account when developing the ASI. The origins of the SPQ are partly in an information processing model which suggested that differences between students - for example, in their cognitive style - would lead to differences in the extent to which they would use coding and rehearsal strategies in their studying, which would in turn influence their learning outcomes. Items were also included to cover aspects of personality which had been related to students' learning, and themes from the literature on study skills (Biggs, 1987). Factor analysis of an earlier version of the inventory (the Study Behaviour Questionnaire) produced three higher order factors which were stable across a range of subject areas and age groups. Within each factor there seemed to be one highly inter-correlated group of items related to motivation and another highly inter-correlated group related to cognitive processes. These motive and strategy components seemed to be logically related, suggesting the motive-strategy congruence theory on which the SPQ was subsequently based (Biggs, 1987; 1993a).

The close resemblance between two of the factors in the SPQ and Marton and Säljö's (1976) description of the deep and surface approaches to studying led subsequently to the adoption of that terminology to describe the factors. The factors and scales of the most recent version of the SPQ are presented in Table 2.5. Although there are clear parallels with the most recent version of the ASI, there are also some differences. Within the deep approach, the SPQ addresses the importance of students' studies for developing their philosophical beliefs about life, a topic which is not considered in the ASI. For example, the SPQ contains the item 'My studies have changed my views about such things as politics, my religion, and my philosophy of life'. The ASI addresses students' critical evaluation of evidence, an issue which is not addressed by the SPQ.

Looking at the strategic (achieving) approach, the most recent version of the ASI does not address the strongly competitive motivation included in the SPQ, although this was a part of earlier versions of the ASI. The alertness to assessment considered
in the ASI is absent from the SPQ. The apathetic aspect of the surface-apathetic approach in the ASI is not reflected in the surface approach in the SPQ. The extrinsic vocational motivation included as part of the surface approach in the SPQ is not included in the most recent versions of the ASI, although again this is a topic which was covered in earlier versions.

**Table 2.5: Scales from the most recent version of the SPQ (Biggs, 1987)**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Main aspects covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface motive</td>
<td>Meet course requirements minimally. Study to further career without intrinsic interest in course content. Fear of failure.</td>
</tr>
<tr>
<td>Surface strategy</td>
<td>Reproduce through rote learning. Syllabus boundness.</td>
</tr>
<tr>
<td>Deep motive</td>
<td>Strong interest in academic topics. Valuing academic topics for their personal meaning.</td>
</tr>
<tr>
<td>Deep strategy</td>
<td>Relate what is learned to real life situations and to prior knowledge. Develop a personal view of a topic. Read widely around topics.</td>
</tr>
<tr>
<td>Achieving motive</td>
<td>Competitive intention to excel.</td>
</tr>
<tr>
<td>Achieving strategy</td>
<td>Good time management and organisation, self-testing.</td>
</tr>
</tbody>
</table>

**Conceptualising approaches to studying**

Having reviewed the aspects of the literature which illustrate the main elements of approaches to studying, it is now possible to consider how each approach might best be defined. The variation between the different conceptualisations means that the definition of approaches cannot be entirely clear-cut, but nonetheless there is a considerable consensus, suggesting that a general description of the approaches is possible. Table 2.6 combines all of the characteristics of the deep, strategic and surface-apathetic approaches to studying suggested by the research described in this section. The deep approach is relatively unproblematic in terms of creating a combined account and the picture that emerges is of very active personal engagement with learning materials directed towards developing in-depth individualised understandings. The surface-apathetic approach also makes sense conceptually, provided that both the intention to reproduce and the intention to cope minimally are included - otherwise there is a potential overlap between the deep and
surface approaches where a student attempts to cope minimally by seeking a basic understanding. These two intentions are then combined with anxiety, lack of purpose and rote memorisation of core course content to give the surface-apathetic approach. The main difficulty in relation to the strategic approach is the cynical, 'playing the game' theme which has sometimes been included within this approach. A strategic approach which includes these themes seems quite different from one which does not. Time management and well organised studying fit well whether or not this theme is included.

Table 2.6: The main characteristics of approaches to studying

<table>
<thead>
<tr>
<th>Deep</th>
<th>Strategic</th>
<th>Surface-apathetic</th>
</tr>
</thead>
<tbody>
<tr>
<td>intention to understand</td>
<td>intention to excel</td>
<td>intention to cope minimally</td>
</tr>
<tr>
<td>active interest</td>
<td>intention to do well</td>
<td>intention to reproduce</td>
</tr>
<tr>
<td>engaging on a personal level</td>
<td>competitiveness</td>
<td>fear of failure/anxiety</td>
</tr>
<tr>
<td>relating ideas</td>
<td>(cynicism)</td>
<td>lack of purpose</td>
</tr>
<tr>
<td>gaining an overview</td>
<td>time management</td>
<td>memorising by rote</td>
</tr>
<tr>
<td>creating outlines</td>
<td>being systematic</td>
<td>syllabus-boundness</td>
</tr>
<tr>
<td>creating structures</td>
<td>finding suitable conditions</td>
<td>focus on elements not whole</td>
</tr>
<tr>
<td>questioning</td>
<td>alertness to assessment</td>
<td>absence of deep processes</td>
</tr>
<tr>
<td>using evidence critically</td>
<td>(playing the game)</td>
<td></td>
</tr>
<tr>
<td>seeing task in wider context</td>
<td></td>
<td></td>
</tr>
<tr>
<td>seeking the purpose of a task</td>
<td></td>
<td></td>
</tr>
<tr>
<td>seeking the central point</td>
<td></td>
<td></td>
</tr>
<tr>
<td>drawing conclusions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Approaches to studying and outcomes

In the Gothenburg studies it was made clear that it is possible for the qualitative differences in students' learning, represented by the approaches, to be mapped onto qualitative differences in the outcomes of their learning (Marton and Säljö, 1976). Since that time, a range of qualitative and quantitative studies in different contexts has suggested that taking deep and strategic approaches has a beneficial effect on the quality of students' learning outcomes and their grades, and that taking a surface approach has a negative effect (Marton, 1976; Marton and Säljö, 1976; van Rossum and Schenck, 1984; Entwistle and Tait, 1990; Trigwell and Prosser, 1991; Marton
and Säljö, 1997; Tait, Entwistle and McCune, 1998). However, these links are not always apparent; in particular, a significant relationship is not always found between the deep approach and students' grades (Trigwell and Prosser, 1991; Provost and Bond, 1997; Tait, Entwistle and McCune, 1998). Grades, of course, depend on the questions asked and the criteria used. Where assessment fails to demand conceptual understanding, the lack of relationship with a deep approach is not surprising. The pooling of grades from different forms of assessment in some of these studies is also problematic, as the grades may be measuring quite different learning outcomes (Trigwell and Prosser, 1991; Provost and Bond, 1997).

Summary

The research reviewed in this section provides an overview of the main aspects of approaches to studying. Despite some variation between the conceptualisations given in different studies and changes over time, a general overview of the approaches is possible. Such a general account of the approaches is particularly useful for the present study, as it provides a background against which to consider the learning of the students interviewed. Research reported by Entwistle and Entwistle (1991, 1992) suggests that there may also be variation within the approaches to studying and gives an idea of how a well developed deep approach might appear for experienced students.

From Marton and Säljö's original work on reading, the research into the approaches has progressed to consider students' day to day studying through both inventory and interview based research. While there has been considerable qualitative and quantitative investigation of the deep and surface approaches, the strategic approach has mainly been explored through inventory studies, raising questions as to whether further qualitative research might challenge the original conceptualisation. Despite some differences, it appears that approaches are generally reasonably stable across research methods, discipline areas, and in independent analyses (Entwistle and Ramsden, 1983; Svensson, 1984; Biggs, 1987), and the deep and strategic approaches have been related to positive learning outcomes in a range of studies.
Concepts related to approaches – aims, beliefs, monitoring and regulation

Introduction

In order to further understand the nature of approaches to studying, it is necessary to consider concepts from the student learning and educational psychology literature which overlap the approaches and which can help to explain why students might adopt a particular approach. Three central themes of interest are, firstly, research into students’ aims or goals; secondly, students’ beliefs about learning seem valuable in understanding their approaches; and finally, research into metacognition and self-regulation which has recently come to the fore as an important theme in understanding students’ learning in higher education. This section gives an overview of these concepts, followed by a discussion of how they overlap, or are distinguished from, approaches to studying. This provides the background to the next section, which considers how such factors can influence students’ approaches.

Aims and goals

Approaches to studying encompass certain aspects of students’ intentions and motives in their learning, but there are other elements within study behaviour which are also relevant to this project. One important theme is the distinction between learning and performance goals, concepts which come mainly from higher education research in the United States. They have also been related to students’ grades and learning processes (Pintrich et al., 1991; Pintrich and Garcia, 1991, 1993; Pintrich et al., 1993; Miller, Behrens and Greene, 1993; Archer, 1994; Bouffard et al., 1995). A second important theme is students’ wider aims and goals in relation to higher education, which have been described as ‘learning orientations’. These orientations help to explain why students may adopt particular approaches to studying (Vermunt, 1996; Beaty, Gibbs and Morgan, 1997).

Learning and performance goals

Learning goals - which have also been described as task-involvement, mastery goals, or intrinsic goal orientation - encompass an intention to develop learning skills, to learn more, or to develop a deeper understanding. Items intended to measure learning goals refer to students liking challenging learning tasks, being interested in their
work, and feeling more successful when they learn something new, or feel they have understood something (Pintrich and Garcia, 1991, 1993; Pintrich et al., 1993; Archer, 1994; Dart, 1994). Performance goals have also been referred to as ego-involvement goals, or as having an extrinsic goal orientation. Performance goals involve demonstrating ability or hiding perceived lack of ability, there is an emphasis on getting good grades, and especially on getting better grades than others (Pintrich and Garcia, 1991, 1993; Pintrich et al., 1993; Archer, 1994; Dart, 1994).

Performance and learning goals are not mutually exclusive, students may have high performance and high learning goals at the same time (Pintrich and Garcia, 1991; Archer, 1994).

Research which considers learning and performance goals in the higher education setting has mainly been carried out using inventories which ask students to comment on their goals for a particular course or subject, rather than beginning with more open-ended methodologies to explore students’ experiences (Pintrich and Garcia, 1991, 1993; Pintrich et al., 1993; Miller, Behrens and Greene, 1993; Archer, 1994; Dart, 1994; Bouffard et al., 1995; Schraw et al., 1995). This raises concerns as to whether students would mention other aspects of motivation if they were given the opportunity to do so, and also assumes that students’ motivation is consistent across learning tasks. It will become clear from the later discussion, that these concerns are both significant.

Students’ wider aims and goals

While much of the research into students’ learning has considered a small number of intentions, a more holistic and broader account is given by Beaty, Morgan and Gibbs in their interview research into students’ learning orientations. From these interviews, a set of categories was built up to describe the variation in students’ attitudes and aims in relation to higher education, and their courses. These orientations are summarised in Table 2.7. They are not seen as descriptions of individual students, but rather as idealised accounts which can be used to illuminate the variation among students. An individual student will show a variety of orientations and these may change depending on the context (Taylor, Gibbs and Morgan, 1980; Morgan, 1993; Beaty, Gibbs and Morgan, 1997).
Table 2.7: Learning orientations
Adapted from: Taylor, Gibbs and Morgan (1980); Morgan (1993); Beaty, Gibbs, and Morgan (1997)

<table>
<thead>
<tr>
<th>Orientation</th>
<th>Interest</th>
<th>Aim</th>
<th>Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocational</td>
<td>Intrinsic</td>
<td>Improve ability to do job.</td>
<td>Relevance to future career.</td>
</tr>
<tr>
<td></td>
<td>Extrinsic</td>
<td>Gain qualification to help career.</td>
<td>That employers will value the qualification.</td>
</tr>
<tr>
<td>Academic</td>
<td>Intrinsic</td>
<td>Follow interest in subject.</td>
<td>Follow own interests in syllabus free manner, have interesting lectures.</td>
</tr>
<tr>
<td></td>
<td>Extrinsic</td>
<td>Take next step up the academic ladder.</td>
<td>Getting good grades and playing the academic game, focus efforts on assessed work.</td>
</tr>
<tr>
<td>Personal</td>
<td>Intrinsic</td>
<td>Self-improvement, broaden thinking.</td>
<td>That the course will help them become more capable and interesting. Challenging and interesting material.</td>
</tr>
<tr>
<td></td>
<td>Extrinsic</td>
<td>Compensate for past lack of opportunity, prove capability.</td>
<td>Concerned with feedback and passing the course. Importance of succeeding and testing their limits.</td>
</tr>
<tr>
<td>Social</td>
<td>Extrinsic</td>
<td>Having a good time.</td>
<td>Facilities for sport and social activities.</td>
</tr>
</tbody>
</table>

The students’ orientations could be described in terms of whether they were primarily vocational, academic, personal, or social, and a distinction was also made between extrinsic and intrinsic interest. In the intrinsic component of learning orientation the course content itself is the focus of student interest, whereas in an extrinsic orientation the content of the course is less important. So, for example, an academic intrinsic orientation implies studying to follow one’s interests in a subject, as opposed to an academic extrinsic orientation, where the aim is mainly to take the next step up the academic ladder. The omission of any category describing a wish to help others or to make a positive impact on social issues seems surprising, especially with the inclusion of psychology and sociology students in the sample. Such a category might be described as social intrinsic, which would fill a gap in the conceptualisation, since there is an intrinsic form of all the other orientations (Hounsell, personal communication).
A series of studies carried out by Vermunt is relevant throughout this section of the review. This research began with semi-structured interviews with first year students about their learning and these were followed by both inventory research and further interviews. All of the interview findings are summarised by Vermunt (1996), while the inventory research is considered by Vermunt and van Rijswijk (1988) and Vermunt (1998), and generally supports the interview findings. Vermunt (1996) identified four learning orientations, which parallel those described by Beaty, Morgan and Gibbs. These orientations are described in Table 2.8. Vocation oriented seems similar to a vocational intrinsic orientation, person oriented overlaps both the personal and academic intrinsic orientations, and certificate and test oriented seems related to the personal and academic extrinsic orientations.

Table 2.8: Learning orientations
Summarised from Vermunt (1996)

<table>
<thead>
<tr>
<th>Learning Orientation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocation Oriented</td>
<td>Aim to acquire knowledge and skill that can be used in current or future employment, or in daily functioning.</td>
</tr>
<tr>
<td>Person Oriented</td>
<td>Curious about subject and about the ideas of others; aim to understand these in order to construct their own versions. Students want to enrich themselves as individuals and to deepen their interests. Find studying pleasant and interesting.</td>
</tr>
<tr>
<td>Certificate and self-test Oriented</td>
<td>Test ability to cope with higher education; use examinations to prove that. Aim to gain the highest possible grades; main objective is to gain academic qualifications.</td>
</tr>
<tr>
<td>Ambivalent</td>
<td>Start with a variety of orientations, but experiences of studying lead to doubts about whether long term goals can be achieved. Insecure attitude to studies, doubts about choice of course and subject area. Question ability to succeed, unsure about continuing studies.</td>
</tr>
</tbody>
</table>

Beliefs about learning

It is apparent from the literature that the assumptions and expectations through which students interpret their educational experiences differ in important ways, and that these differences affect how students go about their learning (Säljö, 1982; Marton, Dall’Alba and Beaty, 1993; van Rossum and Schenck, 1984; van Rossum, Deijkers and Hamer, 1985; Vermunt, 1996, 1998). Students may potentially differ in their
beliefs about any aspect of learning, but the research has tended to focus on certain themes. Individuals' ideas about the nature of learning in general were the focus of much of the early research (Säljö, 1982). Students' reflections on the nature of knowledge and learning in higher education have also been considered (Perry, 1970; van Rossum and Schenck, 1984; Perry, 1988; Vermunt, 1996). The ways in which students conceptualise their learning tasks has been an important theme, and this research is considered later in this review, in relation to essay writing. Van Rossum and colleagues suggest that students can be seen as having a 'learning image' which the authors see as a coherent personal philosophy of learning (Van Rossum, Deijkers and Hamer, 1985). It is important to bear in mind, however, that students' beliefs about learning may be implicit assumptions rather than explicit, considered, positions (Säljö, 1982).

Some of the earliest work in this area derives from the interview studies reported by Perry (1970, 1988). The interviews were very open, beginning with the question "Would you like to say what has stood out for you during the year?" followed by requests for specific examples. As they analysed the interviews, the researchers came to feel that the students reacted to challenges in their studies and wider lives in ways which suggested marked differences in their ideas about the nature of knowledge and this influenced both their ways of learning and their perceptions of their courses (Perry, 1970, 1988). For example, students with a dualist perspective saw knowledge as correct answers handed down by 'Authority' whereas others saw knowledge as having a more subjective and relativistic nature.\(^2\)

Similar differences in students' beliefs are found in research into conceptions of learning. This research began with Säljö's analysis of interviews with ninety adults from a range of educational backgrounds about what learning meant to them (Säljö, 1982). He found that there were qualitative differences between the interviewees' ideas about learning which have been characterised in terms of conceptions of learning. The central distinction was between conceptions where learning was seen as taking in and reproducing content, as opposed to conceptions where learning was seen as an active transformation of content to form new understandings (Marton,\(^2\)

\(^2\) Perry's findings are considered in more detail later in this review.
Dall’Alba and Beaty, 1993). Another important dimension was that for the students with ‘transforming’ conceptions, learning itself had become ‘thematised’, had become an object of reflection. In contrast, students with reproducing conceptions saw learning as taken for granted; they found it very difficult to reflect about the nature of learning (Säljö, 1982). Since Säljö’s initial study, the difference between reproducing and transforming conceptions has been replicated a number of times with different groups of students in higher education, although the precise conceptions identified sometimes differ (van Rossum and Schenck, 1984; van Rossum, Deijker and Hamer, 1985; Marton, Dall’Alba and Beaty, 1993; Eklund-Myrskog, 1997).

Table 2.9: Mental models of learning
(based on Vermunt, 1996)

<table>
<thead>
<tr>
<th>Co-operation and being stimulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most cognitive and regulative learning functions are seen as tasks of instruction. For example, students expect teachers to show relationships between topics, and to check whether students have mastered the subject. Working with other students is seen as important, providing support, motivation and help with understanding.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intake of knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studying is seen as absorbing knowledge and understanding for reproduction. Learning by heart and rehearsal are considered important. Students expect teachers and course materials to carry out many learning functions, such as making the important points clear. Students feel that instruction should motivate them and that teachers should check their understanding.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Construction of knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning is seen as being confronted by the thoughts of others and forming personal opinions about these. Study tasks seen as, for example, thinking critically, making relations, following lines of reasoning, and developing those lines further. The students see it as their own responsibility to perform most learning tasks, to be motivated, and to diagnose the cause of problems. They aim towards meaning rather than gathering grades.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Use of knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using knowledge is seen as the main goal of learning. Students expect teachers and course writers to illustrate how the content is applied. They want teachers to carry out functions such as stimulating their learning and generating curiosity. Students see their own tasks as working on practical applications and showing interest.</td>
</tr>
</tbody>
</table>

Elements of both Perry’s and Säljö’s findings can be seen in the research reported by Vermunt (1996). Vermunt describes four different mental models of learning which are summarised in Table 2.9. The main differences between students illustrated by these models relate to the nature of learning. There are parallels with the conceptions of learning: the reproducing view of learning is seen in the ‘intake of knowledge’ category as compared with the transforming view seen in the ‘construction of
knowledge' category. One interesting point about Vermunt's 'intake of knowledge' category is that students within an essentially reproductive conception of learning see understanding as important. It seems that one of the students' aims is to reproduce the understanding provided by instruction. Both Perry's work, and the conceptions of learning, give some idea of the way in which students see their role in the learning process. This is taken further in the mental models, where the different roles ascribed to instruction or to the student are clarified in some detail. It appears from Vermunt's findings that students differ markedly in their ideas about which learning activities are their responsibility and which they expect to be carried out for them.

Metacognition and self-regulation

Metacognition and self-regulation are considered in this review because they provide insights into why students adopt particular approaches. The two concepts are discussed together because there is considerable overlap. The term 'metacognition' has been used to refer to theories of mind, as well as to reflection on psychological phenomena such as cognition, beliefs and desires. It can also refer to monitoring and control of cognitive processes (Reder, 1996). In education, the term metacognition has been used to encompass beliefs and knowledge about learning as well as monitoring, regulation of, and reflection on, learning (McKeachie, 1990; Vermunt, 1996; Entwistle, 1997b; Vermunt, 1998). It would therefore be possible to include the beliefs about learning, described in the previous section, within the definition of metacognition.

Two main themes can be distinguished within research into self-regulation. In the first, the focus is on the 'self'; such research considers the extent to which individuals are autonomous, the extent to which they are able to rely on their own resources (Garcia, 1996). In the second theme, the emphasis is on 'regulation', describing the sorts of regulatory actions that individuals carry out (Garcia, 1996). Educational research into self-regulation has considered both of these aspects (Vermunt and van Rijswijk, 1988; Zimmerman, 1989; Garica, 1996; Vermunt, 1996, 1998; Zimmerman, 1994).
In this review, the focus is on students’ monitoring and regulation of their learning in higher education, as this is most directly relevant to development. Monitoring activities can include a general awareness of progress, and also the testing and evaluation of strategies (Brown, 1987; Vermunt, 1996, 1998). Descriptions of regulation have included accounts of: the selection and regulation of cognitive processes; goal setting; planning; resource management strategies, such as time management and help seeking; the maintenance of effort, persistence and attention; and the regulation of the affective consequences of learning (Vermunt and van Rijswijk, 1988; Pintrich et al., 1991; Miller, Behrens and Greene, 1993; Vermunt, 1996; Zimmerman and Risemberg, 1997; Wolters, 1998).

Vermunt (1996) gives an illustrative example of the diversity of students’ monitoring and regulation activities. He found that some students he interviewed struggled with these activities, carrying out only limited regulation, for example, spending more time on difficult sections of the work; others carried out considerable monitoring and regulation of their learning, which could involve monitoring their understanding, or the extent to which they felt they could apply the subject matter. Some of these students thought extensively about difficulties in their learning and made changes in their learning processes where required.

**Overlap between concepts**

It is clear from the preceding discussion that there is considerable overlap between some of the concepts and categories described in this section and between these and the approaches to studying. For example, the strategic approach to studying incorporates aspects such as time management, which fall within some conceptualisations of self-regulation (Pintrich et al., 1991, 1993). A matrix which illustrates how the relationships between these concepts can be understood is presented in Table 2.10. It is clear from this matrix that approaches are quite broad concepts and it is difficult to see how they could best be delimitated. For example, it would make sense conceptually to make the link with metacognition and self-regulation more explicit, but this raises the issue as to which of the many facets of these concepts should be included.
Table 2.10: Conceptual overlap in definitions describing learning

<table>
<thead>
<tr>
<th>Beliefs about learning and knowledge</th>
<th>Monitoring</th>
<th>Regulation</th>
<th>Learning processes</th>
<th>Specific Intentions for task or course</th>
<th>Broader aims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metacognition</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Self-regulation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Conceptions of learning</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Perry's findings</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Mental models</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>Learning orientations</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Lng/Perf. goals</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Deep</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Strategic</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Surface/Apathetic</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

✓ - often explicitly included in conceptualisations,
✓ - implied by some conceptualisations,
✗ - not generally included.

Summary

This section has introduced the main concepts from the student learning literature which relate to students’ approaches to studying. It is clear that there is considerable overlap between these conceptualisations. Although there has now been a good deal of research into many of these areas, there are also some gaps. Most notably, there are currently few qualitative studies, other than the work of Vermunt (1996), which explore how students actually experience and carry out their self-regulation and metacognition in their everyday studies in higher education. It is clear from the findings reported in this section, that students differ markedly in their beliefs and aims in relation to learning and in the ways in which they monitor and regulate their studies. The next section of this review explores how these differences may affect students’ approaches to studying.
Influences on approaches I – aims, beliefs, monitoring and regulation

Introduction

This section focuses on the empirical links between different aspects of students’ learning, rather than the conceptual overlap illustrated in the preceding section. The section begins by considering some of the early qualitative studies in this area, but the emphasis is mainly on inventory studies, as these tend to break the concepts down into narrower sub-scales making it easier to measure inter-relationships. Different models for these inter-relationships are considered, but it is clear from the findings that no single model can fully represent the underlying complexity.

Earlier studies

Beaty, Gibbs and Morgan carried out some of the earliest research into the inter-relationships between students’ aims and beliefs and their approaches to studying in the early 1980s. This research has been summarised by Beaty, Gibbs and Morgan (1997) and Morgan and Beaty (1997). Beaty, Gibbs and Morgan describe students’ study contracts - the relationships between their learning orientations and the ways in which they went about learning and studying. The authors suggest that there was a clear indication of internal negotiation about studying and long term planning of students’ efforts, based on their orientation. There was a logical consistency between students’ orientations and the ways in which they worked, although students’ were not always able to live up to their good intentions and were not always logical in the way they worked. These study contracts were much affected by context, for example, how competitive the job market was, and by what grades the student had already achieved.

Morgan and Beaty (1997) present two case studies which illustrate that students’ learning orientations, conceptions of learning and approaches to studying are inter-related in meaningful ways. These cases are useful in giving a more holistic description of students’ learning, but the post-hoc explanations of inter-relationships are problematic. It would have been helpful if the authors had, for example, explicitly tested their data for cases which did not show the expected relationships between the concepts. There are, however, other studies which support Beaty, Gibbs and Morgan’s claims about a link between conceptions and approaches to studying.
Qualitative research by Eklund-Myrskog, and by van Rossum and Schenk, suggests that reproducing conceptions are related to taking a surface approach, whereas transforming conceptions are linked to the deep approach (van Rossum and Schenk, 1984; Eklund-Myrskog, 1997).

Research with the ILS and MSLQ

Based on the interview and inventory studies described earlier, Vermunt identified the four learning styles reported in Table 2.11 (Vermunt and van Rijswijk, 1988; Vermunt, 1996, 1998). The learning styles suggest inter-relationships between particular learning processes, forms of self-regulation, and mental models of learning. Vermunt (1998) proposed the model shown in Figure 2.1 to explain these relationships. He suggested that the effect of mental models and learning orientations on learning processes would mainly be indirect via regulation strategies. The regression analyses of the findings from his Inventory of Learning Styles (ILS) support this model in general terms, in that there are significant predictive effects from regulation strategies to learning processes, and from mental models and learning orientations to regulation strategies and to learning processes, however, the effects of learning orientations on regulation strategies were apparently fairly weak.

Figure 2.1: Relationships between regulation and other aspects of students' learning
Table 2.11: Relationships between different aspects of students’ learning

<table>
<thead>
<tr>
<th>Learning Style</th>
<th>Orientation</th>
<th>Mental models</th>
<th>Processes</th>
<th>Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application directed</td>
<td>Certificate, vocation.</td>
<td>Use of knowledge.</td>
<td>Concrete processing.</td>
<td>External or self.</td>
</tr>
<tr>
<td>Undirected</td>
<td>Self-test, ambivalent.</td>
<td>Intake of knowledge, cooperation and being stimulated.</td>
<td>No clear link or lack of processing.</td>
<td>Lack of.</td>
</tr>
</tbody>
</table>

As there is some overlap between aspects of Vermunt’s learning styles and approaches to studying, it may provide an insight into how the approaches might be influenced by other aspects of students’ learning. Overall, the critical and constructive learning processes and interest characteristic of a deep approach tend to be linked with self-regulation and a ‘construction of knowledge’ view of learning. The memorising and rehearsal strategies which form part of the surface approach are most clearly linked with learning orientations to do with testing one’s capabilities and passing courses, and with seeing learning as being about the intake of knowledge. The strategic approach is not generally addressed by Vermunt’s inventory. Links between students’ self-regulation, mental models of learning and their approaches are also supported by the inventory study reported by Lonka and Lindblom-Ylänne (1996). These authors also found a link between dualism, as described by Perry, and surface approaches to learning.

Research with the Motivated Strategies for Learning Questionnaire (MSLQ, Pintrich et al., 1991) also sheds light on the inter-relationships between these different aspects of students’ learning. The relevant scales from the questionnaire are shown in Table 2.12, which also illustrates the strong overlap between the MSLQ and aspects of the approaches to studying as measured by the most recent version of the ASI. The correlations reported in studies with the MSLQ broadly support the model suggested by Vermunt (1998) in that there are the expected correlations between goals, self-regulation and learning processes.
Table 2.12: Scales from the MSLQ and links to most recent ASI

<table>
<thead>
<tr>
<th>Scale</th>
<th>Description</th>
<th>Link to approaches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance goal</td>
<td>Main aim is to get good grades to show ability.</td>
<td>Similar to achieving motive in strategic.</td>
</tr>
<tr>
<td>Learning goal</td>
<td>Intention to understand, preference for challenging/interesting material.</td>
<td>Links to intention to understand in deep but MSLQ scale broader.</td>
</tr>
<tr>
<td>Self regulation</td>
<td>Maintaining focus when studying, monitoring understanding, regulating study methods.</td>
<td>Links to monitoring effectiveness scale in strategic but MSLQ scale broader.</td>
</tr>
<tr>
<td>Time/study environment</td>
<td>Time management, finding appropriate study environment.</td>
<td>Similar to time management and organised studying in strategic.</td>
</tr>
<tr>
<td>Effort regulation</td>
<td>Ability to maintain effort even when course difficult or boring.</td>
<td>No clear overlap.</td>
</tr>
<tr>
<td>Organisation</td>
<td>Organising/structuring content</td>
<td>No clear overlap with recent ASI items but generally considered part of deep.</td>
</tr>
<tr>
<td>Critical thinking</td>
<td>Questioning content and developing personal ideas.</td>
<td>Similar to use of evidence in deep.</td>
</tr>
<tr>
<td>Elaboration</td>
<td>Making connections between different sources, concepts, prior knowledge etc.</td>
<td>Similar to relating ideas in deep.</td>
</tr>
<tr>
<td>Rehearsal</td>
<td>Rehearsal and memorisation</td>
<td>Overlap with unrelated memorising but no explicit sense of lack of understanding as in the ASI scale.</td>
</tr>
</tbody>
</table>

The self-regulation scale tends to show relatively strong positive correlations with time and study environment management, and with all of the learning processes, although the link with rehearsal tends to be weaker; effort regulation shows a very similar pattern of relationships (Pintrich and Garcia, 1991, 1993; Pintrich et al., 1993). There is generally a positive relationship between a learning goal orientation and self-regulatory strategies and time and study environment management. A learning goal orientation typically also has a stronger relationship with learning processes such as elaboration, organisation and critical thinking and a weaker, though still positive, relationship with rehearsal processes (Pintrich, Smith, Garcia and McKeachie, 1991; Pintrich and Garcia, 1991, 1993; Pintrich et al, 1993; Miller, Behrens and Greene, 1993; Archer, 1994; Bouffard et al, 1995). The relationships between performance goal orientations and self-regulation and learning processes vary across studies, although relationships with time and study environment management are typically positive (Pintrich et al., 1991; Pintrich and Garcia, 1991,
Pintrich and colleagues report a range of other analyses which illustrate that the inter-relationships between these different aspects of students’ learning are more complex than can be described within any straightforward model. For example, there may be an interaction between learning and performance goals. Pintrich and Garcia (1991) found that a learning goal orientation had a generally beneficial effect on self-regulation and learning processes, but that this was modified by having a performance goal orientation. When learning goal orientation was high the effect of performance goal orientation was negative, but when students had a low learning goal orientation, having a performance goal orientation was helpful. The cluster analyses carried out by Pintrich and Garcia (1993) suggest that students can hold a variety of combinations of motives, processes and self-regulatory behaviours.

Dart (1994) fitted a structural equation model to his data which addressed the place of goal orientations in explaining learning processes and metacognition. In this model, having a learning goal orientation predicted the use of elaboration strategies and also the extent of a student’s performance goal orientation. Having a performance goal orientation predicted metacognition, which in turn predicted collaboration and organised study strategies. This is quite a different picture from that suggested by the other studies described here, as it gives a stronger role to a performance goal orientation. As Dart also tested one model in which a learning goal orientation predicted metacognition, it is hard to argue that, although his model fitted the data, a model giving a greater role to a performance goal orientation would also have fitted. Nonetheless, as it is possible for several different models to all provide a good fit to a particular data set, another model which emphasised the role of learning goals might still be found (Loehlin, 1992). It may be that the findings could be explained by the particular inventory items used (these were not reported in full), or by the particular learning context.
Summary

Overall, the studies presented in this section suggest that students’ approaches to studying are influenced by their aims and goals, beliefs about learning, and metacognitive or self-regulatory activities. The model provided by Vermunt (1998) (Figure 2.1 above) is generally supported by these findings and provides a basic overview of how these aspects of students’ learning may be inter-related. It is clear, however, that no simple model can fully illustrate the underlying complexity of students’ learning. The cluster analyses and examples of interaction between the goal orientations presented by Pintrich and Garcia (1991, 1993) illustrate this point. For example, the cluster analyses show that the inter-relationships between different aspects of students’ learning vary between groups of students, even in the same context. Structural equation modelling approaches, such as that used by Dart (1994) do allow for more complex relationships, but typically many models will fit the same data set. Further, such techniques cannot allow for differences in the inter-relationships at the level of individual students, or small groups (Loehlin, 1992).

Influences on approaches to studying II – teaching-learning environment

Introduction

From the previous section it is clear that students’ approaches to studying are influenced by interaction with their aims, beliefs, and regulatory efforts. This section of the review will illustrate how students’ approaches also interact in a complex manner with their perceptions of the learning environment. The ways in which students’ approaches and other aspects of their ideas about learning may influence their perceptions of the learning environment are considered first. This will be followed by an account of studies which illustrate how students’ approaches might be influenced by their perceptions. These findings, taken in conjunction with the previous section, suggest that students’ approaches might best be considered as part of an interacting system involving all of these different elements.

Influences on students’ perceptions of the learning environment

Entwistle and Tait (1990) suggest that what is perceived as good teaching will be bound up with students’ conceptions of learning; if the learning environment does
not support what students believe to be good learning, then they are unlikely to see it in a positive light. This view supported by the student case studies presented by Säljö (1982) which illustrate, for example, how students with reproducing conceptions prefer straightforward teaching-learning environments which present knowledge which can be reproduced in examinations. Vermunt (1996) also takes up this theme, noting how students’ mental models of learning affect the ways in which they appraise the learning environment.

There is also research which illustrates the relationships between approaches to studying and students’ preferences for different learning environments. Entwistle and Tait (1990) report a study in which the ASI was given in conjunction with questions about students’ preferences for contrasting aspects of the learning environment. Factor analysis of the findings showed a clear pattern where the deep and surface approaches were related to preferences for teaching which supported these kinds of learning. For example, the deep approach was related to preferences for courses where personal interest was catered for and where the examinations let students show their thinking about the course. Similar patterns have also been found in a number of other studies (Entwistle, Meyer and Tait, 1991; Entwistle, Tait and McCune, 2000).

From these studies, it is reasonable to suggest that students with different approaches may perceive the same learning environment in more or less positive ways. It also seems possible that students’ approaches may influence their perceptions of the learning environment beyond simply having preferences for particular contexts. One might imagine, for example, that a student adopting a predominantly surface approach would perceive the workload on a course as being higher than a student adopting a generally deep approach on the same course, because surface strategies are likely to be less efficient (although a fully deep approach could also be very time consuming).

These relationships between students’ approaches and their preferences for different types of teaching do not, however, hold up in all circumstances. Meyer identified that certain groups of students, typically those who are weak academically, seemed to show uninterpretable inter-relationships between their approaches to studying,
perceptions of the learning environment, and preferences for contrasting environments (Meyer, Parsons and Dunne, 1990; Entwistle, Meyer and Tait, 1991; Entwistle, Tait and McCune, 2000). For example, Entwistle, Meyer and Tait (1991) found that, for less successful students, a surface approach was associated with preferences for both ‘surface’ and ‘deep’ aspects of the learning environment. Such findings have sometimes been explained in terms of students who wish to take a deep approach but do not know how to achieve this. Another possibility is a mismatch between a student’s preferred approach and their perceptions of the learning environment (Entwistle, Tait and McCune, 2000; Meyer, 2000).

The influences of students’ perceptions of the learning environment on approaches

While students’ perceptions of the learning environment do not always map onto their approaches to studying, there are often interpretable relationships. Entwistle and Tait (1990) note that, although students’ approaches can influence their perceptions, students in a class may share the same perceptions of the learning context, in which case it can be seen how the context can influence students’ approaches. Figure 2.2 provides a simplified model of the aspects of the teaching-learning context which may influence students’ approaches to studying, based on a range of studies across different contexts and using a variety of methodologies (Ramsden and Entwistle, 1981; Entwistle and Ramsden, 1983; Thomas and Bain, 1984; Newble and Clark, 1987; Entwistle and Tait, 1990; Meyer, 1991; Trigwell and Prosser, 1991; Biggs, 1993b, 1996; Ramsden, 1997; Entwistle, 1998b; Wilson, Lizzio and Ramsden, 1997; Scouller, 1998). As illustrated in the diagram, it is a student’s perceptions of this context, rather that the context per se which will most directly influence that individual’s learning (Ramsden, 1997).

The wider context, which will influence students’ learning indirectly, includes the characteristics of the discipline being studied, political pressures, and the institutional context (Biggs, 1993b; Becher, 1994). For example, political pressure leading to an increase in student numbers may influence teaching methods and therefore students’ learning. As the development of students’ approaches is most likely to be directly influenced by the immediate teaching-learning environment,
these elements will be the focus of this section of the review. Teaching is considered first, followed by other important aspects of the course context, including assessment. The relevance of the discipline specific discourse within the immediate teaching-learning context is considered next. Finally, the potential influence of advice about learning is discussed.

**Figure 2.2: Contextual influences on students’ approaches to studying**

Teaching and approaches

Research in this area has identified certain elements of ‘good teaching’ which seem to contribute to students taking a deep approach to studying, or to the absence of a surface approach (Ramsden and Entwistle, 1981; Entwistle and Ramsden, 1983; Entwistle, 1987; Entwistle and Tait, 1990; Trigwell and Prosser, 1991; Entwistle, 1998b; Ramsden, 1997). Of these characteristics, good explanations, enthusiasm, and empathy with students seem to be particularly important in supporting a deep
approach (Entwistle, 1998b). In the large scale interview and inventory study reported by Entwistle and Ramsden (1983), it was clear that the students perceived teaching as influencing their approaches to studying. From the inventory data, the authors were also able to show that teaching influenced students’ approaches independently of their subject area or entrance qualifications (Ramsden, 1997). As a consensus could be found among the students as to the nature of the teaching in certain departments, it was possible to rule out that the findings had been caused simply by students’ preferred approaches influencing their perceptions of the context (Entwistle and Ramsden, 1983; Entwistle and Tait, 1990).

The research also indicates that differences in the conceptions of teaching held by staff and approaches to teaching they adopt may influence students’ approaches to studying (Trigwell and Prosser, 1996; Trigwell, Prosser and Waterhouse, 1999). Conceptions of teaching have been described along the continuum from lower to higher categories where there is a change from: an emphasis on teaching as transmitting information, through seeing teaching as facilitating and helping students elaborate their understanding, to teaching as changing students’ world views. Another dimension runs from not supporting students, through intensive support of students, to promoting students’ self-regulation, with a parallel shift from a focus on what teachers feel they should teach, to a focus on where students are starting from, and from expecting students to motivate themselves to trying to stimulate students’ learning (Samuelowicz and Bain, 1992; Prosser, Trigwell and Taylor, 1994; Van Driel et al., 1997). Gow and Kember (1993) found that the conceptions of teaching reported by staff influenced the change in students’ SPQ scores over the course of a year. A learning facilitation conception was related to an increase in deep and strategic and a decrease in surface approaches, whereas a knowledge transmission conception seemed to have the opposite effect. It is unclear from these findings, however, whether the lecturers’ conceptions had affected students’ development, or whether they had simply caused a temporary change in the students’ approaches.

Conceptions of teaching have been shown to be related to teachers’ approaches to teaching, which in turn appear to influence students’ approaches to studying (Trigwell and Prosser, 1996; Trigwell, Prosser and Waterhouse, 1999). For example,
the more student centred conceptions are linked to an approach to teaching which aims to bring about conceptual change and this has been related to students taking a deep approach. There are also clear parallels between the characteristics of good teaching identified in the earlier research and the conceptions of, and approaches to, teaching which support the deep approach.

Course characteristics and approaches

Aside from teaching, Figure 2.2 illustrates a range of other influences of the course context on students’ approaches. Certain aspects - such as workload, resources, and freedom of choice - are fairly self-explanatory. It is only necessary to mention that high workload tends to promote a surface approach, whereas freedom of choice tends to encourage a deep approach (Entwistle and Ramsden, 1983; Entwistle et al., 1989). It should be borne in mind, however, that students’ ability to cope with freedom of choice is likely to depend on their self-regulatory ability (Vermunt, 1996). Course design and objectives can influence students’ learning in a number of ways, for example, the objectives of the course may give students some sense of the ways in which they are expected to learn.

The central theme in this area of the literature is the importance of students’ reactions to assessment in influencing the ways in which they learn (Snyder, 1971; Entwistle and Ramsden, 1983; Thomas and Bain, 1984; Entwistle, 1987; Laurillard, 1997; Entwistle, 1998b; Scouller, 1998). One point from this research, which is particularly relevant to the present study, is the importance of essay writing in encouraging a deep approach (Thomas and Bain, 1984; Scouller, 1998). Writing essays ideally requires students to engage actively with material, to examine ideas in depth, to integrate and critically evaluate what they read, and to state their understanding clearly - which often requires that they develop their understanding further (Applebee, 1984; Hounsell, 1997). The literature related to essay writing is considered in detail in a later section of this review.

Discipline specific discourses and approaches

An important consideration for understanding the approaches to studying adopted by students, is that both teaching and learning differ across disciplines. The differences are illustrated in work reported by Becher (1994), which was based on 350 in-depth
interviews with academics and research students. Becher suggested that different disciplines could be seen as having very different cultures, norms, and values which fundamentally affect teaching, learning and research. Although the research reported in this thesis is focused only on psychology, these issues are still relevant, as the students have to come to terms with the particular discourse of that discipline during their first year.

Entwistle and Ramsden (1983) found that students saw learning tasks as being different between arts and science subjects. Learning tasks in science were typically described as hierarchical, logical, heterogeneous, and rule and procedure governed. Arts and social science subjects were seen as requiring interpretation, comparison and generalisation and to be more self-governed. In this research, approaches were expressed in different ways in different subject areas. In the science areas the deep approach appeared to require an initial concentration on details which seemed in some ways similar to a surface approach, whereas in the humanities, a deep approach involved students working from the outset to form personal interpretations of the material.

A further complication is that the norms and values related to teaching and learning in particular disciplines are not easily communicated, causing problems for students in successfully adopting an appropriate approach (Hounsell, 1987; Ballard and Clanchy, 1988; Prosser and Webb, 1994; Hounsell, 1997). There are ideas and beliefs within academic disciplines which determine what may be said, and the ways in which it may be said. These beliefs may be tacit, and even where they are better understood, they are rarely discussed openly in teaching (Hounsell, 1988; Ballard and Clanchy, 1988). This issue of the lack of explicit explanation of requirements has also been addressed by Snyder (1971) who illustrated how students in the US found that what they were required to do to get good grades was often at odds with the formally stated goals of their courses. So it is clear that the overt characteristics of a particular context do not give a complete picture of the influences on students' approaches to studying.
Advice about learning and approaches

There has been little research into the effects of simply making advice available (as was the case for the students involved in the research reported in the later chapters of this thesis), but some studies have considered the effects of specific interventions. This research suggests that it is possible to change students' approaches, but that this is not necessarily a straightforward process (Biggs, 1987; Ramsden, Beswick and Bowden, 1987; Vermunt, 1995; Norton and Dickens, 1995). Biggs (1987) reports on an intervention carried out at Stanford University which was successful in decreasing the surface approach and increasing the deep and strategic approaches, as measured by the SPQ. The nine-week course involved encouraging students to reflect on their learning in interaction with peer counsellors, covering topics such as time management, and understanding and remembering what is read. The students' grades improved markedly following the course, but it is unclear to what extent this was due to the changes in their approaches. Biggs notes that the students in this sample were a highly motivated group and that the findings may therefore not generalise to other students with study difficulties.

Vermunt (1995) describes a programme where students were encouraged to reflect on their learning styles as measured by the ILS. The students were given individualised support to think about their learning using a learning guide and tutorials. At the end of the programme, many of the students reported that had more insight into their ways of learning and that they had received suggestions that they wanted to use to improve their studying. The students reported changes in their ideas about using deep processes and time management. Although the students' approaches were not measured directly at the end of the programme, the effects of the programme on students' examination results support the suggestion that their approaches did develop. Participants in the programme showed higher examination grades, despite their being almost no differences in the background characteristics of participants and non-participants.

Ramsden, Beswick and Bowden (1987) describe interventions where students discussed their learning problems and approaches to studying in small groups. The approaches of attendees and non-attendees at the courses were assessed using a
questionnaire based mainly on the ASI, and interviews were held with a small sample of the students. The attending and non-attending students were similar in their approaches and school attainment prior to the interventions. Contrary to what had been hoped, the deep approach scores of both groups had decreased by the end of the intervention and the surface approach scores of the attending group had increased. The authors suggest that the learning skills groups may have become more able to reflect on what would be successful strategies for their courses, but may have perceived that surface approaches would be more appropriate. This explanation was supported by the interview findings and emphasises the importance of the course context, and in particular the assessment requirements, in influencing students’ approaches. It also indicates the difficulty of intervening successfully where the course context is not supportive of the desired changes.

Finally, Norton and Dickens (1995) report an innovation where attempts were made to change the course context related to a ‘learning to learn’ intervention to support the deep approach. For example, the final examination was changed from a ‘short answer plus essays’ to an ‘essay only’ format, and efforts were made to make the course work essays more supportive of the deep approach. The innovation seemed to have the effect of decreasing the surface approach, but not of increasing the deep approach. Subsequent discussions with students and staff suggested that this might have been because the deep approach continued to be perceived as a risky option, involving a break from familiar methods of learning.

**Summary**

The research described in this section illustrates how students’ approaches to studying interact with their perceptions of the learning context. It appears that students’ approaches can both influence, and be influenced by, their perceptions in important ways. Bringing together these findings with the research described earlier in the review makes it clear that students’ approaches to studying must be considered as part of a complex interacting system, as has previously been pointed out by both Biggs and Entwistle (for example, Entwistle, 1987; Biggs, 1993b, 1996; Entwistle, 1998b). Students’ aims, beliefs, self-regulation, approaches to studying and perceptions of the learning context are all connected within this system.
There is a complexity in these issues which is difficult to capture completely in any one model or analytic scheme. The inter-relationships between aspects of students’ learning differ both at the individual and the group level, and these relationships are often reciprocal (Entwistle and Tait, 1990; Entwistle, Meyer and Tait, 1991; Pintrich and Garcia, 1993; Sambell and McDowell, 1998; Entwistle, Tait and McCune, 2000). Further, both the macro characteristics of the system - such as the general forms of assessment - and the micro characteristics - such as the particular problem set - can have important influences (Thomas and Bain, 1984; Laurillard, 1997; Scouller, 1998). There is also the issue that aspects of the system seem to be hidden or tacit (Snyder, 1971; Ballard and Clanchy, 1988; Sambell and McDowell, 1998). Nonetheless, interpretations can be made which illustrate the central importance of aspects of the teaching-learning context for students’ learning.

**Essay writing and approaches to studying**

*Introduction*

The previous section discussed the importance of assessment in general as an influence on students’ approaches to studying (Snyder, 1971; Entwistle and Ramsden, 1983; Thomas and Bain, 1984; Entwistle, 1987; Laurillard, 1997; Entwistle, 1998b; Scouller, 1998). This section looks more closely at one particular form of assessment - essay writing - which is particularly relevant to the present study. Essay writing is of interest here because it can encourage students to take a deep approach (Thomas and Bain, 1984; Scouller, 1998), and it is therefore possible that writing essays will help students to develop this approach. As noted earlier, the students in this study completed three essays over the course of the research, providing a consistent context against which to consider development. Their only other assessment during the research was a single multiple-choice examination, which is unlikely to have prompted any development of their approaches. Essay writing may also be a means by which students may gain access to the academic discourse of psychology, a necessary prerequisite for taking a fully deep approach.

This section will begin by considering how students’ approaches to essay writing may vary. Next, research into students’ conceptions of essay writing will be discussed, as these findings help to explain students’ approaches by illustrating some
of the problems involved in gaining access to the academic discourse of a subject area.

**Variation in approaches to essay writing**

Although writing essays tends to support a deep approach, as compared with some other forms of assessment, it is possible for students to interpret this task in different ways. Sambell, McDowell and Brown (1997) found that essay writing can sometimes be seen more simplistically and negatively by students - for example, as requiring them to simply lift information from books. Biggs (1988) characterised students' approaches to essay writing using a conceptual structure for different forms of the deep and surface approaches derived from the literature, which was then supported using extracts from students' interviews; he also found marked differences between students in the ways in which they approached their essays.

Variation in students' approaches to essay writing has also been identified by Lavelle, based on an *Inventory of Processes in College Composition (IPIC*, Lavelle, 1993, 1997). The five factors identified in this research show interesting correspondences with the approaches to studying. For example, the elaborationist and reflective-revisionist scales seem to be conceptually related to a deep approach. The elaborationist scale describes engagement and a search for personal meaning in writing, while the reflective-revisionist scale involves a view of writing as an emergent process involving revision as a means of remaking and clarifying thinking. It was clear from Lavelle's findings that some students tended to take surface rather than deep approaches to essay-writing tasks.

**Conceptions of essay writing**

One reason why students may adopt different approaches to essay writing derives from their beliefs about the nature of that task. In his interview research with psychology and history students, Hounsell (1987) found that essay writing had distinctive meanings for these individuals and these took qualitatively different forms which he called 'conceptions of essay writing', although his findings also describe aspects of students' approach to this task. Among the psychology students in his study, Hounsell found two overall conceptions - 'relevance' and 'cogency'. The 'relevance' conception involved characterising essays as an ordered discussion of
relevant material. The students' own thoughts about the topic were not central to their essay writing and they did not focus on establishing meaning. The students treated the organisation and use of data in their essays as discrete issues, separate from each other, and from their interpretation of the topic. The students' essay writing therefore seemed to be a mechanical process uninformed by an overall focus on meaning. In the 'cogency' conception, by contrast, students' own interpretations were dominant in the essay. Students evolved a coherent view on the topic from their reading, which determined their use of data and the organisation of their essay. They were focused on making meaning, and developing an individual view of the topic based on a firm empirical foundation (Hounsell, 1987, 1997).

Although the 'cogency' conception seems closer to what most teachers of psychology would want, the 'relevance' conception was still present for some of these second year students. A similar lack of congruence between students' conceptions of essay writing and what was expected in their disciplines has been identified in research with first year psychology students (Norton, 1990), first and third-year education students (Campbell, Smith and Brooker, 1998), first-year sociology students (Prosser and Webb, 1994), and first, second and third-year biology students (Merry, Orsmond and Reiling, 1998). These difficulties with conceptions of essay writing can be seen as an instance of difficulty in gaining access to the discipline-specific discourse mentioned earlier. Sometimes, students' difficulties with these issues can be masked in essay writing, as problems mastering the academic discourse can manifest themselves in surface difficulties with grammar and syntax (Taylor, 1988).

One reason why students may remain wedded to inappropriate conceptions is that their existing beliefs influence their interpretation of any advice they are given. There is evidence that students' conceptions of essay writing may include misinterpretations, or simplifications, of assessment criteria (Norton, 1990; Campbell, Smith and Brooker, 1998). Hounsell (1987) explains that tutors and students must both understand the assumptions underlying the advice given before it can be effective. He suggests that such problems in explaining the nature of essay writing could cause students to see feedback as marginal, and to have a negative attitude towards essay writing. Yet, discussion on these issues cannot easily be made
clear and precise, and it may not occur at all (Hounsell, 1988; Ballard and Clanchy, 1988).

**Conceptions and approaches**

We have seen that a deep approach to studying is characterised by an intention to develop a personal understanding, with related processes, such as use of evidence (Entwistle and Ramsden, 1983; Entwistle, 1997a). It seems that for students to take a deep approach to essay writing they must believe that it is required and must understand how to carry this out within the discourse of their discipline. For example, students must understand that personal interpretations are sought and must know how to evolve and present these in relation the relevant literature. In the psychology students’ conceptions discussed by Hounsell (1987, 1988) it is clear that only the cogency conception fully supports a deep approach, as this conception involves seeing essay writing as creating meaning through evolving a personal interpretation based on evidence. The link between students’ conceptions of essay writing and their approaches to the task has also been made by Prosser and Webb (1994) and by Campbell, Smith and Brooker (1998).

**Summary**

It is clear from the findings presented in this section of the review that the essay writing task provides important opportunities for understanding how students come to adopt a deep approach. Although this task is generally more supportive of the deep approach that some other forms of assessment, it is not a foregone conclusion that students will work in this way (Biggs, 1988; Lavelle, 1993, 1997; Sambell, McDowell and Brown, 1997). It seems likely that for students to be able to adopt a fully deep approach, they must see this as necessary and must understand how to take such an approach within the discourse of their discipline. Research into students’ conceptions of essay writing helps to illustrate the nature of this discourse and the problems that students may encounter in coming to terms with it (Hounsell, 1987, 1988; Prosser and Webb, 1994; Hounsell, 1997; Campbell, Smith and Brooker, 1998).
Research into students' development I – beliefs and regulation

Introduction

Up to this point, this review has explored the nature of students’ approaches and what might influence them, but it has not yet addressed development directly. This section of the review considers research into the development of students’ beliefs about learning and their self-regulatory abilities, as this would be expected to affect the development of their approaches. It seems that there is a general developmental pattern which links students’ ideas about learning and knowledge, their self-regulation, and their beliefs about their learning tasks. These studies also provide some insight into what might provoke, or inhibit, students’ development. This section will provide a background for the following one, which looks directly at the development of students’ approaches.

Overall developmental pattern

Table 2.13 summarises the main developmental trends which have been suggested, time moving from left to right across the table. All of these changes have been illustrated in longitudinal studies, with the exception of the conceptions of essay writing (Perry, 1970, 1988; Beaty and Morgan, 1992; Marton, Dall’Alba and Beaty, 1993; Beaty, Dall’Alba and Marton, 1997; Hofer and Pintrich, 1997). The potential for such development in students’ conceptions of essay writing is suggested by a cross-sectional study carried out by Campbell, Smith and Brooker, and by the parallels between the conceptions of essay writing and the developmental pattern illustrated in the table (Hounsell, 1997; Campbell, Smith and Brooker, 1998).

The overarching theme suggests that the source of knowledge and the responsibility for learning shift from being external to the learner to being within the learner. On the left-hand side of the table the learner is a passive receptacle of knowledge, whereas on the right they have become an active creator of meaning. As this progression is mirrored in all of these aspects of learning, it seems that there must also be connections vertically within the table. Some of these connections have already been illustrated through the research discussed earlier in this review, others, such as the link between beliefs about knowledge and conceptions of essay writing,
have yet to be demonstrated. The main longitudinal studies in this area are considered next.

**Table 2.13: Potential developmental trends in students’ learning**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Beliefs about knowledge</td>
<td>Correct answers handed down by authority.</td>
<td>Commit to viewpoints based on evidence but accept subjectivity and relativism.</td>
</tr>
<tr>
<td>Beliefs about role of self and others</td>
<td>Expect teachers to activate or carry out most learning functions.</td>
<td>See main learning functions as own responsibility.</td>
</tr>
<tr>
<td>Conceptions of essay writing</td>
<td>Essay writing involves passive regurgitation.</td>
<td>Essay writing involves actively constructing meaning.</td>
</tr>
<tr>
<td></td>
<td>Idiosyncratic conception of essay writing.</td>
<td>Conception of essay writing which maps onto discourse of the subject area.</td>
</tr>
</tbody>
</table>

**Longitudinal studies of development**

Some of the earliest research in this area derives from the studies reported by Perry, and already mentioned. Perry and his colleagues interviewed students at the end of each year of their college studies, the analysis of the data suggesting nine developmental stages. The scheme began with dualism in which the world was understood in terms of right and wrong answers handed down by ‘Authority’, while later stages were characterised by varying degrees of relativism. The students seemed to move through a position where they suggested that any opinions could be valid, to a point where they were able to make a personal commitment to particular positions based on their interpretation of the evidence and accepting the contextual and relativistic nature of knowledge (Perry, 1970; 1988; Hofer and Pintrich, 1997). Hofer and Pintrich (1997) raise the possibility that Perry’s findings may to some extent be a function of the socialisation process in American liberal arts education. Their review of other work in this area suggests, however, that similar themes can be identified in a range of contexts.
Perry’s findings were not limited to students’ ideas about the nature of knowledge. These beliefs seemed to be intertwined with a range of aspects of learning so that: ‘each year they interpreted their educational experience through frameworks of assumptions and expectations that placed knowledge and learning, hope, initiative, responsibility, and their teachers, in new relations.’ (Perry, 1998, p.150). The study suggests that students’ ideas about self-regulation and about their roles in the learning process also developed. As the students came to realise that the material they were taught could be questioned, this realisation shifted the responsibility for learning towards them and away from their teachers.

Perry’s study also sheds some light on how development might come about, and on what might limit development. Perry suggested that the changes in students’ ideas about the nature of knowledge evolved through their being presented with multiple conflicting viewpoints, either in their classes or by their peers. This encouraged them to see that learning could not simply be correct answers handed down by ‘Authority’. For many of the students, however, it was difficult to accept these new ideas about the nature of knowledge as they sometimes raised threatening ideas, for example: ‘if there are several theories of monarchy, why shouldn’t there be infinite theories of monarchy? So is there such a thing as a monarch? Is the same true of all authority and so of all obedience? Of parents and sons? Of all meaning?’ (Perry, 1988, p. 151).

Perry suggested that students who felt alienated, overwhelmed, or resentful, about these challenges might react through ‘temporising’, ‘retreat’, or ‘escape’. ‘Temporising’ involved stopping at a particular stage in development for a time to consolidate ideas, which could then lead on to further development or to ‘escape’ or ‘retreat’. ‘Retreat’ meant that the student returned to earlier dualistic perspectives, which, Perry suggested, might be due to authoritarian structures of emotional control. Finally, ‘escape’ could take a range of forms, for example, detaching oneself emotionally from the problems raised, by passively accepting the position that all views are equally valid. Perry also noted that cynical gamesmanship could be used as a way to avoid facing these sorts of issues, suggesting that there might be an aspect of the strategic approach which could block further development. Perry was unable to suggest exactly how students’ development might best be supported, but he felt
that it would be helpful to provide contexts in which students were valued for taking the risk to develop their ideas (Perry, 1970, 1988).

Several of Perry’s findings are echoed in work reported by Taylor (1986) on the experiences of mature students coming to terms with the change in their ideas provoked by self-directed learning. The students were interviewed at weekly intervals throughout a 13-week graduate course in facilitating adult learning. Like Perry, Taylor found that challenges to students’ ideas led them to move through a common developmental path. In Taylor’s findings, however, it was the process of development that was common, rather than the stages of development; this process is summarised in Table 2.14. The students’ ideas were challenged, leading them first to become disoriented, and then gradually to discover a new perspective which accommodated what they had learned.

Table 2.14: The developmental cycle described by Taylor (1986) (adapted from Taylor, 1986, p59)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disconfirmation</td>
<td>Major discrepancy between expectations and experience.</td>
</tr>
<tr>
<td>Disorientation</td>
<td>Disorientation and confusion, crisis of confidence, withdrawal from those associated with the problem.</td>
</tr>
<tr>
<td>Naming the problem</td>
<td>Naming problem without blaming self or others.</td>
</tr>
<tr>
<td>Exploration</td>
<td>Relaxation with the unresolved issue, intuitively guided, collaborative, and open-ended exploration. Gather insights, confidence, satisfaction.</td>
</tr>
<tr>
<td>Reflection</td>
<td>Private reflection on the issue.</td>
</tr>
<tr>
<td>Reorientation</td>
<td>A major insight or synthesis experience simultaneous with a new approach to the task.</td>
</tr>
<tr>
<td>Sharing the discovery</td>
<td>Testing out the new understanding on others.</td>
</tr>
<tr>
<td>Equilibrium</td>
<td>Period of equilibrium in which the new perspective is refined and applied.</td>
</tr>
</tbody>
</table>

Given that Taylor’s respondents were mature graduate students experienced in such professions as education and counselling, it is not clear whether a similar process would be expected over such a short time-scale for undergraduate students. The idea that developing one’s ideas through academic learning can be emotionally challenging is also illustrated by Taylor’s work. The students talked about how difficult it was to adapt to self-directed learning and how this could lead to
confusion, anxiety and crises of confidence, along with withdrawal from others whom the learner associated with this confusion.

Insight into students’ development has also been provided by an interview study which followed a small cohort of students from the Open University through their degrees. Over the course of the study, the students’ conceptions of learning tended to move up the hierarchy illustrated in Table 2.15, from reproducing conceptions towards transforming conceptions (Marton, Dall’Alba and Beaty, 1993; Beaty, Dall’Alba and Marton, 1997). The studies did not explore in detail what might have caused this development, but the authors note that it may have been because the students were on a course designed to provoke changes in their ideas about society and that the students tended to be studying for intrinsic reasons.

**Table 2.15: Hierarchy of conceptions of learning**
(based on Marton, Dall’Alba and Beaty, 1993; Marton and Säljö, 1997)

| A quantitative increase in knowledge. Reproducing |
| Acquiring facts and procedures for subsequent use. |
| Abstracting meaning for yourself. Transforming |
| An interpretive process aimed at understanding reality. |
| Developing as a person. |

The Open University study also provides an insight into the development of students’ self-regulatory abilities. Beaty and Morgan (1992) explain that over time the students became more able to decide for themselves how to work and what work to cover. The students also came to rely less on the institution to guide their learning, taking more personal responsibility. The authors suggest that the changes came about partly due to the students’ increasing confidence and competence in learning. As the students came to see themselves as more capable learners, they felt more able to take control of the learning process.

**Summary**

The studies reported in this section suggest that development may be brought about by challenges to students’ ideas and assumptions, but that such challenges may also be difficult for students, leading them to react in ways which block development (Perry, 1970; Taylor, 1986; Perry, 1988). It seems that an overall developmental
trend can be identified in students’ learning during their time in higher education. This is characterised by a shift from seeing their role as passive and externally directed, to seeing themselves as self-regulated learners who actively construct meaning. This then suggests the likelihood that students’ approaches to studying will become deeper and more strategic over time. Most of the studies which support this trend were carried out over four or more years, and it seems unlikely that such marked development would take place during a single year. Taylor (1986) did illustrate significant shifts in students’ ideas over a shorter time span, but the respondents in her study are likely to have been particularly open to development given their backgrounds and maturity. This section of the review has focused on aspects of learning which may affect or overlap students’ approaches, the next section considers more direct evidence that students’ approaches may develop, including some studies conducted over a shorter time span.

Research into students’ development II - approaches to studying

Introduction

The findings reported in the previous section suggest the possibility that students’ approaches will change over time, to parallel the development of their beliefs and self-regulation. This section of the review explores whether this in fact seems to be the case. Before considering the research, it is important to ask how one might characterise and measure the development of students’ approaches. It is clear that students change their approaches in response to the learning context, and such change in itself would not necessarily constitute development. Entwistle and Ramsden (1983) note that students have a relative consistency in their approach, although still being influenced by context; a change in this habitual approach could reasonably be seen as development. It is also clear that students may take a particular approach with differing degrees of sophistication (Svensson, 1984; Entwistle and Entwistle, 1991, 1992; Entwistle, 1995), where students come to a achieve a new level of skill or sophistication for this first time this could certainly be seen as development.

This section begins by considering research into the development of students’ intentions in learning, using a scale which parallels the development of students’
beliefs, as described in the previous section. This is followed by an account of research using the ASI and SPQ, the most common methodology that has been used in exploring students’ development, although these studies do present problems in distinguishing change due to a changing context from developmental change. Finally, qualitative studies of students’ development are considered. Overall, it seems that there is still a great deal to be learned about the development of students’ approaches.

The development of students’ intentions

Students’ intentions in relation to their studies are an important part of their approaches to studying. Research by Volet and her colleagues suggests a possible developmental pathway within students’ intentions which maps onto the developmental trends described in the previous section (see Tables 2.13 and 2.15). In studies of first-year economics and computing, students described their intentions for the course on items from the following hierarchy: remembering key features; understanding key features; comparing and contrasting theories; critically assessing theories; and constructing one’s own theories. Students’ answers were submitted to an unfolding analysis which suggested that the assumed hierarchical order was generally observed, although not all students showed this structure (Volet and Chalmers, 1992; Volet, 1997).

When students’ intentions were tracked over their first semester, however, it was found that on average they moved down the hierarchy to begin with and then stabilised; there was no overall evidence of development (Volet and Chalmers, 1992). Volet (1997) then assessed students’ perceptions of their courses by asking them to rank their goals as objectives of the course. Students’ perceptions showed a significant positive correlation with their goals at the beginning of the course and a non-significant positive correlation at the end of the course. It was also found that students’ perceptions of the course differed from those of the academic staff, suggesting that students’ misperceptions were negatively influencing their intentions in learning.
**Inventory studies of the development of students’ approaches**

Inventory data can give an insight into the development of students’ approaches to studying either by making comparisons over the course of their studies or by exploring the relationships between approaches and age. Studies which have explored changes in students’ approaches during their studies are summarised in Table 2.16. One of the limitations of these reports is that they do not demonstrate that students’ approaches have changed against a consistent context. For example, most of the studies do not give information as to what assessments students were working on when they completed the inventory, or about the students’ workload at those times. As it appears that both the ASI and the SPQ are sensitive to differences between learning environments (Entwistle and Ramsden, 1983; Eley, 1992; Gow and Kember, 1993) it is difficult to assess the extent to which development has occurred, as opposed to a temporary change in response to variations in context.

**Table 2.16: Change in students’ approaches during their courses**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Type of study*</th>
<th>Time span</th>
<th>Measure</th>
<th>Changes over time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watkins and Hattie (1985)</td>
<td>L</td>
<td>3 yrs</td>
<td>ASI</td>
<td>Deep decreases</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Surface decreases</td>
</tr>
<tr>
<td>Biggs (1987) Arts</td>
<td>X</td>
<td>4 yrs</td>
<td>SPQ</td>
<td>Deep increases</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Strategic decreases</td>
</tr>
<tr>
<td>Biggs (1987) Science</td>
<td>X</td>
<td>4 yrs</td>
<td>SPQ</td>
<td>Deep decreases</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Strategic decreases</td>
</tr>
<tr>
<td>Newble and Clark (1987)</td>
<td>X</td>
<td>6 yrs</td>
<td>ASI</td>
<td>Deep increases</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Surface decreases</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Strategic decreases</td>
</tr>
<tr>
<td>Gow and Kember (1990)</td>
<td>X</td>
<td>Degree course</td>
<td>SPQ</td>
<td>Deep decreases</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Strategic decreases</td>
</tr>
<tr>
<td>Volet, Renshaw and Tietzel (1994)</td>
<td>L</td>
<td>1st Semester</td>
<td>SPQ</td>
<td>Deep decreases</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Strategic decreases</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Surface increases</td>
</tr>
<tr>
<td>Cuthbert (1995)</td>
<td>X,L</td>
<td>3 yrs</td>
<td>ASI</td>
<td>Deep increases</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Surface decreases</td>
</tr>
</tbody>
</table>

*L, longitudinal; X, cross sectional.

The only consistent pattern across all of the studies is a decrease in the strategic approach over time, suggesting that the students feel their time management and organisation is weaker, and that they have less of an intention to excel. The authors of the studies reported in Table 2.16 say little about why this drop might have
occurred, tending to focus on influences on the deep and surface approaches. One possible reason why students might report that their strategic processes have decreased is that more demands on these skills are made in later years, leading students to feel they are coping less well. Thus, it is possible that the students’ time management and organisation were in fact as successful as they were in earlier years, but that the students felt less confident about coping with the changing demands of their context.

Meyer and his colleagues give further insight into the development of students’ approaches in a series of reports on the study orchestrations of first year engineering students from disadvantaged educational backgrounds. Study orchestrations describe individual students in terms of their processes in studying and their perceptions of the academic context. For some students their orchestration remained stable across time, while others either improved - when their approaches became deeper and more coherent - or deteriorated. This suggests the possibility some sort of development was occurring for those students who improved, as they were responding in a different manner than their colleagues to a particular context. Where change in orchestration occurred, intention, process and perception all changed, suggesting that development of these aspects is related. It is not clear, however, what caused some students to develop whilst others in the same context did not (Meyer, Parsons and Dunne, 1990; Meyer, Dunne and Sass, 1992; Meyer, Cliff and Dunne, 1994).

Studies of the relationship between students’ age and their approaches to studying provide an alternative perspective on development. These studies consistently find that older students are more likely to take a deep approach and this seems to be independent of year of study or faculty (Watkins, 1982; Watkins and Hattie, 1985; Biggs, 1987; Gow and Kember, 1990). Taking a more detailed look at these issues, Biggs (1987) found that the surface approach declined systematically with age, whereas the deep and strategic approaches declined somewhat till age 22 then increased sharply with age. Biggs suggest that this may be because older students have to give up more to study in higher education and are therefore more intrinsically motivated. It is not clear from these studies, however, the extent to which the changes with age represent development in students’ ability to adopt
particular approaches, against the extent to which particular approaches are adopted due to the students' motivation and circumstances.

**Qualitative studies of the development of students' approaches**

To date, there has been very little qualitative research into the development of students' approaches to studying. There is a cross sectional study by Eklund-Myrskog (1997) which suggests that students may move towards a deeper approach to studying during the course of their nursing studies. The only longitudinal qualitative study which has been identified is the Open University research discussed in the previous section, and the data from this study is now almost twenty years old. Alongside the changes that the Open University students made in their conceptions of learning, confidence, and self-regulation over the course of their degree, they also developed their deep and strategic approaches to studying. For example, within the deep approach, the students became more confident in their ability to identify main ideas and themes, to question material, and to engage with it on a personal level. Within the strategic approach students improved their ability to organise their studying in relation to assessment requirements (Beaty and Morgan, 1992). The authors suggest that increasing confidence in their learning ability and knowledge of the Open University system, led the students to develop deep, strategic approaches, which in turn increased their confidence further. What is not made clear from reports of the Open University findings, however, is how many students developed particular aspects of their approaches and whether changes in their approaches always paralleled changes in other aspects of their learning. Nor do these reports give much detail of the nature of the development of students' approaches.

**Summary**

From the studies reported in this section, it appears that it is possible for students' deep and strategic approaches to studying to develop even over as short a time span as a year, but that this does not necessarily occur (Watkins and Hattie, 1985; Biggs, 1987; Meyer, Parsons and Dunne, 1990; Meyer, Dunne and Sass, 1992; Meyer, Cliff and Dunne, 1994). It seems that students' responses to the learning context may sometimes overshadow changes which would be expected from the developmental pattern apparent in their beliefs and regulation, discussed in the preceding section. It
is clear that there is still a great deal to be learned about the development of students’ approaches to studying and the reasons why these changes do, or do not, occur. Firstly, there is little detailed research into the precise nature of the development of students’ approaches. In particular, there is a dearth of qualitative studies which could illuminate the fine grained detail of students’ development. Students may, for example, change in the sophistication of their approaches, or in their ability successfully to enact a single aspect of an approach: such changes would not be detected through the inventories used in this area. There is also a need for more studies which can disentangle the effects of students’ temporary adjustments to changes in the learning context, from changes which are genuinely developmental. Finally, more detail is required about the influences of the learning context and other aspects of students’ learning on the development of their approaches, although the importance of these aspects is already clear for the approaches that students choose within a particular context.

**Conclusion**

This chapter has considered the conceptualisation of students’ approaches to studying in higher education, what might influence those approaches, and how they might develop. Whilst there are some difficulties in bringing together a coherent account of approaches from a range of methodologies and perspectives, there is also considerable consensus across these different sources. It does, therefore, seem possible to suggest how fully developed deep and strategic approaches might be characterised, in order to provide a comparison point for the students in this research. A fully developed deep approach would involve an intention to develop in-depth personal understanding of a subject area, as was the case for some of the fourth year students in the studies carried out by Entwistle and Entwistle (1991, 1992). There would also be active interest and engagement with the subject. These motives would be related to appropriate and sophisticated use of the learning processes of the deep approach. The ability to critically analyse and synthesise material, for example, would be well developed.

A fully developed strategic approach is more difficult to characterise, as the research reported by Entwistle and Ramsden (1983) is the only qualitative study which has
focused directly on that approach. It would certainly involve an intention to excel, perhaps with an element of competitiveness. Well organised studying, good time management, and sophisticated alertness to assessment would also be part of the picture. The cynical, playing the game, aspect included in earlier work should be omitted, given that this is seen as a block to development within Perry’s research (Perry, 1970, 1988). Omitting this aspect also fits with evidence that students can show a well-developed deep approach in conjunction with a well-developed strategic approach (Entwistle, Tait and McCune, 2000).

The research discussed in this section illustrates the difficulties inherent in defining the boundaries of the approaches to studying. For example, the ASI - which has contributed much to the definition of the approaches - has been developed by balancing conceptual and empirical issues in studies with a range of purposes. There are no straightforward rules for how this procedure should be carried out, therefore it is always possible to argue that sub-scales could be added, or taken away. There is also the related issue of overlap between the approaches and other aspects of students’ learning, such as self-regulation and metacognition. For the purposes of this study it makes more sense to keep these elements distinct, so that their role in influencing the development of the approaches can be explored more easily.

The findings relating to change in students’ beliefs and self-regulation suggest a developmental progression over the course of the degree. It seems that students may start their degree in an externally directed position, where they expect correct information to be handed down by their teachers, and where they want considerable support from their teachers in performing learning functions. Over time, students seem to move towards a position where they are more self-regulated, take more responsibility for their learning and see learning as the active personal construction of meaning. It would thus be expected that students would develop deeper and more strategic approaches as they progress through their degrees. Yet this pattern was not identified in many of the studies reported here. One possible reason for this is that many of the studies did not take into account changes in the learning context when assessing change in students’ approaches. In some cases, students may have wished
to take deeper and more strategic approaches, but perhaps felt that this was not being encouraged by the learning environment.

The majority of these studies of students' development have been carried out over the course of a degree; there is little research which focuses specifically on the first year. The findings reported by Meyer and his colleagues suggest that it is possible, but not inevitable, for students' approaches to develop during this time span, and that the development of their approaches may parallel development in their perceptions of the learning context (Meyer, Parsons and Dunne, 1990; Meyer, Dunne and Sass, 1992; Meyer, Cliff and Dunne, 1994). This research was mainly based on inventories, which means that it can only identify general shifts in students' intentions, or choice of learning processes. It is more difficult through inventory studies to identify the exact nature of the changes in students' learning. These studies were also carried out with a particular student group in South Africa, and it is unclear how far these findings would generalise to the UK context.

The research reported by Entwistle and Entwistle (1991, 1992) illustrates how students' learning may vary even within a deep approach. Inventories may miss differences in the sophistication with which a student employs a particular learning process. It is also important to bear in mind that a shift in overall approach, say towards a more surface approach, does not preclude the possibility that the student has become more skilled in enacting the deep approach. Indicating on an inventory that one uses certain learning processes, does not necessarily imply making a good job of carrying them out, nor that the student has sufficient understanding of the discourse of the discipline, or of the assessment task, to adopt an approach entirely successfully.

What is missing, therefore, is a full and detailed account of the nature of students' development during their crucial first year when they are adapting to the university setting. This is the reasoning behind the first of the research aims, set out in Table 2.17. The intention of the present study is to provide an account which would begin to fill this gap in the literature. It will be important in this work, to differentiate as much as possible between development, and temporary reactions to changes in the learning context, as this has been a limitation in a number of the earlier studies.
Moreover, as so little is known about change in students’ approaches over this time span, it will be important to gain as rich and detailed understanding as possible from this study. No specific research questions have been set, given the lack of prior research of this kind.

**Table 2.17: Aims of the research**

<table>
<thead>
<tr>
<th>Aim</th>
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<tbody>
<tr>
<td>To provide a rich, detailed, account of the development of students’ approaches to studying during the first year at university.</td>
</tr>
<tr>
<td>To provide a fine-grained description of the influences on students’ development during that time frame.</td>
</tr>
</tbody>
</table>

Direct information as to what might influence the development of students’ approaches to studying is very limited, but there is research which suggests that students’ perceptions of the teaching-learning context are likely to be very important, as are their aims and beliefs in relation to learning in higher education, and their self-regulation of their studying. This research illustrates how the approaches are best seen as one aspect of a complex, interacting system, in which the approaches both influence, and are influenced by, other aspects. The nature of these interactions may vary both between groups and between individuals. Further, it seems that it may not only be the main characteristics of the teaching-learning environment which are important in understanding students’ approaches, but also the fine-grained details, such as the particular assessment questions which are set. At present, research at this more detailed level is less common. It is also important to bear in mind that important aspects of the teaching-learning context may be hidden or tacit. The second main research aim, set out in Table 2.17, seeks to address these issues by providing a thorough, fine-grained, description of influences on students’ development in the first year.
CHAPTER 3 - DESIGN, CONTEXT AND METHODOLOGY

Introduction

For this study, the key design issues were the choice to adopt a fine-grained focus on the development of individual students; the use of a longitudinal design; the choice of a psychology department as the research context; and the choice of methodology. All of these decisions have important implications for the outcome of the research, therefore the rationale for each will be considered in turn. This will then provide the background to a more detailed account of the design and methodology of the studies. The research involved a pilot study followed by the main study, which was carried out in two phases over successive academic years. The details of the design and methodology of these studies are discussed in the latter part of this chapter. The timing of the data collection is discussed, as are issues of recruiting, response rates, and the characteristics of the samples. This is followed by an account of how the interview schedules were developed and of the interviewing style adopted.

Overview of design, context and methodology

This section gives an overview of the main decisions taken about the design and methodology of the study. The general focus of the study is considered first, as this had implications for all of the other choices made. This is followed by an explanation of why the study was carried out in only one context, a psychology department, and some detail about this context is given as a background to the later discussion. Finally, there is a discussion of the potential strengths and weaknesses of different methodologies in relation to this study, to explain why semi-structured interviewing was utilised.

Detailed longitudinal focus on individual students

From the outset, a longitudinal design was considered to be ideal for this project. There was a range of advantages which were provided by this choice of design; most importantly, the longitudinal study made it possible to follow individual students’
development in detail. In any other design, the students could only have been asked to respond retrospectively about their development, which might have caused significant problems. The students might not have been able to remember their earlier experiences in detail and might have reconstructed previous experiences based on their current, rather than their past, perspectives (Hakim, 1987).

Longitudinal designs also help to establish the temporal ordering of events. One aim of the study was to provide some explanations for students’ development and a key aspect in establishing causal explanation is, of course, that the causal event should precede the caused event in time (Menard, 1991). A longitudinal design also made it possible to follow the same students through repetitions of similar contexts, which means that development and the effects of changing contexts could be separated out to some extent. It was clear from the review of the literature that any explanation of students’ development must necessarily involve complex interactions between a range of different influences, thus the intention was not to provide straightforward causal explanations, but rather to suggest which influences might play an important role.

Given that the aims of the research involved generating a rich, fine-grained, account of students’ development, this suggested the need for a detailed focus on individual students. This would make it possible to create descriptions which could encompass the complex inter-relationships and fine-grained detail which seem important in understanding students’ learning.

**Choice of context**

The decision to carry out in-depth longitudinal research into students’ development made it necessary to limit the focus of the research to a single context to allow time for detailed data collection and the complex methods of analysis necessitated by longitudinal designs (Hakim, 1987). There were a number of reasons why the psychology context was selected rather than some other subject area. Firstly, the author was very familiar with this context, having taken a degree in psychology and
having given tutorials in that same department. This facilitated communication with the students about their learning, both through knowledge of the specific context and also through familiarity with the discipline-specific discourse. Having contacts in the students' department was also an advantage in terms of recruiting and retaining students in the study. This is particularly important in longitudinal designs, where drop-out can pose significant problem (Hakim, 1987). As a subject area, psychology had the advantage of being broad and cross-disciplinary; the students could choose to study it within the faculties of Art, Science and Engineering, or Social Science. This provided a fairly heterogeneous group of students.

The first year psychology context

In order to provide a background to the discussion of the design and methodology employed in this study, some details of the context in which the research was carried out must first be described. The research reported in this thesis focused on the development of students' learning in relation to their experiences of a first-year psychology course at a Scottish university. The first-year psychology group typically numbered around three hundred students. All of the students were taking two subjects in addition to psychology and in some cases one of these other subjects was their main interest. These subjects were diverse including, for example, artificial intelligence, philosophy, nursing, anthropology, biology, or business studies.

On the psychology course the students attended hour-long tutorials every second week in groups of around twelve to fifteen students. The students signed up for tutorial groups based mainly on timetabling, although they could also choose to be with their friends. The tutors had considerable freedom in terms of the content and structure of the tutorials, so that each tutorial group had somewhat different experiences. The tutors set and assessed the three essays that the students were required to complete during the year. The second and third of these essays counted towards the students' final grades, as did the multiple-choice class examination and a degree examination which involved both multiple-choice and essay style questions.
The students could gain exemption from the degree examination if they performed well enough in the class examination and the essays. An overview of the students’ timetable is provided in Figure 3.1.

**Figure 3.1: First-year timetable.**

<table>
<thead>
<tr>
<th>term 1</th>
<th>term 2</th>
<th>term 3</th>
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<tbody>
<tr>
<td>essay 1</td>
<td>essay 2</td>
<td>degree exam</td>
</tr>
<tr>
<td>multiple</td>
<td>essay 3</td>
<td></td>
</tr>
<tr>
<td>choice exam</td>
<td>student</td>
<td></td>
</tr>
<tr>
<td></td>
<td>learning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>lectures</td>
<td></td>
</tr>
</tbody>
</table>

In addition to their tutorials, the students attended three hour-long lectures per week. These lectures covered a wide variety of topics in psychology including, for example, the biological basis of behaviour, research methods, social psychology and developmental psychology. The students also had lectures on the topic of student learning. These lectures covered several topics that were very relevant to the focus on interest in this study. Most importantly, they gave an overview of research into students’ approaches to studying. The students also completed the most recent version of the ASI although they did not receive any feedback about their scores (ASSIST, Approaches and Study Skills Inventory for Students, Entwistle, Tait and McCune, 1999). The lectures also referred to conceptions of learning and research into students’ learning for their final examinations, which was discussed in Chapter 2 (for example, Entwistle, 1995). The students could opt to write one of their essays on a topic related to these lectures.

In addition to the student learning lectures, a range of other information about learning and study skills was available to the students. There were a number of short sessions advertised, on activities such as note taking or essay writing. There was also a set of
books displayed prominently in the main library. The students had access to advice about learning via a computer package known as PASS (Personalised Advice on Study Skills, CRLI, 1995a). These materials addressed topics such as approaches to studying and gave advice specific to particular learning tasks, however, the materials were not extensively publicised, and the students tended not to use them. The students had access to advice from a number of additional sources, but this provision was varied. Some psychology tutors provided help with studying and sometimes students received information from their other courses. In relation to essay writing, the students received a handout from the psychology department, and also had advice and feedback from their tutors. The details of the support available to students and the impact this had on their learning will be discussed in Chapters 5, 6 and 7.

**Choice of methodology**

In order to select the appropriate methodology for a study, it is important to evaluate each possible technique (Burgess, 1984; Robson, 1993). Semi-structured interviewing was chosen as the most appropriate method for this study, but in order to explain that choice the potential strengths and weaknesses of a range of different methodologies must be discussed. This section provides an evaluation of questionnaires, diaries and observational methods, before going on to consider the possibilities inherent in different types of interviewing.

**Questionnaires**

The main advantage of fixed-response questionnaires, such as the ASI, is that they provide the opportunity to reach a large number of respondents, as they are quick to complete and to score. This discussion in the literature review has made it clear that - given the focus in this study on developing a rich, detailed, account of students’ development - a questionnaire such as the ASI could not be the main source of information. It was initially intended, however, to use the ASI as a supplementary method, but this idea was subsequently abandoned. It became clear from the early analysis of the interview data that the developments in students’ approaches to studying were quite subtle, often involving a slight change within an approach or sub-
scale. The ASI would not be useful for measuring such minor changes for a number of reasons. Firstly, presenting the ASI at the beginning and end of the study would effectively involve asking, 'How do you think you will study', then, 'How do you think you did study'. This difference would be likely to hide slight changes in approach; it is a general problem in longitudinal studies that respondents may interpret questionnaire items differently at different points in time (Menard, 1991). Secondly, the inventory may measure a change in a student’s overall choice of learning processes, but cannot fully illustrate, for example, the extent to which the student is successful in taking that approach. Further, the students were interviewed about their responses to the ASI, which had been given in their lectures. A preliminary analysis of these responses suggested that the inventory was problematic at the individual level for some students, for example, there seemed to be a degree of wishful thinking in some individuals’ responses.

Open-ended questionnaires would have allowed students to elaborate in more detail about their learning. Nonetheless, such instruments would still have been limited in terms of exploring their idiosyncratic experiences and they would not have allowed the interviewer to discuss with students what they meant by their responses. This is an important issue, given that students often have very different interpretations of words such as ‘learning’ or ‘understanding’ (Marton, Dall’Alba and Beaty, 1993; Entwistle, 1995). As so little was known about the development of students’ approaches, choosing appropriate fixed questions to explore the range of important themes would have been difficult. A questionnaire might have been given to a wider group of students after initial analyses of the interview data, but it was felt that it would be very difficult to achieve a good response rate and detailed responses from the students, as such a task would be too time consuming to carry out during class time. In the end it was decided to use questionnaires only to collect basic background information from the students before their interviews, these questionnaires are shown in Appendices 3.8 and 3.9.
Diaries

One important advantage of diaries is that they could have been completed closer in time to students' learning tasks than any other data collection method, which might have made for more accurate recollection on the part of the students. Diaries could have provided very detailed data if students could have been persuaded to use them extensively. It might also have been easier for students to have reported their personal feelings in relation to learning when they were not face to face with an interviewer.

As with questionnaires or inventories, diaries also had the limitation that it is not possible for the researcher to probe what students mean by the language that they use. Another important drawback would have been that keeping detailed diaries would have led students to reflect frequently and in depth about their studies, which might have changed their learning considerably, making it atypical of first year students' experiences (the extent to which this was a problem for the interviews is considered in Chapter 6). Maintaining a reasonable response rate would have been particularly difficult, as diaries would have required considerable effort from the students. This method of data collection would only have been feasible if it had been possible to give the students some additional reason for completing the diaries, such as making them part of their assessed work. As this was not the case, diaries were not considered to be suitable.

Observational Methods

Observational methods can be taken to include observation of behaviour as well as any collection of talk other than in a formal interview situation. These methods have the advantage that data are typically collected in natural settings over a considerable period of time. This makes it difficult for respondents to maintain socially desirable behaviour and potentially allows the researcher more direct access to natural behaviour and interaction than any other method. Participant observation allows
respondents' meanings to be explored in detail through discussion and immersion in their lives.

The difficulty with observational research into students' development would have been that many situations in which development was likely to have occurred would not have been amenable to observation. For example, students' thinking during essay writing, examination preparation, and lectures, could not be observed without causing disruption as students are typically silent during these activities. Simply looking at what students were noting down was unlikely to be productive as similar notes may relate to very different underlying processes (Svensson, 1976; Gibbs, 1985). Observation would not have been appropriate for exploring the development of individual students' learning in detail, as this would have required excessive intrusion into the students' lives. The possibility of using observation in students' tutorials was considered, but it was decided that this would not be the best use of the time available for this study. This is because it was felt that first-year students in this context generally did not put a great deal of effort into their tutorial work because this work was not assessed. This suspicion was later confirmed in the students' interviews.

Interviews

Interviewing methods can differ markedly in the extent to which question wording and order are specified in advance by the researcher (Powney and Watts, 1987; Cohen and Manion, 1989; May, 1993; Robson, 1993). At one extreme there are fully structured interviews, where the interviewer asks only the pre-set questions in the same order for every interview. For the purposes of this study, fully structured interviews would have presented similar disadvantages to inventories; they would not have allowed the researcher to explore what students meant by their responses, and they would not have provided sufficient opportunity to collect rich data which took into account students' idiosyncratic experiences and ideas. Less structured interviews therefore seemed much more suitable for this research.
There were, however, several reasons why it was important to have some structure to the interviews. Firstly, this allowed prompting on issues that seemed relevant based on previous research; the students might not have considered such issues to be important early in their studies and therefore might not have mentioned them spontaneously. The interviews also needed some structure to allow for longitudinal comparisons. It was felt, therefore, that the semi-structured interview method would be most appropriate. This method had been used successfully in much of the earlier research in this area (Beaty, 1978, Entwistle and Ramsden, 1983, Entwistle, 1984, 1997a).

It has been suggested that interviews that are not fully structured might create difficulties due to variations in question choice, wording, and order (Sheatsley, 1983; Molenaar, 1991). For example, variation in question choice between the first, second and third interviews in this study might have masked development, or given a false impression of development. The checks made to assure that such problems did not affect the outcomes of the analyses in the present study are discussed in Chapter 4. It is also important to note that less structured interviews may also help to avoid problems with the quality of the data, as they can explore deeper and stronger ideas which are less easily influenced (Cohen and Manion, 1989).

Consideration was given to the use of previous interview transcripts as prompts in the interviews. This would have had the advantage of stimulating students' memories of their learning experiences. It was felt, however, that there was too much risk that students would reconstruct accounts of their recent experiences to be more consistent with the previous transcripts. Group interviewing was also considered as a possibility, but it was felt that the group dynamics may have affected individual expression and it was development at the individual level which was the focus of this research (Watts and Ebutt, 1987; Fontana and Frey, 1994).
Other Sources

A number of other sources of data were relevant to the project. It was decided to collect students’ grades and copies of their essays to supplement the analysis. It seemed likely that students’ grades would influence the extent to which they felt the need to develop and the feedback on students’ essays was potentially an important influence on their learning for that task. Advice on essay writing given to the students by their tutors or the department were collected, as it became clear from the interviews that many of the students had at least looked at this information. No other advice materials were collected as the students so rarely used these.

Pilot and main studies – details of design and methodology

This section describes in more detail the design and methodology of the studies carried out in this research. The work began with pilot interviews, conducted with an opportunity sample of sixteen first-year psychology students at the end of the Spring term and the beginning of the Summer term, of the academic year 1995-1996. The main purpose of these pilot interviews was to give an initial understanding of first-year psychology students’ experiences of learning and to give the researcher experience of interviewing. The main study was carried out in two phases, in the 1996-1997 and 1997-1998 academic years, Important issues to consider for the main study included the timing of the interviews, the method of recruiting and retaining students in the study, and the nature of the sample; these issues are each considered in turn in this section. This is followed by an account of the development of the interview schedules for the research, and an explanation of the style of interviewing used.

Main studies – timing of interviews

The timetable for the two phases of the main study is set out in Figure 3.2. In both phases, the first interview was placed in week three of the first term, as this was the earliest time possible. The second and third interviews were placed as close as possible to the return of the students’ first and third essays as this task provided a
stable context against which development over time could be considered; the essays were the only aspect of students' assessed work which was repeated over time. As lectures and tutorials occurred throughout the year these could be discussed in any interview.

The other important points in the timetable were the multiple-choice class examination, and the student learning lectures. The second interview was well placed to discuss students' experiences of preparation for the class examination as it fell in the same week. The final interview fell several weeks after the student learning lectures, which was not ideal, but retrospective data was interesting as it gave and idea of what students remembered and used from these lectures. The degree examination fell after the end of the study; it was excluded as the majority of the students gained exemptions from this examination.

Of course, the timing was not straightforward, some students forgot to arrive for their interviews in the final week of the Autumn or Spring terms and this necessitated rescheduling after the holidays. The students did, however, seem able to remember their learning experiences well enough after the holidays to discuss them in interview. Since no additional learning tasks were carried out before the late interviews the delay seemed to be a minor disruption to the study.

**Figure 3.2: Timetable for the main phases of the study**

<table>
<thead>
<tr>
<th>term 1</th>
<th>term 2</th>
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<tbody>
<tr>
<td>essay 1</td>
<td>essay 2</td>
</tr>
<tr>
<td>multiple choice exam</td>
<td>essay 3</td>
</tr>
<tr>
<td>interview 1</td>
<td>interview 2</td>
</tr>
<tr>
<td>student learning lectures</td>
<td>interview 3</td>
</tr>
</tbody>
</table>
Main studies – recruiting and sample

Students were recruited for the studies from their tutorial groups. Information was collected from them using the questionnaire shown in Appendix 3.8. In the second phase this information was used to split the students into two groups matched as far as possible in terms of gender, faculty, main subject, age, and whether they had taken time out before coming to university. One group was invited to participate in the repeated semi-structured interviews, the other group was used as a control to explore the effects of the repeat interviews on the other students. Further information was collected at students' first interviews on the questionnaire shown in Appendix 3.9.

Recruiting from particular tutorials allowed an easy means of contacting students, this was especially valuable as attrition and non-response are a particular problem in longitudinal designs (Hakim, 1987; Menard, 1991). An important part of the recruiting was the ways in which the students were approached for interview and how a relationship was maintained such that the students were happy to participate in repeat interviews. Approaching students with the explicit support of their tutors was very helpful in securing their participation. In addition, students had been informed in a course handout that they were expected to participate in at least two studies during their first year to gain experience of psychological research. Participation in this study allowed them to meet half of this requirement. The combination of these factors led all of the students asked to volunteer for the study even though it was made clear to them that participation in this particular study was entirely voluntary. They were also told that they could withdraw at any time.

The author aimed to maintain a good relationship with the students through the relaxed style of the interviews, through explaining clearly to students what their participation would involve, and by emphasising the value of students' contributions. Students were assured that confidentiality would be maintained and that only the author would see unanonymised transcripts. As most students used electronic mail and as they were all in a small number of tutorials, losing contact with students
through change of address was not a problem. Students who missed an interview were contacted twice to try to secure their participation.

In the 1996-1997 academic year ten students participated in all three interviews, giving a response rate of 56%. In the 1997-8 academic year this procedure was repeated with a further nine students, giving a response rate of 53%. In the second phase seven students participated in control group interviews at the time of the third interview. The response rate for the control group was 46% of those invited. The reason for these relatively low rates - despite the efforts made in recruiting and retaining students and the high turn-out for the first interview - is most likely that the students saw three hours of interviews as quite a large commitment, and they would have found as the year progressed that they could fulfil their requirement to participate in research more easily by other means. Table 3.1 gives descriptive statistics for the grades of the interview groups, the control group, and the students’ wider year group. It appears that the interview and control groups were fairly typical of students in their years in terms of grades, except that the groups tend to be less representative of the very weakest and very strongest students. The control group were generally similar to the relevant interview group in their grades.

<table>
<thead>
<tr>
<th>Table 3.1a: Minimum, maximum and percentiles for grades from phase 1</th>
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<tbody>
<tr>
<td><strong>min.</strong></td>
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<tr>
<td>essay 1</td>
</tr>
<tr>
<td>essay 2</td>
</tr>
<tr>
<td>essay 3</td>
</tr>
<tr>
<td>exam</td>
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</tbody>
</table>

**Interview group** whole year group

<table>
<thead>
<tr>
<th>Table 3.1b: Minimum, maximum and percentiles for grades from phase 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>min.</strong></td>
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<td>essay 1</td>
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<tr>
<td>essay 2</td>
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<tr>
<td>essay 3</td>
</tr>
<tr>
<td>exam</td>
</tr>
</tbody>
</table>

**Interview group** whole year group (control group)
Table 3.2 gives a summary of the background information collected about the students. The groups are all similar in terms of gender, faculty, main subject and highest qualification attained before reaching university. The high proportion of female students in these groups reflects the distribution of the year groups from which the students were drawn. The majority of the students indicated at the beginning of the year that psychology was their main subject and most of the students stuck with this decision throughout the course of the study. With the exception of two of the interviewees, all of the students were between 17 and 20 years of age.

**Table 3.2: Background information - N in each category**

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>Faculty</th>
<th>Main subj.</th>
<th>Highest Qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>Arts</td>
<td>Sci.</td>
</tr>
<tr>
<td><strong>1st phase</strong></td>
<td>3</td>
<td>7</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>2nd phase</strong></td>
<td>3</td>
<td>6</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td><strong>main gp</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2nd phase</strong></td>
<td>2</td>
<td>5</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td><strong>cont. gp</strong></td>
<td></td>
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</tbody>
</table>

The second phase of the study also involved interviews with the students’ tutors and collection of copies of the students’ essays and any handouts that they were given on essay writing. The main reason for this data collection was that it had become increasingly apparent as the study progressed, that the essay writing context was important for students’ development and thus it seemed particularly worthwhile to collect additional data about this task.

**Style of interviewing**

The style of interviewing was based on research arising from the phenomenographic tradition. The findings discussed in the literature review illustrated how productive research in this mode has been for understanding students' learning. This research suggests that interviews which approximated a natural conversational style would encourage students to provide extensive, detailed, accounts of their learning.
Although the style was relaxed and interactive, there were some ways in which it differed from day-to-day conversation. Firstly, the students were often prompted to elaborate on and explain their initial answers. Secondly, there was an emphasis on asking students to speak initially about their concrete experiences and then to elaborate and reflect on this basis. This was done in order to encourage accounts that were well grounded in students’ actual experiences, rather than brief, glib, responses or unfounded generalisations. Given that some of the interviews were conducted very early in students' studies, special emphasis was placed on reassuring them that they were not expected to have thought about all the issues raised and that there were no 'right' answers. The interviewer also aimed to be neutral, allowing students to develop their own ideas in their own words without giving opinions or asking leading questions. The intention was to allow in-depth exploration of students' meanings so that their perspectives could be reported fully and as they were intended.

The interviews were set out to follow a logical order which was guided by an interview schedule consisting of a list of topics and sub-topics (see Appendices 3.1 - 3.6). The interview schedules listed main themes that were considered in every interview. There were also additional prompts, which could be used at the interviewer's discretion. Despite this latitude, the majority of the sub-topic covered by the prompts were addressed in most of the interviews. The interviewer was free to ask additional questions wherever the opportunity arose to follow up a point relevant to the focus of the study. The interviews were carried out in a similar manner throughout the research, as this method seemed to be successful, however, after the pilot interviewing the style was altered slightly to aim for even more reflective interviews with less emphasis on the mechanics of students' work (sample extracts to illustrate the interviewing style from the main studies are given in Appendix 3.7, all of the interviews were carried out by the author).
Pilot study interview schedule

For the pilot study, the interview schedule was developed in a similar manner to previous research in this area - where students were asked about their learning activities and the thinking behind those activities (Entwistle, 1984, 1997a). Ideas about the sorts of questions that might be asked were derived from interview schedules from related research (Hounsell, 1984; Entwistle, 1995). Questions about students' strategic thinking were also included, these prompts were based on an earlier version of the ASI (Revised Approaches to Studying Inventory, CRLI, 1995b) and were added with the aim of covering all aspects of the approaches to studying within the interviews. Since the focus of the study was on development, prompts regarding change in learning, and the reasons for those changes, were also included. Students were asked about their experiences of, and attitudes to, study skills materials as it was thought that this would affect their development.

First phase, main study, interview schedules

It was apparent from the pilot interviews that the schedules for the first phase would need to be shorter and easier to follow. The pilot study also gave some idea of which prompts were most useful in terms of getting students to provide detailed reflection on their learning. The interview schedules for the first phase of the main study (see Appendices 3.1 - 3.6 for schedules) were also designed to address the central themes from the student learning literature which was discussed in Chapter 2. At the beginning of the first interview, the students were asked about why they had chosen to come to university and why they had chosen that particular university and course. These questions were intended, in part, to explore students’ learning orientations. Students’ approaches to studying, and their metacognition and self-regulation, were in focus in all aspects of the interviews where students were asked about how they had worked on particular learning tasks and why they had worked in those ways.

The students’ beliefs in relation to learning were discussed in a number of ways in the interviews, for example, they sometimes came up when students were asked to
explain their learning or their attitudes to development. Students’ beliefs about learning were also considered when they were asked to speak about what they meant by understanding; how they felt their learning was progressing; and what they believed was required for their psychology essays. The students were not asked directly about their conceptions of learning or wider epistemological beliefs in the first phase, because this seemed more distant from their day-to-day learning experiences. It was felt that it would therefore have been difficult to discuss these issues fully within the interviews, which had to cover a wide range of topics. Further, the research into these themes suggested change over the course of a whole degree, it did not seem likely that they would change so prominently during one year.

In the first interview, the students were also asked to talk quite extensively about their prior learning experiences, as it was felt that these would be important to their current learning. For example, if a student had felt that university was very different to their previous experiences they would have been more likely to see a need to develop their learning. The interview then went on to explore the students’ initial experiences of studying psychology and their sense of what the subject was about. The students were also asked how they felt they were progressing and whether they felt they needed, or had sought, any help with their learning. This theme of difficulties with learning, and their resolution, was emphasised throughout the interviews, as it was felt that this would be important in understanding students’ development.

A central aim in designing the second and third interview schedules for this phase was to provide as many points of comparison between the interviews as possible, without trying to address too many themes in any one meeting. For example, lectures were considered in the first and the final interviews to allow scope to assess development, but they were not considered in the second interview, as the class examination had to be discussed at that time. On the whole, the later interviews were similar to the first one, except that the focus was more on students’ experiences of
learning at university - particularly their lectures, reading, examination and essays. The third interview also included questions about the students’ reactions to study skills materials and the student learning lectures. Throughout all of the interviews, the students were prompted to elaborate and explain their responses and to talk about their awareness of development in their learning.

Second phase, main study, interview schedules

A number of changes were made to the interview schedules before the second phase of the study. Consideration of preliminary analyses of the data from the first phase in relation to the literature suggested where the schedules might be modified to provide better coverage of relevant issues. This analysis included consideration of the items from a range of inventories in the area to suggest possible issues to include (LASSI, Weinstein, Schulte and Palmer, 1987; SPQ, Biggs, 1987; MSLQ, Pintrich et al., 1991; Flemish inventory, Janssen, 1992; ILS, Vermunt, 1998; ASSIST, Entwistle, Tait and McCune, 1999).

The two main changes were, firstly, that the emphasis on certain aspects of students’ essay writing, was increased, as it became clear that this task was particularly important in relation to understanding students’ development. Secondly, the students had not been asked about their tutorials in the first phase since it was felt that they often did not put a great deal of effort into their tutorial work as it was not assessed. Further reflection and consideration of the literature (Anderson, 1995, 1997) suggest that tutorials should be discussed, if only briefly. A few questions were included to explore students’ overall impressions of the tutorials and their roles, and to pick out any evidence of development in relation to tutorial work. In addition, more emphasis was placed on exploring the development of students’ wider aims in relation to higher education and psychology, as comments made by students in the first phase suggested this would be worthwhile. Prompts related to students’ conceptions of learning were tested in the second phase of the study but, as the students found it
difficult to respond to these questions within a short space of time, they were abandoned.

**Tutor interview schedule**

The interviews with the students’ tutors were conducted in a similar manner to the student interviews. These interviews covered a range of topics selected on the basis of relevance to the student interviews and a review of the literature. After the interviews had been conducted, however, it was decided to focus the analysis of this data mainly on the tutors’ support of their students’ essay writing. This was because the analysis of the student interviews had shown that this task was particularly relevant to their development. In the section of the interview on essay writing, the tutors were asked to talk about what advice and feedback they had given to students and to reflect on the reasons behind their methods. They were also asked to give an account of what represented a good psychology essay, as this had been shown to be an important issue by the student interviews.

**Conclusion**

The central design decision for this study was the focus on the development of individual students in fine-grained detail. The main study was carried out in two phases in successive academic years. Each phase involved repeat semi-structured interviews with students, carefully timed to explore relevant learning experiences and to allow longitudinal comparison. The possibility of following up students’ experiences on successive essays was particularly valuable as it made it easier to separate out development from change provoked by a change in the learning task. Interviews were chosen as the methodology as no other method was suitable for this particular design. Semi-structured interviews were used to allow for longitudinal comparison, whilst at the same time giving the researcher the opportunity to explore students’ meanings and individual experiences. The recruiting for the phases was carefully planned to encourage as many students as possible to volunteer and to take part in all of the interviews. Although the final response rates were around 50
percent, on the whole the interview groups were typical of the year groups from which they were drawn. Perhaps more importantly, in the second phase, the control interview group seemed very similar to the main group with whom they were being compared.

The interview schedules were designed to assess students’ approaches to studying and any influences on the development of those approaches, based on the research literature, interview schedules from previous research, and the pilot interviews. Despite this focus, the interviews could still assess the development of other aspects of the students’ learning, as they involved asking students to talk about all of their main learning tasks and about what influenced their learning. Thus, the interview schedules did not preclude the possibility that additional important themes in students’ learning could be identified. The interviewing style was designed to provoke detailed reflection from students while trying to avoid influencing their ideas, for example, by asking leading questions. Overall, the carefully timed repeated semi-structured interviews used in this study seem to have been an appropriate choice, given the aims of the study.
CHAPTER 4 - METHODS OF ANALYSIS

Introduction

This chapter explains how the student and tutor interview data were analysed. The discussion begins with an explanation of the different techniques used in the analysis. This involves an account of the relevant details of the qualitative analysis package that was used (NUD.IST 4, QSR, 1997). This is a necessary prelude to understanding how the category analyses were carried out. The development of the categories of description is discussed next, as these categories were the basis of many of the later analyses. Two further aspects of analysis technique are also considered - the coding sheets used to describe each student's learning, and the summaries of development drawn out from those sheets. This set of explanations provides the background required to understand the details of the analysis.

Qualitative analysis does not proceed in tidy stages; it is better seen as a flexible cyclical process (Tesch, 1990; Bryman and Burgess, 1994). The iterations and shifting between stages involved in such a process cannot be laid out in detail with any clarity. For this reason, the processes involved in developing each section of the findings are set out separately and in a linear fashion, after the description of the analysis techniques. It is important to bear in mind, however, that the analysis actually involved interaction between these sections and in some cases cycled through the steps in the analysis several times.

An account of how the students' approaches to studying were investigated is given first, as much of the later analysis depended upon these findings. This is followed by a description of how development in students' approaches was assessed, and how general influences on that development were identified. The analyses specific to essay writing are considered next, as these were used to illuminate the development of students' approaches for this specific task. These analyses considered further aspects of the nature of students' learning in relation to essay writing, as well as describing, and offering explanations for, any development. The final section of the analysis involved case study investigations with students whose learning was
particularly important in understanding the reasons why students do or do not develop.

The final section of the chapter provides an account of how the quality of the analyses was checked. This involved firstly, providing background information about the analysis, for example, by giving an account of the assumptions made in relation to the data. Based on this background, quality criteria for the analysis were developed and, where relevant, tested. Some of the relationships between the analyses carried out here, and analysis methods discussed in the research literature, are also considered.

Before moving on to describe the different aspects of the analysis, it is necessary to explain the effect that data collection over two phases had on the analysis. Some aspects of the analysis were begun using only the interviews from the first phase of the research; this was done so that the findings of the first set of interviews would inform the questions used in the second phase. Various methods were used to ensure that the analyses were not biased by being too dependent on the first phase findings; these are explained in greater detail later in this chapter. The main difference between the data collected in the two phases was that more data was collected about essay-writing in the second phase. For this reason, some of the more detailed analyses for essay writing rest more heavily on the second set of interviews. Most of the remainder of the analyses are based on all of the interviews, 57 in total. The only other exceptions are analyses that included the control group, and the analysis over time of students' wider aims in relation to higher education and psychology. This latter change was also due to a development of the interview schedules between the two phases of the study.

Analysis techniques

This section gives the details of the main techniques used in analysing the qualitative data. This account provides an overview of these methods; further details of how each method was used within the analysis as a whole are given later in the chapter. The first aspect of the analysis technique that needs to be considered is the qualitative data analysis package.
The qualitative data analysis package

Much of the earlier stages of the analysis were carried out using NUD.IST 4. A brief overview of the functions of the package that were used in this project is given to help the reader follow the description of the analysis. NUD.IST is, in essence, a data management tool that can make it easier for the researcher to work with a large volume of qualitative data. NUD.IST does not carry out the analysis in the sense that quantitative analysis packages do; the researcher still has to perform all of the steps described, but using NUD.IST makes it easier to keep track of the data whilst doing so.

NUD.IST allows the researcher to create an index tree into which sections of text can be coded. The index tree is made up of nodes to which data can be added, the same data can be put into any number of nodes. Each node has a title and a short description, these can be changed at any time. The researcher can also add a memo to the node in which they can record their comments or thoughts. The nodes are typically arranged in a hierarchical tree structure. The researcher creates initial nodes from a root, and then ‘child’ nodes can be created leading from these ‘parent’ nodes. At any point in the analysis the researcher can add and delete nodes and alter their titles, definitions and memos. The researcher can move nodes around the index tree, and can merge the content of two nodes. Successive versions of the analysis can be saved to keep track of the analysis process.

In this project, each interview was treated as a separate document. Each document has a header to hold a small amount of identifying information. Sub-headers can also be used within the interview; they were used in this study to separate students' descriptions of their school learning from that at university. Whenever part of a document is coded to a node, the appropriate header and subheader are included automatically. Documents also have memos to hold the researcher's notes. A document can be displayed with its memo, header and sub-headers and various summaries of its coding. NUD.IST performs a variety of other functions the details of which will be given as they arise in the description of the analysis.
Forming categories of description

Categories of description refer to clearly defined categories which, in this analysis, delimited qualitatively different aspects of students' experiences, perceptions, and ideas. For the purposes of this study, it was necessary to develop categories to describe all aspects of the students' learning that seemed to be conceptually related to previous descriptions of approaches to studying in the literature. Categories were also required to describe certain potential influences on students' approaches to studying. These issues are considered in more detail later; at this stage, the intention is to give an overview of the process of category formation.

The first step in developing the categories was to work through the transcripts giving initial codes to parts of the data. Each time an excerpt was found that seemed relevant to the research questions, it was coded at one or more nodes using the NUD.IST package. Initially, this involved creating a considerable number of new nodes to account for new aspects of the data. Later coding involved making additions to existing nodes. Once this initial coding had been carried out, the categories were developed further, by working through a number of analytic processes several times. Firstly, the text coded to each node was read, focusing on whether all of the text coded at that node should be considered as part of a single category, or whether some of the text should be moved to another node. Notes were made within the node memos to reflect these developments, and node titles and definitions were altered as required. As the categories developed, decisions were made about how the nodes might relate to one another. This was represented by grouping nodes which all seemed to refer to the same wider topic, under a parent node for that topic.

To refine the categories of description further, the analysis explored whether all of the extracts in one node had similar underlying meaning. To do this the researcher considered the group of extracts together, and also referred back to the context of the individual interviews. Using NUD.IST facilitated this process, as it allowed the researcher to call up the text surrounding a given extract in the original interview. Refining the categories also involved considering the details of the relationships between the categories. To do this, the researcher focused on exploring what the central features of each category were, and what distinguished the categories from
one another. Defining the categories sometimes involved identifying qualitatively different levels of experience, both between and within individuals. These levels were considered in terms of complexity, sophistication, and inclusiveness, in a way similar to the development of logical hierarchies in phenomenographic research (Marton and Booth, 1997). There was a particular focus on looking for sets of categories that might suggest developmental pathways.

In developing such analyses, there is always some subjectivity involved in deciding the precise boundaries of the categories, and in selecting the level of description. To describe fully every relevant aspect of the students’ learning, it would be necessary to have a large number of very specific categories, for example, a category for each different method of essay planning, or note taking. But such an analysis would not be helpful in terms of providing a broad structure on which to base further analyses. On the other hand, categories that were too general would become distant from students’ actual ways of learning. In making such decisions, the aim was to arrive at categories that would help provide a clearer understanding of students’ development. This meant that the outcome of the category analyses was one distinct picture of the students’ learning, although it was accepted that other pictures could have been drawn from the same data.

Throughout these processes the concepts from the literature were kept in mind. This involved considering how the categories resembled, and how they differed from, those found in previous research. Notes were made in the node memos to aid this process. The aim was to develop categories that described students’ approaches to studying or aspects of their learning which might influence these approaches. This does not mean that only aspects of learning described in the literature were identified. For example, categories which seemed to be conceptually related to the approaches, but which had not been identified in the literature, were included in the analysis. Further, no category was included in the analysis unless it was clearly represented in the student interview data. So, the analysis was linked to previous research findings, but was not constrained by them.
Creating coding sheets and development summaries

Huberman and Miles (1994) note that qualitative analysis will be greatly aided by data displays that allow the researcher to see as much as possible of the data in one place, arranged in relation to the research questions. It was originally intended that the students’ coding to different categories, as well as additional information about their learning, would be represented using diagrams. As the analysis proceeded, however, it became clear that this would not work effectively as the students’ development did not generally seem to involve changes in category coding, but rather more subtle changes within categories. Furthermore, the students’ development was quite idiosyncratic and the reasons for their development seemed complex, therefore representation using diagrams was not ideal. In order to represent the data in an analytically useful manner, two methods of display were created - coding sheets and summaries of development.

A sample coding sheet is shown in Appendix 4.1, and a summary of the functions of the coding sheets is given in Table 4.1. Some of the purposes of the coding sheets are explained in more detail later in this chapter, but essentially the coding sheets provided boxes which indicated the categories the students coded into at each interview for each learning task. Each set of boxes was followed by a space where the researcher could record other relevant material, such as information on development within categories of description (e.g. an improvement in a student’s method of time management). In addition, there was room to record a note of any material that might suggest the need for additional categories.

The coding sheets also allowed the recording of information that could be used to form less tightly defined themes in the analysis. This was important as the students’ development and learning was to some extent idiosyncratic, and would not have been well represented by categories alone. Looser themes allow the inclusion of information about these idiosyncrasies and about their vagueness, uncertainties and inconsistencies in relation to learning. This fit well with the aims of the research, which involved providing a rich, fine-grained, account of students’ development.
There were spaces where the researcher could indicate the details of any interview material that suggested development that was not covered by the category analysis. Sometimes these were pointed out by the students, at other times these were identified by the researcher reading and re-reading the sections for each learning task across the interviews. For example, the students’ talk about essay writing at each interview was compared. Thus, the coding sheets contained a thorough account of the evidence for development made available by the interviews. The sheets were also used to record possible explanations for development, or limitations on development. For example, there was a space on each sheet for the researcher to summarise the students’ responses to advice about learning, along with a note of the point in the interview at which these comments occurred. Finally, the coding sheets allowed the researcher to record information to check claims arising from the analysis. For example, it was claimed that students tended to aim for quite basic understandings, so it was important to record any exceptions to this claim.

Table 4.1: Functions of the coding sheets

<table>
<thead>
<tr>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Track development over time within categories.</td>
</tr>
<tr>
<td>Track development over time from shifts in category coding.</td>
</tr>
<tr>
<td>Pick out any developments not linked to categories.</td>
</tr>
<tr>
<td>Pick out any reasons for development that was not covered by the categories.</td>
</tr>
<tr>
<td>Allow comparison with control group.</td>
</tr>
<tr>
<td>Check that categories gave complete coverage of students’ learning.</td>
</tr>
<tr>
<td>Check claims from the analysis.</td>
</tr>
<tr>
<td>Explore how categories differed between learning tasks.</td>
</tr>
<tr>
<td>Allow case studies to be selected.</td>
</tr>
</tbody>
</table>

In order to complete coding sheets for each student, the researcher made use of the coding stripes facility within the NUD.IST package. This function allowed copies of the students’ interviews to be printed with stripes down the side, indicating which parts of the text had been coded to each category. From this it was possible to check the students’ coding and to indicate the categories on the coding sheets. The stripes also made it easier to compare students’ coding to a category across their interviews, to identify any development within categories.

After a lengthy process involving repeated reading of each student’s interviews, the coding sheets were completed. During this part of the analysis, possible modifications to the category scheme were considered, and some changes were made.
to accommodate aspects of the data that had been missed earlier in the analysis. The SPSS package (SPSS Inc., 1996) was used to make a further note of each student's coding to each category, for each task, at each interview. This allowed the calculation of category frequencies to aid the later analyses.

As the coding sheets were quite extensive, summaries of development were created for each student that listed all of the development they had shown, along with any explanations that seemed to be directly linked to this change. The creation of the development summaries was also used to check for examples where change in one category of description for a student seemed clearly related to change in another category, but this was rare. Both the coding sheets and the development summaries were used in the later analysis.

As a final point in this section, it is worth mentioning why coding sheets and development summaries were used, rather than using the NUD.IST package for all of the analysis process. Initially, the analysis began by coding explanations for development at NUD.IST nodes, and comments on students’ development to NUD.IST memos. This process was useful as a starting point, but it did not allow the detailed recording provided by the coding sheets. It would have been possible to create some sort of coding display within the NUD.IST memos, but this would have been more difficult and time consuming, as NUD.IST does not have all of the properties of a word processor. The NUD.IST package is also demanding in terms of computer memory, which meant that it tended to run too slowly to allow displays of development to be easily created.

Sections of the analysis

Having explained the techniques used in the analysis, it is now possible to describe how each set of findings emerged. Each heading in this section corresponds to the headings in Chapters 5, 6 and 7, where the findings of the analysis are reported. A summary of these headings is given in Table 4.2 to provide an overview of the analysis. It can be seen that the findings involve three main aspects. Firstly, an account of the nature of these students’ approaches in general, combined with an overview of the ways in which these approaches developed and potential
explanations for their development. Secondly, the development of students’ approaches was explored through essay writing. This involved exploring how best the variation in students’ thinking about essay writing could be described, and the integration of these descriptions with the approaches to studying concepts. Next, an account of students’ development in relation to essay writing was given, including potential influences on development specific to this context. The final part of the analysis involved the consideration of case studies to provide a more complete account of students’ development.

**Table 4.2: The sections of the analysis**

*Findings reported in Chapter 5*
Investigating the nature of students’ approaches to studying I
- approaches in general.

Describing the development of students’ approaches I
- general trends and reactions to tasks.

Explaining the development of approaches I
- general themes to explain development and its absence.

*Findings reported in Chapter 6*
Investigating the nature of students’ approaches to studying II
- approaches and related concepts in essay writing.

Describing the development of students’ approaches II
- development in essay writing.

Explaining the development of approaches II
- influences specific to essay writing.

*Findings reported in Chapter 7*
Holistic accounts of learning and development
- case studies.

**Investigating the nature of students’ approaches to studying I - approaches in general**

The first stage in the analysis was to identify categories that might potentially form part of a description of the students’ approaches to studying. Full descriptions of each of the categories developed are given in Appendix 4.2. As explained earlier in this thesis, the approaches to studying were chosen as a basis for the categories because there is an extensive literature demonstrating their value in understanding students’ learning. The analysis involved identifying elements of students’ intentions and motivations for their academic work, and of their learning processes, the main
aspects of students' approaches. At this stage, there was no attempt made to group the categories into approaches. Some categories emerged from the analysis that had not been prominent in previous conceptualisations, while some expected categories were not found. No categories were created to represent lack of motivation or absence of learning processes, as these were simply the converse of other categories. The individual students were coded for absence of each of the categories where appropriate. There were no specific forms of low motivation worth categorising.

As the students carried out so many individual learning processes, it was difficult to create categories that would cover everything that they did, without having separate categories for each specific activity. The categories were intended to cover all of the main general processes, although some detail of the activities involved was given in the category descriptions. The intentions and motivation categories were less problematic in this sense, as there seemed to be less potential for a wide range of different categories. Nonetheless, there was some selection, as categories were only formed for those intentions which were shown by at least a few students. The aim in doing all of this was to strike a balance between clearly defined categories, and categories that captured the diversity of the students' responses.

It was noted in the literature review, that the definitions of the approaches had been extended in some studies to include additional aspects of metacognition. This was not done in this study, as one of the aims of the research was to explore influences on students' development, so it seemed more appropriate to consider additional categories - such as further aspects of metacognition - separately, in relation to their effect on the development of students' approaches.

After the categories were developed, they were brought together into approaches to studying. These conceptual groupings were used as a means of gaining a more holistic understanding of the learning of the students in this study. This was necessary in order to provide a background against which to comment on the need for these students to develop. Further, accounts of the most developed approaches shown by the students were required to illustrate the level which first-year students might realistically be expected to achieve.
It was clear from considering the coding of the students’ interviews that the grouping of the categories into approaches could not be done on a purely empirical basis. One reason for this was that some of the categories of description applied to all, or almost all, of the students, so that they could not be grouped empirically with other combinations of categories. Secondly, students typically showed elements of several approaches, even within a learning task, and not all of the elements which might be expected to form part of a particular approach were necessarily present for a given student involved in a particular task. It was necessary, therefore, to group the categories along conceptual lines. Some of the limitations of such groupings are discussed later.

Describing the development of students’ approaches I - general trends and reactions to tasks

Once the approaches had been described, it was possible to explore the ways in which the students’ approaches had developed. This analysis involved mapping the ways in which students' learning changed during the year, either in reaction to different learning tasks, or where they appeared to have developed their learning. This distinction between change which seemed related to variation between the tasks on which students were working at a particular time, as opposed to change which seemed clearly developmental, was important throughout the analysis. The analysis focused on students’ lectures and related reading, their essays, and their examinations. Tutorials were only considered where they appeared to have had some effect on development. This is due to the focus of the interviews, where tutorials were dealt with in less detail, because many of the students did little work for tutorials.

This mapping of students’ development was carried out using the coding sheets, the summaries of development, and the category frequencies for each student on each task. This procedure allowed a thorough account of the students’ development that included any change in the categories to which students coded, as well as any change within the categories over time (e.g. a change in time management method between one essay and the next). It was also possible to investigate changes in uncategorised aspects of the students' learning as this had also been recorded on the coding sheets.
Thus, although the analysis of development was guided by the categories of description, they did not limit it. This thorough analysis was carried out to ensure that no evidence of development was missed, allowing claims to be made about lack of development of the aspects of learning considered in these interviews. The analysis took into account the existence of missing data, and instances where the semi-structured nature of interviews meant that precise comparisons were not possible.

In addition to mapping the general developmental trends in the data, the summaries of development were considered, as a way of illustrating the learning patterns of each individual student. This was designed to show where individual students differed from the general picture provided by the analysis and identified five students whose development differed from the general patterns. These students were investigated as case studies; the nature of these analyses is described later in the chapter.

Explanations of development that were explicitly linked to the changes outlined here were also identified in this stage in the analysis. Once a developmental trend or an absence of development had been identified, the coding sheets and summaries of development were searched for any explanations that clearly related to that particular change, or lack of change, in the students' learning. The temporal ordering provided by the longitudinal design contributed to these analyses as an influence could only cause a change if it preceded it. In addition to these specific explanations of development, there were a range of general influences which may have enhanced or limited change in the students' learning. The analyses involved in identifying these changes are considered next.

*Explaining the development of approaches I - general themes to explain development and its absence*

This part of the analysis brought together all of the data from the students' interviews which gave a general insight into why the students did or did not show development. This involved consideration of which explanations could be ruled out, as well as which could be included. This analysis was based mainly on material collected on the students' coding sheets. When the sheets were created, every extract from each student's interviews that seemed to indicate an influence on development was
summarised, along with a note of the relevant text units. This allowed all of the relevant extracts to be taken into account, to ensure unbiased coverage within the aims and framework of this study. It avoided the problem of the analysis being too strongly influenced by themes identified early in the analysis, or by particularly striking quotes.

The extracts identified were grouped into themes and categories. Categories were used where there was a large amount of varied data to explore on a given topic, or when a topic seemed particularly significant. Where appropriate, the frequency of coding to these categories was charted over time, and attempts were made to relate any changes to the development of students’ approaches. Themes were used to bring together data that did not lend themselves to clear categorisation, either because of their complexity, or lack of variation. Counts of the number of students who showed the different themes and categories were used to get some sense of the relative importance of the different explanations.

The interviews with tutors were also included in this analysis, but only to allow further exploration of the themes identified from the student interviews. Once the analysis of the students’ interviews was complete, the tutors’ interviews were re-read to identify any extracts which shed further light on any of these issues. The effects of students’ grades on their development were also considered.

**Investigating the nature of students' approaches to studying II - approaches and related concepts in essay writing**

It became clear, as the analysis progressed, that most of the development shown by the students was in relation to the deep approach. In order to further understand this development, essay writing was considered in more detail. This focus was chosen because, as suggested in the literature review, the essay-writing context provided the most support for the students to employ, and develop, a deep approach.

As the essay-writing task was so important, it was decided to develop categories of description specific to essay writing, in order to illustrate the main variations between students in their thinking about the task. These categories combined students' essay-writing processes, their thinking about these processes, and their
beliefs about what was required in a psychology essay. As these elements were strongly inter-related, this combination was retained in the categories. The categories are referred to as 'conceptions' of essay writing. As the analysis progressed, a developmental structure for the conceptions began to appear which influenced the latter stages of the analysis quite strongly, with some categories being retained because they seemed to form a link in this developmental path, although they did not contain many extracts.

The most developed of these conceptions categories were integrated with the deep approach categories developed earlier, to give a more complete account of the nature of a deep approach to writing essays for these students. This then provided a backdrop against which to consider the extent to which these students might reasonably be expected to develop, and the extent to which they did develop, in relation to essay writing.

Describing the development of students’ approaches II - development in essay writing

The conceptions of essay writing categories were added to the students’ coding sheets and summaries of development. Although all of the interviews were used to create the conceptions categories, only the students from phase two could be clearly coded for all of the conceptions, as these issues had been considered in more detail at this stage, their importance having been highlighted in the first phase findings. From the coding sheets and summaries, it was possible to chart all of the development in relation to essay writing that was apparent from the interviews. This was carried out in a similar manner to the analyses of development already described. The analysis identified the extent of change in students’ category coding over time, the change in students’ learning within categories, and also change which was not related to the categories. Once this analysis was completed, it was possible to explore those influences on students’ development which were specific to essay writing.

Explaining the development of approaches II - influences specific to essay writing

This next stage in the analysis required consideration of the students’ reactions to the essay handouts they were given, to their grades, and to the written and verbal
feedback that they had received. In-depth analyses were carried out for the students in the phase two group, as the importance of certain aspects of essay writing had become more apparent by this time. It was only in phase two that the students’ tutors were interviewed and copies of students’ essays collected. It was still possible, however, to make a useful, but more limited, analysis of the phase one data.

Before exploring the students' reactions to their feedback, it was necessary to consider the nature of the feedback they received. Copies of students’ essays were examined, and the main theme of each comment made by the tutors was noted. The type and frequency of the comments were recorded to give an overall impression of the nature of the feedback given to the students.

For the phase two group, a detailed analysis was made of their reactions to this feedback, where all of their development was considered alongside what was written on their essays, and their comments about this feedback. Use was made of the temporal ordering in the data to assess to what extent development was caused by the feedback. A similar analysis was made of the students' reactions to any handouts that they were given. For the phase one group, a simpler analysis was conducted, which simply considered the students' comments in interview about their feedback and handouts.

Statistical analyses, to evaluate the relationships between the categories to which students coded and their essay grades, were carried out only for those categories which were most important in terms of the students’ development. The small sample size meant that multivariate analyses were not appropriate, and analyses for all of the categories would have required a large number of post-hoc univariate tests. There was also the difficulty that some of the categories did not vary a great deal between students, and some of the categories were relevant to only a small subset of the students. The students’ grades, and their reactions to them, were also considered more generally, in order to explore any possible influences on development.

The analysis also included an account of the tutors' perspectives, taken from their interviews and the handouts that they provided. Each of the three tutors interviewed had somewhat different perspectives, and methods, in helping students with their
essay writing. For example, one tutor only provided handouts on essay writing, another discussed essay writing briefly in the tutorials but gave no handouts, and the third tutor both discussed the essay and gave handouts. As the interviews only involved a few students from each tutorial group, it was not possible to examine the effects of differences between the tutors in detail. What was possible, however, was to give a general account of the aspects that the tutors considered to be important in a good psychology essay. This gave a sense of the perspectives presented to the students. The tutors' comments about essay writing in their interviews, and the handouts that they provided to students, were summarised in relation to the hierarchies of conceptions of essay writing. The tutors' perspectives were also examined to identify any material relevant to other significant changes in the students' learning in relation to essay writing. Care was taken not to force the tutor's ideas to fit the student categories.

In addition to the specific analyses described above, all of the information on the coding sheets and summaries of development that suggested explanations of development in essay writing was pooled. Particular attention was paid to influences on aspects of the students' development that had not been explained well by the earlier analyses.

Holistic accounts of learning and development - case studies

In addition to the more abstract analyses described so far it seemed important, in relation to the aims of the research, to include analyses which provided a more detailed, holistic, account of individual students' learning rooted in their reported experiences. There were five students who seem to differ from the others in this study in ways that were important for understanding development. These five students were considered as case studies, to explore why they differed from the expected pattern.

The case study method of analysis is valuable for a number of reasons. It allows the different approaches to be illustrated as they manifest in individual students, rather than the idealised picture given by descriptions made up from composite quotations. Further, case studies provide an illustration of individual students' learning which goes beyond the necessary simplification created by categories and their combination
into approaches. The case studies also provided an opportunity to explore the value of particular idiosyncratic experiences that would not feature in the earlier analyses, as these focused on drawing out the main features from the student group. They also helped to illustrate how different aspects of students' learning interacted, with a complexity that was not possible in the more general analyses. They provide an integrated, contextualised account of students' learning.

The aim for each case was to give a full account of the students' development and to illustrate any possible explanations for development or lack of development. In addition to this, the case studies were used to explore the limitations of the approaches to studying. Each case was considered in terms of whether the student's learning was explained well by the approaches. Further, where a case was an example of a well-developed approach, this material was reported in order to give a further perspective on what development might reasonably be expected from first-year students.

Rather than following a set procedure for the analysis and discussion of each case, the intention was to draw out the elements for each student which seemed most relevant in relation to understanding their development, or lack of development. Nonetheless, the analysis for each case was thorough, involving careful checking of the development summaries, coding sheets, and interview transcripts, to identify all the relevant themes. The students' interviews were searched for evidence of development, using the methods described earlier in this chapter. Evidence was sought of change in category coding, of change within categories, and of any other development not associated with the approaches to studying.

**Framing and evaluating the analysis**

Recent writing about qualitative research suggests the importance of drawing on a range of traditions to find the methods and forms of analysis most suited to a given research project (see, for example, Silverman, 1993; Coffey and Atkinson, 1996). This recommendation was taken into account in designing the qualitative analysis for this study, but care was taken to select only methods of analysis that were appropriate to the project.
Having described how the analysis was carried out, it is now possible to set the analysis in its wider context. This requires an understanding of the underlying assumptions and choice of focus made in relation to the research aims, as these assumptions affect every stage of the research process, including the analysis (Powney and Watts, 1987; Hammersley, 1989; Altheide and Johnson, 1994; Huberman and Miles, 1994; Janesick, 1994). This background information is given next and this then provides the setting for a discussion of the criteria by which the analysis was evaluated.

**Background to the analysis**

In this project, the students' learning and development were seen as complex, fluid and to some extent contextualised, as indicated by the literature reviewed in Chapter 2. For example, the interaction between the learning context and students' approaches, aims, beliefs, and self-regulation, illustrates this complexity. This view of the student learning meant that it was not appropriate to attempt any straightforward causal explanations of students' development. Rather the aim was to explore which aspects of development were most salient for the students in the study and to describe how these might have related to other factors, without necessarily showing causal direction. The longitudinal nature of the study did, however, allow some limited causal inference to be made due to the relationship of factors across time.

Given the nature of the research aims, the decision was made to treat the student interviews solely as a source of information about the ways in which they carried out their learning. This is not the only way in which interview material can be interpreted. For example, Fairclough (1992) discusses how text, including interviews, can be interpreted in a variety of different ways. These include interpreting interview text in relation to the construction of social identities and subject positions, or in terms of the construction of social relationships between individuals. It is also important to bear in mind that students' are unlikely to have full insight into their learning and its' development. Treating students' self report in interviews as a source of information about their learning, albeit an incomplete one, is justified by the research literature discussed in Chapter 2, where interview and self-report inventory
findings have been related to the outcomes of students’ learning, suggesting that they do provide important insights into how students learn (for example, Marton and Säljö, 1997; Tait, Entwistle and McCune, 1998).

The final aspect of the background of the analysis that needs to be discussed relates to the ways in which the analysis was influenced by the academic discourse in psychology. This influence derived especially from the way in which the critical use of research evidence is valued in psychology instead of, for example, valuing arguments derived from personal experience. Development was seen partly in terms of the extent to which students achieved this critical use of evidence. Some criticism of, and reflection on, this discourse is given in the analyses, but there is no detailed exploration and critique of the taken for granted assumptions made in this learning context. Again, this is only one possible perspective, but it seemed worthwhile to explore the extent to which students developed in relation to the discourse of their discipline, as this would be likely to affect their academic progression.

Evaluating the quality of the analysis

The influence of the approaches to studying literature on the development of the categories of description, and the effects of the academic discourse in psychology on the analysis, imply that the findings of a research project of this type are not straightforwardly objective. This suggests the need to meet the criteria of transparency in describing the research process as a whole, including the analysis. Both Guba and Lincoln (1989) and Mishler (1990) emphasise the importance of transparency, which involves describing the effects of the research process on the findings, to allow the relevant research community to interpret those findings. One of the purposes of the detailed account of the analysis process and its underlying themes, given in this chapter, is to provide such a transparent account. Of course, transparency can never be complete. It would not be possible to describe every idea, discussion, or other influence, on the analysis. Nonetheless, an attempt has been made to provide an account that makes the central influences and stages in the analysis clear.

Whilst acknowledging a degree of subjectivity in the analysis, the data is still seen as reflecting students' everyday studying, albeit imperfectly. It is therefore important to
show that the analysis represents this data accurately, within the limitations imposed by the focus of the study. A common fault in qualitative analysis is to skew the findings by placing too much emphasis or confidence in a subset of the data or by being over influenced by first impressions (Huberman and Miles, 1994). One of the purposes of the coding sheets and summaries of development, was to allow a range of checks to be made to ensure that the analysis was both inclusive and unbiased. In creating these tools, each interview was rechecked to ensure that all of the relevant extracts had been coded and considered in the analysis.

After the categories of description were developed, all of the interviews were checked for material that suggested the need to include additional categories. This checking led to the addition of the thinking for yourself category that covered aspects of students’ learning that had been missed by the original categorisation. Similar checks were done when identifying the themes that were used to help explain the development of the students’ learning. The themes were created by pooling all of the relevant extracts from the interviews, using the coding sheets and summaries of development. These extracts were grouped into themes, and then each extract was ticked off as it was used, to ensure that all of the extracts were considered.

Such summary analyses always have the limitation that they cannot account for all of the details of individuals’ learning, but the aim was to create categories and themes which addressed all of the main relevant aspects, as defined by the focus of the research and its underlying assumptions. For example, in the approaches to studying analyses, the aim was to identify categories of description that addressed all of the main aspects of students’ learning which were conceptually related to approaches to studying.

The coding sheets were also used to check the claims made within the categories and themes. One example of this is the checks on the claim made in relation to the intention to understand category, that most of the students seemed to have aimed for a basic understanding of the lectures and main readings, rather than more in-depth understandings.
Miles and Huberman (1994) note that when making explanations from qualitative data, it is important to search for negative cases or outliers, and to check rival explanations. The explanations in this study are not like those sought in, for example, analytic induction where hypotheses or theories are revised until all of the data can be accounted for by that formulation (Bryman and Burgess, 1994). Based on the literature review, students' development and the influences that affect it were expected to be complex, and to differ between students. Further, the explanations given for students' development and for their grades were largely complementary rather than mutually exclusive. Therefore, trying to fit all of the data to some overall explanation seemed inappropriate. Thus, the general use of negative cases to refute some theory would not be appropriate. For example, one student finding that deadlines are motivating does not rule out the explanation that other students find them stressful and demotivating.

One rival explanation that could be checked, however, was whether it was the repeat interviewing that had caused the development shown. As most of the students' development occurred in relation to essay writing, control group comparisons were made for that context. For these analyses a separate group of seven students were interviewed only at the time of the third interview in the second phase of the study. Therefore the analysis involved comparing the learning described by these seven students against the learning of the nine second-phase students at their third interview.

Category count comparisons were made where there was evidence of development that involved changes in the categories to which students' coded. For those categories where the students' learning seemed to have developed within the categories, a brief qualitative check of the control interviews was made to make sure that there were at least some instances of well-developed learning in those categories. The findings of these analyses are reported in detail in Chapter 6, but it is worth mentioning here that the repeat interviews apparently had little or no effect on the development of the students' learning.

A further rival explanation to be ruled out, was that any of the apparent development was caused by differences in the topics discussed in each of the three interviews, for
example, only the first interview addressed students' school experiences and only the second interview considered the class examination. The way in which development was identified in the analyses effectively minimised this possibility. Most of the analyses involved looking for change within tasks which meant that comparisons were only made between interviews which both addressed the task in question. The only exceptions to this focus on tasks were the analyses considering change in students' reasons for valuing psychology and higher education, and these topics were addressed in every interview. In the case of the class examination, any change reported was identified by the students during the second interview.

Checks were also made against the possibility that differences between the questions asked within each topic in each interview would create a false impression of development. For example, there was a box on the coding sheets to indicate where students were not asked about the conditions in which they studied, as this question tended to be omitted when time was short in the interviews. Less common differences between the interviews that may have distorted the analysis were noted on the individual coding sheets as required and taken into account in deriving the findings.

No inter-rater reliability analyses were carried out for this study. One reason for this, is that the researcher had an in-depth understanding of the context of the study, which would have made it time consuming for another reader to make full sense of the interview transcripts, as the communication involved a range of shared understandings. This understanding of the context evolved because the researcher had been a student in the department in question, and had then tutored on the course for a number of years. The large number of categories and themes would also have made inter-rater reliability a considerable task for another researcher. Given the limitations of time and resources on the study it therefore seemed more appropriate to devote time to other, more central, checks on the analysis.

Inter-rater reliability was considered less important, firstly, because the researcher made extensive checks of the coding whilst completing the coding sheets. The supervisors of the research also read many of the sets of extracts as the analysis was developed, and were therefore able to provide an informal check on reliability.
Secondly, because development was sought by comparing each task across the interviews for each student, any development would still have been identified, even if there had been minor discrepancies in the coding of the categories.

Up to this point, the evaluation of the fit of the analysis findings to the underlying data has focused on the extent to which summary themes and categories represent the data set as a whole. Further support for the analysis was derived from the clear links to the existing literature. This fits with Hammersley's suggestion that the validity of findings is judged in part by their plausibility in relation to existing knowledge (Hammersley, 1990; 1992). Having other researchers check the analysis is often considered important in qualitative research (Guba and Lincoln, 1989; Entwistle, 1997a; Creswell, 1998). This was achieved by both supervisors being involved in discussing and evaluating the qualitative analysis throughout its development.

Given the comments made earlier in relation to the complexity of students' learning and development, it seems that an additional important criterion in evaluating the analysis is the extent to which it represents that complexity. Glaser (1978) also emphasises the importance of preserving the uniqueness of individuals and of remaining faithful to the core of participants' experiences. The case studies were included for these purposes. In developing each case, careful attention was paid to including all of the relevant aspects of each individual's learning, whether or not these were represented in the more general analyses.

Overall, the range of levels of analysis used in this study made it possible to give a thorough account of students' development and the influences on that development. Analysis was carried out at the group level and for individual cases, development was charted across categories, within categories, and independently of the categories. It was therefore possible to state with some confidence that all of the examples of development given in the interviews were included in the analysis and that the main influences on development were explored in considerable detail.

**Relationships with analysis in the phenomenographic tradition**

Some of the links between the analyses carried out in this study and various types of analysis reported in the wider literature have already been considered. It seems
worthwhile, however, to explore in greater depth the relationship between the analyses carried out here and those done within the phenomenographic tradition; this is partly because some of the analyses reported here overlap quite strongly with the phenomenographic tradition, and also because phenomenographic analysis is common in research into students' learning.

The development of the categories of description drew strongly on the phenomenographic research tradition (see Marton and Booth, 1997; Säljö, 1997; Entwistle, 1997a). For example, the categories were abstract descriptions used to formalise the researcher's understanding of a group of experiences, rather than descriptions of any one student's learning (Marton, Dall'Alba and Beaty, 1993). It is important to note, however, that the analysis differed from this tradition in several central ways.

Phenomenography aims to develop clearly defined categories that can be seen in relation to one another, usually in a logical hierarchy. In this research the individual expression of the categories was generally of more interest than any logical relationships between them, although the logical developmental relationship between the conceptions of essay writing categories was more similar to phenomenographic findings. Phenomenographic analyses typically describe the main variations in participants' experiences (Marton and Booth, 1997). The categories developed for this study describe the main aspects of students' learning, whether or not these showed variation between the students.

A further difference was that more loosely defined themes were developed in addition to the categories, whereas phenomenographic analyses are entirely based on categories of description. The end point in phenomenography is a description of the qualitatively different ways in which something is experienced by individuals. In the present research, the aims moved beyond such general description, towards accounts of individual students' learning and tentative explanations of development. Further, phenomenographic analysis does not always acknowledge the effects of the literature, or of the researcher's perspective, on the findings, as was done in this analysis.
Conclusion

To recap, the stages in these analyses began by considering the nature of the approaches to studying for this particular student group. The development of these approaches and potential explanations for the change, or lack of change, in students' learning, were also considered. These issues were then revisited in detail for the essay writing task, as this task seemed to show the most potential for supporting students' development. Finally, case studies of those students whose learning was particularly relevant to understanding development provided a more detailed complete analysis of development at the individual level.

There was a range of different focuses in the analysis, each of which had certain advantages. There was a broader focus on students' learning throughout the year that allowed detailed consideration of the effects of context on learning as distinct from development. This is an important improvement on the mainly quantitative studies of the development of students' approaches which have been carried out to date, as these did not allow in-depth consideration of the effects of context and it was therefore difficult to distinguish change in reaction to the changing learning context from established development.

The detailed focus on essay writing allowed careful consideration of the task that seemed to be most conducive to development. As the students had to complete three essays over the course of the research, this provided an ideal backdrop against which to study development. These analyses also provided a more detailed understanding of the effects of advice and feedback on students' learning. The looser themes in the analysis, and the case studies, provided further perspectives on students' development. The students' learning was to some extent idiosyncratic, and could not have been fully understood through categories alone. The inclusion of these additional forms of analysis also allowed students' uncertainties and inconsistencies to be considered.

Overall, the aim was to carry out an analysis that was appropriate to the research questions and to the researcher's perspective, rather than to follow one particular tradition. This involved acknowledging and identifying the effects of the literature,
and of the researcher's perspective, on the findings. Despite this subjective aspect of the analysis, every effort was made to do justice to the data. Extensive checks were made of the quality of the analysis. The intention was to address the research questions through a transparent account that fairly represented the participants' reports of their experiences, providing generalisations without losing uniqueness.
CHAPTER 5 - THE CHARACTERISTICS AND DEVELOPMENT OF STUDENTS’ APPROACHES TO STUDYING

This chapter and the following two chapters present the findings of the analysis, the content of the chapters is summarised in Table 5.1. This chapter begins with an account of the general characteristics of the approaches to studying of this group of students. Firstly, a description of the students’ typical approaches is given to provide an understanding of the nature of their learning: this helps to illustrate what development might be useful for these students. Secondly, descriptions of the most developed approaches for these students give a sense of how much change might reasonably be expected from the students in this group.

Table 5.1: The sections of the findings

<table>
<thead>
<tr>
<th>Findings reported in Chapter 5</th>
<th>Investigating the nature of students’ approaches to studying</th>
</tr>
</thead>
<tbody>
<tr>
<td>I - approaches in general.</td>
<td>Description of general trends and reactions to tasks.</td>
</tr>
<tr>
<td>II - general themes to explain development and its absence.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Findings reported in Chapter 6</th>
<th>Investigating the nature of students’ approaches to studying</th>
</tr>
</thead>
<tbody>
<tr>
<td>II - approaches and related concepts in essay writing.</td>
<td></td>
</tr>
<tr>
<td>II - development in essay writing.</td>
<td></td>
</tr>
<tr>
<td>II - influences specific to essay writing.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Findings reported in Chapter 7</th>
<th>Holistic accounts of learning and development</th>
</tr>
</thead>
<tbody>
<tr>
<td>II - case studies.</td>
<td></td>
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</tbody>
</table>

This chapter continues by exploring the development of students’ approaches and the ways in which their approaches change with different learning tasks. These aspects are not entirely separate, as adaptation to context can, of course, lead to development. This chapter ends with an overview of the main themes in the
interviews which seemed to explain why students did, or did not develop their ways of learning.

The analyses reported in this chapter suggested that the essay writing context was the most important in terms of understanding students’ development. For this reason, a more detailed specific examination was made of students’ learning for this task. Chapter 6 begins with a description of conceptions of essay writing, which illustrate the main variations in the students’ learning for their essays. The relationships between these conceptions and students’ approaches are explored next. This is then followed by an account of students’ development in relation to essay writing and an exploration of the ways in which that development was supported or inhibited.

This chapter and Chapter 6 illustrated that a wide range of interacting influences was important for students’ development, and that some of the most significant changes rested on idiosyncratic aspects of students’ background and experiences. This suggested the need for case studies to explore how these interacting elements might come together to support an individual student’s development; Chapter 7 presents these case studies. Figure 1 recapitulates the time plan for the study, to assist the reader in understanding the details of the analysis:

**Figure 1: Time plan for the research**

<table>
<thead>
<tr>
<th>1997/8</th>
<th>term 1</th>
<th>term 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>essay 1</td>
<td>multiple</td>
<td>essay 2</td>
</tr>
<tr>
<td>choice</td>
<td>exam</td>
<td></td>
</tr>
<tr>
<td>interview 1</td>
<td>interview 2</td>
<td>interview 3</td>
</tr>
</tbody>
</table>
Investigating the nature of students' approaches to studying I - approaches in general

This section gives a description of the main aspects of the approaches to studying of the students involved in this research. In Chapter 4, the processes by which the approaches to studying categories were developed were described. It was explained that it was not possible to form the approaches based purely on the empirical data, as some of the categories of description applied to all, or almost all, of the students so that these categories could not be grouped empirically with other categories. There were also other issues, for example, not all of the elements which might be expected to form part of a particular approach were necessarily present for a given student involved in a specific task. It was necessary, therefore, to group the categories conceptually; these groupings are described in this section.

Aspects of the deep approach

In the literature review, it was argued that the defining feature of each approach was the students' intention for their learning task. For the students in this study, the deep approach was defined by a limited intention to understand combined with interest, and related learning processes, as illustrated in Table 5.2. The most common learning processes used by the students were efforts to select and summarise material and to relate, organise or structure content. More rarely, students also attempted to gain an overview of the topics that they were studying, or tried to develop a more personal understanding of an area. Memorising with understanding was an important aspect of the deep approach for students' examinations.

Most of the students in this study mentioned understanding as one of their aims when they were studying psychology, but generally this was limited to developing a basic understanding of their lecture notes, the relevant materials in the main textbooks, and the texts they used when writing their essays. Students' attempts to understand were almost always limited to trying to understand within a particular topic, or group of lectures, rather than trying to do more wide scale integration.
Table 5.2: Categories included in a deep approach to studying first year psychology

<table>
<thead>
<tr>
<th>Category name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention to understand.</td>
<td>The student’s intention in learning was to understand course material. Typically, but not always, limited to understanding individual lecture topics or sections of the main textbooks, rather than a wider integration.</td>
</tr>
<tr>
<td>Thinking for yourself.</td>
<td>Students tentatively attempted to develop their own thinking about topics. The sense was that students were trying to go beyond just understanding what they had read or heard, to develop their own ideas on a topic.</td>
</tr>
<tr>
<td>Interest.</td>
<td>Interest was shown to affect the students’ work in some way, either by influencing their learning choices or by motivating them to work.</td>
</tr>
<tr>
<td>Selecting and summarising.</td>
<td>Students focused their learning within their learning tasks, for example, by staying relevant to the essay topic or selecting the main ideas to note in lectures.</td>
</tr>
<tr>
<td>Relating, organising and structuring.</td>
<td>Students related ideas and organised and structured their learning materials. This was typically carried out within a specific topic or task, rather than across tasks or topics.</td>
</tr>
<tr>
<td>Getting an overview.</td>
<td>Students tried to get an overview of an essay topic or lecture series, for example, by using the course textbook. Attempts to gain broader overviews were rare.</td>
</tr>
<tr>
<td>Memorising with understanding.</td>
<td>The student tried to memorise material from the course, having first understood it. Alternatively, the memorising was carried out first, for example, when a student memorised terms to gain a better understand of a topic.</td>
</tr>
</tbody>
</table>

These restricted aims perhaps explain why most of the students commented that they did not generally find understanding to be a problem. They might struggle with one or two sets of lectures, but typically found they could deal with this by using the textbook. It was rare for students to go beyond these basic intentions, but one or two students did talk about developing more extensive understandings, as in the extracts below:

By the end of the first year ... I want to have an understanding of what psychology is ... So maybe once I've done my revision and everything, I could, if somebody asked me what psychology was, I could draw a spider diagram or a mind map or something of all the ideas that we'd come across. But to do that, then I have to understand each bit....

(Gail, third interview)

I'm trying to understand all the terms, for example in learning, and I need to know all the terms to start with. I need to know what classical conditioning is, what the puzzle box was, and who Thorndike and Skinner and Pavlov, who they all were.

1 All names have been changed to preserve students' anonymity.
So you know all the terms, and then further to that actually understand what it's about. OK, I know the name Pavlov, but who was he, what did he do, and what does it mean, why was he important. So actually, if I'm reading, I'll go, 'Oh yeah, Pavlov; oh yeah dogs; oh yeah light or something', but then that's maybe all I've got on my lecture notes. I'd have to re-read it and go, 'Oh so that's what happened', and then sort of relate it to, I don't know, to increased tolerance of drugs, or to being scared when someone flashes a light in your face, or something. Relate it to, you know, phobias of snakes or whatever, it relates to us in real life; which I hadn't, well for that particular topic, I just hadn't grasped (that) at all from the lectures. I needed to go to the book, read it, and note it.

(Sean, second interview)

The category thinking for yourself also provides some evidence of students having more extensive goals in relation to understanding. This category was developed to describe students' tentative attempts to develop their own ideas about topics in psychology. Only five students showed some evidence of this category, all of them in relation to essay writing. Here, the students were trying to go beyond just understanding what they had read or heard, to develop their own perspective on a topic. This may be the initial stages of the development of personal understanding, which is seen more clearly with some students in their final year of study (Entwistle, 1995). The extract given below illustrates the limited and tentative nature of what the students were doing:

I thought this time actually to do it in a slightly different way, I thought to have ideas about it myself, and then back them up with some actual theories or whatever, and try and do it from my own point of view more ... I don't know really (what prompted that). I just got, I sort of felt that I was writing down other people's ideas and going, 'This is this person's idea', then reflecting on that, I don't know. It was probably the same really ... but it was just I felt I wanted to think myself what I actually thought about this, and see if anyone else agreed at all. (At the beginning of my essay) I sort of thought about things. Actually what I thought about was what everyone talks about anyway - nature, nurture, evolution, sort of things ... so what I was thinking was what they were writing about ... So I kind of wrote down, it was just like five words. Just thoughts that came into my mind about each topic meaning given...

(Shona, second interview)

In addition to an intention to understand and thinking for yourself, it made sense conceptually to bring the interest motive into the deep approach. The students often mentioned interest in psychology. In some cases, the main role of interest seemed to be in directing students to choose particular essay topics, or to focus on specific reading. For about half of the students, however, interest also played a role in motivating them to work, or in sustaining their motivation once they had begun.
I found it very interesting. That's been one of my main motivations this whole year ... The subject and everything was quite interesting. I mean I read the question and thought, 'Oh no', but then I started reading the first book and it was like, 'Oh this is quite interesting', and after that I was just reading on the bus, and reading when I was eating, reading between lectures. That was my main motivation, I just found it interesting.

(Gary, second interview)

Typically, students' interest motivated them to do the work that was required by the course, rather than being strong enough to motivate them to do additional work. Some students noted that their interest varied between topics, which affected the way they worked. It was also clear that students' interest was not always sufficient motivation to keep them working hard.

In linking the learning processes to the intentions, it made sense conceptually to bring together all of the processes that might be expected to be involved in developing an understanding of a topic, even though these were not necessarily all shown by each individual student. There were five categories of processes which seemed relevant to a deep approach, thinking for yourself, which has already been discussed, and in addition: getting an overview, selecting and summarising; relating, organising and structuring; and memorising with understanding. No category is given here for critical thinking or use of evidence, elements that have often been included in the deep approach, as these were not generally apparent throughout the students' studies. A few students did make brief critical comments relating to lecture content, but this was rare. Critical thinking and use of evidence were more common for essay writing, however, and are discussed in detail in Chapter 6.

Selecting and summarising involved students focusing their work within a learning task. For essays, students worked on constraining their reading and writing to stay relevant to the title, and to work at the appropriate depth for the word limit. In lectures, students aimed to select the main points in order to summarise what the lecturer was saying. Students also summarised and selected main points in their reading and revision. Relating, organising and structuring involved, for example, considering how different points were related when writing an essay plan, in order to
structure the points within the essay. Some typical examples from one student are presented here:

It kind of arises from finding out different main areas (for an essay). As you are reading through it, you see similar things that are relative and you make a sort of a mental note, 'Right there is an area here, and there is an area here, and these two areas would link on to each other'. So you can put one after the other. You need to have a logical structure...

I mean for me it's classical conditioning comes before operant conditioning, and that goes before all the other stuff that I have been doing (in my revision) ... It all kind of flows and its easier to define things when you know where they lie ... You are thinking, 'Well that's there' and you know where to find it ... So you, kind of, relate it...

(Martin, second interview)

Quite a number of students mentioned the importance of getting an overview of a topic. This typically came up in relation to essay writing. Students began by reading their lecture notes, or more general textbooks, to get an overview of the area. This helped them decide what to include, and made it easier to understand other texts. Sometimes the course text was used to help gain an overview of lecture topics, when the students felt this was missing from lectures. Memorising with understanding involved carrying out a combination of work involving both trying to understand and memorising course materials. Most often the students began by working to understand their notes and then once that was done they tried to memorise the material.

I have been reading the relevant parts from (the course textbook) beforehand, to understand it before I go to the lecture, because when I am writing notes I find it very hard to, kind of, start as I am writing it ... After the lecture, some lectures, I felt that I hadn't understood it, so I have been going back to the textbook again and writing my own notes ... I have been doing that all along, so when it came to the point now that I have got to revise ... I have just been able to keep to my notes ... I have always found it hard trying to memorise things, so I write a lot of notes, because I find that writing it down is consolidating it in my own head ... Maybe just the last night beforehand, I'll try and memorise it then ...

(Jane, second interview)

The composite quotation below draws together edited extracts from a number of students to give a sense of what a fully developed deep approach to first year psychology might be like. No single student showed such a complete deep approach; as was explained earlier, more developed intentions to understand and thinking for yourself were quite rare. It was also unusual for students to look for broader
overviews, or to relate ideas between essay topics or lecture series. Students could also be deeper in relation to some learning tasks than others.

By the end of the first year ... I want to have an understanding of what psychology is ... so maybe once I've done my revision and everything ... I could draw a spider diagram (mind map) ... of all the ideas that we'd come across, but to do that then I have to understand each bit...

The first time (I revised it), I would just read it through, just getting a general kind of picture ... it helps you to get a better understanding I suppose, just before you start...

Part of the thing with lecture notes is when you get them ... some of it doesn't make any sense at all ... so some of the topics I would basically re-note it from the book and it would actually make sense to me ... I'm trying to understand all the terms ... OK I know the name (of the theorist) but who was he, what did he do, and what does it mean, why was he important ... I'd have to re-read it ... and then sort of relate it (to other parts of the topic) ... I think I'm better at making links between things now and knowing what are the key points that I need ...

(I aim) to pick out the areas ... words, and their definitions, and where abouts they come into the understanding of that particular topic... Things like, in what order does this happen ... I'd try and make sure I knew what came in certain areas, 'cos I mean sometimes it could be quite close between what came into (one topic) and what came into (another topic) and I would have to make sure I knew.

(I was thinking about this topic) which is really interesting, and (so I chose to do an essay on it) ... It was really interesting actually, I really enjoyed doing it. It taught me, it brought out a lot of things that were interesting, and I didn't realise it ... wasn't actually ... as I'd thought all along...

Well sometimes it was difficult (to be selective in taking notes for the essay). In certain areas there was masses of them, but some of the studies were continuations, or perhaps follow-up studies, of the ones I'd done earlier. So perhaps I'd talk about that one, and decide I was going to follow up ones that found this and that, and not go into details very much. And also if they were totally different, talking about totally different things, then I'd take those rather than ones that were studies that were quite similar to each other.

I suppose I got the information (for the essay) and tried to just rewrite it in my own style, but at the same time know exactly what it was that I was writing, 'cos all too often it would be easy to say, 'That sounds like a really good sentence' ... but you might not fully understand it ... It can be very easy just to copy it out ... Then its not really your essay, you haven't really achieved much, and it doesn't really help anybody...

You could think, you know, how far does one experiment really go to showing (something) and it was interesting to, and then it helps you evaluate, well, this is what they've said, but if you go back to the experiment, what actually are they, you know, what actually are they testing for here...

Once I'd come away from the books and I just had my own notes, I found it a lot easier ... Just focus entirely on what you've got and how to link it all together ... I get my categories and use maybe a highlighter pen ... I'll decide what links onto what ... I'll have the categories highlighted and then I'll have a note of what colour I'm going to do first...

I try and make (the essay) a little bit more original, rather than just right from the book. So I try and think about it myself first and then, I don't know, not sort of
meaning to make it original, but I think just when you consider something yourself, your own ideas are obviously going to be put into that...

**Aspects of the strategic approach**

The categories forming a strategic approach for these students are shown in Table 5.3. The approach is defined by an *intention to reach an academic standard* combined with a set of related learning processes, some of which had formed part of a strategic approach in the earlier literature, others of which are new.

**Table 5.3: Categories included in a strategic approach to studying first year psychology**

<table>
<thead>
<tr>
<th>Category name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intention to reach an academic standard.</strong></td>
<td>The student was motivated by an intention to reach an academic standard which may have been an acceptable grade, or the best possible grade for them. This was not a competitive form of motivation.</td>
</tr>
<tr>
<td><strong>Time management.</strong></td>
<td>Students planned out their time in one of a number of possible ways, for example, by having a timetable.</td>
</tr>
<tr>
<td><strong>Finding suitable conditions for work.</strong></td>
<td>Student tried to create, or find, conditions in which they could work well. Typically, this was not an in-depth reflection on these issues.</td>
</tr>
<tr>
<td><strong>Alertness to assessment.</strong></td>
<td>The students showed their alertness to assessment requirements in a number of ways, for example, by attending to their tutors’ feedback or by focusing on the course text, as it was the source of the examination questions.</td>
</tr>
<tr>
<td><strong>Being task focused.</strong></td>
<td>Students focused their efforts almost exclusively on their university tasks, such as tutorials, lectures, essays, and examinations, rather than on studying psychology more generally.</td>
</tr>
<tr>
<td><strong>Taking easier or more efficient options.</strong></td>
<td>The students looked for easier or more efficient options, generally in relation to essay writing. For example, choosing a topic that had reading readily available.</td>
</tr>
</tbody>
</table>

In the earlier literature, the strategic approach was typically characterised in terms of an intention to gain the best possible grades. For the students in this study, this type of intention was quite rare. The strategic approach therefore had to be redefined to an extent, by making the central intention an *intention to reach an academic standard*. The students coding to this category did not generally describe the competitiveness that is sometimes related to a strategic approach (see for example, Entwistle and Tait, 1990) although some did show determination and drive. Even the students who were
aiming to get the best possible grades, were more concerned with doing the best they could manage, rather than trying to do better than others.

I think (what is motivating me is that) I am very determined ... you know, I have got a real determination and drive, I really want to do well ... I am going to do my best, you know, and that's all I can do at the end of the day...
(Susan, third interview)

For these students, the learning processes conceptually related to a strategic approach included, firstly, time management. The students in this study had a variety of methods by which they managed to get their work completed on time. These ranged from quite detailed schedules, through a less structured awareness of what work had to be done in a given time, to simply starting work very early, so that there was no need to plan to finish on time. Within these methods, the students often prioritised more difficult, or more important, materials. Some students also found it helpful to have regular times set aside for studying. All of these methods seemed to work well for some students. Another aspect of students’ time management was that several students planned their time to take account of the way they studied. For example, a student who was easily distracted would schedule work into times when there would be few distractions. Students who felt they were more productive working in shorter or longer blocks scheduled their time to suit that preference.

Finding suitable conditions for work was also important within a strategic approach for these students. A number of students realised that they needed particular environmental conditions in order to study well and aimed to meet those conditions where possible. The conditions sometimes varied depending on the type of work that the students were doing. It did not appear that students spent much time reflecting on the best conditions for studying, rather they noticed a few things that suited them and bore that in mind when choosing where to work.

There was a lot of distractions in the flat - the ‘phone was ringing about every 10 minutes or so. There’s always the TV on, or the hi - fi ... If you go to the library there’s nothing like that there. The only thing (is) you might meet other people, (but) if you meet other people they might be able to help you ... I quite like working in the flat, because if I want something to eat I can go through and get something, or a drink, or whatever ... I think, if it’s more if I want to concentrate, I am better going to the library. If it’s less concentrated work I do it in the flat.
(Donald, second interview)
For the students in this study, *alertness to assessment* describes their attempts to focus their effort on getting better marks in their assessed work. Unlike items from the *ASSIST* scale of the same name, there was little evidence that the students were aiming to please a specific marker. Apart from this difference, the category is similar to the scale. This category also overlaps some items from monitoring effectiveness scales, other aspects of monitoring effectiveness, such as students trying to make uninteresting work more interesting, were not apparent for these students.

For *alertness to assessment* in relation to the class examination, the students tried to work out what topics were most important. Many students pointed out that they focused their work on the main course text, as they knew that the class examination questions would come from that text. They also focused selectively on statistics, as that had more questions assigned in the examination. In addition, some students bore in mind the type of examination when they were revising, explaining that they would revise differently for a multiple-choice examination, for example, by practising those sorts of questions. It was quite common for students to test their revision in some way, either by using the course study guides or by devising their own tests.

For their essays, the students worked to improve on their work based on their tutors’ feedback. A few students mentioned other aspects, for example, choosing more recent textbooks for their essays, or aiming to display the breadth of their reading. The students also checked their essays before they handed them in, mentioning, for example, that they checked spelling, grammar, stylistic aspects, clarity or sense, and structure. The student quoted below shows an alertness to assessment typical of the students in this study.

*(When preparing for the class examination) the (study guide that goes with the main textbook), that is really good. They’ve got all the parts you should know; they say what you should know, so I have been going through that writing down all the things I should know, and then doing the multiple-choice questions...*

*(The feedback on my essay was definitely helpful) because one of my problems was, in my first essay, I was writing, ‘I think this, I think this, my view is’. I didn’t do that at all in these essays... (For the second essay) my tutor said to use more research evidence. In my third one I had done that and (my tutor) noted that on my third essay, that I had done more research evidence. (Jane, various interviews)*
Almost all of the students involved in this study were *task focused*. This category groups extracts where students chose to carry out only work that related directly to their tasks on the course - that is lectures, essays, revision, and tutorials. This is related, to an extent, to the syllabus-boundness category which has formed part of a surface approach in some research (for example, Entwistle, Tait and McCune, 1999) but differs in that the students are not limiting what they do to just what would be required to pass. Also, the students did not seem to want to be told exactly what to do in their assignments, as suggested by syllabus-boundness items. The students talked, for example, about only doing the reading set by lecturers, or about only reading when it is required for essays, or to understand the lectures. In reading around the lectures, the students focused mainly on the course text.

The final category which seemed to be related to a strategic approach was *taking easier or more efficient options*. The category referred mainly to students' essay writing, for example, several students picked essay topics that looked easier or quicker, that had literature readily available in the library, or that their friends had found to be straightforward. In their reading for the essays, a number of students looked for books that would be easy to follow, or that covered all of the main points. The category was sometimes associated with an *intention to reach an academic standard*, in which cases it seemed to be related to a strategic approach.

The composite quotation below, taken from several students, illustrates a strategic approach to psychology to give a sense of the nature of the strategic approach for these students. Most of the students in the study did show most of the elements of a strategic approach as defined here, although the intention to gain the best possible grade was unusual. The strategic approach shown by the students in this study more closely resembles the strategic approach as defined by the more recent versions of the *Approaches to Studying Inventory* (for example, ASSIST, Entwistle, Tait and McCune, 1999). The students do not show the cue-consciousness or competitiveness of earlier conceptualisations (for example, Entwistle and Ramsden, 1983).
(What motivated me was that) ... I don't like not doing well in the exams. I just try to give it my best shot ... I just really feel sick with myself when I know I could have done better and I didn't...

I can't revise in the library at all, so I always work in the flat, in my bedroom, with classical music in the background. I like revising like that ... I think I started about two and a half weeks before (the examination) ... just very lightly read over things ... just so that I understood what we've actually covered ... If I'd missed a lecture (I would) make sure I've got all the material for it, and then the closer I got to the exam, the more probably focused I'd be ... I also had nursing exams as well ... so I had to, sort of, split my time to try and work it out equally ... I gave more time to the nursing exams, basically because I'm doing nursing, and I find them more important, but I did try not to forget psychology as well.

I have just basically been revising from (the course text), because they told us that all the exam questions are going to be based on that ... (In my reading I tried) to pick out the areas, the things that are likely to be examined - words, and their definitions, and where abouts they come into the understanding of that particular topic ... I knew that there was going to be multiple-choice questions ... so I knew that I was going to need practice on it, but I also knew I had to know the information before I had the practice on the multiple-choice ... So that's why I went through the book first, before I went onto the multiple-choice.

(My main motivation to work on this essay was) I wanted to get a good mark, and I liked the subject ... I guess a good mark would be (more important), but when you are actually interested in it, it makes it easier to write more about it, hopefully.

I chose (the essay title), I think, because it was the only one that I could see where there was still quite a lot of books in the library, 'cos often with psychology essays the question is so obscure ... that it's really difficult to get books about it...

Because it was my first essay, and I didn't think it was supposed to be particularly in-depth, I looked at the books which were, would have concise information about what I wanted, the sort of synoptic books. (The reason I thought it was not supposed to be in-depth was) because the word count was fairly small for a start ... and because its the first year essay...and because, I don't know, the information we studied in class was mainly just the basic, here are the main studies, not sort of odd quirky studies.

I started with reading the books and journals quite a few weeks before it was to be handed in and then I just started, I started planning and writing it I think about a week and half before the actual deadline, and then typed it up a couple of days before it had to be handed in ... I thought I should leave myself quite a bit of time, because I wasn't very sure about what I was doing, so I really pretty (much) started to do it straight away.

When I was writing (the essay) I liked to be at home. When I was reading for it, or taking notes, it didn't matter, I could do it anywhere, but when I was actually writing, I liked to be at home. I would shut myself away in the bedroom ... I don't like the library very much at all. It seems peculiar, a sort of formal place. It's dead quiet and you are not allowed to make a noise or anything. It's more comfortable at home; it's just something I'm used to basically.

(After the essay was written) I just, sort of, read it aloud, as if I would be the person reading it, and if it made sense, and if it sort of flowed, then that was good. There was a few strange errors ... so just little things to correct like that, and just, sort of, polishing it off really...

(The feedback on my previous essay was helpful) because one of my problems was, in my first essay, I was writing, 'I think this, I think this, my view is'. I didn't do
that at all in these essays ... I used a lot more of research evidence (this time) ... my tutor said to use more research evidence.

The development of the surface approach is not discussed in this study, as most of the elements which make up this approach for the students interviewed were shown as the absence of aspects of a deep approach, and their development is thus covered within the analyses of the deep approach. It was also found that those categories which could be seen as specific to the surface approach did not show any significant evidence of development.

**Describing the development of students' approaches I - general trends and reactions to tasks**

This section gives an overview of the ways in which students' learning changed during the year, either in reaction to different tasks, or because their learning had developed. The main contexts considered are lectures and related reading, essays, and examinations. Tutorials are only mentioned where they are relevant to explaining development. This follows the focus of the interviews, where tutorials were dealt with in less detail, because many of the students did little work for tutorials. Explanations of development which were explicitly linked to the changes outlined here are also introduced in this section.

**Development within a deep approach**

Overall, within the deep approach, students' learning processes were the aspects most likely to develop. Many of the developments made were quite minor, but there were also some significant changes for some students. There was little evidence of any shift in *interest* or the *intention to understand* over time, which was sufficiently strong to warrant a change in coding for those categories. Focusing in more detail *within* the categories, there was still little evidence for the interest category of development in students' level of interest in the work they carried out. There seemed to be more evidence, however, for the *intention to understand*. Here a few students seemed to develop in terms of the kind of understanding they were seeking, moving from a concentration on developing a basic understanding of the course materials, to
the category describing thinking for yourself, where they tried to develop a more personal understanding. Thinking for yourself was the only category where students’ coding changed over time. The majority of the instances of this category occurred at the third interview and it was not apparent at all at the first interview.

A summary of the development of students’ learning processes within the deep approach is given in Table 5.4. It can be seen from the table that development of these processes occurred mainly in relation to thinking for yourself, as already mentioned, and also for selecting and summarising and relating, organising and structuring. For these latter two processes, there was only development within the categories. In other words, the types of processes students chose were fairly consistent, but their ability to carry them out improved over the year.

Table 5.4: Development and relationship to context for learning processes within a deep approach.

<table>
<thead>
<tr>
<th>Process</th>
<th>Summary description</th>
<th>Context and development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinking for yourself.</td>
<td>Students were trying to go beyond just understanding what they had read or heard, to develop their own understanding of a topic.</td>
<td>Seemed to occur only for essays and there was clear evidence of development.</td>
</tr>
<tr>
<td>Selecting and summarising.</td>
<td>For example, focusing essay reading, selecting main points in lectures, and summarising reading for examination revision.</td>
<td>Important for all contexts - lectures, essays, examinations. Commonly developed through the year, as the students improved their skill.</td>
</tr>
<tr>
<td>Relating, organising and structuring.</td>
<td>Students organised or linked materials, for example, in their essay planning or in rewriting their lecture notes.</td>
<td>Most important for the essay context, but also occurred for some students in relation to lectures and the examination. Some evidence of developing techniques within this category.</td>
</tr>
<tr>
<td>Getting an overview.</td>
<td>Students attempted to gain an overview of a topic.</td>
<td>Quite rare for all contexts; no evidence of development.</td>
</tr>
<tr>
<td>Memorising with understanding.</td>
<td>Students memorised materials in various ways but their revision always involved understanding the material.</td>
<td>Only applied to the examination context. No evidence of development.</td>
</tr>
</tbody>
</table>

Looking in more detail at students’ development, there seemed to be no single theme that explained the changes. The development of thinking for yourself will be
discussed in detail in Chapter 6, as it related to essay writing, but to summarise here, the influences included students' interactions with their tutors, their tutors' comments on their essays, the students' own reflections on their learning, and their ideas about the essay criteria. It is interesting to note that most of these opportunities were available to most of the students, yet the majority did not develop in this way, for reasons which will be discussed later.

The students' development within the selecting and summarising category was by far the most common change. For their lectures, students tended to start off trying to write down everything the lecturers said, or at least most of what they said. For some students this carried over from school, where they were used to teachers who dictated notes for them. Gradually the students got better at selecting and summarising materials from lectures. Where students were able to talk about how this development had happened, they generally mentioned realising that there was a problem, and therefore making efforts to adapt; so there is a self-regulatory element to their development. A few students also mentioned advice from staff, or friends, about not trying to write everything in lectures.

For their essays, students learned to be more focused in their note taking from textbooks. In some cases this involved a change in their planning technique. They planned the essay earlier in the process, so that they could use the plan to guide their reading. Some of the students also learned to be more selective in their essay writing, staying closer to the essay question and to the word limit. As with their lectures, these changes were also prompted by reflection on problems with their essay writing, for example, that the reading took too long. Some students were prompted to these changes by the feedback on their essays or by discussion with their tutors. For the student quoted below, lack of time forced her to be more selective and also led to a change in her method of relating organising and structuring where she noted book pages into a plan, rather than writing notes and then restructuring them.

I made a plan of the factors (for the essay) ... I put down the key ideas that led to thinking that it was inherited down one side of paper ... for the environmental
factors ... then I did the same ... I think before I left it more open, 'cos I always hope to find something more from the reading ... but this time, because I was a bit more short on time, and because I just wanted to get it done and out of the way, then I think I thought a bit more about what I actually had to do ... So I thought a bit more about how I'd set it out earlier on ... I think just try to be more organised and waste less time ...

One thing that I didn't do, for that essay, was actually write notes from the books ... previously I think I'd have probably done that ... It made it so that it took less time doing the essay, and I think it also helped me to use more books as well, because I had the variety of books open when I was actually writing it, instead of ... it would, say, be on a different piece of paper and then it would be difficult to find the bits that went together from your notes. So I think it maybe did help...

(Gail, third interview)

A few of the other students also developed their relating organising and structuring, for example, by planning their essays when they had not done so previously, or by changing their planning method. This was generally in reaction to some problem with their learning. Jane was unusual in that she sought study skills help because she was having difficulty in taking lecture notes. She attended a talk on note taking and from this evolved a much more developed method of relating organising and structuring for her notes:

(On how Jane does her lecture notes) He's got page references on what he'll be talking about. I read those before the lecture, just so that I have a basic understanding, because I find it really hard to take notes if I don't understand what he is talking about. ... Then, during the lecture, he usually states the heading. So I write that heading down and underline it, then just go through all the points he makes ... But then the margin ... sometimes they refer back to something else ... so I can go back up and put it there, instead of my notes being in a muddle, and then afterwards when I am reading it over I can develop. I don't really often do it, but sometimes when I read it, if there's something else I want to say about that, I can write it beside it, in the margin I have left ...

(The reason that I started this was that) the first few lectures were awful, I was finding it so hard to take notes and they were so messy.... So, after my first lecture, I spent three hours going over my notes, and going over the textbook, and taking notes from the textbook, and I thought, 'There is no way I can keep this up for every single subject'. So then I thought, 'I am just going to have to start taking notes in the lectures that are going to do me, that I won't have to write out again' ... I actually went to ... it was study skills talks ... It was actually what the students that were there were saying afterwards ... I got that idea from another guy who said that's what he did, and it was also what the guy who was taking the talks said, that you should really try and make notes you won't have to write out again afterwards ... So I have just started doing that and I find it much easier.

(Jane, first interview)

There did not appear to be any evidence of development within the memorising with understanding or getting an overview categories. It seems likely that development within memorising with understanding was not seen in this study, because this
process was only carried out in relation to the class examination. As an examination only occurred once within the study, and as students typically prepared over a short time, there would have been little opportunity for change.

Attempts to gain an overview of topics within psychology were rare throughout the study, and across learning tasks. This sort of learning would not have been required to do well in the multiple-choice class examination. It would have helped students’ understanding to gain an overview of the lectures, but as the students were generally task focused and aimed most often for a basic understanding, it is not surprising that this category did not develop for lectures. For essays, it would seem that an overview would be helpful, and indeed the category was more common in relation to essays. Perhaps the reason that development was not shown, is that more students did gain an overview when they were organising the material for their essays, but did not see this explicitly as a goal, and therefore did not mention it as a learning process.

Development within a strategic approach

Students’ development within the strategic approach did not tend to show the sorts of profound changes suggested by the development of thinking for yourself within the deep approach. The students were more likely to develop their learning processes than their intentions for the strategic approach. In general, the students did not seem to develop in relation to the intention to reach an academic standard either in terms of change within that category, or by changing to take up that intention. Even though their first essay did not count towards their final grade, the students were very similar in their intention to reach an academic standard for the first and final essays. It seems that, whether or not the work was formally assessed, the target for their personal standards remained similar.

Looking at the development of the strategic processes, summarised in Table 5.5, time management showed the clearest evidence of change. These developments tended to come about through students’ own reflection on their studying, although one student also had advice from a friend. Some students came to realise that they worked better
if they organised their time in particular ways. For example, by working in a large block of time or conversely by taking more breaks. Other students realised that there was some problem with their time management and worked to rectify that:

(For my essay) reading and note taking I called it about three days or something, possibly not that long ... Then I think I put down about a day and a half for writing it. That's quite generous I think; it didn't take that long. Then I just, like, put on an extra day or something for good measure, which I needed. I always underestimate the time it takes me to do everything ... (That was an improvement from last time) Just knowing that I underestimated, by about a million hours, the amount of time I would need for the last essay...

(Donald, third interview)

Table 5.5: Development and relationship to context for learning processes within a strategic approach.

<table>
<thead>
<tr>
<th>Process</th>
<th>Summary description</th>
<th>Context and development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time management.</td>
<td>Students' methods for getting work completed on time and time management to facilitate better studying.</td>
<td>Not relevant for lectures. Most students made some efforts for essays and examinations and around half were successful. Some development within this category for some students.</td>
</tr>
<tr>
<td>Find suitable conditions.</td>
<td>Students finding or creating conditions conducive to good work.</td>
<td>All students who were asked about this made some efforts to find suitable conditions for writing essays and examination revision. No evidence of development.</td>
</tr>
<tr>
<td>Take easier/more efficient options.</td>
<td>Students picked an easier or more efficient path through their learning, for example, selecting the easiest essay topic.</td>
<td>Applied mainly to essay writing as this task allowed students to select options. Somewhat more common for the students' final essay.</td>
</tr>
<tr>
<td>Alertness to assessment.</td>
<td>For examinations this involved, for example, focusing on the course text as it was the source of the examination questions or practising multiple-choice questions to mimic the examination. For essays this involved checking work and paying attention to feedback.</td>
<td>Important for both essays and examinations. No evidence of development.</td>
</tr>
<tr>
<td>Task focused.</td>
<td>Only carrying out work related directly to tasks on the psychology course.</td>
<td>All but one student were task focused for all tasks. No evidence of development.</td>
</tr>
</tbody>
</table>

Taking easier or more efficient options also seemed to show some development, as it was somewhat more common for students’ final essay than for their first one. The students did not generally mention being aware of this change during their interviews,
so the specific reasons for this shift were unclear. It may be that this change was prompted by students' general interest in efficiency, as illustrated in the discussion of metacognition, later in this chapter.

There were some specific reasons which may help explain why the other strategic categories did not show evidence of development. Firstly, it would be difficult to see development in alertness to assessment in relation to the class examination because this type of task occurred only once in the period of the study. Also, the students' preparation time was typically quite short, so they would have had little opportunity for reflection. In relation to their essays, it appeared that students had problems in engaging with any feedback and advice they received, which may have limited their development. This issue is taken up in greater detail in the chapter on essay writing which follows. There was also some practical difficulty in exploring students' alertness to assessment in relation to essays, as not all of the students had received their essay feedback in time for a particular interview.

In their later years at school, these students' efforts would have been very much focused on the work for their assessed tasks; thus being task focused would be an accepted initial perspective. As being task focused was apparently so universal among the students, they were unlikely to have ever encountered an alternative perspective from their peers. Although the tutors did wish to engage the students with psychology more widely, this was not something that was made an explicit goal for the tutorials. So it seems that being task focused was something that was unlikely to have been challenged.

All of those who were asked about it had made some attempt to find suitable conditions for their work, but this did not generally seem to be considered in any depth. Again there was little likelihood that this had been raised as an issue for the students.
Deep and strategic approaches in context

Overall, the pattern of students' motives across the different tasks was similar, with interest and an intention to understand being the most common for essays, exams and lectures. The intention to reach an academic standard was relatively rare across all of these situations. It is clear, however, from Tables 5.4 and 5.5 (shown earlier) that many of the students’ learning processes were affected by the tasks on which they were working.

Learning for examinations most often involved alertness to assessment, selecting and summarising, and memorising with understanding. For both the examination and the essays, around half of the students felt that they had been successful in their time management. Students' work for their essays was mainly characterised by relating, organising and structuring; selecting and summarising; and alertness to assessment. It appeared that relating, organising and structuring was almost a prerequisite for essay writing, as this task generally required material to be organised, unless the student happened to find a question where a structure could be lifted from the textbook.

Students made use of evidence in their essays, and in some cases were able to offer critical comment. As the variation around the use of evidence was so central to differences in students' essay writing, it is dealt with in detail in Chapter 6. These aspects were almost exclusively related to essay writing. Furthermore, all of the examples of the thinking for yourself category came from students' essay writing. This is likely to be because essays were the only assessed work which required students to give critical comment and to read beyond the course textbook.

The quotation given below, in relation to the student learning lectures, illustrates that critical use of evidence and thinking for yourself can be very difficult for students, even when they know that that is what they should be doing. A few of the students explicitly mentioned that they found it difficult to be critical, for example, because they did not feel that they knew enough to offer an opinion. This difficulty may
explain why these aspects of the deep approach only appeared in the essay writing context, where students were pushed for criticism. Essays also allowed students to select topics which they found interesting, which may have encouraged more personal reflection. It seemed, therefore, that essay writing generally gave better support for a more complete deep approach.

From the student learning lectures ... (I realised) that I don't, I haven't got it in me, to question what is written down in the book ... I think it's quite bad that I just take what the book says literally and don't question it or anything ... I'm trying to change it, but it's still very easy to take what the book says as literal ... I haven't actually started changing it yet, but I do plan to change it, but it doesn't seem to work very well at the moment ... I try and look at things and say, 'Well, can I disagree or agree with all this' but it doesn't seem to be coming together too well at the moment ... I don't sort of see problems with it, I think it's more because a book's said it, therefore it's true ... It's a wrestle within me 'cos I say, 'Well, that's got to be true, 'cos it's come from a book, but 'cos a book's said it could be one sided, can it say anything else' ... It's just backwards and forwards all the time; ... it never really gets anywhere, so I tend to generally give up and take it as what's written down.
(Julie, third interview)

For their lectures and related reading, students mainly worked by selecting and summarising material, although a few students carried out some relating, organising and structuring. Alertness to assessment was very rare for the lectures. There was, for example, little evidence that students were trying to question spot, probably because the examination was linked to the course text. As with essays and examinations, attempts to get any overview of the material were rare.

Other evidence of development

Thus far, the evidence suggests that development was fairly limited for the majority of students. However, there is one further possibility, namely that students' development happened mainly in ways which were not addressed by the categories used in the analysis. To check this, each student's interviews were compared for each task across time, to try to identify any further development. In addition to this, students had been asked several times whether they were aware of any development in their learning, and so these responses were also considered.

The findings suggested that, on the whole, change in the students' learning outside of the approaches categories was limited, relating to minor changes in their techniques.
For example, many of the students changed in some restricted aspect of their essay writing, such as learning the technicalities of referencing. Most of this was learned from tutor feedback and from handouts provided about essay writing. The two other common changes were, firstly, that quite a number of students became more successful in using the library as the year progressed. Secondly, students modified their lecture note-taking methods, or stopped re-copying their notes, but there was no evidence of a more significant change behind this development. Generally both of these aspects of studying developed by trial and error; it was unusual for students to seek help. A few other changes were mentioned, but these were generally trivial.

**Considering individual students**

All of the findings described up to this point have addressed the development of the group of students as a whole. This section of the analysis focused on individual students' experiences and illustrated that the overall picture of limited development was somewhat deceptive, as there were students within the group who did develop in more dramatic ways, while others developed very little. There were five students who apparently differed from the norm of both limited development and limited effort to develop. These five students are the subjects of detailed case studies later in Chapter 7. Two of these students, Gail and Leane, developed their deep approach to such an extent that it was clear that there had been a profound shift in their thinking about learning. Susan was unusual in that she saw considerable flaws in her learning and tried hard to improve, but found it difficult to do this successfully. Alistair and Kirsty were conspicuous for their almost total lack of development or effort towards development.

**Explaining the development of approaches I - general themes to explain development and its absence**

This section expands on some of the issues raised in the preceding section by bringing together all of the general data from the students' interviews which gave an insight into why the students did or did not develop their learning during the first year. The
main themes from this analysis are summarised in Table 5.6 below, and are discussed in detail in the rest of this section. Information from the interviews with students’ tutors is included where it sheds further light on the reasons why students’ learning did, or did not, develop during the year. Material specific to essay writing is only summarised briefly in this section, as that is considered in detail in Chapter 6.

**Table 5.6: General influences on the development of students’ learning**

<table>
<thead>
<tr>
<th>Students’ reasons for entering higher education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ reasons for choosing and valuing psychology</td>
</tr>
<tr>
<td>Students’ prior learning experiences</td>
</tr>
<tr>
<td>Students’ reaction to study skills materials at university</td>
</tr>
<tr>
<td>Students’ experiences of the student learning lectures</td>
</tr>
<tr>
<td>Students’ experiences of their tutorials</td>
</tr>
<tr>
<td>Students’ interactions with individuals other than academic staff</td>
</tr>
<tr>
<td>How students rated their progress</td>
</tr>
<tr>
<td>Students’ extrinsic motivation</td>
</tr>
<tr>
<td>Metacognition and self-regulation</td>
</tr>
</tbody>
</table>

**Students’ reasons for entering higher education**

The main reasons given by students for entering higher education and valuing that experience, were described within the following categories of description: opting for higher education by default, for example, because it seemed to be the obvious choice; focusing on the potential of higher education to improve their career prospects; wanting the opportunity to take their education further; and valuing the non-academic benefits of university life. Typically, students’ reasons were a complex mixture of these different elements, rather than one category describing any student's sole motivation.

The categories overlap some aspects of the learning orientations described by Beaty, Gibbs and Morgan (1997). It did not seem appropriate to match the analysis entirely to these categories, firstly, because some of the orientations, such as vocational and personal, were not directly relevant to this sample. Secondly, other aspects of the orientations - such as interest in the subject, and whether or not the students were syllabus-bound – are treated here as aspects of students’ approaches.
Entering higher education by default

In the extracts included in this category, the students described going into higher education simply because it was what they had always expected that they would do, or because it had seemed the obvious thing to do. Sometimes, the students mentioned that this had been their focus throughout their school years; other students talked about how it was part of their family context - members of their family had attended university, and it was assumed that they would do the same. The sense of the category is that going on to university was simply accepted as what would happen, rather than any indication that the students were being explicitly pushed by their school or family.

Continuing one's education

The most typical comments in this category were vague references to the idea that the students would like to take their education further. Students also mentioned not wanting to waste their school studies, and wanting to continue to learn because they enjoyed it. One student, Leane, went much further, explaining how she valued the development of her thinking about academic topics. Her case is discussed in detail later in this chapter.

I kind of expected to come here ... Yeah, I think that was my initial reason, but now it has turned into, gradually into, just sort of developing how I think ... Most people who are here say it is to get a qualification, that sort of thing. Yes it is a tiny little bit ... but on the whole ... that's not what I consider the reason for being here ... (It is) because I am finding that the way I am thinking is changing and developing, which is very, very good, and it wouldn't happen elsewhere...

(Leane, third interview)

Non-academic benefits of university life

This category describes students valuing the non-academic side of university life, the whole experience of being at university. This was not simply students looking for sporting and social opportunities, for example, but rather there was a sense that students saw the experience of university as a stage in their development, as an important experience. They talk about growing up, about university being a stage between their school years and moving out into the wider world, about meeting like-minded people, or people from different backgrounds. There is also a less serious
element, with students looking at their time at university as an opportunity to have fun. The quotation below shows a typical answer from a student, where non-academic reasons were intermingled with some of the other categories described in this section.

(My main reasons for being at university are) basically to further my education, I don't think I am just here for the study aspect; I think it's full of opportunity University ... I think it's a really important aspect of your growing-up, going to University. It's kind of an integration process between home and being independent later on. Yeah, that and wanting a good job, wanting a job that I will be interested in. Not just something that I am in it for the money sort of thing... (Jane, second interview)

Improving career prospects

The majority of the students in this study who stressed the importance of higher education to their career, were referring to increased chances of getting better jobs in general, rather than focusing on a specific career. A substantial minority, however, had a specific career in mind, and required their degree in order to begin that path. Unlike the vocational intrinsic category, described by Beaty, Gibbs and Morgan (1997), the students did not focus in any detail on the value of their courses for their future profession, probably because they did not have any experience of the career that they had in mind. This does not imply, however, a vocational extrinsic orientation, where the student sees the course simply as a necessary step in getting a job. Instead, the sense was of students having quite vague ideas about how the course might be useful for a career.

When the students talked about psychology specifically in relation to a career, they continued to be fairly vague about how the course would be useful. There was often an indication, however, that they saw the content of the course as relevant to their future work. Two students doing Nursing commented on how well the psychology course complemented their studies in Nursing. Some students valued psychology because it was a wide, non-vocational, subject which would give them plenty of scope for choice when they came to decide on a career.

I want to be a journalist and so I think understanding people well is very important ... I didn't want to do anything vocational, 'cos I want to be a journalist, or
perhaps do a law conversion course, after I've left university. So, I didn't want to do anything vocational straight off.
(Sean, first interview)

In addition to these four main categories, one student mentioned a sense of achievement and pride as being important, and another raised the importance of proving to himself that he could complete the course. A small number of students also talked about using university as a way to avoid working, or to avoid taking responsibility. It was rare for students to mention interest in a subject as a reason for choosing to enter higher education, perhaps because these students had generally not studied their subjects before coming to university, and so would not have had a chance to develop that interest. Once they were at university, however, students picked out psychology and other subjects as being potentially interesting, and developed those interests as the year progressed.

Looking at the categories, they did not seem to show any obvious conceptual link with a particular approach, or aspect of an approach. As students typically showed a combination of these categories, it was not possible to map their reasons directly onto their approaches. It was striking that none of the students, with the exception of Leane, mentioned developing their ways of learning as a reason to value higher education. It seems reasonable to suggest that, had development of learning been a more common goal, more development would have occurred for these students. Although development was mentioned as a benefit within the non-academic benefits of university life category, this referred to more general personal development, rather than development of students' learning ability.

For the phase two group only, development across and within these categories was charted\(^2\), however, no clear indications of development were found. Overall then, there seemed to be little explicit link between students' reasons for entering and valuing higher education and the development of their learning. However, it is clear

\(^2\) This was done in a similar manner to the analysis of the development of students' approaches in the preceding section. This analysis was limited to the phase two group because these issues were not considered developmentally in the interviews in the first phase of the study, but comments by some students in that phase suggested that this should be done in the second phase.
from the case studies (discussed later in Chapter 7) that these aspects can be relevant for understanding students’ development.

**Students’ reasons for choosing and valuing psychology**

We now come to the categories developed to describe students’ reasons for choosing psychology, and for valuing it once they had begun to study it. There were three main themes, by far the most common of which was that students had thought the subject was interesting, and continued to find it interesting. Related to this interest, many students mentioned the relevance of psychology either to their lives or to understanding society, including the potential of psychology for helping others. The final major category was the relevance of psychology to the students’ careers, as described in the previous section.

**Interest in psychology**

The majority of the students cited interest in the subject as one of their main reasons for choosing to study psychology, although few had much knowledge of the subject before coming to university. Most often they had either no background knowledge, or had done a small amount of reading, which led some to be quite surprised by the subject matter taught. Despite this, it was striking how many of the students spoke about being very interested, or fascinated, by at least some aspects of the course. In some ways this is like the academic intrinsic category identified by Beaty, Gibbs and Morgan (1997), but it is not as strong. Academic intrinsic students were described by Beaty and colleagues as following their interest in the subject above all else, and as being syllabus-free. This was not the case with the students in the present study.

One of the main reasons I actually chose psychology and philosophy as a joint course, is this mind-body problem that I looked at when I was about sixteen. I thought that was absolutely fascinating ... psychology is just unstoppable, I mean we’ve got nowhere, we know a couple of things in relation to the size of the brain. It’s almost pathetic in a way as a subject, because we just do know so little about such a complex thing. But there is nothing else within science, or I mean any form of knowledge, that has got such uncharted territories, and that’s so exciting for a subject.

(Martin, third interview)
Relevance

A number of students commented that they valued psychology because they saw it as relevant, either to their lives, to understanding others, or to understanding society. Some students commented that studying psychology had made them reflect more about themselves, although they did not report major changes based on that reflection. Others commented that the potential for psychology to help people, or to have a positive effect on society, was one of the reasons that they valued it as a subject. This category picks up elements of Beaty and colleagues' (1997) personal intrinsic category, but does not have the same sense of the students trying to better themselves.

I know people have said to me ... what is the point (of psychology), and I’ve definitely heard people express cynicism about things like Pavlov’s slavering dogs, and why bother with this type of thing, and what has it to do with life ... (But) I think it is important and really interesting ... I think it’s all about the behaviour of people and I think that’s something we would all benefit from knowing more about really ... I think people benefit a lot from looking at their behaviour, and then, I suppose then, you can modify it if you needed to, and obviously there’s people with real problems that psychology can help. (Kirsty, third interview)

Both the interest and the relevance reasons for valuing psychology seem to be conceptually linked to a deep approach. Indeed, interest in the subject could potentially be seen as part of a deep approach. It is considered separately here, as the distinction is made between interest in one’s academic work - which is likely to be related to the learning processes used in that work - and interest in the subject, which may not be related to learning processes. For example, a student who is interested in psychology generally, may still be bored by a particular revision topic and therefore choose to memorise it without trying to understand. Perhaps the presence of these interest and relevance motives is one part of the explanation of why significant development for these students was most commonly related to a deep approach to studying. Again, direct mapping with the deep approach categories was not possible, because some of the categories were so common that differentiation between students on that basis was not possible. It was possible, however, to chart the development of the reasons for valuing psychology so as to see if that related to any other aspect of
the students' development. Again these analyses were limited to the phase two group.

It was found that the most common student motive for valuing psychology was interest and this was true throughout the year. Looking in more detail, however, it seemed that a number of the students were finding psychology more interesting at interview three. In several cases, this effect was strong enough for the students to want to switch to having psychology as their main subject. This might, in part, be explained by more of the students coming to value psychology because of its relevance between interviews two and three. Indeed two of the students mentioned this explicitly as a reason why they were finding the subject more interesting. Good quality lectures were also mentioned as helping to develop students' interest. Sean picked up both of these issues:

(The lectures have) been very interesting this term ... I think 'cos he gave a lot of material and he was very good at presenting it, very interesting. We did a personality test ourselves at the beginning ... then he related it back to how we had performed, like, in his last lecture, so it was all related very well ... If you can see how it relates to you ... I always find it much more interesting than if it's just sort of abstract, and you're just studying it for academic purposes.

(Sean, third interview)

At the group level this shift towards finding psychology more interesting and relevant seemed to coincide with the introduction of efforts towards personal understanding by some students. But this link did not hold up under closer investigation at the individual level, which suggested that there was no evidence that the particular students, who had developed with respect to thinking for yourself, had generally come to see psychology as more personally relevant by the third interview.

There was no other aspect of the students' development which had an obvious link to these changes in students' reasons for choosing and valuing psychology. So, it seemed that no direct connection could be made between these changes and other aspects of students' improvements in their learning. Perhaps, however, this increased sense of the value of psychology would be generally supportive of students' learning and may thus have had some indirect role in their wider development.
Students' prior learning experiences

Sixteen of the nineteen students in the main interview groups had come to university soon after leaving school, and therefore this analysis is focused on that setting. The students’ experience of learning in the school setting was relevant to the development of their learning at university for two main reasons. Firstly, the students often felt that their learning at school was similar to the learning required at university, which may have limited the extent to which they felt the need to develop. Secondly, the students’ attitudes to advice about their learning were influenced by their school experiences.

It was clear that, for many of the students, aspects of their learning at university were very similar to their learning at school, as illustrated by the extracts given below. Some of the students explicitly mentioned how similar they felt their school learning was to their university learning.

For biology (at school) ... I wrote notes under topics ... then sub-headings and things, then wrote bullet points to remember and also like trigger my memory off... I just did lots of ... practice papers for (the multiple-choice part of the exam) ... I wrote (my notes) in heading titles and then subheadings which triggered of memories of other things ... I take (it in) a systematic way rather than just kind of lots of things everywhere ... (I write the notes out more than once) ... long notes, and then short notes, then bullet points and short notes.

(Shona, first interview)

S: (For the psychology class examination) I went through the notes first, wrote my notes out. Then I went through the Study Guide ... I did the multiple-choice questions just to make sure I knew really the ideas ... (I did it like I revised at school). Yeah, I always write the notes out, then write the sub-notes on that. Read it through, test myself ... Yes, that's just the way I keep doing things, read it, write it, write it, write it...

I: And did you modify anything this time?

S: No, I don't think so. (Shona, second interview)

According to the students, it was rare for their schools to provide them with advice about learning at university, beyond brief comments that the students would have to work more independently and that they would have to take their own notes in lectures. This may have led some of the students to have a sense that learning at university did not require major developments in their ways of learning. Some of the students also commented that they felt that Sixth Year Studies or ‘A’ Levels had
helped them prepare for university, as they had to work more independently on these courses.

Around a third of the interviewees had received some study skills advice at school. These individuals were divided fairly evenly between those who were positive about this advice, and those who felt the advice was unhelpful. Those students who reacted well to the advice seemed to have responded by making some specific limited changes in their study methods, although the student in the first quotation given below seems to have gone a little further than this. It appears that the students did not generally experience more significant transformations, which might have sensitised them to the possibility of transforming their learning at university. Those students who had negative experiences sometimes expressed these quite strongly and this may have put them off later advice, as in the second quotation given below.

The study skills things (at school)? They were quite good ... the only things that I remember which were quite helpful to me, were that you had to always be objective about everything you did, and I was very unobjective, I wanted to do everything and do it now. But no, you had to set a task for yourself, be objective, and do everything in the present, because obviously it's far too easy to having cups of tea and wondering if it would ever get done ... The key words were 'objective' and 'present', and they seemed to work.
(Leane, first interview)

No (I have not looked at anything on study skills) that's a categorical no, not at all ... I prefer to read up about something else ... I suppose I like arrogantly to think I do it well enough ... I was put off, probably, from study skills at school, which is very dull ... you sit there and they patronisingly say how you should study, and study more, and do this, and have breaks, and that sort of thing, and really ultimately you will do it as you want. I know people (who) sit in a room playing music and revise that way. Other people just sit in a room and have cotton wool in their ears. It just all depends on you and how you study...
(Shona, third interview)

**Students' reaction to study skills materials at university**

The general picture, in relation to students' reactions to study skills advice, was that the students made little use of such support. Where students did look at such materials, they typically had little influence on their learning. There seemed to be a range of reasons for this state of affairs, including some students being confident in their own methods, and others having negative perceptions of the materials.
The students in this study had access to a range of study skills advice. Firstly, hour-long sessions were advertised on various learning activities, such as note taking or essay writing. Secondly, there was a range of study skills books displayed prominently in the library, in an area students would need to visit in order to write their essays, and the students indicated that they were aware that these resources were available. In theory, the students in the first phase should also have had access to advice about learning via a computer package which explored issues such as approaches to studying, however, only one student seemed to be aware that this package was available and she had not used it. Some of the students also had access to study skills help from a range of other sources, for example, books owned by friends or by their tutors. The nature of the materials available was not explored in any depth for this study, as so few of the students made any use of such support. Also, those students who sought help looked to a diverse range of sources, which meant that no single source was used sufficiently to give a clear idea of its effectiveness.

Students gave a range of reasons for not having sought study skills help. Firstly, around one third of the students rejected such help because they were confident in their own methods. In all of these cases the statements were made either before the students had received any grades, or after they had received reasonable grades, which may explain, and in a sense justifies, their confidence. Nonetheless, from the description of the typical nature of students' approaches, one might argue that further development in their learning was possible and desirable. The nature of the conceptions of essay writing expressed in this study also supports this assertion (see Chapter 6).

A few of the students explained their failure to use study skills materials by saying that they would wait until something went wrong in their learning. As none of the students giving this reason received any poor grades during the period of the research, they did not have this incentive to look for advice. Grades, as a motivation for
learning development, was an issue more generally for the students in this study. No student scored below a ‘C’ in either of the essays that counted for their final grade, which may be partly responsible for the low interest in study skills help in this group. There were some poorer results in the class examination, but only one of the students was motivated by this to seek study skills advice. The range of the students’ grades is shown in Table 5.7.

Table 5.7a: Breakdown of percentage grades for the phase one group (N=10)

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>25th Percentile</th>
<th>50th Percentile</th>
<th>75th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>class exam</td>
<td>44</td>
<td>69</td>
<td>46.50</td>
<td>55.00</td>
<td>61.50</td>
</tr>
<tr>
<td>1st essay*</td>
<td>46</td>
<td>74</td>
<td>55.75</td>
<td>60.00</td>
<td>66.50</td>
</tr>
<tr>
<td>2nd essay</td>
<td>58</td>
<td>82</td>
<td>60.00</td>
<td>65.50</td>
<td>70.50</td>
</tr>
<tr>
<td>3rd essay</td>
<td>60</td>
<td>73</td>
<td>62.75</td>
<td>67.00</td>
<td>68.00</td>
</tr>
</tbody>
</table>

Table 5.7b: Breakdown of percentage grades for the phase two group (N=9)

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>25th Percentile</th>
<th>50th Percentile</th>
<th>75th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>class exam</td>
<td>39</td>
<td>66</td>
<td>47.00</td>
<td>60.00</td>
<td>64.00</td>
</tr>
<tr>
<td>1st essay*</td>
<td>55</td>
<td>68</td>
<td>59.50</td>
<td>65.00</td>
<td>67.50</td>
</tr>
<tr>
<td>2nd essay</td>
<td>54</td>
<td>78</td>
<td>58.50</td>
<td>64.00</td>
<td>68.00</td>
</tr>
<tr>
<td>3rd essay</td>
<td>50</td>
<td>69</td>
<td>61.50</td>
<td>65.00</td>
<td>68.00</td>
</tr>
</tbody>
</table>

* first essay does not count towards final grade for the year

A few of the students said that they would not use study skills materials because they did not think highly of such help. Some of these students indicated that they would prefer to study in their own way, or learn from their own mistakes. This suggests that they would expect any advice provided to be didactic. In some cases this opinion was apparently held despite not having had any experience of didactic advice. Sean also seemed to hold negative attitudes towards study skills, despite not having had the experience to justify this.

S: Um, (study skills materials) just seem, like, written by some guy in an American university, just to make lots of money... I don't think they could help me in any way at all really.

I: Have you ever looked at any?
S: Um, well, we've been given handouts and stuff from teachers at school and from tutors here, like how to write an essay.... I don't think I've ever actually looked at one of the books...

(Sean, third interview)

Some of the students also questioned whether it was possible to develop through using study skills advice, either because they were not sure generally that this was likely, or because they felt that they, personally, would be unable to benefit from such advice. Alistair expressed this latter position; he felt that he would be unable to take advice on board, even if the advice was good.

No (I have not done anything on study skills), not really no, not at all in fact ... I assume if I went to the study skills books, or a study skills workshop, or something, it would tell me to organise my time better and to write notes in this way and to do this, that, and the other, and to improve it. I would go away and take no notice of it ... What makes me take no notice? Bloody mindedness I suppose ... I would think, 'Well, that's nice but I don't want to' ... I think it would be a waste of my time to do it, because it would say things which I'd think: 'Ah it's very sensible, I should do that, that would really help me', but I wouldn't take any notice of it...

(Alistair, third interview)

Around half of the students had something positive to say about study skills. These were generally just brief comments that they believed that such help could be useful and that it was possible to change one’s learning. Despite these more positive attitudes, there was a strong sense from the students’ comments that seeking study skills help was not a high priority for them:

(No-one does anything on study skills) because no-one thinks about it until it's two weeks before the exam and they think, 'Oh I'd better do something now'.

(Claire, third interview)

No (I've not done anything on study skills) ... I actually meant to go to the talk on lectures and taking notes, but it was the same day as the careers, the Academic Fair, and I got held up in that ... I read somewhere, too late, but I think there was another session on note taking ... If I'd known about that, I would have gone to it... (Emily, first interview)

Some of the students involved in the study did seek study skills help, but these efforts were limited. For example, they might have attended one lecture, or had a brief look at one book. Only one of the students, Susan, felt that looking at these materials had changed her learning. The others felt that they had not developed as a result of the help they had sought, for example, because they did not see the ideas offered as an improvement on their own methods, as illustrated by Julie’s comments. Alan’s
ideas illustrate just how different students’ beliefs about study skills can be from what we might expect.

In freshers' week I went to 'Writing notes', but they basically told me to write how I normally did anyway ... Some people it will help because ... some of them are mature students ... It must be very difficult not to study for, I don't know, for ten years and come back into it, and suddenly have to start studying and thinking ... I suppose it's very good for them... Most of the skills that the person said about writing notes, or whatever, I'd actually been told at school and ... it just didn't seem particularly relevant to go to any of the others.

(Julie, third interview)

This photo reading course that I am doing, which is one of those crazy schemes where you are supposed allegedly (to) be able to read at 25,000 words per minute ... It's sort of absorbing (into) the sub-conscious mind through the eyes ... (I got involved with that because) I wasn't reading enough and I thought right I had better do something about this ... Yeah, it did sound very believable. Maybe I am just a schmuck, but so far I feel that I have progressed in it. So it is perhaps working. (I feel I have progressed because) ... you have to go on what is called the photo focus state. And to do that you have to look at the book and you have to be able to see ... what is called the blip page which is a sort of page, almost like an inch and a half page across between the two pages of the book ... If you are in that state and you can keep it steady then you can flick through the pages of the book maybe ... a page a second and hopefully your sub-conscious mind is absorbing all this information...

(Alan, third interview)

As well as the general study skills materials available to students, they also received information specific to psychology essays. Their reactions to these materials are discussed in detail in Chapter 6. To summarise briefly, the students were more likely to see the relevance of, and make use of, help specific to their essays, but they still tended not to engage strongly with this help, and they had difficulty in benefiting from the advice that they received.

Students’ experiences of the student learning lectures

A further opportunity for the students to reflect on their learning was provided by the lectures they received on student learning topics such as approaches to studying. These lectures were obviously relevant to the development of students’ approaches, yet, on the whole, the lectures did not seem to have much effect on the students’ learning. In some cases this may have been due to students’ justifying their ways of learning in relation to the lectures, and for some students negative attitudes to the lectures were a problem. More generally, the implicit lack of importance given to the lectures within the course may have lessened their impact.
As mentioned in Chapter 3, the lectures involved a general introduction to research related to approaches to studying. The students were also given the opportunity to complete the most recent version of the Approaches to Studying Inventory (ASSIST, Approaches and Study Skills Inventory for Students, Entwistle, Tait and McCune, 1999) although they did not receive feedback about their scores. The lectures also covered conceptions of learning and research into differences between students in the forms of understandings they developed in preparation for final year examinations, or for essay writing (see, for example, Entwistle, 1995). Additionally, students had the opportunity to write one of their three essays on a student learning topic, although few of the students in the interview groups chose this option.

In terms of their general attitudes to the lectures, the majority of the students felt that these were relevant to their learning, and a number of the students commented that they found the lectures interesting, as in the first quotation below. Several of the students had more negative attitudes to the lectures, either suggesting that the findings reported were just common sense, or that they had not seen the lectures as relevant to their learning, as in the second quotation given below.

(I thought the students learning lectures were) quite a good lot of topics... It was suddenly quite personal I suppose ... This actual learning thing seems specifically relevant to you now ... I think I saw myself in all this ... I have not been aware whether there were differences in the way that you learned and making me aware of it I think, yeah, it influences you, once you are aware of it, because you could, sort of, manipulate the way you would tackle something ... I don't know if I do consciously think, 'Right I am going to deep learn this', or something. But ... you would maybe take a bit more time. You'd want to try and understand it more... I wouldn't say its changed the way I learn. It's just ... backed it up, knowing that this is the recognised way people do learn...

(Leane, third interview)

I didn't think that something, which seems like common sense, would be studied in psychology ... I thought that was fairly obvious, that if you wanted to understand it, and you made an effort to understand it, then you would; which when I do read something, I do tend to make an effort to understand it. Not to learn the facts, because, I don't know, I have always done that. That's the way I've been taught, to understand it, and the exams that I have done have called upon understanding largely speaking ...

(Alistair, third interview)

One thing that was striking about the students' discussion of the student learning lectures was the number of students (about half) who noted that they did not remember much about the lectures. Even those students who did not say this
explicitly were not able to report in much detail about what they had learned in the lectures. This is a bit surprising, given that the relevant interviews were carried out between four to nine weeks after the end of the lecture series, but without having students’ recollection of any other lectures to compare it is not possible to say whether this is typical. Most of what the students were able to report about the lectures was to do with approaches to studying. The students knowing that this was one of the researcher’s main interests may have influenced this.

The students’ comments about the approaches were considered in more detail and it was found that most of the students were able to mention some elements of the deep and surface approaches, but that none of the students was able to give a complete description of them. The first two extracts below illustrate some of the weaker accounts given, whilst the second two extracts illustrate some of the better understandings. None of the students mentioned the strategic approach; it may be that this is because this approach was not discussed in such detail in the lectures.

I think we were doing the one about in-depth reading and passive reading. Well, if you looked at a thing superficially you couldn't remember it, but if you actually read it because you wanted to and you were interested in it, it stayed with you longer than it did when you read it any other time...
(Claire, third interview)

Well, it was sort of saying ... people that take surface approach just forget things. Like, you read over it just before an exam and you completely forget it afterwards, and you come out of the exam and you just don't remember at all. But, if you sort of read about things, then it's going to stay in your mind a lot longer. Just I mean it's true from what I've done ... Things you do a lot more reading on, you just remember it, 'cos you sort of understand it.
(Liz, third interview)

(From the essay on approaches I learned that) there's a deep approach and a surface approach to learning, and the surface approach is learning facts and not understanding the whole picture. A deep approach is understanding the whole picture and, you know, actually understanding. I suppose surface is more just remembering things, abstract ideas, and so surface approach can be good for learning scientific - I don't know names, or equations, or whatever - and is used much more in scientific areas, but it can be misconstrued as the right thing to do, even in scientific areas, 'cos it's understanding of the knowledge rather than knowledge itself...
(Sean, third interview)

When I'm learning for exams ... I tend to do more of what they call surface approach, just learning facts and figures to regurgitate if the question is asked. I don't tend to do the revision for deeper understanding, or anything like that...
(Julie, third interview)
The students were also asked whether they felt that the lectures had influenced their learning in any way. Most of the students who felt that the lectures had had some effect on them spoke about deep and surface approaches to studying, with a deep approach being seen as desirable. None of the students showed any dramatic changes in relation to the lectures, but, for two of the students, the lectures seemed to support important changes in their learning that were happening for a variety of reasons. Both of these students (Gail and Leane) are described in more detail in case studies in Chapter 7. To summarise, they both shifted to a more developed deep approach and felt that the lectures affirmed this change.

A few students did feel that the lectures had caused some more minor changes in their learning. One student felt that the lectures had influenced her to do a bit more reading and to shift towards a deeper approach. Another felt that the lectures had influenced him when they were given, but he could not now remember in what way. Four students felt that they had been influenced by the lectures in the sense that they could see now that they could learn in better ways, but none of them felt that they had yet put this into practice.

The first two students quoted below seemed to be justifying their own way of learning in relation to the lectures in such a way that they would not be inclined to change. This raises the issue again that students must be prepared in some way to benefit from advice about their learning. Two further students resisted change in relation to the lectures, one by claiming that her main problem was laziness so this advice could not help her, and one emphasising that she did not want to change, as shown in the third quotation below.

I am not all that deep, but I am not surface ... It was quite worrying to think, 'Oh no, if you do this it means ... you have an exam and then two or three months later someone asks you a question and you forget'. (But) I just feel that's natural and I cannot study everything into detail, deep approach ... Some things I know which will stick more than others, I don't see anything wrong with that ... I do need to study differently, I try to ... I think I should do it more deeply, to try to understand things, and make them stick for a lot longer than they do sometimes. I am not too bad I don't think. (Angela, third interview)
(The lectures made me think) I wasn't what they call a deep learner, but it was brought through during the lectures that that didn't matter, because that is what is developed when you're here ... I tend to do more of what they call surface approach, just learning facts and figures to regurgitate ... But I mean the person that's doing it said they didn't really want to make us depressed, just wanted to show how things changed ... I don't think (my learning has) really changed ... I mean I have tried to change it but, for class exams in particular, I don't have much time, so the surface approach is the best way of doing it ... I always have, with taking notes, done deeper reading for more understanding anyway ... it's just for revision I realise that I'm not doing the depthness with that.
(Julie, third interview)

(I don't think the lectures have caused any change in my learning because) I'm quite stubborn like that. If I can get by with my old way of studying, I'm very loath to take on new methods. You know, not just on writing essays, just about anything really, like for example driving a car ... I keep the clutch in too long or something (but) it gets me from A to B so I think to myself, 'Well why should I change', I might need a new clutch but ... I like to stick to my old (ways) ... And then when it comes to studying, I've honestly studied like that since I started exams when I was eight ... I've studied like that all these years, so I've managed to get to uni, so it can't be that bad ... I'm frightened that (change) won't work ... and it will be a waste of time, so I'll just go back to my old method anyway ...
(Fiona, third interview)

A final possible explanation for the limited impact of the lectures on students' learning, is the departmental context within which they were presented. The lectures were given in the middle of the spring term, when the students had already completed their first essay and the class examination. If the content of the lectures were seen as central to students' learning, it would have made more sense to give the lectures earlier in the year. The content of the lectures was not covered in the course text, which was the basis of most students' reading. Also, the lectures were not included in the class examination, which meant that all of those students who gained an exemption (about half of the year group) would not have had to revisit this material, unless they chose to do an essay on that topic. In part because the readings on this topic were less accessible, most students did not choose this essay option. Further, the lectures were not considered in the tutorials of the students in this study.

Overall, these findings raise some important issues for the provision of advice for students about learning. The students in this study did not generally have well-developed deep and strategic approaches to studying, even by the end of the first year. Yet, it is clear that, despite the content of the lectures often being perceived by the students as relevant to their learning, they did not generally feel that they had made significant changes in their learning due to the lectures, although some of the
students noted that the lecture had given them a greater understanding of ways in which they might develop.

Students' experiences of their tutorials

The tutorials were not a central focus of this project, however, there are data which are relevant to understanding students' development. The tutors did see the tutorials as a place for students to develop their thinking about psychology, and to get advice about learning, although this role was typically implicit rather than explicitly stated. On the whole, the students did not see the tutorials as a place to develop their ways of learning, the only exceptions to this were a few students who mentioned getting help with essay writing, or gaining confidence in speaking in front of others, as a benefit of the tutorials.

There were also some students who saw the tutorials as a place to develop their thinking about psychology. When discussing the reflection on psychology promoted by the tutorials, the students talked about being made to think about other areas in psychology, to broaden their thinking by seeing different points of view, to discuss the subject with guidance, or to develop their interests.

(The tutorials are) interesting because the different topics are interesting, the way they present them... You think about things you haven't thought ... then you read evidence to back them up and things like that ... We discuss and talk about what was the good and bad thing about it, and what conclusions we can come to, and things like that...

(Angela, second interview)

I suppose this way (of doing tutorials) sort of makes you think for yourself, because you have got to rehearse it. You've got to read all the information, you've got to talk about. You have to be able to give your viewpoint and then do a discussion ... I think it's just making you think more about different things in psychology that you wouldn't cover maybe in the lectures...

(Claire, second interview)

Although the students saw the tutorials as a place where they could develop and expand their understanding of psychology, a few students also commented quite negatively about the extent to which this was possible in the tutorials. They felt that tutorial learning had a lot of potential, in terms of developing their understanding, but that this was not happening as well as it might, either because the tutorials were only
every two weeks, or because the students felt there was a problem with the quality of the tutorials.

At the moment, quite a lot of people in the group presumably have (psychology) as an outside subject and they don't tend to contribute; we've got the quietest tutorial group I've got in all my subjects and that's really really difficult ... (The tutor) has tried everything, basically, to get people to speak, but it's just kind of hard. One of the problems, as well, is that the conversations tend to degenerate ... (People) tend to come up with some sort of random comment and it just, you know, cuts the whole conversation dead ... it just doesn't quite go the way I want it to go; it doesn't quite go deep enough, or it doesn't quite cover a particular area ... it's great having a tutor ... someone to talk to ... conversations, which is the best way of learning, and it is really enjoyable. As long as the conversation doesn't become too out of control; ... that's really the dilemma that's facing me in the tutorial.

(Martin, third interview)

The conclusions that can be drawn from the tutors' comments on the functions of the tutorials were limited, as the tutors were only interviewed in the second phase, when three different tutors were involved. This meant that the development of only a few of the students relates to each of the tutors. Nonetheless, there are a few points worth mentioning in more detail. All of the tutors mentioned help with essay writing as a legitimate purpose of the tutorials, unlike most of the students. Two of the tutors also mentioned that they would provide help with other aspects of students' learning, although this was not a central theme, but rather something that tended to be provided in response to requests from individual students. None of the tutors had done anything in relation to approaches to studying, and comments from one of the tutors suggest why this might be the case.

(I don't do anything on approaches) principally because it is slightly outwith basic psychology ... I feel that anything that is in (the course text) I can basically give a good go of, but that is a very particular field ... I mean I am familiar with some of the stuff that is covered, but I wouldn't want to say anything which would contradict what they'd been told in lectures, or what the reading has said.... I certainly feel that I could be misleading students if I gave my own interpretation and that proved to be wrong ... so best not touch it basically.

(Tutor 2)

When discussing how the tutorials developed students' thinking about psychology, the tutors talked, for example, about helping students to think about statistics and methodology, encouraging them to develop their understanding and their interest in psychology, building students' ability to discuss and express their own views,
helping students to consolidate ideas from different parts of their course, and encouraging critical thinking, as illustrated in first two extracts below. It seemed, however, that these developments were something that the tutors tried to encourage through tutorial interaction, rather than something that was made explicit for the students. The tutors also noted problems in achieving these aims, as illustrated in the second two quotes.

(Tutor 2) Allowing them to think about topical areas and getting them to discuss, and think about, and be critical ... When they have described a theory or an experiment, I'll say, 'But, you know, what do you think about that? Do you think that is any good? Do you think there are problems with that?' and actually allow them to be critical, encourage it, because I am not sure whether people think it is appropriate to criticise ... just (to) be aware that there are different interpretations of every theory, there are different views on which theories are relevant, and which aren't relevant, and there is different view of the best methodological approaches to studying an area...

(Tutor 1) All of them gain the ability to hear arguments, and reflect upon them, and put their own point of view... if I feel a particular individual is sitting back and it's all washing over him or her then ... I'll direct a specific question at that person, with the aim of having that person reflect on what the current state of the argument is, and make some kind of sensible comment ... They are also developing the skill of just working inside a large group and understanding how it is that discussion can be used to help them in their own work ... They are also passively picking up an understanding of how a small academic group develops an argument, and how various argumentative points appear, and disappear, inside an argument.

(Tutor 1) Very often the discussion is really quite poor ... because they just don't know enough about psychology yet to understand the difference between a well-grounded empirical assertion and somebody's opinion. So, you get a lot of personal life history, and you get a lot of anecdotage, and you get a lot of, 'Well my view is this, that, or the other'...

(Tutor 3) The first half hour I just was trying to get from them what was happening in the lecture series at the time ... trying to encourage them to tell me what it was that he was talking about, and try and reflect on whether they thought this was directly helpful to them, an understanding of where they lacked ... (But that was like) drawing teeth ... it seems to have been a constant uphill struggle... I've found it extremely difficult to get anything approaching a discussion going with them at all...

To summarise, for both the students and the tutors, the idea of tutorials as a place for developing one's ways of learning, or ideas about learning, was implicit or in the background, rather than a central and explicit role of the tutorials. Although there were no direct indications from the majority of students that the tutorials had prompted development in their learning, the possibility cannot be ruled out that, where students had developed in their deep approach, the tutorials had played a part...
in this change. The tutors’ interactions with students in relation to their essays also provoked some development, and this is discussed in Chapter 6.

**Students’ interactions with individuals other than academic staff**

It was very rare for students to mention having discussed their learning with other individuals, for example family members, even though students were often asked in the interviews if they had asked anyone for advice. Nor did most students seem to discuss their learning with their peers. A few of the students explicitly mentioned that discussing their learning was something that was perhaps not considered acceptable within the student culture, but these sort of comments were unusual.

I really felt slightly on my own (with my essay) because your mates can read it through for you as well, but no-one wants to read an essay, I didn’t want to read their essay, so why would they want to read mine...

(Shona, second interview)

I don’t make it a big thing to talk about revising for the exam. A lot of people just want to avoid the subject, I just set myself the time for it; I don’t discuss it with anyone.

(Gary, second interview)

Where students had discussed their learning with someone else, this did not necessarily lead to any development, for example, because interaction with peers convinced the students that they were working in a similar way to their friends, or had similar problems, as in the extract below. Only one student seemed to have been given advice she found helpful; her sister had told her to write only the main points in lectures and not to accept the teacher’s view uncritically. Interaction with others was not the central focus in the study, so the reasons for its absence were not discussed in-depth. It seems possible, however, that some of the reasons students gave for rejecting study skills help - such as feeling that they were coping without it - may also have influenced them to not discuss their work with other individuals.

(For my revision) I just write down the main words and the definitions, reading it over and trying to get them into my head ... I just can’t concentrate on it at all. I don’t know what’s wrong with me. (I) just read it over and it just doesn’t go into my head ... Most of my friends are the same ... they sort of just sit and try and do this ... most of my flatmates are doing it the same way as well. Maybe it’ll be in there somewhere.

(Liz, second interview)
How students rated their progress

In each of the interviews, the students were asked to comment on how well they felt they were progressing in psychology, and to explain why they felt that way. This is an important issue, because students would be more likely to change their ways of learning where they felt they were not progressing well. All of the students who commented on this issue mentioned their examination results and essay grades as a means by which they rated their progress in psychology. As mentioned earlier, the students tended on the whole to gain reasonable grades, which may have limited their impetus to develop. Students sometimes also thought about how they compared with other students - for example, in contributing to tutorials.

Most of the students also used intrinsic indicators to rate their progress. Many of the students mentioned enjoyment, interest, and a sense that they understood the subject, as important to their sense of whether they were doing well. The extract given below shows a combination of these elements. Angela seemed to show the view, which was common amongst the students in the study, that the understanding required was a basic understanding of the course content, and that understanding was something quite simple. As the students were gaining a sense of progress from this achievement, they were less likely to feel the need for development. Gail and Leane - both discussed as case studies later in this chapter - seemed to rate their progress against higher standards of understanding, and interestingly these were the two students who made most progress in their deep approach.

S: Judging from yesterday's exam (my progress) was OK ... I understood most of the things as I was going into the exam...

I: And is that mainly how you would gauge your progress, in terms of your marks? Is there anything else that is telling you how you are getting on?

S: My marks, not my marks, but I find it interesting. I understand lots of things so far, I think I understand what I am supposed to understand. Like all that we have been taught, I understand most of it. So I think I am getting on, I am not far behind, or I am not getting off the course or anything ... What we were doing last week, for instance, was quite interesting...

(Angela, second interview)

In addition to the above, about half of the students also rated their progress in terms of how much work they were doing, or how well they were keeping up with tasks
such as the recommended reading. The extent to which they remembered material was only mentioned as a separate reason by two students, but it may be that this was because their sense of progress in relation to their examination grades included a sense of how well they were remembering. Leane was also the only student in the study to rate her progress in terms of whether she was adopting good ways of learning. The absence of this sort of measure of progress in the other students again suggests that development of their ways of learning was not something that formed an focal aspect of their thinking in the first year.

**Students’ extrinsic motivation**

A number of the students reported being motivated to work by the pressure of approaching examination or essay deadlines. This went beyond simply being task focused, as these students often commented that they were unable to get themselves to work until a deadline was approaching. They also commented that they would work less if they were not going to be assessed, for example, when they had an exemption, a trial essay, or when they had tutorials where they felt they could get away without doing the reading. In addition, there was sometimes a sense that assessed work was a chore, something that just had to be done. Many of the students mentioned pressure of assessment as one of their motivations, but a few, like Martin, showed this motivation in an extreme form.

_Hopefully I am just going to keep doing what I am told to do and not slack off, but I say that, I have big intentions... He has set us this thing to do ... two people in the group go off (to) research it and come back and talk about it, and everyone else can read about it and try and be able to contribute to the conversation ... The problem with that system, is that it just works well for the two people involved, and the other guys haven’t actually got any motivation for that. There is no reason for really going off and doing the reading, but I am intending to do it, and I will do, but I wouldn’t be surprised if I just don’t get round to it, because I know that I can get away with it..._

At the moment with psychology I think I’ve got a distinction, ‘cos my tutor said ... So, yeah, so he’s told me right at the start of term you don’t need to go to any lectures, and you know why should I then, sort of thing. Which is a bit of a shame. (Martin, various interviews)

This need for the pressure of assessment in order to do work in psychology is likely to have limited these students’ potential for development. This is partly because students motivated in this way had more of a tendency to leave work late, which
allowed less time to adapt their methods. Such motivation also made it unlikely that students would make changes unless they seem to be explicitly required for their assessed work. This made development in relation to aspects of a deep approach, such as getting an overview or thinking for oneself less likely.

**Metacognition and self-regulation**

The review of the literature had demonstrated that a wide range of aspects of students' learning could be subsumed within metacognition and self-regulation, these included some aspects that overlapped other concepts, such as approaches to studying. Accounts of metacognition and self-regulation in education often include three main elements: knowledge and beliefs about learning; monitoring of learning; and regulation of learning. The analysis reported in this section focused on students' monitoring and regulation of their learning, as these were likely to be directly related to students' development. To focus the analysis more tightly on the research questions, the emphasis was to look only for monitoring and regulation which might affect students' development.

Within this metacognitive activity, three main categories were identified which varied in terms of the focus of students' monitoring. These categories were monitoring efficiency and related regulation; monitoring time management and related regulation; and monitoring understanding and related regulation. Although monitoring and regulation were combined to define these categories, it was possible for students to monitor without regulating. Often, the students' metacognition took the form of reacting to problems, or recognising the value of a way of working retrospectively. Planned efforts to improve without the stimulus of some problem were unusual.

**Monitoring efficiency and related regulation**

This category describes students reflecting on the efficiency of their study methods, generally because they had come across a more efficient method unintentionally, or
because they realised they were working too slowly, rather than any spontaneous attempts to improve their methods.

I think by writing on a computer I do use a completely different style to how I'd write it if I was writing it out by hand, because when you're writing (by hand), you have to think of the whole essay as you are writing it ... Whereas on a computer ... you don't necessarily have to think how you're going to put it at the end, because you can change it all around ... We were told that it had to be printed ... so I thought I might as well just whack it straight into the computer ... It saved time, and it linked it all together quite well.

(Sean, second interview)

I don't think I can carry on for much longer looking at everything, writing everything down, I think I'm just going to have to read it and underline it in the book, because I'll be there all night if I try to write everything down... But I think I'm just going to redo it if I don't understand it, I just don't have enough hours in the day.

(Fiona, first interview)

Monitoring time management and related regulation

In this category, the students reflected on how they should manage their time, and make changes accordingly. For example, the student might realise that their time management had gone wrong in some way, and then would try to improve it for next time. Another typical occurrence was where students discovered that they were best able to write essays if they worked intensively over a short period of time. Monitoring and regulation of time management can be seen as development of one aspect of a strategic approach to studying.

I was finding for the first few weeks that I was concentrating all my time on trying to do the maths work ... (I didn't want) to get caught up in spending far too much of my time on one subject... So I changed that (subject) and now I think I have got quite a happy medium ... I also had a job over Christmas, and that was a big mistake ... I lost an awful lot of time just before my first exam ... I spent far too much time researching (a biology essay) ... So therefore to manage my time, I have to learn to divide my time equally, and say, right, that's the time set aside for studying psychology ... and trying to get a good balance.

(Susan, third interview)

(I did the reading for the essay) over a few days, so it was all, I kept it all in my head, instead of spending like a week over it. So I could remember more what was in the books, and how it was set out, and that made it a lot easier as well, instead of having to retrace what I'd written previously... I'm going to maybe leave doing lecture notes for a few days ... and just concentrate on getting my essay done, because doing it over a short period of time, when you can hold the reading in your head ... You tend to be more organised with your time as well, if you set it over a few days.

(Gail, third interview)
Monitoring understanding and related regulation

This category encompassed instances where students assessed whether they understood the material on which they were working, along with the regulation that students carried out based on the outcome of that evaluation. This category is related to, but distinct from, a deep approach as defined in these analyses. The main distinction is that the processes within a deep approach are aimed at developing an understanding, whereas in this metacognitive category students are evaluating the outcome of these deep processes.

The central theme in this category was that students tended to monitor their understanding in quite a superficial manner. Their efforts were most often to do with clarifying a basic understanding of the material taught, rather than developing an in-depth personal understanding. By far the most common extracts were those which referred to students not understanding occasional points from the lectures, and looking those up in the course textbook. This was sometimes linked to comments which suggested that the students perceived understanding in psychology as being relatively unproblematic. It is also interesting to consider the sorts of comments that do not appear. Students did not comment on monitoring their understanding of the discipline as a whole, or their understanding of how different parts of the course were inter-related, even though these issues were raised in the interviews. There were a few extracts, such as the second one below, which suggested that students were trying to get a more in-depth understanding.

During the lectures I understand most of the stuff anyway, I mean some bits are a bit confusing, but if I didn't understand something I'd look it up in the textbook. Well, I'd read the textbook anyway, and most of it's quite logical ... so I kind of understood it all the way along...
(Fiona, second interview)

(I read about it in the textbook) because it was frustrating me that the lectures were pretty incoherent, and I didn't understand the sort of structure of where these people were ... on the level of learning, or where they were coming from. So, I thought the best thing to do is to try and understand where they were coming from, and link them all back in. My memory works in a way, I have to understand it before I can remember things. So I need to know ... the sort of level they are coming from, before I can put them in my memory and then remember what they are talking about...
(Alistair, first interview)
A few of the extracts from *monitoring understanding and related regulation* suggested that the students’ monitoring and regulation was leading to development of their learning. For example, Gail came to realise that understanding may require some memorisation of new terminology. Leane described the realisation that she needed to take more time to express her understanding in her own words, otherwise she would be unable to sustain a thorough enough understanding in order to write her psychology essays. She also talked about how she improved her understanding of the readings for her essay. Examples like this, however, where students described development in their learning based on the monitoring of their understanding, were rare.

(In my revision) I was trying to get an overview on the work we had done, so I knew where it all fitted in with each other, and I wanted to have more of an understanding. But to do that then most of all I had to learn some of the work, like, sometimes you have to learn something before you understand it, because if you have too many new terms to deal with you just get confused. I think I maybe didn’t, although I understood it, I didn’t actually learn terms as much as I should have done, I thought that I’d learnt them, but ... I think in the exam that I felt quite confused about some things. I think it’s partly because of such a lot in a short space of time that I hadn’t really, I hadn’t had time to become really familiar with my work here.

(Gail, second interview)

The first time I read it, I really came away feeling I hadn’t actually got anything from it. Nothing had, sort of, stayed in my mind... Because it took a lot of kind of grinding through to understand it, I would whisk through it and of course this is the worst thing you can do with something like psychology, where you have got to understand every little word and how it fits together... A few of the things, I would just skim through it and got completely the wrong meaning, just because I assumed it would be a different meaning and it wasn’t at all ... It was a result of that, I just had this one day when I thought I must be doing this a bit wrong, I must be reading it wrong or something. So, I just sort of read through it a second time very slowly ... I think actually this time I understood what they were talking about, rather than just made up what they were talking about, by making little references back to it.

(Leane, third interview)

**Further examples of metacognition and regulation**

In addition to these main categories, there were a number of other extracts which seemed to show that students had made developments in their learning, based on their monitoring of their studying. A few of these suggested significant changes. For example, the first extract below shows a student who had come to understand the value of having an overview or structure for their material; several of the students
picked up on this. The second extract suggests that the student has moved towards the thinking for yourself category.

What I tried, I think, before that was just to go straight to the information ... and then try and take out the relevant bits. Now what I do more is look at the information and read through it all, get an overall image of what the information is about, so that you can be more selective ... (That arose from) not being satisfied with your note taking ... my earlier notes would be quite dense and occasionally copying out sentences. Which implies that clearly I haven't looked at the whole thing, and I have just been going through it mechanically, and just completely asleep ... Whereas if you skim through it all first, and you see that it all seems to click together, 'cos you get a good overview and you know exactly which areas are important...

(Martin, third interview)

I thought this time to do it in a slightly different way ... I thought to have ideas about it myself and then back them up by actual theories or whatever, and try and do it from my own point of view more ... I don't know really (what prompted that). I just got, I sort of felt that I was writing down other people's ideas and going this is this person's idea then reflecting on that, I don't know. ... it was just I felt I wanted to think myself what I actually thought about this, and see if anyone else agreed at all.

(Shona, third interview)

The effects of metacognition and self-regulation on students' development

Once the categories for metacognition and self-regulation had been established it was important to ask to what extent these activities led to development in students' learning. For monitoring efficiency and related regulation most instances where monitoring was accompanied by regulation led to some form of development, although this was generally small changes in students' methods of working. Most instances of monitoring time management and related regulation also led to development, and for some students these changes seemed more significant.

Table 5.8 give the number of occurrences of monitoring combined with regulation for each learning task, collated across the interviews. It seems from these figures that students who monitor and regulate in relation to efficiency or time management for a given task are in the minority. Monitoring understanding and related regulation is more common, but this is generally a part of students' everyday learning, rather than a process which leads to development. Where change did occur it involved a shift towards a more developed deep approach.
### Conclusion

This chapter has explored the nature of the students' approaches to studying, the ways in which these approaches developed and manifested for particular tasks, and some of the reasons why the approaches did or did not develop. The analysis has focused on the deep and strategic approaches, as the surface approach was of less interest with respect to development.

The students' deep approach was characterised by interest, an intention to understand and related learning processes - such as relating, organising and structuring and getting an overview. The nature of the deep approach for these students was generally quite limited, as compared with previous conceptualisations, with an intention to understand which was most often related to a basic understanding of lectures and course texts. The students' interest did not typically motivate them to do any work beyond what was required to cope with the course, and was not always sufficient to motivate the students to put in as much effort as they felt they should. This relates to Volet's (1997) findings which suggest that 'deep' intentions are not necessarily related to greater effort in studying. The students' learning processes tended to apply narrowly to particular topics, for example, getting an overview of one lecture topic, rather than working across topics.

The students' use of the deep approach was dependent on the task on which they were working, with essay writing being most supportive of this approach. It was only within essay writing that students used evidence critically, or tried to develop more personal understandings. The most profound developments of students' deep approaches also occurred during essay writing, with a shift towards the thinking for
yourself category occurring for a minority of the students; this may be the early stages of the more developed attempts towards personal understandings shown by some final year students (Entwistle, 1995). The reasons for this development are considered in more detail in Chapter 6, but it was possible that both interest, and a sense of the relevance of psychology, were important. Most of the influences on this development described by those individuals who changed were available to all of the students, yet not all students developed in this way. This suggests the need for receptiveness to opportunities for change, an issue which is considered further in the next two chapters.

Development in relation to the deep approach was generally more limited, and most commonly involved changes within the categories describing students’ learning processes. For example, students improved on their methods of relating, organising and structuring. In other words, the students developed in their ability to carry out certain learning processes, but did not typically change which learning processes they used in a particular situation. Students often mentioned self-regulation in relation to a problem in their learning as the reason for these developments.

The students’ strategic approach differed to some extent from the conceptualisations given in the literature. The strategic approach was characterised by an intention to reach an academic standard that students had chosen, rather than an intention to gain the best possible grades. This was coupled with related processes, such as time management and alertness to assessment. The students’ alertness to assessment did not involve trying to meet the preferences of particular markers. Almost all of the students were very task focused, in that they generally only did work that was directly relevant to the course and typically limited their reading to a few of the most relevant texts. This is related to the syllabus-boundness sometimes described in the literature as part of the surface approach (Entwistle and Ramsden, 1983; Tait and Entwistle, 1996), but did not involve the students limiting their work so severely to only what was required to pass.
The strategic approach was more consistent across tasks than the deep approach, although there were some differences. For example, alertness to assessment was not seen in relation to lectures and had different meanings for essays compared with examinations. Taking easier or more efficient options generally only occurred in relation to essay writing.

Development within the strategic approach most commonly involved improvement in students’ methods of time management; students often gave reflection on their own learning as a reason for this change. An increase in the number of students who tried to take easier or more efficient options was also seen, but it is not clear why this occurred. The other aspects of the strategic approach did not appear to develop for these students, and development in the strategic approach did not typically involve such profound changes as sometimes seen in development of the deep approach.

The overall picture for most students in this study was that students’ development was limited, as were their efforts to develop, but five students were exceptions to this picture. Gail and Leane developed their deep approaches extensively. Susan was able to see flaws in her learning and tried hard to improve, although she found it difficult to do this successfully. Alistair and Kirsty showed almost no development. These students’ cases are discussed in Chapter 7.

Perhaps the most striking concern raised in this chapter, is how little students seemed to look for, or benefit from, help with their learning. The analyses exploring the nature of students’ approaches, and the comments that students’ made in terms of monitoring their learning, both suggested that the students would benefit from opportunities to improve. Despite this, the students did not generally seem to grasp the opportunities provided in terms of study skills or the student learning lectures. To explain this lack of engagement with advice about learning, the findings reported in this chapter can be drawn together into a wider picture, which suggests that the students were immersed in an environment which was not very demanding of, or supportive of, learning development.
The first aspect to consider, in describing the learning environment in which students were working, is the students themselves. The students showed a range of attitudes which were not supportive of development, and given that the interview samples seemed fairly representative of the relevant year groups (as indicated by their grades) the attitudes and experiences of the students interviewed are likely to reflect those of the year group as a whole. Thus, the limited nature of the interviewees’ attempts to improve their learning would be implicitly supported, rather than challenged, by the attitudes of their peers.

One aspect of this culture was the students’ aims for their learning. All but one of the students was clearly task focused. That is, their goals in learning were very much to do with getting to grips with the task requirements, rather than the subject more widely. This focus was further narrowed, for many of the students, to the lectures in conjunction with reading taken mainly from the course textbook. In terms of understanding, most of the students aimed for a basic understanding of the course materials, efforts to integrate across course topics were quite rare. These goals were relatively easy to achieve for most of the students, which would give them less impetus for development.

Although all of the students in the study rated their progress partly in terms of their grades, it was rare for them to be very competitive, or to aim for very high grades. Again, the students tended to reach their goals. The grades for the year groups as a whole were slightly more varied, but nonetheless the majority of the students were quite successful. One further point worth mentioning in relation to students’ aims, is that only one student in the study mentioned rating her progress against the extent to which she was adopting good ways of learning.

Two of the tutors made some comments which supported the idea of a learning culture in first year which involved limited aims or engagement, and thus less impetus for development. Tutor 2 suggested the possibility that the background of the students may have predisposed some of them to be less engaged with psychology.
Tutor three expressed the belief that the students’ engagement may have been limited in the first year and that first year students may have felt inhibited in expressing the interest they did have, but he felt this situation improved in later years. It is worth noting here that limited goals and engagement may make sense where students are in the position of having to adapt to a whole new way of life and may not feel able to accept additional pressures.

I think (at this university) generally ... there is a lot of very strategic learners ... (who) do it specifically to pass exams, or to get exemptions. (For example, there is one student who) I can imagine going through the whole of psychology with the aim of going into publishing, or something like that, and really not being motivated to self initiate learning ... Having come from a completely different (institution) ... there was a much much higher level of motivation to learn about psychology among my peer group, I think, than is clear among some of the people who study here.

(Tutor 2)

There is absolutely no comparison between the way in which people in their final year engage with their subject, and get excited about their subject, as compared to how it is in the first year. There just doesn’t seem to, by and large, (be) that licence for excitement in first year, which is pretty difficult to inhibit in the final year ... When you get them individually, they are quite different people, and it seems to be OK to be interested, but in the context of the group meeting, there seems to be a strong inhibition against anybody letting on that they are excited by this...

(Tutor 3)

The second aspect of the learning environment, which was not fully conducive to development, was the advice about learning which was received by the students. To begin with, the students in this study generally came from school backgrounds where study skills help was not a central focus, and they did not generally remember any instances in which such help had caused their learning to develop dramatically.

The provision of study skills advice was also an issue at university. From the interviews, it was clear that the students perceived that the only help provided to the student body in general, was a small number of study skills sessions and a set of books displayed in the library. What other help was received varied between departments and even within departments - to some extent the help the students received in the psychology department depended on their tutor. This sort of provision was unlikely to give students the impression that development of their learning skills was central to their university career. The confidence of some of the
students in their own methods, and the intention of others to wait until there was a problem before seeking help, contributed to low uptake of study skills help. As few of the students used, or developed from, study skills advice, students would not be encouraged towards such support by their peers.

The psychology students did have the lectures on student learning and the lectures were seen as a potential source of help with development, at least by some of the students. There was a range of circumstances, however, which may have reduced the extent to which the students perceived the lectures as important. For example, the content of the lectures was not covered in the course text, the class examination, or the students’ tutorials. It may also be the case that lectures on their own are not generally well remembered by students unless they are followed up in some way.

Overall, the findings suggest that developing one’s learning tended to be something that was done through individual reflection, rather than something that was explicitly discussed and problematised. For example, self-regulation was a much more common explanation given for development than discussion with peers. The tutors did discuss how they tried to draw students towards a deep approach (although the tutors did not use this terminology), but this was not an issue that they raised directly with the students. It seems fair to say that development of learning was not at the forefront of the agenda in these students’ interactions at university.

All of these issues may have contributed to the students’ lack of a sophisticated discourse about the development of their learning. The students did not generally talk, for example, about the possibility that they might rethink their underlying beliefs about learning, or about building and reflecting on their existing learning practices with support from others. The student learning lectures might have provided a language for this sort of thinking, but the students did not engage with the lectures as well as might have been hoped.

It seems, therefore, that the students in this study were immersed in a context which was not fully supportive of development in learning, either in terms of the attitudes
and activities of their peers, or in terms of the learning support that was provided. This situation was somewhat different for the specific task of essay writing, which is discussed in Chapter 6, but even there the support for change was limited.

The issues raised in relation to the context for development suggest the problems inherent in simply offering students general advice about their learning, without considering whether the teaching-learning environment is supportive of development. Even where advice is based on relevant research, and is perceived by the students as relevant - as in the case of the student learning lectures - this may well not be sufficient to support significant change for most students. There was a range of additional issues which also suggested the limitations of providing students with only limited general advice. For example, students may not change because they are confident in their own learning methods, even where there is potential for them to develop. Students may also wish to wait until something goes wrong before they change their learning, and they may be generally resistant to the idea of change. Even where students wish to change, they may not feel able to do so. Negative attitudes to study skills can also be a problem, and these attitudes may be held without justification. Although each of these problems was only shown by a small number of students, due to the size of the overall sample, they are all evidence of the difficulty of supporting students’ development.

Despite these problems, the picture that arises from these findings is not entirely negative. While it seems that students could have developed further, many of them did develop to some extent, and a few changed more profoundly. The teaching-learning context seems to have provided some support for the deep approach and the essay writing tasks seems to have been particularly helpful in influencing students to take a deep approach, and in allowing the development of that approach. Although there were limitations on the extent to which the students engaged with psychology, they did tend to try to understand the subject, and often found it interesting and relevant.
That some students were able to shift their thinking and learning considerably, in an environment that was not generally supportive of extensive development, suggests the need for some sort of receptiveness to opportunities for change, in order for development to occur. The analyses in this section gave some ideas about what this receptiveness might involve, but they did not present a simple picture. Receptiveness might require both the absence of barriers to change - such as a belief that one is unable to change - plus the inclusion of abilities and experiences supportive of change - such as self-regulatory ability. This issue is considered further in Chapter 7, in relation to the case studies. For the moment, we shall look in more detail at the development of students' approaches to essay writing.
CHAPTER 6 - DEVELOPMENT IN DETAIL - APPROACHES AND RELATED CONCEPTS IN ESSAY WRITING

From the overview analysis, it was clear that the essay writing task provided the greatest scope for a more extensive deep approach and for development of that approach. As essay writing was so important, it seemed worthwhile to include analyses specific to this task. This involved, firstly, the generation of a set of categories of description which illustrated the main variations between students in their thinking about the essay task. These categories, and their relationship to the deep approach, are discussed in the first section of this chapter. Having established categories to describe students’ essay writing, it was possible to chart their development for that task, and to explore explanations for that development which were specific to essay writing. These two aspects are described in the latter two sections of the chapter.

Investigating the nature of students’ approaches to studying II - approaches and related concepts in essay writing

The categories created to illuminate the main variations in students’ learning for their essays brought together aspects of students' essay writing processes, their thinking about these processes and their ideas about what was required in their essays. As these elements were strongly inter-related, it seemed more appropriate to retain this combination in the categories. The categories are referred to as conceptions of essay writing, following the work of Hounsell (1997) where students' conceptions of essay writing were inferred in part from the procedures they used in writing their essays. In this section, these categories are explained and then their relationship to the deep approach is considered, in order to provide a description of a deep approach to essay writing for these students.

Conceptions of essay writing

It appeared that the main differences between students were in the ways in which they talked about the role of evidence in their essays, the structures of their essays, and the conclusions of their essays. The categories of description related to each of
these aspects seem to form a developmental structure. This structure does not imply nested hierarchies, as the more developed categories do not necessarily encompass the less developed categories. The categories relating to evidence are described first, followed by the categories for structure and then those related to the conclusions of students’ essays.

Conceptions of Essay-Writing I - Evidence

The hierarchy of categories related to students’ use of evidence in their essays is presented in Table 6.1 and each category is described in more detail below. The categories seem to suggest a potential developmental path from a point where students are unclear about how evidence is used in their essays, through progressively more developed ideas, to a position which is congruent with how their tutors wished them to use evidence in their psychology essays (the tutors’ comments are discussed in more detail later in this chapter).

Table 6.1: Hierarchy of categories related to evidence

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>vague ideas about evidence</td>
<td>students said that information from psychological studies needed to be used, but gave no explanation of how this should be done.</td>
</tr>
<tr>
<td>including different viewpoints</td>
<td>students suggested that different viewpoints or arguments should be included, but did not talk about evaluating these views.</td>
</tr>
<tr>
<td>precursors to using evidence to support arguments</td>
<td>students realised that it was necessary to make evaluation of viewpoints, but they had difficulties in doing this.</td>
</tr>
<tr>
<td>using evidence to support arguments</td>
<td>students saw that evidence should be used to support or evaluate arguments, with none of the difficulties expressed in the precursor category. They were sometimes able to suggest criticisms of research studies.</td>
</tr>
</tbody>
</table>

Evidence - vague ideas about evidence

This was the least sophisticated category for evidence, it includes instances where students were aware that it was important to use research studies and facts, but they did not say anything about the role that the research played in their essays. Most commonly the students mentioned the importance of including lots of experiments. In the quote below, Leane, who seems to have held vague ideas about evidence begins to realise that she needs to think more about the role of evidence.

I guess knowing which experiments you want to put in (is important to a good psychology essay), yeah, because I am very tempted to think, what a wealth of
facts, what a lot of information, I had better put it all in ... giving a reason why you would use that experiment. That's what I thought when he was reading this essay over to me, I was sort of hearing it and thinking 'God, why did I put that in?' ... I just read it and stuck it in the essay ... so I had to clarify, and ask myself the question, you know, why is this relevant all the time ... it was kind of like making a nice flower arrangement and sticking flowers in and thinking it will be much better, but no, you have to decide whether they are going to be worth putting in there, and I found that quite hard with something like this ...
(Leane, third interview)

Evidence - including different viewpoints

In this second category, the students suggested that different viewpoints or arguments should be included in their essays, but they did not talk about evaluating these views. They suggested that you should include all of the different views, or give both sides of an argument. The students often mentioned that it was important to read about, and mention, lots of authors and sources in order to give a balanced account. They talked about not being biased, about dividing the essay up evenly between different arguments. The students sometimes talked about giving evidence for the different views, but they did not talk about using that evidence in an evaluative manner.

Evidence - precursors to using evidence to support arguments

In the extracts included in this category, it seemed that the students were beginning to see the importance of evaluating views and arguments in their essays, but that difficulties persisted. One common theme, was that students had problems relating to the role of their own views in their essays. They suggested, for example, that they could not criticise because they had not done research themselves. Others suggested that they worked from the evidence in their essay, but then also added in their own view, so their own view was seen as something separate, rather than developing a view based on the evidence in the essay. Some students also suggested that it was not possible to evaluate as everyone was entitled to their own view.

For these students, there were also problems related to resolving conflicting viewpoints. Students suggested that they might favour the most modern evidence, or they suggested that they would have to ask for help. Others were beginning to see
that they could evaluate the evidence for different views, but they were not confident about doing that. Students also mentioned that being critical was a problem, they did not know how to do that.

Evidence - using evidence to support arguments

In this most developed category, students were beginning to use evidence to support arguments and views, but still in a tentative way. They saw that evidence was used to support or evaluate arguments, with none of the difficulties expressed in the previous category. Quite a number of students emphasised the importance of having evidence for the points that they made, as explained by Sean, below. Others, like Gail, were also able to offer some criticisms of the research about which they were writing. Where there were conflicts, the students would address these by exploring the evidence for each side. Where the students talked about including their own views in an essay, they described deriving their views from their evaluation of the available evidence. This was not the fully developed and articulated thinking one might expect from a student in later years, but it was an account which showed that the students' ways of thinking were essentially in line with what was expected in the discipline.

I think a lot of it is using lots and lots of different sources, and backing everything you say up with an experiment ... I won't put forward a proposal unless there is some experiment to back it up. So that makes your essay pretty much watertight, 'cos everything you've said you've been able to show it, so you know it's true, or it's alleged to be true... They've gone some way to showing it could well be true. (Sean, third interview)

I: And what makes them that way, what makes the convincing (studies) convincing?

S: Just how the samples have been taken, and how pairs of twins had been chosen, and whether some twins that had been brought up had actually been brought up in similar environments... One of the books maybe wouldn't say about this, but one of the other books would criticise it and say, well, the twins actually were brought up with relatives ... so the environment would actually be quite similar. I think because I'd been more critical with my tutorial reading, then that's helped me write a better essay as well, because I'm more critical of the actual research that goes into the essay, and I'm more likely to give both sides of the argument ... I'm better at being able to say there are problems with this study, whereas before I wouldn't have had the confidence to do that, and I wasn't sure whether to put that into the essay. (Gail, third interview)
Evidence - problems with evidence

This category, which sits outside of the developmental framework, picked up attitudes to evidence that might have been problematic for the development of students' essay writing in psychology. The theme here was that students used evidence selectively to support their preconceived opinion, or left out findings that were awkward to deal with. Students would also use their personal experience or opinions in evaluating theories, without mentioning the use of research evidence in doing that. This is not to suggest that students' own experiences were not relevant to their essay writing, but in this category, they sometimes seemed to be being used as a substitute for research evidence, which was not what was required by the department.

Conceptions of Essay-Writing II - Structure

The suggested developmental path for students' ideas about the structure of their essays is presented in Table 6.2. The first category again suggests that these students were unclear about how to structure their essays. The next two categories structure from textbook and structure from question are seen as being at a similar developmental level, as the students derive the structure for their essay from an external source. In the final category, structure from content the students appeared to be developing structures for themselves.

Table 6.2: Hierarchy of categories related to structure

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>vague ideas about structure</td>
<td>students said that essays should be well structured, but did not comment on where the structure came from.</td>
</tr>
<tr>
<td>structure from textbook and structure from question</td>
<td>the student developed the structure for their essay either by lifting a structure from the textbook, or by setting up a simple structure based solely on the parts of the essay question.</td>
</tr>
<tr>
<td>structure from content</td>
<td>students described developing a structure for themselves, based on the reading for their essay, which was appropriate to what they had read.</td>
</tr>
</tbody>
</table>

Structure - vague ideas about structure

This was the least developed category relating to the ways in which students talked about the structure of their essays. The students said that essays should be well
structured, but they did not comment about where the structure came from. The extract below illustrates this by looking at the difficulty Alan had in explaining about the structure of his essay. Commonly, the students suggested that the essay should be 'flowing' or 'logical', but did not expand on that.

It was just it read more as an essay which had a flow to it ... The first essay ... I wrote it in bits and then it didn't read as an essay ... I don't know, it's hard to explain it, because it just didn't hold together. It didn't flow from beginning to middle to end. It sort of talked about things randomly and put things in, whereas the second one, sort of, explained it better. I don't know, probably reliant upon the last sentences and first sentences of the things that's all. That might have been all that changed, but it worked better.

(Alistair, third interview)

Structure - structure from textbook and structure from question

These two categories were seen as level in the developmental hierarchy. In these categories students derived the structure for their essay either by lifting a structure from the textbook, or by setting up a simple structure based solely on the parts of the essay question. Where the structure was taken from textbooks, the students commonly noticed that similar groupings were made in several textbooks, then decided to use these same groupings to structure their essay. Other students picked the structure out from one particular book. Where the students drew the structure from the essay question, they typically had a question to answer which had some clear, simple, structure. For example, they had been asked to compare two or three different alternatives, so they structured the essay by having a section for each alternative. They described using structures such as 'a' then 'b' or 'ab', 'ab', 'ab'.

Structure - structure from content

This category brought together extracts where students' ideas about structure seemed more sophisticated. The students had reflected on the most appropriate structure for a body of material for themselves. Sometimes they had drawn out quite a simple structure, because it seemed appropriate to the materials that they had. In other cases the students had considered in more depth how the materials they had should be organised. They had thought, for example, about similarities and differences between the different main themes in the materials, in order to develop a logical structure.
It was about dealing with the biology of hunger. Well obviously people need to eat to stay alive, so that was hard and fast. Then you go onto (the) obesity thing and that was very much again to do with the body. But it has a slight aspect of people wanting to eat to feel comfort, which again is quite a lot a chemical thing but then also a social thing... Then that led itself very well on to anorexia, which is perhaps a bit of a chemical thing, but very much more a social thing. Then it's sort of going from one extreme - the chemical, definite, biological - to anorexia, which was much more a social thing but (also) a bit of a chemical thing.

(Sean, second interview)

Conceptions of Essay-Writing III - Conclusion

Table 6.3 represents the categories which describe the variation in the students’ ideas about the conclusions of their essays. As with the evidence categories, there seems to be a progression from uncertainty, through progressively more developed ideas, to a position similar to that which would be required by the students’ tutors. The categories are described in greater detail below.

**Table 6.3: Hierarchy of categories related to conclusion**

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>unsure about conclusion</td>
<td>students realised that the conclusion of an essay was an issue, but were unsure as to how to conclude it.</td>
</tr>
<tr>
<td>conclusion as summary</td>
<td>students described the conclusion as a summary of the points in the essay, but nothing more than that.</td>
</tr>
<tr>
<td>precursors to drawing conclusions from evidence</td>
<td>students suggested that the conclusion should be a summary with something more, for example, that they should also include their own opinion.</td>
</tr>
<tr>
<td>drawing conclusions from evidence</td>
<td>students explained that they had actually drawn a conclusion from the evidence which they presented in their essay.</td>
</tr>
</tbody>
</table>

Conclusion - unsure about conclusion

The extracts included in this category described students who knew that the conclusion of an essay was an issue, but who were unsure as to how to conclude it.

The students either pointed out that the conclusion of the essay was a problem for them, as illustrated by Emily’s comments, or they had difficulty in explaining what they meant by a good conclusion.

Conclusions; I’m not very good at conclusions. I never know how to sum things up, I’ve just never been good at that, its always been a weak point ... I’ve got that to come across, 'cos we've got another essay due, so I don’t know ... With every essay, I never know how; ... it was just something I was never very good at. I’d just finish it in one sentence, or summing up every single thing you’ve mentioned through the essay.

(Emily, second interview)
Conclusion - conclusion as summary

In this category, the students were not unsure about the conclusion, rather they described the conclusion of the essay as a summary of what had gone before in the essay and nothing more. This category is somewhat tentative, as only two students could be clearly coded into it. The reason it is retained, is that it seems to be a logical developmental step towards precursors to drawing conclusions from evidence where the students often suggested the conclusion of the essay should be a summary with something more, such as adding suggestions for the future.

Conclusion - precursors to drawing conclusions from evidence

In the extracts included in this category, the students seemed to be moving towards - drawing conclusions from evidence. There was a sense that the students were going beyond just creating a simple summary, but their ideas were not as developed as in the final category, described below. Typically the students mentioned that the conclusion would be a summary with something more, such as ideas for the future, or that they would add their own opinion. There was a sense of adding their own opinion on at the end, rather than developing an opinion and conclusion from the evidence in the essay.

Conclusion - drawing conclusions from evidence

In this final category, the students drew a conclusion based on the evidence presented in their essay. Although the students were drawing a conclusion from evidence, they still found it difficult to conclude which of the theories or arguments they discussed in their essays had the best support, although Martin seemed to be moving towards that. There was typically a sense that they were able to provide evidence for several views and therefore concluded that a combination of those views would be the best explanation. This was, of course, still not the detailed evaluation of the weight of different arguments that might be expected in later years.

I think it was a case of weighing up the pros and cons. You can get a good conclusion, even if there isn't an answer, by saying, 'This is a conflicting debate and so much study has gone on in it that there is no way of really finding out what's right and what isn't, but a lot of research is showing that there is a link, although some of the studies slightly disprove it' ... I mean some of the studies
done over a long period of time were quite reassuring, but then other ones were a little (weak), and just sort of weighing up the evidence at the end, but saying its still up in the air a bit. I think that's still a good conclusion, as long as you can back up the fact that it's up in the air.  
(Martin, second interview)

Relationships between the hierarchies

Looking at all of the sets of categories, it seems that the evidence and conclusion hierarchies are related, as they both refer to students’ ideas about using evidence and there are some similar issues to do with how students integrate their own opinions into the essays. The structure hierarchy appears to be conceptually distinct. This distinction is not, however, confirmed by the correlations between the positions of the students on each of the hierarchies, which are given in Table 6.4. The correlations are all positive, but not so large as conclusively to suggest some overall conception of essay writing underlying the categories. It could simply be that the students who were most able to develop more sophisticated ideas about one aspect of essay writing - for example, through their understanding of their essay feedback - were also better able to develop more sophisticated ideas about another aspect.

Table 6.4: Spearman correlations between positions on the ‘evidence’, ‘structure’ and ‘conclusion’ hierarchies

<table>
<thead>
<tr>
<th></th>
<th>Rho</th>
<th>N of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>evidence vs structure</td>
<td>.56*</td>
<td>30</td>
</tr>
<tr>
<td>conclusion vs structure</td>
<td>.33</td>
<td>29</td>
</tr>
<tr>
<td>conclusion vs evidence</td>
<td>.23</td>
<td>27</td>
</tr>
</tbody>
</table>

Significant at p<.01 2-tailed * (none of the other correlations were significant at p<.05). Note: each interview from the phase two group is treated as one case, as is the interview from each of the control group students.

A deep approach to essay writing

Since essay writing was so important to the deep approach and its development, it was important to explore the nature of a deep approach to this task for these students. The deep approach also shared the closest conceptual relationship with the conceptions of essay writing categories. Table 6.5 summarises the categories which were involved in, or related to, a deep approach to essay writing. This combines the
most developed conceptions of essay writing categories with aspects of the deep approach as described in the previous chapter. The deep approach to essay writing for these students appears to be a more complete deep approach than for any of their other learning tasks. It was only for essay writing that attempts towards developing more personal understandings and critical use of evidence were carried out.

Table 6.5: Categories related to a deep approach to essay writing

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using evidence to support arguments.</td>
<td>Students saw that evidence was used to support or evaluate arguments. They were sometimes able to suggest criticisms of research studies.</td>
</tr>
<tr>
<td>Thinking for yourself.</td>
<td>Students were trying to go beyond just understanding what they had read or heard, to develop their own understanding of a topic.</td>
</tr>
<tr>
<td>Structure from content.</td>
<td>Students described developing a structure for their essay for themselves, which was appropriate to the content they had read.</td>
</tr>
<tr>
<td>Relating, organising and structuring.</td>
<td>Students organised or linked materials, for example, in their essay planning.</td>
</tr>
<tr>
<td>Selecting and summarising.</td>
<td>Students selected or summarised material, for example, by focusing their essay reading or by working to stay relevant to the essay question.</td>
</tr>
<tr>
<td>Getting an overview.</td>
<td>Students attempted to gain an overview of the topic.</td>
</tr>
<tr>
<td>Drawing conclusions from evidence.</td>
<td>Students explained that they had actually drawn a conclusion from the evidence which they presented in their essay.</td>
</tr>
<tr>
<td>Intention to understand.</td>
<td>Generally this referred to an intention to gain a basic understanding of the readings for the essay. Some students specifically selected texts for ease of understanding or abandoned more difficult materials.</td>
</tr>
<tr>
<td>Interest.</td>
<td>Interest often directed students' choice of essay topics, sometimes interest was also a motivating factor for the students' work.</td>
</tr>
</tbody>
</table>

The relationships between the conceptions of essay writing hierarchies and the deep approach to studying need to be clarified. The categories in the 'evidence' and 'conclusion' hierarchies illustrated the beliefs and methods which lay behind students' use of evidence in their essays. Use of evidence is typically seen as a process within a deep approach to studying. It was not included as a category in the wider study, as
students only used evidence within their essays. The conceptual distinction between
the thinking for yourself and using evidence to support arguments categories was that
the former implied attempting to develop a more personal understanding of the essay
topic, whereas the latter involved knowing how to bring your own opinions into an
essay in a manner appropriate to the discipline, those opinions may have been
derived mainly from views expressed in the textbooks. There were students who
were coded into one of these categories and not the other.

The 'structure' hierarchy described students' beliefs about how they should structure
their essays, as well as illustrating how students did structure their essays. Position
on the structure hierarchy had an impact on students' selecting and summarising and
relating, organising and structuring as more developed structures required more
effort within these categories. In contrast, taking the structure from the textbook, for
example, generally led to limited planning and organisation of material. Structure from
content was the only structure category which gave a sense of the students
transforming what they had been learning, an important aspect of a fully developed
deep approach (Entwistle, 1997a).

In addition to the general description given in Table 6.5, it was also possible to build
up an idealised conceptual account of the most developed deep approach which could
be described for these students. The grouping combined interest and an intention to
understand with the metacognitive category monitoring understanding and related
regulation, related learning processes and the most developed conceptions of essay
writing. This will provide a backdrop to the accounts of students' development in
essay writing, as it gives some sense of what might be reasonably expected from a
first-year student at their best.

In a deep approach to essay writing, the student would have selected the essay topic
for interest and would continue to be interested in the topic during their reading and
writing. The student's efforts to gain an overview of the topic, to select relevant
material for their essay, and to relate and plan this material, would reflect their
attempts to develop their own structure for the essay. The approach would involve the student using evidence to support arguments in a manner appropriate to the discipline. The student would be able to make some critical comment on this evidence.

This use of evidence would be related to an ending in which the student drew a conclusion from the evidence presented in their essay which reflected their attempts to develop a personal understanding of the topic. Although personal, this understanding would still be quite limited, and would probably be closely related to general textbooks for the topic. This attempt to develop a personal understanding implies that the student’s learning could be assigned to the thinking for yourself category. The student would monitor their progress in gaining this understanding, making changes in their learning if necessary. The student’s conclusion would probably be a tentative attempt to combine the ideas from the essay into an overall conclusion, although it would not be a full evaluation of which arguments had the best support.

None of the students in this study showed a fully developed deep approach with all of these elements, but the composite quote below brings together talk from several students to illustrate all of the aspects:

We were given a selection of essays and I chose one ... I was more interested in doing ... it was really interesting actually ... It was fascinating, it was just so good ...

I thought this time actually to do it in a slightly different way, I thought to have ideas about it myself and then back them up ... by actual theories, or whatever, and try and do it from my own point of view more ... I don't know really (what prompted that) ... I sort of felt that I was writing down other people's ideas and going, 'This is this person's idea', then reflecting on that, I don't know. It was probably the same really ... but it was just I felt I wanted to think myself what I actually thought about this, and see if anyone else agreed at all ... I sort of thought about things. Actually what I thought about was what everyone talks about anyway - nature, nurture, evolution, sort of things ... So what I was thinking was what they were writing about ... So I, kind of, wrote down, it was just like five words. Just thoughts that came into my mind about each topic ... then read lots of books ... and got ideas out of that ....

To make a stimulating essay, or whatever, you have to play with the ideas that have been presented to you ... I mean they say in the essay criteria that they are looking for originality, not pedestrian thinking. So the best way to achieve that is
to think about the ideas, run them over in your mind, and come to your own conclusions, rather than take them straight out of a book...

I usually try to get as many (books) as possible, and then I look at it from that, and sort of narrow it down to the one or two that I actually going to concentrate on in my essay. So I can try and get the most relevant and ... I go for the ones that makes me understand it, so that I can use them and make them understandable in the essay...

I probably read a lot of it, and then I tried to be more strict with myself this time and just write what was relevant ... I don't waffle on about things that are interesting but completely, well not so much irrelevant, as much as you can't waffle on too long; you had one thousand five hundred words, so you had to be quite specific...

The first time I read it, I really came away with the feeling I hadn't actually got anything from it ... A few of the things I would just skim through it and got completely the wrong meaning, just because I assumed it would be a different meaning ... So it was a result of that I just had this one day when I thought I must be doing this a bit wrong, I must be reading it wrong or something. So I just read through it a second time very slowly. Sometimes I would read it aloud, that kind of helped ... It was very much easier to understand, I think just reading through it a second time and not having this horrible feeling, oh its taking so long ... I think actually this time I understood what they were talking about, rather than just made up what they were talking about by making little references back to it...

(The wider textbooks are) very good for basic overviews I think... If you look at a book that's by a particular author, they sometimes only show their point of view and in an essay of that sort you're looking for a general perspective, so the larger textbooks are very helpful...

I highlight the things I think are interesting (on the photocopies) then, when I am writing, I just look at all the different photocopies, and then kind of combine all that is being said ... They all talk about different studies, even although some will write about the same studies ... So, I just look at the main points, and even although two studies are similar, I just join them, just to give an idea of the results which were found ... It's all the different types of evidence ... I just group them into different kinds of studies ... That's how I had it for (one essay) but the other essay won't be that. The (other essay) I had, I did it on different theories ... So, it depends on the topic and what you see in the books. I just try to organise it as best I can.

(How I did my notes) would depend how obvious the route through the matter was going to be. If I couldn't see (it), then I do it in a more diagrammatic fashion, but if I could logically think it through in my head - the way that the essay would obviously flow from one region to the opposite argument ... I wouldn't necessarily do it in a diagrammatic form, I would just write down the points...

Most of them, the experiments (that one side) will give, do have an experiment, and then make a conclusion from it ... Then (the other side) also come along and criticise and say what they are saying is not valid. That's how I did it. Each study I did it with the results and what (one side) concluded from it, and then give the flaws in the experiment and things like that. Why the (other side) also disagree with what they are saying ... You sort of get your own view when you read through it, you sort of think that some things are not very plausible, or you just don't really agree with them, so you maybe gear your essay more towards that bit, but with this essay I thought that it was basically a mix between the two, so you take bits from both sides.

Sometimes, the way that the research has been done, or whatever, just makes it sound a bit like it hasn't been done properly ... It's sort of been manipulated so
that people get the view that they want. 'Cos I mean there was experiments ... it was all coming up with different results... but ... basically the main sort of results were the same; ... it was the same sort of pattern...

I think the main thing that I was saying (in the essay) was that ... it's due to many things, a lot of it is to do with (one side of the argument) ... (but) I think there is some evidence as well (for the other side) ... I talked about all the different theories of it ... what I did was give a balanced account of every single one, giving all the evidence for it, and I think at the end I also gave some evidence against each one as well; but basically at the end I came up with the conclusion that (it) was (a combination of both arguments) ... I just used evidence from each of the theories saying that ...

Describing the development of students' approaches II - development in essay writing

Having developed an account of the main aspects of students' essay writing, the next stage was to explore how students' learning developed over the course of their three essays. From the analyses reported earlier, it was clear that some of the main developments in students' approaches to essay writing involved changes in their learning processes. Within selecting and summarising students learned to be more focused in their note taking for the essay, and more able to stick to the question asked when writing their essay. Some students developed their relating, organising and structuring, for example, by changing their planning method, or by planning when they had not done so previously. In one of the most significant developments, students' attempts to think for themselves and gain a personal understanding of their essay topics appeared mainly in relation to their final essay. Some students' time management also improved as they progressed through their three essays. Finally, students coded more frequently to taking easier or more efficient options for their final essay than for their first essay. Many of the students also improved in more minor details of their essay writing, for example, they learned the technicalities of referencing, to avoid repetition, to explain specialist terminology, and how to use the library systems more effectively.

Before exploring what influenced students' development, it was necessary to chart the development of their conceptions of essay writing. The students' position on each of the hierarchies of conceptions of essay writing at each interview for the phase two group were summarised. It appeared, from this summary, that it was difficult for
students to develop higher level conceptions. Excluding moves from no conception to no mention, and counting only examples where all of the changes were upwards as development, it was found that seven of nine students had developed the 'structure' component of their conception, however, only two students developed between interviews two and three and two students dropped down the hierarchy over the same time span. The students were talking about their initial ideas about essay writing at interview one, then at interview two about their first essay and at interview three about their final essay. This suggests that most students developed their initial ideas in reaction to their first essay, but then did not develop further.

Three of nine students developed on the 'evidence' component, but only one of these examples was between interviews two and three. Six of nine students developed on the 'conclusion' hierarchy with four examples between interviews two and three, suggesting that this was an area where students continued to progress. Only Angela seemed to develop on all of the hierarchies and much of this development was from having no idea what a psychology essay might be like at interview 1 to having clearer ideas at interview 2. All of the students showed some development at some point through the year, but none of the students reach the top of all three hierarchies.

**Explaining the development of approaches II - influences specific to essay writing**

There were several possible explanations for students' development, or lack of development, which were specific to essay writing. The main focus of this analysis was the students' explanations for their development, which included their reactions to discussions with their tutors, the essay handouts, their grades, and the feedback that they received. The analysis did, however, include an account of the tutors' perspectives.

**Tutors' perspectives on essay writing**

Three tutors had been interviewed, and their comments about essay writing in these interviews and in the handouts that they provided to students, were summarised in relation to the student hierarchies for conceptions of essay writing, and to identify
any material relating to students thinking for themselves, or developing personal understandings. This focus was chosen as shifts in conception, or towards the thinking for yourself category, represented the most profound changes in the students' thinking. Care was taken not to force the tutor's ideas to fit the student categories.

It was found that the tutors’ conceptions, and the advice on the tutors’ and departmental handouts, was generally consistent with the top of the student conception hierarchies, although tutors were able to explain their ideas in much more depth. For 'structure', the tutors’ conceptions were better described in terms of structure arising from an interaction between the content and the question.

Two of the tutors talked with the students during tutorials about some of these issues, one of these two also placed a good deal of importance on teaching students to use evidence correctly throughout the tutorials. The third tutor did not discuss these issues in the tutorials, but he provided a detailed handout on essay writing, which addressed such concerns. The tutor did not create this handout, it is a chapter from Heffernan (1997). The handout had the potential to be very helpful to students, as it unpacked some of the issues around getting your own ideas into essays (see extracts below). This process seemed difficult for students in relation to the evidence conceptions of essay writing. But, as we shall see later, the students did not in fact seem to learn much from these handouts.

(from handout on essay writing) ... Whilst the majority of students thought that providing good content and structure were the main things to aim for in an essay, rather than putting forwards an argument based on the literature addressed, tutor's marks indicated that it was those essays that produced an argument on the basis of research evidence ... that achieved high marks. Structure and content do feature in marking, but not nearly as highly as argument, critical analysis, and so on ... arguments in psychology essays should normally be based on published theories and research, with personal experience being used at the most as supplementary information ... tutor's marking criteria often imply that it can be fruitful to include your own ideas in an essay ... Fortunately originality can be indicated without using the first person in academic writing ... your tutor will assume that any idea for which no source is cited is your own! ... "Understanding" was judged by tutors to be one of the most important criteria. One good way to demonstrate understanding is to express ideas in your own words ... your tutor wants to assess your work, not Glassman's (1995) ... 

(various pages, Heffernan, 1997; emphasis in the original)
The end of this extract also suggested to students the importance of developing a personal understanding of the topic of the essay. None of the tutors specifically raised this as a criterion for good essay writing in their interviews, but it was clear from their comments about what they valued in learning in psychology more generally (see quotes below) that this was something that they consider to be important. Some of what they said in relation to the use of evidence in psychology essays also implied that the students were expected to develop a personal understanding of the materials. Further, the handout on essay writing provided by the department mentioned originality of thought as one of the characteristics of a first class essay.

(After first year I expect them to) not (be) taking things at face value, not going directly from authors' conclusion to accepted fact, to be consciously seeking for artefacts ... It's about critical thinking, I suppose, crucially, not simply the rehearsing of evidence; ... it should be the quality of that evidence, the reliability and the validity of the evidence, the conclusion that are drawn from the evidence. (They should know) that their opinion is valuable, and there is no reason why they should not be able to come up with alternative interpretations, or criticisms, of a study which are novel...

(Tutor 3)

There are those people who engage the same skills right the way throughout, and others who you can see really blossoming ... One guy in particular, who I feel is really good, ... (has) a deeper understanding and a critical appraisal of theories ... having a view of which approach is better, not just regurgitating what has been read, but actually having a view on it ... Even at fourth year there are very few scripts that you get where they have actually come up with anything original, where they have criticised the theory using their own ideas ... So to have that at first year is actually a very positive thing, and it shows that he has come on leaps and bounds.

(Tutor 2)

In the final extract above, tutor two discussed how difficult it was to get students to show original ideas even in their final year, which reinforces the finding from the students in this study that thinking for yourself was only present for a few students and represented quite tentative attempts towards developing a more personal understanding.

Overall, it seemed that tutors' ideas about essay writing, and the handouts presented to the students, were consistent with a well-developed composite deep approach to essay writing. It was clear, however, from the students' coding on the categories, that none of the students had arrived at such a fully developed approach by the end of the
year. The reasons for this problem are considered further in the next section, where students’ responses to their handouts, feedback and grades are explored.

*Students’ reactions to essay handouts, feedback and grades*

The students’ reactions to their essay handouts, feedback, and grades, could potentially have been an important influence on their development. On the whole, however, this was not the case. The students received advice which was relevant to developing aspects of their learning, such as their conceptions, but they did not generally seem to benefit from the help given. One of the reasons for this problem appeared to be difficulties in communicating the academic discourse of psychology. These issues are considered in detail in this section and in the conclusion of the chapter.

*Table 6.6: Summary of essay feedback given to phase two students*

<table>
<thead>
<tr>
<th>Type of comment</th>
<th>N of students to which comment was made (from a total of eight who provided essays)</th>
<th>N of essays on which comment was made (from a total of 22 provided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>general use of evidence</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>critique of evidence required</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>research examples required</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>total incidence of comments on evidence</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>no comments/ almost none</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>details of referencing</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>suggests additional issues that could have been included</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>more detail required</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>general structure</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>general conclusion</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>general introduction</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>terms need to be defined</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>keeping to the essay question</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>style e.g. not using first person, paragraph construction</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>other (clarity, grammar, proof reading, minor plagiarism)</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 6.6 gives a summary of the essay feedback given to the students in the phase two group. It appeared, from the total number of comments about use of evidence, that this topic was the one most commonly addressed by the tutors. The tutors also mentioned structure and conclusion to the students, though not as commonly as evidence. The comments varied, but at least some of them were relevant to the development of students' conceptions of essay writing. The tutors did sometimes write quite detailed comments, but they did not explicitly spell out issues related to conceptions, as in the examples given:

... Examples of research evidence could have been cited more often and would have improved your mark...

... You have covered a wide range of research evidence but a more critical approach to the research methods employed and interpretation of results would have improved your marks...

... Not such a clean feeling of a plan to the essay however, and it does stop rather suddenly. Try to cultivate more of a structure, and the feeling of telling a story which proceeds in stages to a conclusion.

There was nothing in the tutors' comments which seemed to relate to originality in essay writing, which might have promoted the other important development made by some of the students - a shift to attempting to develop a personal understanding about the topic. This may be because originality was something that was difficult to mark for, partly because the students were not very experienced in referencing, and partly because tutors are not necessarily very familiar with the topic they are marking. To pick out originality in essay writing, the students would have to have referenced every idea that was not their own, so that the tutors could pick out the original ideas. Given that referencing was often criticised by the tutors in their feedback, and given that it is something that the students found confusing, this seems unlikely. Being less familiar with the topic would also make it hard for the tutor to pick up on original formulations and, as noted by Tutor 2, this also made it hard to pick up students' problems with use of evidence:

I: Where there was two contradictory points and one author was saying, 'Well it should be this', and another author was saying, '(It should be) that', how would you like them to deal with that in an essay?... The reason I asked that is that, sometimes when I ask that question, they say they put the one that they agree with in and leave the other one out...
T: I suppose that is difficult to pick up from an essay answer because ... it's this breadth and depth thing. You could just assume that they have taken a strategy of going through a couple of theories in a lot of detail, and that is perfectly adequate. But if their rationale for doing that is faulty, you are not necessarily going to know that. I mean, if an essay comes back, and I feel that they have really missed out a huge important area, then I tend to put something about that... Some of the first year essay topics, ... you are not really going to know what is covered in the lectures. So you won't know whether you are just getting regurgitate the lecture, or whether important stuff is included in the lecture and students don't include it in their essay...

(Tutor 2)

Having considered the nature of the tutors' comments, an analysis was made of the students' reactions to these comments, and to the handouts that they were given. Although a few of the students mentioned that they had had some problems in reading or interpreting the feedback, students generally saw the written feedback given as reasonable. The students' reporting of the feedback was generally accurate, in that it related well to a basic description of what was written, but students did not go beyond this to explore underlying meanings. None of the students was able to discuss the written feedback in great depth.

There was very little evidence that students had made any profound changes in their learning due to written feedback. One partial exception to this was Gail, whose case study is considered in Chapter 7. She made important changes in her ideas about evidence, which were originally prompted by her tutorials in Nursing, but were supported by her psychology tutor's written comments on her essays.

There was a general sense that students did not give the written feedback a great deal of attention, which may explain the limited development of their conceptions, however, most of the students did make some changes on the basis of their feedback. Although these changes did not generally involve any profound rethinking of their ideas, some of them were still quite important to the students' skill in essay writing.

The developments in students' selecting and summarising, mentioned earlier, seem sometimes to have been provoked by tutors' comments, as in the comments made by Sean. But Sean seems to have simplified the tutor's comments into a discrete task, in a similar way to the reactions described by Snyder (1971) in discussing students' reactions to the 'hidden curriculum' in universities in the United States:
Having already done two psychology essays, you know how deep you need to go...

You've got to get some good experiments in, ... but you can't get too clogged down on certain experiments ... I've learned that you need to include quite a lot of different experiments, different peoples' work, different sorts of ways that people have approached the same subject ... I did very well on the second essay, and that's what I did. 'Cos the first essay that was the criticism, I hadn't used enough references ... Then I drew on hundred and hundreds for my second essay, and got a very good mark for that, so I tried again the same thing for the third one.

(Sean, third interview)

Another important development from feedback, was that several of the students responded by making efforts to explain their points more clearly or in more depth, which may have helped them develop a fuller understanding of the topic. Students also made more minor changes, such as being less repetitive, not writing in the first person, and improving on the details of referencing. Although most of the students seem to have benefited to some extent, it was also possible for students to badly misunderstand essay feedback. Susan, whose case study is discussed in Chapter 7, seemed to have seriously misconstrued the importance of the different criticisms made by her tutor on her first essay, thus limiting her development.

While written feedback generally seemed to lead to quite limited development, discussion with tutors had the potential to provoke more significant changes. Fiona developed her evidence conception from including different viewpoints, to using evidence to support arguments, partly based on discussions she had with her tutor about her essay writing. Leane dramatically developed her efforts to understand the topic of her essay after discussions with her psychology tutor. Gail developed her ability to be questioning and critical from discussions in her Nursing tutorials, this then led to development in her psychology essays.

Another potential explanation for students' development, or lack of development, was their reaction to the handouts they were given on essay writing. The students were not all asked directly about the handouts in the interviews, but they were asked about any help they had had in essay writing, and also about the reasons behind the ways they had written their essays. Some students did not mention the handouts at all, and none of those who were prompted, were able to provide much detail about
them. Most of the students who mentioned the handouts either said they had not paid much attention to them, or else felt that the handouts contained little that was new to them. Yet none of these students had well developed ideas about essay writing when the handouts were received, and all of the handouts contained advice which was relevant to important aspects of students' essay writing. It did not appear that any of the students made profound changes in their ideas about essay writing due to the handouts, although some of them picked up more basic points, such as about the details of referencing.

It seems, therefore, that the students were unable to connect with the advice in the handouts. Gail was unusual, in that she recognised this to be a problem. Most of the students did not comment that they could not understand the handouts, or that something was missing from the handouts. It appears that the students simply did not realise that the advice in the handouts suggested that they needed to make important changes in their ideas about essay writing.

The notes for the conclusion ... I didn't find very helpful, because (of) the nature of the essays, then it would be repeating what you'd said in the main part of the essay ... It basically said to draw whatever you'd discussed in the main part together, and maybe form your own opinion, and point out the main things that were involved in it ... but I thought of perhaps doing that as I went along in the essay ... Nothing is really definite about the eating disorders, then it was difficult to, say, put my own opinion in ... because ... everyone was unsure about it anyway, and doing a separate conclusion at the end would have just meant repeating what I had said before.

(Gail, second interview)

Only one of the students mentioned making a change in essay writing based on her grade. On the whole, the students felt their grades were fair and indicated that they were doing quite well on the course. Two students were confused about the reasons for some of their grades, but did not follow this up with their tutors.

Statistical analyses of the relationships between the categories to which students code and their essay grades were carried out only for the thinking for yourself category and the conceptions of essay writing categories, as these categories related to the most important developments in students' essay writing. Spearman correlations were used to explore the links between students’ positions on the
hierarchies of conceptions of essay writing categories and their grades. It was felt that a non-parametric test was more appropriate for essay grades, particularly when there were several different markers. The small sample size means that the findings should be treated with caution. The results of these analyses are shown in Table 6.7. All of the correlations are positive suggesting that students’ conceptions do have some influence on the quality of their essays.

Table 6.7a: Spearman correlations between students’ conceptions of essay writing at interview two and their essay one grades

<table>
<thead>
<tr>
<th></th>
<th>Rho</th>
<th>N</th>
<th>Significant at p&lt;.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>conclusions hierarchy</td>
<td>.52</td>
<td>7</td>
<td>No</td>
</tr>
<tr>
<td>evidence hierarchy</td>
<td>.17</td>
<td>7</td>
<td>No</td>
</tr>
<tr>
<td>structure hierarchy</td>
<td>.11</td>
<td>9</td>
<td>No</td>
</tr>
</tbody>
</table>

Table 6.7b: Spearman correlations between students’ conceptions of essay writing at interview three and their essay three grades (N is higher because the control group are included)

<table>
<thead>
<tr>
<th></th>
<th>Rho</th>
<th>N</th>
<th>Significant at p&lt;.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>conclusions hierarchy</td>
<td>.64</td>
<td>13</td>
<td>Yes</td>
</tr>
<tr>
<td>evidence hierarchy</td>
<td>.17</td>
<td>15</td>
<td>No</td>
</tr>
<tr>
<td>structure hierarchy</td>
<td>.21</td>
<td>15</td>
<td>No</td>
</tr>
</tbody>
</table>

A Mann-Whitney U test was used to compare the essay three grades of all of students who coded to the thinking for yourself category at interview three versus those who did not (this analysis included all of the students involved in the study). No significant difference was found and examination of the 25th, 50th and 75th percentiles of the essay grades for each group suggested that the grades for the two groups were very similar. This may be perhaps be explained by the tentative nature of the attempts of the students in the thinking for yourself group to develop a personal understanding. Alternatively, as discussed earlier, the problem may have been that it was very difficult for tutors to mark for originality at the first year level.
Although more developed conceptions did show positive relationships with essay grades, the students in the interview groups typically gained quite high grades for all of their essays, despite not having well developed conceptions, nor generally making efforts to develop a personal understanding of the topic (see Table 6.8). As noted in Chapter 5, the students typically suggested that they would only make efforts to develop their learning when something went wrong. It seems likely that this attitude, in conjunction with their good grades, may have inhibited their development.

### Table 6.8a: Descriptive statistics for essay grades from interview group in phase 1 (scores for whole year group in brackets).

<table>
<thead>
<tr>
<th>essay</th>
<th>minimum</th>
<th>maximum</th>
<th>25th percentile</th>
<th>50th percentile</th>
<th>75th percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>46 (25)</td>
<td>74 (85)</td>
<td>55.75 (55.00)</td>
<td>60.00 (62.00)</td>
<td>66.50 (67.00)</td>
</tr>
<tr>
<td>2</td>
<td>58 (30)</td>
<td>82 (90)</td>
<td>60.00 (58.00)</td>
<td>65.50 (63.00)</td>
<td>70.50 (68.00)</td>
</tr>
<tr>
<td>3</td>
<td>60 (40)</td>
<td>73 (89)</td>
<td>62.75 (60.00)</td>
<td>67.00 (65.00)</td>
<td>68.00 (70.00)</td>
</tr>
</tbody>
</table>

### Table 6.8b: Descriptive statistics for essay grades from the interview group in phase 2 (scores for whole year group in brackets).

<table>
<thead>
<tr>
<th>essay</th>
<th>minimum</th>
<th>maximum</th>
<th>25th percentile</th>
<th>50th percentile</th>
<th>75th percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>55 (11)</td>
<td>68 (87)</td>
<td>59.50 (57.00)</td>
<td>65.00 (62.50)</td>
<td>67.50 (69.00)</td>
</tr>
<tr>
<td>2</td>
<td>54 (35)</td>
<td>78 (85)</td>
<td>58.50 (58.00)</td>
<td>64.00 (63.00)</td>
<td>68.00 (68.00)</td>
</tr>
<tr>
<td>3</td>
<td>50 (37)</td>
<td>69 (86)</td>
<td>61.50 (60.00)</td>
<td>65.00 (65.00)</td>
<td>68.00 (70.00)</td>
</tr>
</tbody>
</table>

**Other influences on development for essays**

In addition to the effects of tutors' advice to students, there were a range of other factors that influenced the development of students' essay writing. The more general issues related to development were dealt with in detail in the previous chapter; they are referred to briefly here only where relevant. This section focuses on explanations specific to essay writing.

The analyses on the effects of the feedback and advice students have had did not shed much light on the reasons why they developed towards *thinking for yourself*. As noted earlier, it was possible that both interest and a sense of the relevance of psychology would support such development, but these do not seem to be sufficient
to provoke such development in all students. As this was an important topic, each instance of *thinking for yourself* was considered, in order to try and explain why the students had developed in this way. It appeared from these analyses that there was no single influence, nor specific set of influences, which led students towards *thinking for yourself*. The ability and confidence to be critical, reflection on their learning, and specific incidents all had an effect for some, but not all, of the students. As the examples of *thinking for yourself* were quite tentative, and the explanations are post-hoc, these interpretations should be treated with caution.

Reflection on their learning was also a factor in other aspects of students' development in relation to essay writing. There were several examples in the data where students' metacognition was responsible for developments in their time management. Either because they reacted to difficulties with their time management, or because they stumbled on a better method of time management, realised that it was better and kept it up. Some of the development in students' selecting and summarising and relating, organising and structuring for their essays also seemed to have been caused by their self-regulatory efforts. For Leane, metacognitive reflection on her understanding of her reading led her to important changes in her efforts to understand course materials. A number of students also made more minor developments in their essay writing technique through self-regulation. It is worth noting, however, that there were far more instances of students recognising problems in their essay writing than there were of students acting to remedy those problems.

Reactions to advice from tutors and self-regulatory efforts were the most commonly mentioned reasons behind students' development, or lack of development. There were other relevant issues, however, that came up in the interviews. Firstly, it was rare for students to ask for help with essays, or to discuss their essays with other students. General study skills help did not have much effect on the students' development, and they typically did not seek, or benefit from, such advice. The student learning lectures were considered in detail earlier in this chapter, but it is worth mentioning
here that a few students felt that the lectures supported their efforts to understand in more depth or to be more critical for their essays, by suggesting that this was a good way of learning.

Students' motivation for their essays may help explain why they did not develop further. It was rare for students to be aiming to get the highest possible grades, or to do better than their peers. Also, while an intention to understand was more common, this was generally an intention to gain a basic understanding of the materials, not a more developed personal understanding. Since these students were generally getting reasonable grades and felt they were achieving a basic understanding, there was no strong motivation for development.

Control group comparisons

Given that most of the students' development occurred in relation to essay writing, it seemed important to explore whether that development might have been caused in part by reflection prompted by the repeated interviewing which the students experienced. To begin this process, category count comparisons between the control group and the phase two group were made for the thinking for yourself category, the taking easier or more efficient options category, and for the conceptions of essay writing categories, as these were the main category shifts made by students.

For taking easier or more efficient options, there were two students of nine in the relevant main interview group, and two students of seven in the control group, who coded to this category. For the thinking for yourself category, there were three students of seven in the control group - as opposed to three of nine in the phase two group - who showed some evidence of this category. The control group examples, quoted below, were not as strong as the clearest examples from the main groups, but did suggest that the students coded to this category.

I think I am better at doing essays where it's just finding the research and drawing your own conclusions from that, and then presenting an argument ... Just mainly summarising what was in the book ... and then later on I started trying to piece bits together, and interpret it a little bit ... I guess it's interpreting (that) is important; I reckon that'll be the difference between the lower grade and the higher grade... (Graham)
You can't just take it on board without at least questioning it in your own mind and going through it. (Diane)

(A good essay has) some of your own opinion in to make it ... more yours than just from the textbook. (Catriona)

For conceptions of essay writing, comparisons between the control group and the second phase main interview group are shown in Table 6.9. There was no clear evidence that the repeat interviews had had an effect on the development of students' conceptions of essay writing.

Table 6.9a: Number of students at each position of the evidence hierarchy in control and main interview groups at interview three.

<table>
<thead>
<tr>
<th></th>
<th>no conception</th>
<th>no mention</th>
<th>vague ideas</th>
<th>different viewpoints</th>
<th>precursor</th>
<th>to support arguments</th>
</tr>
</thead>
<tbody>
<tr>
<td>N main group</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>N control group</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 6.9b: Number of students at each position of the structure hierarchy in control and main interview groups at interview three.

<table>
<thead>
<tr>
<th></th>
<th>no conception</th>
<th>no mention</th>
<th>vague ideas</th>
<th>from question or textbook</th>
<th>from content</th>
</tr>
</thead>
<tbody>
<tr>
<td>N main group</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>N control group</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 6.9c: Number of students at each position of the conclusion hierarchy in control and main interview groups at interview three.

<table>
<thead>
<tr>
<th></th>
<th>no conception</th>
<th>no mention</th>
<th>unsure</th>
<th>summary</th>
<th>precursor</th>
<th>draw from evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>N main group</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>N control group</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

(total N varies as some students could not be coded for some interviews)

A brief qualitative check of the control interviews was also made to make sure that there were at least some instances of well developed selecting and summarising, relating organising and structuring and time management within the essay writing sections of these interviews. There were a number of students in the control group who had well developed examples of these categories which suggested that these aspects of the main interview groups' learning had not benefited from the repeated interviewing.
Conclusion

Analysis of the students' talk about their essay writing suggested that the main variations between students were best characterised in terms of conceptions of essay writing, rather than approaches to essay writing. The conceptions brought together aspects of students' essay writing processes, their ideas about these processes, and their beliefs about what made a good psychology essay. These conceptions partially overlapped students' approaches to essay writing and they also influenced other aspects of these approaches. Even the more sophisticated conceptions held by the students in this study seemed to be less developed than the cogency conception described by Hounsell as the more advanced category for psychology students (Hounsell, 1987, 1988, 1997). In the cogency conception the students' own interpretations were central. This was not the case for any of the students in the present study, perhaps because Hounsell's students were in the second year of a three year course and would therefore be more confident about their own ideas. The students in the present study often had doubts about how their own views were to be included in essays.

The combination of the most developed of these conceptions, with other categories from the deep approach, and the metacognitive category monitoring understanding and related regulation, gave a composite deep approach. This idealised approach suggested the likely limits of development for these first year students, in the approach within which they showed the most development. In some ways the composite represented a well-developed deep approach, but it was limited in relation to students' developing a personal understanding. Only a small number of students began to develop in this way and their efforts were tentative.

Looking at other aspects of the students' development in relation to essay writing, there was evidence that students developed their abilities in relation to selecting and summarising, relating, organising and structuring, time management and taking easier or more efficient options. They also developed in more limited ways, such as
making minor stylistic changes. The students generally showed little development in their conceptions of essay writing, with the exception of some changes in their ideas about the conclusions of their essays. Overall, therefore, it seemed that the most significant difficulties for the students were related to the use of evidence in their essays in relation to their own understanding of the essay topic. Students had problems, firstly, in being critical in relation to research evidence. The integration of their own views into their essays was also a problem, as was the status of those views in relation to research evidence. This may have been part of the reason why so few students made attempts to develop more personal understandings of their essay topics. Overall, none of the students reached a fully developed composite deep approach. The control group analyses suggested that the repeat interviews had little effect on the students' development.

The tutors' perspectives on essay writing and the advice given in their handouts and feedback were compatible with well developed conceptions of essay writing and with students making efforts towards developing personal understandings. Despite this, the students generally did not perceive the handouts to be helpful, nor did they make significant conceptual developments based on their written feedback. The literature discussed in Chapter 2 suggests that the students' problems with engaging with feedback and conceptions of essay writing reflect difficulties in coming to terms with the academic discourse in psychology (Hounsell, 1987, 1988; Norton, 1990; Prosser and Webb, 1994; Campbell, Smith and Brooker, 1998). Although the discourse was implicitly laid out for the students in their feedback and handouts, the issue that there was such a discourse, which was different from students' previous experiences, was not addressed explicitly. It appears that the students were generally unable to read between the lines within tutors' comments to understand these issues. In some cases this seemed to lead to major misunderstandings; in others, students seemed to reduce their problems with essay writing to a set of discrete tasks.
There were also discrepancies within the discourse around essay writing, suggesting aspects of a 'hidden curriculum' (Snyder, 1971). Although originality was stated as important in the departmental handout and by the tutors (although not necessarily in relation to essays) it seemed that it would be very difficult for the tutors to mark for originality, and this was not something that came up in their feedback. It would also be difficult for the tutors to pick up on some of the students' problems with evidence. In fact, although the conceptions were related to students' grades, most of the students in this study gained quite good marks without having fully developed conceptions or making efforts towards originality and personal understanding. As most of the students were satisfied with reasonable grades and a basic understanding, it is not surprising that they did not develop further.

The advice students were given about psychology essays valued research evidence highly and did not explicitly value their life experiences, or their personal understandings of a topic - unless those understandings were based on research evidence. This being the case, it is not surprising that the students did not go further in their attempts to develop more personal understandings, particularly as some of the students struggled with issues surrounding research evidence and lacked confidence in being critical of psychological research. While it may be the case that a good understanding based on textbooks will produce a better essay than a misconceived personal understanding, such personal understanding might be more valuable in the long term.

In Chapter 5 it was suggested that the students were immersed in a culture which was not generally supportive of development. This is also apparent in relation to the specific task of essay writing. For example, the students had limited interest in their feedback and handouts, and they generally made little effort to discuss their essays with their tutors and with each other. It was also very rare for students to read study skills texts about essay writing, or to attend talks on essay writing. The help provided to students with their essay writing varied between tutorials, which may
have caused students to get a sense that this sort of help was not valued in the department. The students often believed that their experiences at school were sufficient to allow them to cope with their essays and they noted that they would only seek further help where they had some problem. The extracts given below illustrate some of these issues.

We got these (essay) handouts from (our tutor) and they were good, but he admitted in the tutorial that we probably wouldn't read them until we were just about to start the essay, but I kind of didn't ever really read them ... I should have done ... I had actually done a bit of essay writing before, in previous subjects and things at school, so I wasn't totally new to it ... So, it was just a question of going with what you feel is right.

(Martin, second interview)

If anything my dad took us through it (at school), he usually read it through for me. Here I really felt slightly on my own, because your mates can read it through for you as well, but no-one wants to read an essay; I didn't want to read their essay, so why would they want to read mine ...

(Shona, second interview)

It is important to be aware that the students' experiences of this task did have positive aspects. For example, many of the students did take at least a limited deep approach. Further, the tutors were generally thoughtful about their students' learning, and in a few cases, their individual interactions with the students provoked important changes in the students' conceptions, or efforts towards understanding. Although written feedback did not lead to profound shifts in the students' thinking, it did provoke some significant changes, for example, in their ability to select and summarise material and in encouraging them to strive for clarity, which is likely to have helped their understanding.

The findings in relation to essay writing reiterate the importance of receptiveness to opportunities for change, which was identified in the wider analyses reported in Chapter 5. This is illustrated by the experiences of those students who moved towards aiming for more personal understandings for their essays. These students seemed able to grasp opportunities for development which other students missed. Students' self-regulation also seemed to play an important part in their development. Self-regulatory ability must by definition be related to students' receptiveness to opportunities for change, but to understand this receptiveness fully it would be
necessary to understand why some students self-regulated and learned from experiences in such a way as to allow profound development, whereas other students did not.

It was clear from these analyses in relation to essay writing, that the reasons for students' development or lack of development were complex, interacting, and impacted differently on students who were more receptive to change. For the more profound changes, critical incidents played an important part. The findings illustrated the difficulty of development for students, which stemmed partly from problems in accessing discipline specific discourses, and partly from a general culture which was not focused on development. Nonetheless, most students were able to make some progress based on their experiences and the advice that they received.
CHAPTER 7 - HOLISTIC ACCOUNTS OF LEARNING AND DEVELOPMENT - CASE STUDIES

As discussed earlier, there were five students who seemed to differ from the typical pattern of restricted development combined with limited effort to develop. These five students were considered in-depth as case studies, in order to explore why they differed from the expected pattern. The first two cases, Alistair and Kirsty, are used to explore some of the reasons why students do not develop their learning. The third case, Susan, provides an example of a student who could see problems in her learning and who tried to develop, but who had problems with doing this. The final two students, Gail and Leane, are of particular interest, as they developed their deep approach to the extent that they seemed to have made very significant changes in their ideas about learning.

Alistair

Introduction

Alistair came straight to university from school, having completed ‘A’ level examinations. He came to university partly because he felt it was the obvious next step, and partly because he felt that he would have a good time. He chose psychology because he thought that it would be interesting and continued to be happy about this choice throughout the year. He preferred psychology to his other subjects because he found it more interesting, more relevant to making a positive impact in the outside world, and because he found it easier to study. Although he had not studied psychology prior to coming to university, he was pleased that it was similar to the Sociology he took at A level, in contrast to his other subjects which he felt to be quite alien to his previous learning.

Alistair was chosen as a case study as he showed very little development in his learning throughout the year. He came to see psychology as more relevant to real life by his final interview and learned a few minor points about essay writing from his tutors' comments, but otherwise his learning seemed very stable. His learning at
university also showed clear similarities with his learning at school, especially in his methods of examination revision.

Alistair was also interesting because his learning illustrated the limitations of approaches to studying for describing the learning of individual students. He showed elements of the deep and strategic approaches quite strongly, but other elements were missing, even within the same assessed tasks. Further, important aspects of his learning are not addressed by the approaches as typically conceived. Although the approaches were not designed to illustrate the learning of individual students, the extent of their limitations in this regard is of interest.

**Overview of learning**

The most striking characteristic of Alistair's learning was the extent to which he was extrinsically motivated by assessment and his dependence on external factors to judge the quality of his learning. This was important in both his school and university learning. This need for immediate external pressure in order to be able to work does not fall clearly within any of the usual conceptualisations of approaches to studying, for example, it was not simply an intention to cope with course requirements, nor was it an intention to achieve the best possible grades. He found it very hard to work without the pressure of an immediate deadline, even though that might improve his grades. So, although he cared about getting reasonable grades, this did not fully describe the issues around his motivation.

I didn't work that hard (at school) ... the work I did do was driven by the fact that my older brother is particularly intelligent, and I didn't want to look really stupid, and my little brother is probably more intelligent as well than me, so I had to keep the standard up, otherwise I would be ridiculously stupid ... There isn't a driving force (at university) yet, because there's no exams looming ... There's no-one particularly to check up ... Once something happens which I realise that I am behind everyone else, or that I need to do something for a specific task, like an exam or essay, then I will probably start work for real.

Because I knew (the first essay) didn't count towards exemption ... I thought, well, it doesn't actually matter extra specially if I cocked it up ... If it was more important, I would have done probably a little bit more, but I tend to leave it until fairly near the last minute ... I tell myself that I work better under pressure, but that's probably not true....

Before I was writing (my lecture notes) up ... (but because) I am currently counting on an exemption ... I don't really care about them all that much at the moment ...
suppose in the second year I'll come a cropper, because then I'll realise I have the notes from first year, but I haven't read them up for ages...

Further problems with the approaches are raised when his strategic approach is considered. The quotes above show that Alistair had difficulty in putting effort into his studying and in time management. So in some ways he was quite unstrategic, however, he showed other aspects typically associated with a strategic approach more strongly than most of the students interviewed in this study. He was strong on alertness to assessment and thought in some depth about the conditions and state of mind that he required to work well:

(For my school Sociology essays) I normally start with what the introduction is, and relating it to some issue that is in the papers, or whatever; just because I know teachers like that ... the main conclusion would be in a sort of non-decisive way, because you can get marked down for decisive points in Sociology essays ... I didn’t like it to start with, it was quite hard to take out all of your own opinion ... but once I had got the hang of it, I realised it was just the formula and they didn’t actually care, they just wanted to know that you could write sensibly and understand the information ...

(For my first psychology essay) I picked the topic because it was what we discussed in the tutorial ... I thought that would be the sensible one to do, because then I would know the pattern I am supposed to follow and I can make my mistakes now rather than later.

There is a certain mood you have to be in to write certain essays. I couldn’t write an (Artificial Intelligence) essay in the same mood as I’d write a psychology essay ... (For psychology) you have to be a little bit away from the essay, so that you can be thinking along lots of different lines, so that you can put it all together to make sense. Because AI is slightly more scientific, you don’t have to be thinking as generally, or as analytically ...

This last week I have been working in my room quite successfully. So if I can continue that I won’t bother looking for another library, but if that deteriorates and it gets worse, and I can’t work in my room, then I’ll look for a better library ...

Somewhere that’s the right temperature, that’s got non-fluorescent lighting...

In relation to the deep approach, Alistair made consistent efforts to understand throughout his course and saw understanding as a fundamental part of learning. He also showed most of the deep processes identified in this study at some point in his learning tasks and was able to think critically. Despite this, he did not show the active interest characteristic of a deep approach in any of his learning tasks, although he did think that psychology was an interesting subject. Further, when we look at particular learning tasks, we see that his deep approach could sometimes be quite limited. For the class examination, Alistair showed an intention to understand but his revision was quite basic, he revised mainly by rewriting his lecture notes in his own
style and layout to help him remember the details, as he felt he had already understood the material in his lectures. Some of these issues are illustrated in the following quotations:

(I read the topic through in the textbook) because it was frustrating me that the lectures were pretty incoherent, and I didn't understand the structure of where these people were ... or where they were coming from. So, I thought the best thing to do is to try and understand where they were coming from and link them all back in. My memory works in a way by I have to understand it before I can remember things...

I'd say the evidence (in my essay) except that if I thought it was bad it would probably be because of methodological reasons ... In the essay I'd have to write the methodology reason would probably not be very good because X, Y, Z ... I learned about (methodology) in Sociology, but I've got a kind of logical mind and I see flaws quite easily in methodology ... It comes quite easily to criticise that.

**Explanations for lack of development**

Of the characteristics of Alistair's learning described above, his dependence on external motivation seemed most likely to have limited his development, especially since it was combined with mainly high grades. He got a C for his first essay, after which he stopped writing in the first person and included more psychological research in his later essays. He then gained an 'A' for his second essay and high 'B''s for his final essay and the class examination, making him exempt from the June examination. It would have been very difficult for this student to change unless he felt under pressure and these grades did not put pressure on him to improve. The related problems that he had with time management may also have affected his development, as he would not have had time to experiment with new ways of learning, even if he had the inclination to do so.

The quotes below are puzzling and intriguing, as they are somewhat contradictory but nonetheless seem to touch on issues which were important for Alistair's development. The quotes suggest that he sometimes employed a way of thinking about learning which would allow him to rationalise problems in such a way that he still felt that he was capable of learning well. By using this tactic, he could avoid the negative emotional consequences associated with feeling he was intrinsically unable to
cope with his work. Where he employed these tactics, this would block his development, as he would not face up to problems in his learning.

If I'd done badly in the essay, or the exams, then I would have thought, 'Oh crumbs' and then I would have looked for other ways of justifying how well I was doing ... I'd have looked for an excuse ... I'd say, 'I haven't done enough work, so I haven't done very well'. Or I'd say 'Well, I have done really well, but the exam was difficult'...

I think I probably do things quite differently each time. It depends on loads of different factors, like what I am doing in other subjects, whether I've got any time, or when the deadline is ... how much I feel like working that month ... How tired I am, how happy or depressed I am. How much (there is) to do going outwise ... I know I perhaps could write a better essay, but it doesn't really bother me ... Because if I write it at the last minute then I'll do really badly, then I'll justify by the fact that I wrote it at the last minute ... and I know that I now understand the information, so that assuming that that essay doesn't count towards something hugely massive, I can make up in the exam, because I'll understand it relatively well, even if the essay is written badly I think ...

Despite this apparent avoidance of threats to his self-esteem, at other times he did seem able to critique his work and to see the potential consequences of his learning problems. For example, for his third psychology essay he was able to make a strong critique of the piece and rewrote the essay on this basis.

I sat down the night before (the essay) had to be in and rewrote it from scratch again because I didn't like it ... It was just useless, it was just waffle ... I talked about the things which I thought were possibly irrelevant ... My introduction didn't work, then the experiments were reasonably well explained, but they didn't really hold together ... I just knew that my first version was useless, and I had to write something which flowed better, so I sat down then and rewrote it.

It may be that the distinction between these different instances is that Alistair avoided anything which suggested that he did not have the ability to work well, but could accept that sometimes he would not work well due to circumstances. This may explain why, despite the difficulties that he had, he still expressed considerable confidence in his ability to learn in psychology. His confidence also seemed to stem partly from a belief that his 'A' level Sociology had prepared him well for studying psychology at university.

(I have not used study skills advice at university) because I know I can study. It's just a question of organising myself to do it ... Putting the man at the desk ... It's not that I don't know how to do it, it's just I haven't organised myself to do it yet, with this particular framework of learning.

(The sheets of advice on essay writing from our tutor) basically said the advice which I'd got for 'A' levels in Sociology ... I think there were a couple of points which I thought, 'Oh I must take a note of that', but ... I didn't rely on them to write my essay.
Alistair’s confidence in his learning ability seemed to form part of the reason why he was not responsive to study skills advice at school or at university. He also took the student learning lectures as confirmation that his way of learning was appropriate, because the lectures emphasised the importance of understanding. The lectures did not seem to prompt any critical reflection, even though Alistair was weak on other aspects of learning mentioned in the lectures, such as time management and organised studying. An additional problem with study skills advice as a means for development, was his belief that he would not be able to make use of such advice, even if he felt it was sensible:

S: I wouldn’t take any notice of it, I don’t think ... I assume if I went to the study skills books, or a study skills workshop, it would tell me to organise my time better, and to write notes in this way, and to do this, that, and the other, to improve it. (But) I would go away and take no notice of it ... What makes me take no notice? Bloody mindedness I suppose. For example, if it said to organise my time better and just do an hour a night, I would think, ‘Well that’s nice, but I don’t want to’. I may start ... (but) I would just give up on it ... It would say things which I’d think, ‘Ah it’s very sensible’ ... but I wouldn’t take any notice of it... It always comes down to whether you can stick to that plan yourself ... most of the time I won’t be able to.

S: (The student learning lectures) were all right ... I didn’t think that something which seems like common sense would be studied in psychology ... I thought that was fairly obvious, that if you wanted to understand it, and you made an effort to understand it, then you would ... I do tend to make an effort to understand it ... That’s the way I’ve been taught, to understand it, and the exams that I have done have called upon understanding largely speaking...

I: So was there anything from the lectures that you made you think, ‘Oh I wonder if I’m like that, or should I maybe do things like this’, or anything like that?

S: Em I can’t remember them very well, I didn’t take lecture notes from those lectures.

I: Why was that? ...

S: Just because his lecture style was not for taking notes. It was just to listen to and be interested in ... there were facts in the handout which I could use ... it wasn’t very difficult stuff to remember theoretically, I mean just if you tried to understand something you understand it, so I didn’t bother. Perhaps I should have.

Summary

Alistair’s learning was strongly defined by his dependence on external sources of motivation, which did not fall clearly within any of the approaches to studying. He showed some aspects of the deep and strategic approaches, whilst other aspects were
missing, illustrating how the approaches may not work well empirically at the level of individual students.

Alistair’s dependence on external motivation interacted with his good grades and a number of other factors, such as his problems with time management, to limit his development. He seemed to attend selectively to parts of the advice he was given in such a way that it did not prompt critical development. But even where he was able to reflect metacognitively on his problems, this was not enough in itself to cause him to develop his learning. For example, he felt that he would not be able to respond to study skills advice in relation to his problems. His difficulties were complex, as he seemed to avoid facing criticism of his learning at some points, and yet was able to be quite self-critical at others. His confidence in his underlying ability may also have limited his development, although the quotation below suggested that he was not uniformly confident in his learning ability:

I thought it was stupid to do (an essay) where the only explanation I've got was from books, and no one had told me anything about it. Because, if I had got the wrong end of the stick, I would obviously (have) got a ridiculous mark, which would be quite easy from a book ... I assume that the person who is telling you what they have told you in the lectures knows what they are talking about, and so their broad overview will make it easier for me to understand from a book, although I might (still) get the wrong end of the stick.

Kirsty

Introduction

Like Alistair, Kirsty is included as a case because she had shown very little development during the course of the study. Despite a thorough analysis, the only slight change found in her learning was that in the first few lectures she tried to write everything down but realised that was not working and that she was missing the meaning behind the overheads. So, as advised by the lecturer, she began to write only the main points. Although some of her difficulties were extreme compared to other students in the sample, her case did tie in with some of the main themes in this research which had been identified as potential barriers to development.
Kirsty was a traditional entry student, beginning her joint course in psychology and philosophy after finishing her sixth year at school. She had not studied psychology previously, but had become interested in educational psychology while at school and had done some reading about the subject. She had also completed a brief Sixth Year Studies biology project which had a psychological theme. Throughout the interviews she talked of her intention to become an educational psychologist, however, as the interviews progressed, she became more doubtful as to her ability to work hard enough to achieve this.

This case study is another example of the difficulties inherent in using approaches to studying to characterise individual students' learning. Although Kirsty expressed a strong interest in psychology, and an appreciation of its relevance, as well as an intention to understand, her inability to work meant that this was not reflected in the ways in which she studied. Her difficulties also interacted strongly with the context to influence her approach. Although it is well known that students' approaches to studying are affected by the learning context, the dynamics of these issues are difficult to describe in terms of clear categories or themes. An extended extract is presented from Kirsty’s description of completing her third essay to illustrate these issues.

Central themes and barriers to development

The central problem Kirsty mentioned was that she found it very difficult to get down to work, typically leaving everything until the last minute. She also had a related problem, that she found it very difficult to work unless she had large blocks of time free. This had been a problem for her since school. Although she claimed in the early interviews that her problems at school were due to lack of interest in her subjects, it soon became clear that they had carried over into the university context, despite her interest in psychology. It was apparent that Kirsty’s problems with working prevented her from taking a fully deep approach, despite showing an intention to understand.
I really enjoy the lectures, not so much that I manage to make them all, but I do really enjoy them ... The lecturers have been interesting as well ... Ideally, I would listen, and then take brief notes, and then maybe expand on the notes when I got home, but I've never done that... 'cos I'm lazy...

I could spend a whole evening doing (an essay) but I tend to have a lot of other things on, and so it's not a very appealing thing (to) set aside that whole evening and do this essay ... There is always the urgency that it has to be done, so the fact that you're enjoying it, you don't even really even consider that at the time ... It was just something I had to spend all this time doing...

I find that once I've started an essay, I like to finish it right there and then ... I like to get into it, do it for a whole day. If I had anything else on; ... if it was 12 o'clock and I'd come out of a lecture, and I had a lecture again at 2pm, there is no way I would go to the library for the two hours in the middle, because it just wasn't worth my while starting, and so that's a problem.

Although Kirsty was well aware of the problems in her learning, she felt that she would not address her study problems unless they caused her some significant difficulty. As she gained good grades in all of her essays, she felt no need to change her methods of working. Although she barely passed the class examination, there is nothing at interview three to suggest this had affected her learning. It is possible, however, that this would have influenced her approach to the degree examination, which was not considered in this study.

I didn't prepare well for (the class examination) at all actually. ...With the essays having been for two weeks before, ... when it got to the stage that I maybe had three days to do an essay, then I would miss the lectures on these days; because otherwise I've got 10 - 12, then maybe a tutorial somewhere in the middle, then I've got a 4-5 lecture on three days of the week, and on these days ... I wouldn't fit in any work for the whole day ... When it came to getting close to the exams, I'd obviously missed a load of lectures...

(I had realised that this problem would arise) but I'm not a worrier ... Like I said before, nothing really bad has happened yet, maybe I'll fail my psychology exam, that would be a very bad thing ... I didn't think ahead, and even if I had it wouldn't really have bothered me at the time, because, well, I'd just think, 'I'll cross that bridge when I come to it'...

Kirsty's reaction to advice about learning shows how profoundly her difficulties influenced any possible development. She was so focused on the problems that she would not even consider any other improvements. She had not used study skills materials (with the exception of handouts on essay writing) and did not feel she would gain much from using them. She also held similar attitudes to the student learning lectures.

I tend to avoid study skills, 'cos I know I don't have them ... I suppose I'm a bit cynical about the likelihood that I will adhere to any sort of study skills system ... ... I suppose I should, 'cos that's where I'm lacking...
I didn’t go to all of (the student learning lectures) actually, I think that was maybe the week I was doing all the essays, or I was doing something anyway. Yeah, I did find that interesting and, yeah, there are bits that you think you know do relate, (but) I feel that I really know what my problems are with studying ... it’s basic laziness, that’s all it is really, so I don’t think that much about approaches to studying or whatever ... I suppose I don’t really like to, you know, mask it in any deeper ideas about why I don’t do it, I’m sure it just is laziness...

Kirsty also suggested that she was influenced by a student culture in which first year was seen as easy to pass without a great deal of effort. However, this reason was not mentioned by any of the other students in the study.

There’s a certain relaxed attitude towards first (year) ... people in later years will say, ‘First year was easy, first year was nothing’. So, when you’re in first year, that will make you actually not bother much ... but ... when you know there’s a whole lot of work you’ve not done, you don’t need someone to tell you that it’s easy, ‘cos you think, well, you know, it’s obviously not that important then, if everyone else passes ...

**Writing her final essay**

Kirsty’s account of her final essay shows how her problems in learning interacted with specific aspects of the learning context to allow her to complete the essay with little engagement or effort. Her inability to work interacted with the particular essay question to push her towards minimal engagement. This is likely to have been exacerbated by her good grades on previous essays which left her without any reason to improve. It is also clear that the information on essay writing she was given did not encourage her development, partly because it did not answer the particular query she had, and partly because she already felt she was competent at essay writing.

In some ways her approach to the essay seemed very surface, as there was clearly an intention to cope minimally with course requirements. Yet other elements characteristic of surface/apathetic approaches were not present. For example, there was no fear of failure or lack of purpose. Although she did not develop an in-depth personal understanding of the essay topic, she did not describe any particular problems with understanding. There was no evidence of the sorts of difficulties in understanding typically seen in relation to surface approaches.

It is clear that the general definitions of approaches to studying do not fully capture the reality of this student’s experiences, but overall her approach to the task can be
defined by an intention to cope minimally with an absence of some deep processes.

While this was partly due to her typical problems in studying, it was also a reaction to context. For a previous essay, which had a more complicated title, she had been forced to make efforts in relating, organising and structuring.

An extended series of extracts is provided to give a fuller sense of Kirsty’s experience of writing the third and final essay.

It was a very straightforward essay title ... it was 'Outline ... Piaget's pre-operational stage' ...but it didn't say, 'discuss', or 'evaluate', that's the point... When they say 'evaluate' or 'discuss' then you have to maybe come up with some of your own ideas on the subject ... but this was just asking you to basically put down something about what Piaget's theory was, without any of your own thoughts on it, or anyone else's thoughts on it ... That's the sort of essay I like, because ... it's quite easy, you don't have to struggle over complicated ideas ... It's not necessarily what I would enjoy the most, but knowing that I don't tend to put too much work towards my essays, it's the sort of title that I enjoy getting, because I know that there's more chance that I can do it with the minimum of effort....

I left it to the very last minute ... just putting things off really, just not getting round to it, being lazy. I think, as well, I had three (essays) and a presentation, and that does put me off. Like, how I was saying about the reading, if I have more than one thing to do, I can't decide which to do, and I'll find I won't do any for a while anyway...

I leave it so late that I find it hard to get books, which is totally my own fault ... I wanted a book that basically outlined all stages of Piaget's theory of learning... Because I usually have such a small amount of time left to do the essay, I need it written out in a clear concise way, because I haven't got time to read through the complicated textbooks...

So the title did puzzle me at first - like I said, it was so simple - and I did think over, 'Am I supposed to put my own views in here? It doesn't say to, but was I supposed to just do that anyway?' So, I suppose I thought about the title more than usual.

Psychology has been very good for giving us handouts on how to write essays; they're really detailed. So, I actually read through them (but they were not relevant to this problem with the essay title) ... There is advice (on the handouts) that would be helpful for writing any essay, but I had read them before anyway, and it was stuff I probably knew...

Normally, what I'd do (for an essay) is take notes on pieces of paper, ... then I'll put them all together in an essay ... I didn't do that this time, I suppose because it was so much simpler ... the order was quite obvious really ... I did (take some notes), but not nearly as detailed as usual, and I worked from books more, which I don't tend to do..., mainly using the book that just outlined the stages...

Because the essay required so little of your own thoughts, it was quite straightforward. But then, I suppose, because you can't just write straight from books, obviously ... there's a real danger of that in a question like that, because there's only so many ways you can say it I think. (To deal with that) I had a lot of references I suppose, I always put the reference in, because just in case the tutor has read it, but I used an awful lot ... because everything I had, really, was taken
from somewhere, because it wasn't any of your own thoughts, so I didn't deal with it as such, just that I noted it, and I suppose that was what you were supposed to do...

I got (a high B) for it and he said it was a good essay, and it was quite thorough, and explained the theory. He said ... something about referring to recent advances which, thinking about that now, is a bit strange, because I thought really I was just required to explain why Piaget called it his pre-operational stage... That was all really, and there was one bit I should have structured differently apparently...

I don't know, I don't know, I don't know (what a good psychology essay is). I've found the essays for psychology quite easy really, in that I've not given them a lot of time or effort, and I've done better than I thought I should, so I'm not quite sure, I suppose, what makes a good one... I suppose content and structure are the most important things, and balance ... You have to have the right content, otherwise it wouldn't be any use ... You have to pick out the correct pieces of information to include ... Writing an essay for me isn't a problem, 'cos I've done so much of that in school, and I mean, I'm not brilliant at it, but I can put together basically a good sound essay structure...

I don't know that I learned anything (from doing this essay) - how negative! - but we had in lectures covered Piaget's theories, and obviously I was reading them in a lot more detail, but I don't find I do learn much from my essays. Because I do them so quickly, they don't stick in my head...

Summary

Kirsty's learning was dominated by the problems that she had in getting down to work. This seems to have been the main limiting factor on her development, along with her belief that she would not be able to solve her problems, for example, through seeking study skills advice. Her good grades in her essays may also have limited her motivation for change, although her poor mark in the class examination did not appear to provoke any development during the course of the study.

As in Alistair's case, Kirsty's learning suggests that, although category systems and general explanations of the effects of learning contexts can help in understanding students' learning, they do have their limitations. For example, she was interested in her subjects and did show an intention to understand, but her problems in studying often prevented her from carrying out deep processes. So, the deep approach as a whole did not map well onto her learning. Kirsty's reaction to her final essay showed how the fine grained details of the learning context, such as the particular essay title set, can have an important influence on students' learning. So, although essays may
generally support a deep approach, this may not be the case for particular individuals in particular contexts.

Susan

Introduction

Susan is interesting because she differed from most of the students in this study in that she saw a clear need to develop her learning, and was keen to make these changes. While other students in the study saw some room for development in their learning, or had quite positive attitudes to advice about their learning, most of them did not feel the need to make a concerted effort to change. Despite her positive attitude to development, Susan did not show such extensive changes in her underlying ideas about learning as did Leane and Gail. She did, however, make some progress in her skill in learning during the course of the research.

Susan had been interested in psychology since reading some texts on the subject in her teens but, as she had left school with few qualifications, she did not think it would be possible for her to study psychology. After working for some years, she completed an access course which qualified her to study psychology at university. Her aim was to work in clinical psychology after completing her studies. Although she enjoyed her access course, she did not consider it to be a good preparation for university and she felt very overwhelmed by her experiences during the first few weeks.

They do say that access courses are a preparation for uni, but I would tend to disagree ... I found that going into my first lecture here ... was just a really terrifying experience; all these people, I just felt really overwhelmed by it all ... You're used to working in small numbers in an access course, you've got the same class most of the time, the same people, you get to know them really well ...(We didn't really do anything on study skills in the access course); we took some English, in a way they prepared you a bit for writing essays, and we had to stand up and do talks and things in the class. It touches on it, but ... it's so packed; you're so busy. I don't really think they have time to spend on helping you the way that they would like.

Explaining her positive attitude to development

Susan showed a positive attitude to developing her learning throughout the course. She felt that her learning needed to improve and she was prepared to ask for help and
to use study skills materials. This willingness to ask for help seemed to have carried over from her learning on her access course. Her positive attitude to development apparently arose from the interaction between her lack of confidence in her learning ability, aspects of her self-image, and a complex combination of motivations.

The quotation in the previous section illustrates how Susan did not feel well prepared for learning at university to begin with, but this belief - that her skill in learning was not up to a standard which would allow her to cope easily with the course - persisted throughout the interviews. It was not the case that she was certain that she was unable to do well on the course, but rather she believed that her learning would have to improve in order for her to cope. Even by her third interview, she still felt that there was considerable room for improvement. This lack of confidence may have been influenced by her experiences on the access course, which she found very difficult.

So (the access course) was very, very, hard ... There were many tears and frustrations along the way, and not understanding things as quickly as I wanted to, and having to spend excess time on things. ... Some days I just felt, 'Oh God I can't do this any more'. I got really frustrated and really angry...
(first interview)

If I fail things, I would have to do resit upon resit, and I don't want to do that. I know I haven't got a doubt over an exemption for psychology for the June exam which is fair enough ... That's my fault, by not managing my time properly. But if I fail June's, then it will be a case of, well, I've done my best, and it's maybe not quite good enough. However, I am not at that point yet.
(second interview)

I found I have just got screeds and screeds of notes (from the lectures) and when I go back and look at them, I don't understand ... When I go back and try to read my notes I think, 'God this is rubbish' ... I find ... I've got so much in my head when it comes to sitting the exam, so many parts that I have tried to take in, that I just feel as if my head is going to burst ... A week later I can barely remember anything ... I think that's really no good...
(third interview)

One aspect of the way in which Susan perceived herself as an individual seemed important to her positive attitude to development. She appeared to see herself as someone who fought against difficulties rather than giving up; there were several instances during her interviews where she used the metaphor of learning at university as a battle to be fought. This view of herself in relation to university apparently helped her cope with the disappointment of some low grades and the struggle she had to cope with the course. This was quite different from many of the students in the
Susan’s strong motivation for the course was likely to have had an important impact on her positive attitude to development. This motivation had a variety of bases, some of which did not fit well with the categories developed for this research, perhaps because she was the only mature student involved in the study. The fact that she saw her degree as one of her last chances to get a good education, and to do something with her life, was very important. There was also the issue that she felt that getting a degree from this institution would be seen as a very significant achievement, and she described how proud her family were that she had begun these studies.

I left school at quite an early age, and with very few qualifications ... I’ve been round the track a few times, and basically I decided that I wanted to do something that’s more constructive with my life ... I want to do clinical psychology; I’ve always had an interest in psychology, (but) because I left school so young with no qualifications, I didn’t think there was ever going to be a possibility I could apply myself the way that I have. But being that bit older, I suppose I’ve got more staying power ...

(I) never, ever, dreamed that I would come to (this university) ... Obviously, what really does put me off ... is my age ... Who is going to take on (someone my age)? All these things are at the back of my mind, that I have got concerns about that, but, you know, it doesn’t put me off. That’s just something I am going to overcome at the end of the day ...

I’m enjoying the challenge ...When people hear you’ve got a degree from (this university), it’s ‘step back in amazement’ type thing ... I don’t feel that this is my last chance ever in life, but I think it’s one of my last chances to get a good education, so I’m determined I’m going to stick in there... Obviously, my family are very, very, proud of me, and they give me great support in every way, which has been tremendous ... I have had a great interest in (psychology) I think to be interested in it, and to enjoy what you are doing, is half the battle ...

Susan’s interest in psychology was coupled with an intention to understand across all of her learning tasks, although this was limited to an intention to understand course materials, rather than to develop a more personal understanding. Her intention to understand seems to have contributed to her positive attitude to development, as she...
realised she was having some problems in understanding, and this helped her to realise that her learning needed to improve. This was an example of the metacognitive category *monitoring understanding and related regulation*. The second extract below shows how she also had an intention to gain good grades and was spurred to further efforts when she did not do very well.

*You go to lectures to get a better understanding of the subject ... I find that I am spending far too much time writing down notes which I am not understanding ... and instead I want to find some way of being able to sit and listen to the lecture, and take in what's being said, because I think I would get a better understanding ...*

*I can't understand these young people that have a very lackadaisical attitude as, 'Oh I'll sit the exam in June, and I'll sit it in September' and, 'Oh I am not really bothered', but I suppose because I am older, it's kind of my last chance to do something ... So I'll do my best ... My grades to me were a big disappointment, but I suppose I have to turn that into a positive aspect ... It has kind of boosted me up a bit ... If I had maybe done better I would have been more lackadaisical about it ... It has given me a boot up the backside ...*

**Barriers to development**

Despite her positive attitude to development, Susan did not make as many changes in her learning as might have been expected. There are a number of possible explanations for this. Firstly, over the early weeks of her course, Susan was struggling to become acclimatised to the difference between university and her access course. She found the large classes very daunting and also felt that she had had much more support on the access course, whereas at university she was left to cope much more for herself. These feelings gradually subsided as she became more used to university life and had discussions in tutorials which provided some support and helped her to realise that other students shared similar concerns. These problems initially seemed to limit the resources she had available to take on board other opportunities for development. For example, she felt she had not had the chance to read over the handouts that her tutor provided on essay writing. She did read these later, but felt that she did not give them sufficient attention.

Once these initial difficulties had been overcome, one of the main barriers to Susan's development appears to have been the problems that she had with time management throughout her course. Susan felt that these problems began because her outside
courses were inappropriate. She had two courses which she found very difficult, and these were taking up a disproportionate amount of her time. She did eventually get into courses which she found more suitable, but this process meant that she had lost quite a lot of time. There was the extra time that she had spent on the problematic courses and the time taken up by switching to new courses and catching up with these. This all meant that she had little time or thought for other possible developments.

I took chemistry and quantitative biology, and I went to the first chemistry lecture and I got this book and I thought, 'No way' ... two of the subjects that I had to take last year I loathed and they were in the booklet ... So, I went back to the director of studies in the first week (to change that) ... Quantitative biology is very ‘mathsy’ ... I don't have a mathematical brain; I never have, so that was a bit of a concern for me. However, I thought, 'Well I’ll stick it out for a couple of weeks, I’ll work as hard as I can and try and do it'. But I found that as time was passing, I was devoting more and more of my time to (quantitative biology) ... and I wasn’t studying the psychology ... So, I went back to my director of studies yesterday and (my director) was really good ... So now I’m doing Criminology as well and I’m really pleased.

Having sorted out her courses, Susan nonetheless continued to see time management as a central problem throughout the course of the research. One reason for this was that she found it necessary to take a considerable amount of paid work. A second reason was that she found her psychology essays to be very time consuming, which left her with little time for other work, such as studying for the class examination. The main reason why these essays took up so much time appeared to be the difficulty that Susan had in finding resources for her essays, and in being selective in their use. This problem seemed to have carried over from the way in which she collected information for her reports on her access course.

It seems that for the access course she did not really limit her reading or plan out a structure which might have guided her reading. In fact, she did not really seem to have understood what was being asked when these issues were raised in the interview. This may have been a problem in the interviewing: perhaps she was adopting a different accounting practice that the one expected by the interviewer. Susan may have been working to illustrate the extent of the effort that she put into the project, rather than to explain how she dealt with issues of structure and selection of material.
It does appear, however, as if she simply had not considered these issues. An extended extract is given to fully illustrate this point.

S: Well, as I say, the library was the main source (for my access course project) and also the internet, I got a lot of information from the internet ... I phoned up the _______ Society (and) asked a bit about it, they sent a whole stack of information ... I spoke obviously to ______ who is a sufferer, I spoke to other sufferers ... I wrote to a hospital that deals with it ... Just accumulating as much information on the subject as I could.

I: Can you tell me a bit about how you selected which information to use and how you organised it?

S: ... Obviously I could do diagrams, so I selected out diagrams and referred in my writing to the diagram. Just really picked out statistics and did graphs ... I picked out bits from different books and obviously from the internet; ... things that were relevant to what I was writing ... I was interested, obviously, in how it could be cured ... I was looking for bits about that ... Variously just trying to structure it from there, you know, an introduction, a bit about what it's about, a bit about cures, and obviously then the way ahead. I was looking for research that was happening at the time, what was being done about it ...

I: How did you deal with all of that information as it was coming in, did you have a plan in mind from quite early on?

S: What I did at the beginning was write a project plan. What I had at the time was a time limit to do things and I tried to follow it; (it) was like a diary - things for every week that I had to follow up. (Then) I sort of structured it from there, tried to follow the plan as best I could, but obviously that didn't come about. You're writing to different people and they don't respond ... things like that sort of threw out your timing, your schedule, a bit

I: I was wondering more in terms of organising the information, you've got all these different bits of information, like how you dealt with that?

S: Well, I just I read through, —— who's a sufferer; he gets a booklet every month ... so I picked out bits from that that were of importance. As I say, I went through the internet, I got a lot of information from that .... Basically, I structured it from that, picking out bits here and there of what was relevant to what I was doing.

This pressure of time helped to explain why Susan did not in fact make use of any study skills advice until interview three, when she mentioned having begun some work on mind mapping. On several occasions through the interviews, she mentioned having had the opportunity to make use of some sort of study skills help, but not having had the time to do so. For example, she bought a book about essay writing recommended by her tutor, but then only had time to skim it briefly. She felt that the student learning lectures were relevant to her learning and felt keen to make some improvement based on this, but these ideas faded over time and by her third interview she could remember little about the lectures.
I bought a book ... it was recommended by my tutor ... All about essay writing ... I have read a bit about that, I also have other notes which I have read ... What I have to do is, when I have got more time, is to sit down ... and just really concentrate ... I am studying for other things and I don't have the time to concentrate. So therefore I am only skimming through ... Well, as I say, it was just a cursory glance, so basically I can't really say (whether there was anything helpful in the materials) ...

One further problem which limited Susan's development was that she seemed to have seriously misconstrued the importance of criticisms made by her tutor on her first essay. The tutor's comments were as follows and the grade was a mid 'C':

Is this directly relevant to the question? ... You should give full references of all research cited in your essay - this list is not enough ... You need to make reference to specific research studies in psychology essays. In doing so, you should outline the research methods they use and the key results. It is also a good idea not to use subtitles in short essays. On page four, you provide lists of recommendations and key variables - these should be expanded on and research evidence provided.

Susan interprets this feedback as shown below, she believed that it was the technical details of the way that she did her referencing which lost her the most marks, but this would not have been the case. More important would be the general use of evidence to support her points and the fact that she did not remain relevant to the question. Her conception of essay writing did not change between this and her next essay, and she went on to get almost an identical grade for that second piece.

The biggest thing that let me down was not applying references to the various bits of information. I put the references at the bottom, but I didn't actually really write it in the paragraph. I didn't do that, and that was my biggest fault. That's what I lost marks for ... Not to use sub-headings which sort of broke the flow, and there was a couple of things that I had in that weren't specifically relevant to the topic... The biggest thing, as I say, was the references, not applying references ... I don't think in all honesty I did add in the amount of books that I used. The references I referred to were in three or four books where, in actual fact, there was six ...

**Charting and explaining development**

Despite being so focused on issues to do with *time management*, Susan did have the opportunity to make some improvements in her learning. Throughout the interviews she was aware that there were problems in her note taking in lectures. She was unsure what was relevant and had difficulty in understanding her notes when she came back to them. By her third interview, she had just begun to use a mind mapping technique which she hoped would help solve these problems and would make it easier for her to study for examinations. She also hoped that the technique would allow her to work
more quickly, thus alleviating some of her time management problems. She originally learned the technique through her mother's encouragement, but the student learning lectures then supported this change by suggesting that this method was useful.

(first interview) You are writing furiously away, and I find that when I'm focusing on writing, I'm not really taking in what the lecturer is saying. It's really difficult .... trying to do both ... When I pick out key words, I find that a bit easier, as opposed to trying to write down everything ...

(second interview) It is really difficult in the lectures, when you want to pick up all the points and then you think, 'Och, it's OK'; when I look back I'll understand what I meant. When you look back, maybe six weeks later, it's not; you can't fit it together. So, what I tended to do was steer slightly clear of the lecture notes and stick to the books ... To rely on my notes was hopeless.

(third interview) At the moment I have been reading books on mind mapping ... to help me take notes in lectures, because, in that respect, I find I am concentrating too much on writing, and not enough on listening to what the lecturers are saying, and I find I am wasting an awful lot of time. My mother got me these two books; she swears by them herself ... So, I am trying to develop a different technique in note taking and revising of notes ... I have just started; I am halfway through one of the books, but I have been practising ... My first lecture was yesterday and I really found I was looking for key words ... I found that instead of writing five pages I have only written two. So it must be working ... I noticed I was listening more to what the lecturer was saying, as opposed to trying to get everything down on paper ...

(The lecturer) was talking (in the student learning lectures) about different ways of how you study for exams ... He had some overheads, and one of the things was this girl who had gone to all the trouble of doing this mind mapping, and it was so intricate ... That specific lecture got me to thinking, 'Well there must be something to this'. You know, there must be something to the mind mapping ... when he was actually showing the different ways that you can learn, and one of them being this. So that really spurred me on ... I had been talking about doing it but I think it was that specific lecture that really pushed me to think there must be something to this ...

From the first quotation below it can be seen that Susan was worried by her problems with time management and planned to find ways of dealing with this. This is unlike the cases of Kirsty and Alistair, whose lack of development can be partially attributed to their accepting that they would not be able to solve certain of their study difficulties. For example, Kirsty characterised herself as being lazy and did not see that this might change. This intention to fight against the difficulties that she was having may be part of the reason why Susan made some improvement in the efficiency of her use of resources for her final essay. As in her learning on her access course, she was prepared to ask for help and consulted her tutor as to appropriate readings for her essay. She used the sources suggested by her tutor in conjunction
with some of her own books, to make a much quicker job of selecting material to use in this last essay. She also seemed to have had a plan earlier on in the reading process which helped to focus her reading. This plan was developed from one of the texts recommended to her by her tutor. As her grade improves to a 'B' it seems that this increased efficiency has not been detrimental to the quality of her work.

(first essay) I wasted hours trying to get books, which was a nightmare, ... wasting one or two hours going up and down trying to find books that weren't supposed to be taken out, but they weren't there ... Eventually, I did get some books that were relevant ... It did take me an awful long time ... I photocopied the relevant pages and chapters that I wanted, read through the chapters I had ... ... I got stacks of stuff off the Internet, which I had to read through, which took me ages to read through, and a lot of it was rubbish.

(third essay) ... I had recommended reading to do, so I photocopied quite a few chapters from different books. I have quite a lot of psychology books of my own ... I went basically plodding through the books, picking out bits and taking notes ... I just picked out the four main parts about personality ... What I did was go to different books and get a reading on each part ... I spoke to my tutor, obviously, to get a better insight into what was required, and (my tutor said) ... read up in the books - I think 'The Personality Puzzle' was the main book ... Really, I just picked from there. The four parts in most of the books that I read were the same ... they seemed to stand out more to me than anything. So, I just picked on them, and sort of worked around that...

Another possible reason why Susan's grade improved for her final essay was that she seemed to have developed her ideas about the characteristics of a good essay between her second and third essays. She had come to realise the importance of staying relevant to the essay question and had made efforts to explain the points she made in more depth. It appears that the misunderstanding that she had after her first essay - that correct referencing was the most important thing for her to work on - had been cleared up. It is not possible to explain in detail the reasons for this development, as the second essay was not a focus of the interviews, but it seemed that Susan had developed her ideas through talking with her tutor and through interpretation of written feedback.

Summary

Susan was remarkable, as compared with other students in the study, for her positive attitude to development. This attitude seemed to have arisen from a combination of powerful motives, a belief that her learning needed to improve (and could improve) and her preparedness to ask for help. Her view of herself as a fighter trying to win
the battle of university learning was also important. This emphasises the potential importance for students’ learning of the metaphors which they use to describe and explain their experiences.

Despite these advantages, Susan did not apparently make such striking changes in her approaches as did Gail and Leane. Important limitations on her development seem to have been her initial sense of being overwhelmed by the university experience and the problems she experienced with time management. Difficulties in interpreting the feedback on her essays were also an issue. Nonetheless, Susan was still able to develop her learning, most notably her ideas about essay writing, aspects of her time management and her method of note taking.

Gail

Introduction

Gail was a traditional entry student, she came to university to study nursing directly after her sixth year at school. She had taken A level examinations, including biology, which included an element of psychology. This material overlapped strongly with the first set of psychology lectures at university. Gail did not have any particular preparation for university learning at school, except that she was encouraged to read around her subjects independently and was warned that she would have to work more on her own initiative at university.

Gail chose to study psychology because she felt it would be interesting and that it related well to nursing. The combination of nursing with psychology is quite common at this university. As time went on she was pleased to be able to see stronger connections between psychology and nursing:

(first interview) I think it (psychology) complements the nursing a lot and it’s interesting: I liked the psychology that we did at A level...I suppose (I want) more of an understanding of how people think and, I suppose, the way people learn ... Say if I was explaining the medication to them or something, I suppose it would help learning how they’d understand it, and maybe mentioning it again later on, in case they’d forgotten.

(third interview) I'm really happy with them (my courses) ... I've found (psychology) has complemented (nursing) even more as we've gone on. Like the developmental psychology ... I don't know how I would have been able to keep
up with my nursing lectures looking at stages of children's development, ... if I hadn't already covered it in psychology ...

The first three case studies discussed in this chapter illustrated the limitations of category systems for understanding individual students' learning. By contrast, Gail's learning could, on the whole, be characterised as the adoption of a deep стратегic approach. She also carried out metacognitive reflection and self-regulation. Unlike the earlier cases, her learning developed strongly during the year. This case will begin with an account of her approaches as they appeared towards the end of the year, followed by a discussion and explanation of how her learning evolved throughout the year to reach this level of sophistication.

Deep/strategic learning with self-regulation

Throughout her learning tasks, Gail showed interest and an intention to understand as her main motives. This was most often an intention to gain a basic understanding of the course material, but there were a few extracts which suggested that she intended a fuller, more personal, understanding:

With the psychology then, if I think about how ... I can relate that to everyday life, then it makes it more relevant, and so it encourages me more in learning about it ... By the end of the first year ... I want to have an understanding of what psychology is, ... so maybe once I've done my revision and everything ... I could draw a spider diagram (mind map) ... of all the ideas that we'd come across. But to do that, then I have to understand each bit ...

(I think one of the reasons that I've done well on the essays is that the other students are) not copying from the books, but they're not thinking about it themselves ... They're taking it more from the books, they're not really getting an understanding of it, but I try to, 'cos I was more critical of the reading. Then, I looked more at the studies, and tried to get a better understanding of what was being said ...

Gail did not mention any intention to reach an academic standard, but it was clear that both deep and strategic processes with related self-regulation were important in all of her learning activities. By the end of the year, her work for lectures was characterised by planning, selecting and summarising which involved organised efforts to select the main points from the lectures. She then worked to expand her notes by relating them to the textbook in order to develop her understanding. Her time management was characterised by having a timetable for when she was going to work during the week, with goals to accomplish in that time.
I'm a bit more organised about writing. I still write it in rough in the lecture ... then afterwards I go and do the reading and write up ... I think organising my time better, and just I know more what I have to get done in the week ... Saying, 'I'm going to work for an hour' or, 'I'm going to get this lecture written up' ... and then I'd sit down and just work really hard to get it done; ... Just consciously telling myself that I've got to do it. And also I've been writing a list of times when I'm going to work ... and I'd keep to that ...

My notes themselves, ... I want them to cover the main aspects, but I want them to have a bit more as well. So, say, instead of just putting down a key word, and then when I come to revise having to look up in a book what it means, I'd actually put down with the word examples and details that they'd maybe used in the lecture but said you can find this in (the textbook) ... I'd go to (the textbook) ... when I was writing up my lecture notes; then I'd go over it and actually get an understanding of the example used, and then just sort of do a shortened version of that in my notes ... Sometimes, when I read something, then I don't refer it to the actual text that's gone before, or the concepts in the text ... I don't really make a link between them, and I wouldn't understand why they'd used the example, so if I make a conscious effort to actually think why they used that example, then that makes the ideas that have already been used clearer.

Gail also had organised methods for the class examination; she revised regularly, swapping about between topics in order to remain fresh. She was alert to assessment, gearing her studying to the emphasis in the examination on statistics. Her attempts to gain an overview, and to inter-relate and understand the material, suggested a deep approach to this task. Having developed mind maps to achieve these ends, she revised her maps, checking that she remembered enough to expand on the headings in the map, a form of memorising with understanding.

I went through the part in (the course text) and made spider diagrams (mind maps)...so that I had an overview of it ... You can make more links between the different parts to it, ... it's more visual and ... it's easy to remember ... I go over them again and just go through the sequence of how I'd originally done it. I'd go out from the centre, and go to one of the headings, then look at where it branched off to ... I tried to think as much as I can from the heading what I know about, expand about it in my head, and then if I realise that I don't actually know, then I can go back and check in my lecture notes or the textbook ... I was trying to get an overview on the work we had done, so I knew where it all fitted in with each other ... I wanted to have more of an understanding. But to do that, then, most of all, I had to learn some of the work, like sometimes you have to learn something before you understand it ... Although I understood it I didn't actually learn terms as much as I should have done ... I think in the exam that I felt I realised I was quite confused about some things ...

From the end of this quote, it is clear that she was able to reflect critically on her learning for the examination, suggesting specific problems rather than, for example, simply stating that she could have done more work. It seems that she benefited from this critical reflection, as she received a 'D' for the class examination, but a high 'C' for the final examination. It is, however, also possible that the final examination, which
included essays, was more suited to this student’s way of learning than the purely multiple-choice format of the class examination.

Gail chose the topic for her final essay for quite strategic reasons and tackled the task in a well-organised manner bearing in mind the time constraints. Her adaptation to these constraints gave another example of her self-regulatory ability, as she was able to change her essay writing method to work more quickly. She was attentive to the feedback on her previous essay, and made efforts to alter this essay in light of those comments. She was also efficient in her use of the library, quickly selecting accessible texts that were directly relevant to the topic. She was aware of the conditions required for her to work well and aimed to achieve these. Some of these aspects are illustrated in the following quotes:

I chose to do (an essay) on intelligence ... because, well, we hadn't covered any of the lectures in it at that stage; I thought that it would be a good basis for reading for the lectures to come ... Other people in the group had done the intelligence one and they'd found it all right, and said that there was plenty of stuff about it, so that's why, really.

I think (for previous essays) I left (the plan) more open, 'cos I always hope to find something more from the reading ... I think (this time) I thought a bit more about what I actually had to do, and from the essay title then I knew that one bit would be 'nature' and one bit would be 'nurture' ... So, I thought a bit more about how I'd set it out earlier on, ... I think just try to be more organised and waste less time...

I work most effectively, not when I'm really tired, because I can't get things straight in my head... (I need) an hour and a half so I've got time to sit down ... I work better if I'm feeling more confident, and if I'm more optimistic about getting the work done ... If I'm worried about getting it done, and think that I don't understand it, and I'm not really sure about what I'm doing, then maybe because I've wasted a bit of time already, then that puts it off to a bad start ... (If I'm not in the right mood) I'd maybe go for a walk and get some fresh air ... then make myself a fruit tea or something, ... try and, I don't know, look after myself ... I find if I have my hair tied back then that helps ... I always know I'm going to get efficient work done if I've got space on my desk, and if I've got my books in front of me that I need, and my paper out and everything, and then I'm at the right temperature, ... if I just think to myself, 'Right I'm going to get it done'.

Gail’s approach to this final essay was also deep. Although she relied quite heavily on the textbooks for her essay structure, she did also seem to aim for a personal understanding. As Gail was involved in the first phase of the study, her conceptions of essay writing were not fully explored, but she appeared to have reached the top of the hierarchy for evidence - *using evidence to support arguments.*
There aren't actually that many main studies that you can ... draw conclusions from ... The tests aren't really conclusive, but there are only some that are even partly that way ... How the samples have been taken, and how pairs of twins had been chosen, and whether some twins that had been brought up apart, then they'd actually been brought up in similar environments ... One of the books maybe wouldn't say about this, but one of the other books would criticise it ... I'm more critical of the actual research that goes into the essay ... I'm more likely to give both sides of the argument ... I'm better at being able to say, 'But there are problems with this study' ...

**Development**

It is clear from the preceding section that Gail had ended up with a well developed deep/strategic approach to her work in psychology, which had come about partly due to her ability to reflect on her learning. In this section, the developments in her learning will be set out in more detail, along with an account of the reasons suggested for this development.

Looking at Gail's description of her examination revision at school, it was clear that some elements of her deep/strategic approach were already developed at that time. She showed alertness to assessment, in that she was attentive to what was required for the examination and seemed to have well organised approach to her revision. She also seemed able to reflect critically on some of the problems with her learning. It was clear that she had an intention to understand the material. Further, the spider diagram method, that seemed to be an important part of her deep approach at university, was already in use at school. Gail explained that this technique was mentioned to her at school, but that it was really her father that encouraged her to use it.

We were given copies of the (Biology) syllabus and I looked through the points that we had definitely had to know, and worked through my notes, and then made revision cards ... We were given a list of other essays that we could look at, and I looked through those ... tried to recall myself what I'd include in (the essay), and then worked through my notes to make sure that I had brought in all the necessary points ...

(The cards are) just easier to handle than your whole set of your notes, and it also makes sure that you'd gone through all of your notes ... My written cards tended to be more like spider diagrams ... One thing I liked about when we'd finished ... I could see what we'd done, and I could make the link between the different areas, and you can get more of an overview from what you've done ... I'd test myself with them, ... I'd go through the syllabus and look at one area, and then write a bit about it, or write down the key words, and then I'd go back to the revision card and check that I had remembered everything.
(My aim was to get) a good enough understanding of the whole of the book ... so that I could write an essay on any of the areas and so that I knew ... any flow charts or anything that we had, or any like cycles ... and could definitely answer some of the short questions in the exam.

I did, like, a revision timetable ... I don't think I got as much done as I would have liked to have... I was too critical of the work that I was doing, and I felt that I should be doing more ... Sometimes I forced myself to keep going but ... I should have had a total break and then gone back to it ...

Despite this strong beginning, Gail found it necessary to continue to develop her learning once she reached university. Perhaps the most important shifts were the related development in her ideas about critical use of evidence and about thinking for herself in relation to her essay writing. For her final essay, Gail felt that she was perhaps better at essay writing than some of her peers because she tried to understand the material for herself, rather than paraphrasing the textbooks. She also noted that she felt that she could now present both sides of an argument with evidence and offer some critical comment. Neither of these abilities were apparent in relation to her first essay. Gail explained that the reason for this change was instruction in critical reading given in her nursing tutorials. This was then supported by her tutor's comments on her psychology essays and by the student learning lectures:

The nursing tutorials that I've had, we always have an article or a chapter of a book to read ... We've been questioning a lot more about ... whether they actually cover the points that they've said they'd cover, and questioning whether the author is biased. I found that that's really made me think a lot more about what I'm actually reading ... Because I did sciences and maths (at school) ... you take for granted what's there. I think that's helped me with my psychology as well, because I have to keep remembering with psychology that they're only ideas, and psychologists' views on something, and it's not actually dead set. Whereas before with my 'A' levels, then most of what I've been reading is actually fact ...

We talked about the deep and surface approaches (in the lectures) and that reinforced what I was already coming to realise, about being more critical of what I was reading, ... taking more of a deep approach ...

Before, I wouldn't maybe have had the confidence to do that (to use evidence critically) and partly I wasn't sure whether to put that into the essay. I think that's something with previous essays, ... the tutor's put, 'Based on what evidence?' Or, 'Why?' And that's led me to what's been missing has been to be a bit more critical of the studies, so I've tried to pick up on that more.

The two other main developments in Gail's essay writing came about as a result of having less time to write her final essay. She wrote her essay over a shorter time period, and having done so, came to realise that working in this more concentrated
improved her essay writing. Gail also planned her essay earlier on in the process, in order to be more efficient in her reading. This led her to organise her reading notes in a different way, noting page numbers into a plan and then working with the book open. Thus it appears that her self-regulatory efforts in reacting to having less time for her essay led to development in her planning, selecting and summarising and her relating organising and structuring. Gail was also attentive to the feedback made on her essays and this led to a number of more minor changes in her writing, such as showing in her introduction what she was going to write about, and referencing correctly. The development in her essay writing was also reflected in her grades, which move from a high 'C' at essay one, to a low 'B' at essay two, to a high 'B' at essay three.

Another important change for Gail was in the way she dealt with her lecture notes. At interview one, she was able to recognise that there was a difference in the pace and complexity of the material presented at university as opposed to school, and she noted that to cope with this she would need to organise her reading. This need to deal with the lecture material well seemed to relate to expectations that she carried over from school, that she would have notes that she could understand.

(first interview) I'm finding them difficult, in that there is so much covered in each lecture, and there's a lot to read up on afterwards. I haven't really got into the ... way of working yet, and I need to get more into when I do set reading at a set time each day, rather than when I feel like it ... There is just a lot more covered in each lecture than I expected ... I mean in lectures I've had so far here we've already gone ... through all of ... the psychology that was in the biology that I did for 'A' level ... I think it's less detailed here, but it's more complicated.

(On how she judges her progress in psychology) It's not compared to other people, because I don't think anybody has really got settled into it yet. I think it's just because I don't feel very organised at the moment ... I suppose it's comparing it to sixth form, and to having a ... really good set of notes that I understand, and that are going to be useful to look back on, 'cos at the moment I don't feel I've really got that in psychology.

This is interesting, because students, including Gail, often have good notes dictated to them at school by the teacher and she had quickly realised that she must take over this responsibility for herself, not all of the students in this study seemed to rise to this challenge. As can be seen from the description given earlier, Gail was able to fulfil her good intentions by interview three, where she described a well organised system
for dealing with her lecture notes and reading. This development may have been influenced by the warning she was given at school that she would have to work more 'off your own back' at university. Another clue as to why she was able to accept this responsibility is given in the following extract, where she talks about how university was something she has chosen to do for herself, as opposed to work at school which was imposed on her:

Yeah, I think I've got more mature with my studying, because I know more now that it's something that I've chosen to do ... I could be in employment, or something. I've chosen to stay on at university, but at school then it's more you've got to do it because it's compulsory, and like your parents are telling you to do it, and your teachers are telling you to do it ...

One final development worth mentioning is the change in Gail's time management. She came to realise that she should take more breaks when she was studying in order to maintain her concentration. The seeds of this development seem to have been in the realisation that she should have taken more breaks when revising for school examinations. Then a conversation with a friend seems to have reinforced this:

Now, even if I haven't quite finished then I'd have a break after 3/4 of an hour or an hour, I think it's better for me ... (This change happened through) just realising that it was a better way of working, and realising that my concentration was falling off ... I've got a friend in the second year: ... he's quite strict about setting himself time to do things, and then having a break, and then working hard again, and I decided to try it.

Summary

By the end of the study, Gail had come to have a well developed deep/strategic approach to her studies. Some aspects of this approach were carried over from her learning in school, but she had also developed her thinking significantly, particularly in relation to being critical and developing a more personal understanding. The most important external trigger for this development seems to have been the nursing tutorials, in which she was taught how to be more critical of academic articles. This was supported by the ideas presented in the student learning lectures. Her psychology tutor's feedback and essay handout were also helpful to some extent, although she did not understand all of the advice offered.
It is clear that Gail was able to be responsive to opportunities for development. There appear to be several reasons for this, including her ability to reflect critically on her work and make changes based on this. She also found the course interesting and was able to see clear links between psychology and her nursing course; this positive attitude to the course is likely to have benefited her learning. The way Gail rated her progress on the course was important; she expected to be organised and to understand the course material in a more developed way, unlike many of the other students in the study. This expectation seemed to stem from her school learning. Her sense that learning at university was her own choice and her own responsibility also seemed important.

From the quotation below, we see that Gail was not daunted by changes in her ideas about learning, even when they were quite profound. This is important, as it must be difficult for most students to cope with such upheavals at a time when they are making so many other changes in their lives.

S: I have to keep remembering with psychology, that they're only ideas and psychologists' views on something, and it's not actually dead set. Whereas before with my 'A' levels, then most of what I've been reading is actually fact ...

I: Do you quite like this new way of looking at things?

S: Yeah.

I: You don't find it a wee bit daunting that it's all fuzzy?

S: In a way, yeah, it makes me less trustworthy of what I'm reading, but in a way it makes me feel more independent in my work, it makes me feel less like I'm being taken in by what they're writing, if I actually think, 'Well why ... are they saying (that)?' ... Yeah, it's OK.

It is beyond the scope of this study to explore fully why Gail was able to take such a mature and responsible attitude to her learning, but it is clear that this attitude was important for development. Although her grades were not as high as those of some of her fellow students, they did improve over the year, suggesting that her development was in line with what was required on the course.
Leane

Introduction

Leane was chosen as a case study because the change that occurred within her deep approach was one of the most extensive and clear examples of development in the sample. In addition, she showed a number of minor changes, and her case illustrated some of the important influences on development found in the study. Particularly towards the later interviews, her case provides an illustration of the characteristics of a deep approach to first year psychology, and her deep approach fits into a coherent picture which included her reasons for valuing higher education and psychology, and her metacognitive and self-regulatory efforts.

Leane was a traditional entry student, beginning her studies having taken one year out after her A level examinations. She entered higher education for a variety of reasons, partly because it was what had always been expected, partly to improve her career opportunities, and partly to continue learning. Having originally intended to take social anthropology as her main subject, Leane had changed her mind by interview one and intended to take psychology and philosophy as her joint main subjects. She explained that this was because she had not found social anthropology as interesting as she had expected and felt she would prefer psychology, as she wanted to understand more about people generally. She had also done some reading about Freud before university which she found very interesting.

Charting and explaining development

Over the course of the three interviews, Leane developed on her initial reasons for valuing both higher education and psychology. In her first interview she said her main reason for valuing higher education was that she wanted to carry on learning, falling within the category continuing one's education. She saw this as one of the most important reasons for valuing higher education throughout all of the interviews. Her ideas developed within this category across the three interviews as she came to a fuller understanding of how she could develop academically, as illustrated in the
extracts given below. In the final extract below, she was referring to the development in her deep approach - which is described later in this case study - as one of her reasons for valuing the experience of higher education.

(first interview) In the end, I decided to come back because I wanted to do something else, I wanted to be academic again, ... not so much for the job that it will get me, but to sort of carry on learning, as I don't feel that I know enough ...

(final interview) It was the run of the mill thing: I think that was my initial reason (for coming to university). But now it has turned into, gradually into, just developing how I think ... Most people who are here say it is to get a qualification ... it is a tiny little bit ... On the whole of things, I know that's not what I consider the reason for being here ... I am finding that the way I am thinking is changing and developing which is very good and it wouldn't happen elsewhere ...

Leane considered that relevance and interest in psychology were her main reasons for valuing psychology, although relevance seems to have become more important as the course progressed and her interests developed as she learned more about the subject.

(first interview) I don't know (why I chose psychology) ... I've always been vaguely interested in it ... I find that I am quite perceptive and I figured that psychology would some way link to that ... Just the need to know why; why things all happen, people being the thing I am most interested in ... Then psychology ... would be ... stuff I have never learned about before in my life ... I read a few bits about Freud, and got really excited about that, and thought psychology would be like that a bit more ... I had a few surprises with the first three weeks, it has been different from what I expected; it's far more scientific, ... it is still sort of interesting.

(second interview) (My main reason for doing psychology now is) because I'm still finding it interesting. It's all very new; it's still so many possibilities that you can't even conceive yet. Things that I'm learning seem to be ... they actually have connection to what I really want to know about. I will read into things that go off on tangents, and I get excited about it all, and want to go and read this ...

(third interview) (My reasons for doing psychology now are that) I found something very satisfying about having empirical evidence to, sort of, prove what happens in your little life ... Just, sort of, the way it makes me think about things I take for granted that I do, and makes me ... question things like perception, memory ... In writing this essay, I found it was really really interesting ... I had to tell lots of people about this...You find yourself analysing what you do in a different light ... I found it quite relevant I suppose ...

The changes in Leane's deep approach are likely to have been supported by her ongoing interest in the subject, and by the value she placed on developing academically. But there were also a range of other factors which seemed to have affected her development. The seeds of these changes in her deep approach, which occur mainly through essay writing, were apparent at interview one. In describing her learning at school, Leane recounted a number of instances where she had successfully changed her learning, either to solve problems, or through experiences such as an
Easter revision course, where she came to realise that she was capable of studying much harder than she had previously realised. It seems likely that these experiences of successfully changing her learning will have supported her positive attitude to development at University. In her first interview, she described how she would rate her progress in psychology against the quality of the learning methods she adopted.

(I will know how I am getting on by) the level of understanding really ... I think if I adopt what I see to be as quite a good way of actually learning from all the different intakes I have been given - books, lectures, the talks ...

One particular incident at school was particularly relevant to Leane's later development. She described struggling with an open-ended English essay; she was not well prepared for this task and did badly. At the time, she felt that she did not want to ask for help, in case she was making mistakes, but in retrospect she came to realise the importance of seeking help with her learning. As will become clear later, looking for help in this way was part of an important critical incident for her development.

It was just a very free essay, you could write about whatever you wanted to write about ... I was very unprepared for it; no-one really told us how to do the research, so I would go away and choose rather miscellaneous books ... I did incredibly badly, just because it was too much of an open space for me ... It was very much you didn't really want to speak to anyone about this in case it was terribly wrong, you had chosen the wrong thing, but now I do feel like I could go and ask people what was wanted, 'cos I mean you learn that they are human after all, I hadn't asked, so just the verbal communication beforehand.

The next piece of the story of Leane's development is to do with her reaction to writing her first essay at university. After her first essay, she had come to realise the importance of understanding in these essays. Whereas she felt that at school she could get away with not understanding well, provided the style of her writing was acceptable. It is not entirely clear whether she had learned this from her tutor's comments, or whether it was a general impression about university learning:

For 'A' levels, it seems to be more on style to get you through. But by the time you get to university, style isn't enough, because obviously all the tutors are going to be a lot brighter, and they actually know exactly what it is they are talking about ... I used to be a bit of a culprit for a waffly essay that I didn't actually know that much about what I was writing, and that seems to be the thing now of actually having to find out what it is you are actually writing an essay on. That sounds a bit stupid, but before you could get away with being quite airy-fairy about things, as long as it was a nice read for them. So, yeah, now it's actually getting into the realms of having to read those big books about it, and having to understand it yourself.
By interview three, Leane had been to see her tutor to ask him to explain his comments on her first essay. The tutor read her essay aloud to her and this proved to be very significant for her development. Hearing her essay read out gave her a different perspective, which allowed her to see the limitations of her work; previously she had not been able to do this. Her ability to accept that there were problems with her essay is likely to have been very important for her development.

After my first essay I had a bit of a chat with (my tutor) about it ... What he did he read it through back to me, and I was the sort of audience to my own essay, and I thought some of it was completely terrible, and I thought, 'What can he be thinking' ... You do tend to, I think, be a bit presumptuous and think just because you have had these little thoughts in that direction, maybe they will just realise you have them. Then you will be looking at it thinking, 'I just haven't expressed what I thought here'. I know I thought it really kind of strongly, I was really excited about it ... I was quite grumpy about the mark I got; I thought I had much better ideas than that ... Then you heard it back and, well, I would have given myself exactly the same mark, if not lower, because it was really badly expressed.

From this first essay to her second and third essays Leane’s grades improved from a C to a B. She also made a number of developments in her deep approach to essay writing, which seemed to be at least partly due to metacognition and self-regulation provoked by this incident. Her generally positive attitude to development is also likely to have been important. One aspect of these developments in her essay writing was that she worked to be sure that she understood material that she read for her essays. The quotation given below shows how her monitoring understanding and related regulation supported the development of her efforts to gain understanding. It is also interesting that she came to see understanding as quite difficult, whereas at interview two she had thought it was quite simple.

(third interview) I found it quite frustrating ... The first time I read it I really came away with the feeling I hadn't actually got anything from it ... I just found myself whizzing through it ... because it took a lot of grinding through to understand it, I would skim through it ... I would just skim through it and got completely the wrong meaning, just because I assumed it would be a different meaning ... So, it was a result of that I just had this one day when I thought, 'I must be doing this a bit wrong, I must be reading it wrong or something'. So, I just read through it a second time, very slowly. Sometimes I would read it aloud, that kind of helped ... It was very much easier to understand. I think just reading through it a second time and not having this horrible feeling, 'Oh its taking so long'... I think actually this time I understood what they were talking about, rather than just made up what they were talking about by making little references back to it ...

This development in her efforts to seek understanding continued after she had completed her psychology essays. It seems that her experience of writing the essays
and aiming for more understanding may have prompted her to further self-regulatory efforts later on (although Leane did not seem to be aware of this). In her third interview, she talked about how she had changed her note taking recently to help her understanding for her philosophy examination, and noted that if she had another psychology essay to do that she felt she could do it better using this method.

The way I used to read was just, sort of, read through it and you would note things down on the actual bit of the book ... But I found doing that, ... with philosophy as well and psychology, ... while I am doing that, I might as well note it down.... You can only underline so many words and so you get the sort of seed of the idea, but ... I kind of forget what it's about when I am going through it again ... I found that happened when I did my essays; they'd be quite ambiguous, because I actually wouldn't know what I was talking about, because I hadn't remembered what I had read. So I find now, ... I actually take the time to write it down how I think it, and also you find you get little ideas ... so you spend a bit of time writing them down ...You think it takes more time, but I don't think it does actually in the long run, because you actually understand it initially, and you can think about it while it's really fresh in your brain.

I don't know what it was (that prompted that change) ... it just happened ... I found after I had done that I could understand the notes I had made much more, because they were actually as a result of me thinking, rather than as a result of me sort of wondering what I had thought at that time...

(If I had another psychology essay) I would like to record my data in the way I was saying - about just writing it down and having my own ideas at the same time ... I don't know if it would necessarily be better, but it would certainly be a lot quicker than the way I have been doing it, because I seem to be going back a lot and trying to re-understand everything that I had initially understood, but not written down ...

A further development in Leane's deep approach, which evolved through her essay writing, was that she seemed to be making an effort which fit into the thinking for yourself category for her final essay. She reported tentative attempts to gain a more personal understanding and to bring in her own ideas. It is not entirely clear how this development came about, but it may have been related to her reaction to the essay topic. She felt that she was reflecting on the relevance of the topic for herself, rather than distancing herself from it.

(third interview) I try and make (the essay) a little bit more original, rather than just right from the book. So, I try and think about it myself first and then, I don't know, not sort of meaning to make it original, but I think just when you consider something yourself, your own ideas are obviously going to be put into that ... I wrote little drafts, just how I thought about these little things, and the things I thought about them ... It came, I think, from ... reading similar texts ... I feel there has to be a time after you have read it, and before you write it down, where you have to consider it to be able to understand... I think this is what I did in my first essay ... I just hadn't thought about it, and took it from what I had written down, and tried to kind of put it on the piece of paper and type it up ... I would have
before distanced myself from it, I think ... I find now by thinking about it is relevant to me, and this is why the social psychology thing is kind of easier to do, I think, because it wasn't, sort of, so scientific.

A final aspect of Leane's deep approach that seems to have developed was her ability in relation to the *selecting and summarising* category. Again this development occurred during essay writing, as she became more focused on what was relevant for her essay. This also seems to have been triggered by the incident where the tutor read out her essay to her.

In addition to the development of her deep approach Leane also made a few more minor developments in her essay writing such as changing her note-taking method from noting on the text to highlighting photocopies. The only apparent development she made in a context other than essay writing was also a minor one. She realised that writing up her own revision questions was inefficient and therefore began to use questions from a study guide, an instance of development through *monitoring efficiency and related regulation*.

**Taking a deep approach in first year psychology**

In addition to showing development in aspects of her deep approach Leane also held this approach quite consistently throughout her studies. In her essay writing she showed an *intention to understand* for all of her essays which included tentative attempts to develop a more personal understanding for her final essay. She also showed an interest in the topics for her essays.

Her work on all of her essays involved *planning, selecting and summarising*, although she improved as time went on and the method of carrying out these processes changed. She showed evidence of *relating, organising and structuring* only in her second interview. For her final essay, discussed in her third interview, she was able to use a structure from a textbook, which meant that she did not have to structure for herself. She also described attempts at *getting an overview*, but only in her final interview.

*(third interview)* I read the (the course text) first, because that always seems to give quite a good overview ... There was actually a very good structure in the book I used, and I was a bit hesitant about using (it) ... It almost answered that
question ... So, on one hand I was thinking, I don't know, maybe it would turn into massive plagiarism if I copied the structure, ... but then on the other hand it was taken from the other two books, and I thought well there is nothing really wrong. You shouldn't have to be kind of new for it to be good ... I don't know whether you should feel, not that you were cheating, but you are maybe plagiarising by stealing a structure ...

I had to clarify and ask myself the question, you know, why is this relevant all the time, and be quite strict about that ... I found that quite hard with something like this because all the experiments we had sounded quite interesting ... I found myself getting really into it and not wanting to leave anything out, but I think less is more ...

So, overall, Leane seems to have shown consistent intention to understand for her essays, but the deep processes she adopted varied, partly depending on the particular essay task. She did not show any motives or processes for essay writing that would be incongruous in relation to a deep approach, although taking her structure from a textbook might have limited her deep approach for her final essay. As illustrated earlier, her deep approach for essay writing seemed strongly related to the metacognitive process monitoring understanding and related regulation.

There is little information in the interviews about how Leane dealt with the lecture situation, as the discussion about essay writing in her final interview went on so long that lectures were not discussed. Where they were discussed, at interview one, Leane had only had a few weeks of lectures, but she did express an intention to understand and seemed to be making efforts towards planning, selecting and summarising. Again there were no motives or processes incongruous with a deep approach.

An intention to understand, and an interest in the topic, also appeared in Leane’s discussion of the class examination. Although she did note that she was also motivated by the possibility of getting an exemption and she did have some problems with motivation. She did not show all of the deep processes for this task, but she was making efforts towards getting an overview and memorising with understanding. Overall, this seemed like a more limited deep approach than she showed for her essay writing.

Initially I read through my notes, thought, ‘These don’t make very much sense: they’re a bit sort of sketchy’ ... I didn’t have a broad overview of each topic ... So to an extent I abandoned these lecture notes and read (the course text) ... Suddenly, it was really clear ...
I think there's just the idea, as I said before, of an overview of what you're doing. Whereas before ... it wouldn't all really tie up, it was all very an isolated piece of knowledge that you knew, but in reading the (the course text) again brings them all together. In doing that you can start to comprehend an overall picture, rather than just the little factual things.

(My main aims were) comprehension of what I thought I'd learned ... So, consolidation and understanding, and then just answering these questions helped quite a lot - the study guide.... Just to do the factual run down of all the things that you're meant to have taken in from reading it; I found that quite useful.

I think the motivation begins with me thinking, 'I've got an exam, wouldn't it be nice to get an exemption' ... This is what prompts me, and then having had that, then the interest maintains the motivation. I mean, if I was not interested, I really couldn't do it ... Thinking more long term about what you're doing helps you, helps me anyway, to carry on learning it ... it will be relevant in two years, this particular thing. So it's all groundwork ... which can be a bit non-motivating in itself, but then you've got to know it in the first place.

Beyond Leane's reaction to particular tasks, there were also two further aspects of her learning which contributed to an understanding of her deep approach. Firstly, there was her strong interest in the subject as a whole, which was reiterated throughout the interviews. Secondly, there was her ideas about how learning should be in psychology, which also seemed to fit in with a deep approach; she felt that learning in psychology was very much to do with understanding.

I've never done any of this in my life; I can sometimes go off on a tangent and get very excited about this one little thing I have learned ...

I was incredibly interested about why homosexuals are homosexuals; I had no idea. I don't know what I was reading about ... just little things that will be about life. That's the thing about wanting to do psychology to know why, why is this, why is that ... Something that I read about that I wanted to carry on reading the pages about it, actually gripped, me interested me ....

What it's like to learn in psychology? I'm not exactly sure ... it's facts and understanding at the same time which is interesting, different ... You've got to know your questions to ask in the first place, and you've got to know what you are talking about. You have got to know who it was, when they did it, what they did exactly, and be quite precise about it - why they were bothering in the first place, and also understand what they were doing. So I think both the factual element and the reasons for that experiment, what was it proving, what was it showing, why bother to show it in the first place.

**Summary**

Leane's case gives an illustration of the nature of a first year students' deep approach to psychology. In a sense, this account based on the experiences of a particular individual is more realistic than the overall description of the deep approach given in Chapter 5, which was drawn from a number of students and did not represent any
one individual. Leane showed a consistent intention to understand and, unusually for the students in this study, this extended to tentative attempts to form a more personal understanding. This intention was linked to a strong interest in her studies, and to processes typical of a deep approach. Not all of the deep processes were present, however, and those that were present were sometimes quite limited. Monitoring understanding and related regulation, for example, was associated with her deep approach, but only for essay writing.

Leane's deep approach developed across the interviews. Most significantly she improved her ability to seek understanding and came to realise how difficult it could be to achieve thorough understanding. This was likely to be a crucial step in developing a fully deep approach in later years. This change seems to have been due, in part, to her metacognitive activities and also to the critical incident of her tutor reading her essay aloud. It seems likely that her positive attitude to development was also important.

Conclusion

The case studies point up the diversity of influences which promote, or limit, students' development. They also suggest the importance of the fine-grained details of the learning context - as opposed to broader issues, such as the overall method of assessment, which have been the focus of much previous research. For example, while the findings of previous research suggest that essay assessments tend to promote a deep approach (Thomas and Bain, 1984; Scouller, 1998) this connection did not hold for Kirsty for the specific question she tackled for her final essay.

Gail's development further illustrates these issues, as it was supported by a complex set of experiences and abilities which included skills carried over from her school learning, such as her ability to self-regulate and her expectations about learning. The experience of working on critical reading in her nursing tutorials was crucial, and this was then supported by the student learning lectures, and by her tutors' comments on her essays. Her preparedness to accept responsibility for her own learning, her sense
that university was something that she had chosen to do for herself without outside pressure, and her ability to cope with significant changes in her ideas, were also central.

Alistair’s case is also of interest in relation to the complexity and diversity of influences on development. His learning seemed to be a complex and contradictory mixture of good and poor elements, of critical reflection combined with avoidance of self criticism, and of confidence alongside lack of confidence. Cases like Alistair’s illustrate the potential difficulties inherent in helping students to develop their learning. How can one support the development of a student who only works when pressured, and who reacts to advice about his learning in such a way that he is unable to benefit from it? It was worrying to find him dismissing the aspects of the student learning lectures which reflected badly on his learning, while remaining cynical about the benefit of other study skills support.

Alistair’s problems raise significant questions about the provision of general learning support without individual attention. Even if the advice given was relevant and based on research into students’ everyday learning, it still seems unlikely that students with these tendencies would be able to benefit from such help. Moreover, some students who did not develop their studying had one over-riding problem, overshadowing the rest of their learning, and limiting their capacity for change. For example, Kirsty had an inability to get started on her work. Unless the advice provided to students addresses these central issues in such a way that they believe their problems can be solved, it is unlikely to be effective.

The limitations of generic advice are also suggested by the students’ more profound developments. These developments seemed to involve individual sensitivity to the opportunities for change afforded by particular incidents. It seems likely that this sensitivity will rest on varied and individual experiences, attitudes and motivation. The general advice provided in the student learning lectures in some cases supported such changes, but it did not seem to be enough in itself, since most of the students did
not make use of the advice presented in the lectures. Both the students’ receptiveness to change, and their resistance to change, seemed to show an element of continuity from their prior learning experiences. For example, Leane’s positive attitude to change seemed to date from her school experiences, as did Kirsty’s problems in getting on with her work. Advice provided to students should ideally take into account the influence of the perspectives that they bring from their prior learning experiences.

Although the approaches to studying categories have proved valuable in charting and explaining students’ development, the case studies add another dimension to our understanding of these issues. They pick up the importance of idiosyncratic details of students’ learning which might be missed, or only touched on, by the approaches scheme - for example, Susan’s sense of her family’s pride in her learning. This was not included as a category for this study because there was only one example, but in the wider student group there may be many more instances. The strength and limitations of conceptual schemes for understanding students’ learning are considered further in the discussion which follows.
CHAPTER 8 – DISCUSSION

Introduction

This final chapter of the thesis brings together the main findings of this study with findings from the wider literature to make suggestions as to the strengths and weaknesses of different perspectives on student learning and to discuss the implications of the findings for supporting students. The reconceptualisation of the approaches to studying to fit the learning of this particular group of students is considered first, followed by a discussion of how the students’ learning changed and what seems to have influenced these changes. The next section explores the issue of levels of description in research into students’ learning. The findings of this study suggest the importance of detailed descriptions of students’ day-to-day studying to supplement previous research which has generally focused on higher level, or more abstract, descriptions. The final part of this chapter discusses both the wider applicability of the findings and their implications for supporting students’ learning.

Reconceptualising approaches to studying

It was clear from the review of the literature, that a wide range of studies have supported the central aspects of approaches to studying. This conceptualisation holds across different methodologies, perspectives, subject areas and contexts. Despite this apparent generality, the findings of this study suggest that approaches should be reconceptualised to provide a better fit to the learning of this particular group of students. It was necessary to adapt the categories to suit the discipline, the students’ limited experience of learning in higher education, and also their ways of working on particular learning tasks.

The literature review also explored the difficulty of defining the exact boundaries of approaches to studying, given their overlap with other concepts, such as metacognition. While there can be no absolute answer as to what should be subsumed within approaches, arguments can be made for a wider conceptualisation than is presently used. Drawing on recent developments in educational research, Entwistle has suggested that broad composite constructs may be valuable to understanding in this field as: ‘groups of variables act synergistically to produce
learning outcomes' (Entwistle, McCune and Walker, 2000, p.11). Entwistle also points out that such groupings are more likely to be recognisable by staff and students than narrow psychological variables.

While adding further elements to the approaches categories may therefore be helpful, it is important that the concepts do not become so broad as to become virtually meaningless. Nor is it necessary to broaden one underlying concept to illustrate these wider groupings, as has been shown in a range of studies exploring such links (for example, Vermunt, 1996; Lonka and Lindblom-Ylänne, 1996; Vermunt, 1998). Nonetheless, the description of approaches given in this study suggests strongly that aspects of metacognition, or self-regulation, would sit well within a broader framework for approaches. The findings show how the deep and strategic approaches can each be conceptualised as including their own specific monitoring element. In previous characterisations of approaches, this was less explicit. The most recent version of the ASI does now include a monitoring effectiveness scale, which touches on metacognitive themes, but the categories given here develop the conceptualisation further, as illustrated in the summary descriptions of the students' approaches which follow.

**The deep approach for the students in this study**

Table 8.1 brings together categories from the students' deep approach in general (as described in Chapter 5) with categories from a deep approach to essay writing (Chapter 6) to illustrate the nature of a 'complete' deep approach for these students. The most developed conceptions of essay writing categories have been included in a modified form to fit in with this more general conceptualisation. The overview given in Table 8.1 includes categories similar to those derived from the review of the literature, but there are some important differences. Firstly, the inclusion of monitoring understanding and related regulation adds a metacognitive category which is specific to the deep approach. It is hard to imagine how a student could take a deep approach successfully without monitoring their understanding, yet this has not been made explicit in prior conceptualisations.

Secondly, it is clear that the use of the deep approach by the students in this study could not be considered to be fully developed, although this is not surprising given
that the students were in their first year. It is, however, instructive to consider the differences between their approaches and what might be expected from more experienced students. The central issue seems to be the more limited ability of these first-year students to go beyond basic understandings of the course material. They seemed less able than experienced students to engage actively with the subject on a personal level and to make links between topic areas. It appears that students in their final year are better able to engage critically with content and to develop personal frameworks which extend across the boundaries of particular tasks or lecture series (Entwistle and Entwistle, 1991, 1992; Entwistle, 1995, 1998a). It is also important to bear in mind that the complete approach, given in Table 8.1, does not give a good representation of the learning of most of the students in this study. None of the students showed this deep approach in its entirety, and certain important elements of the approach were particularly rare.

**Table 8.1: Categories included in the deep approach**

<table>
<thead>
<tr>
<th>Category name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention to understand.</td>
<td>An intention to understand the course material.</td>
</tr>
<tr>
<td>Thinking for yourself.</td>
<td>Tentative attempts to develop personal perspectives on topics in psychology.</td>
</tr>
<tr>
<td>Interest.</td>
<td>Showing a clear interest in course content.</td>
</tr>
<tr>
<td>Selecting and summarising.</td>
<td>Focusing learning activities within the learning tasks, for example, staying relevant to the essay topic or selecting the main ideas in lectures.</td>
</tr>
<tr>
<td>Relating, organising and structuring.</td>
<td>Relating ideas, organising and structuring learning materials.</td>
</tr>
<tr>
<td>Getting an overview.</td>
<td>Working to get an overview of a topic.</td>
</tr>
<tr>
<td>Memorising with understanding.</td>
<td>Either memorising material from the course, having first understood it, or memorising terms to aid understanding.</td>
</tr>
<tr>
<td>Use of evidence.</td>
<td>Using evidence to support or evaluate arguments and to draw conclusions, with critical comment.</td>
</tr>
<tr>
<td>Monitoring understanding and related regulation.</td>
<td>Checking understanding and modifying learning when problems are identified.</td>
</tr>
</tbody>
</table>

To understand the deep approach to studying in this particular context, it is also important to take into account its discipline-specific aspects. In order for the students to take a fully developed deep approach, they had to understand how to enact the
approach in relation to the norms and values of psychology. This was particularly apparent where the students were struggling with the use of evidence in their essays. They had difficulty, for example, in conceptualising how to integrate their own perspective on a topic with the requirement in psychology for critical use of research evidence to support arguments.

The final variation from the generic description of approaches was that the nature of the deep approach changed depending on the learning task with which the students were engaged. In particular, it was clear that it was only for essay writing that any students adopted the full range of deep processes. For example, it was generally only for this task that the students made attempts to evaluate ideas based on evidence, or to develop more personal understandings. These findings support the conclusions from the earlier literature that essay writing is more likely to encourage a deep approach than tasks such as multiple-choice tests (Thomas and Bain, 1984; Scouller, 1998). The case studies illustrate further how the specific essay question set can also be important in the extent to which students adopt a deep approach.

The strategic approach for the students in this study

Table 8.2 describes a fully articulated strategic approach for the students in this study, by bringing together the categories developed to represent the approach with a merged form of the other two self-regulation categories – monitoring time and efficiency and related regulation. This is one of the few qualitative accounts of the strategic approach available. As discussed in the literature review, most other qualitative studies have only considered the deep and surface approaches. As with the deep approach, it seems unlikely that students could enact the strategic approach successfully without this monitoring element. The strategic approach for these students involved an intention to reach a chosen academic standard linked mainly with concerns about efficiency, time management and alertness to assessment. This maps quite closely onto the strategic approach as defined by the more recent versions of the ASI, except that, for some students in this study, the central intention was to gain acceptable grades, not necessarily high grades (ASSIST, Entwistle, Tait and McCune, 1999). The students here did not generally show the attention to the perspectives of particular markers, the competitiveness, or the cynical ‘playing the
game' attitude which had been identified in some of the earlier studies (Entwistle and Ramsden, 1983; Entwistle and Tait, 1990).

Table 8.2: Categories included in the strategic approach

<table>
<thead>
<tr>
<th>Category name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention to reach an academic standard.</td>
<td>An intention to reach an academic standard, in terms of either an acceptable grade, or the best possible grade for that student. Not a competitive form of motivation.</td>
</tr>
<tr>
<td>Time management.</td>
<td>Planning time in one of a number of possible ways, for example, by following a timetable.</td>
</tr>
<tr>
<td>Monitoring time and efficiency and related regulation.</td>
<td>Monitoring the success of one's time management strategies and the efficiency of one's study processes then making changes where necessary. Such changes are not necessarily planned in advance, they can involve stumbling on a better solution unintentionally and then adopting it for later use.</td>
</tr>
<tr>
<td>Finding suitable conditions for work.</td>
<td>Trying to create, or find, conditions in which one can work well.</td>
</tr>
<tr>
<td>Alertness to assessment.</td>
<td>Alertness to assessment requirements, for example, by focusing on the course text, as it was the source of the examination questions.</td>
</tr>
<tr>
<td>Being task focused.</td>
<td>Focusing efforts on course tasks, rather than on studying psychology more generally.</td>
</tr>
<tr>
<td>Taking easier or more efficient options.</td>
<td>Looking for easier or more efficient options, for example, choosing an essay topic that has reading readily available.</td>
</tr>
</tbody>
</table>

Most of the strategic processes described in Table 8.2 seemed to be fairly common for most of the students in this study, although not always successful enacted, even by the end of the year. The intention to reach an academic standard was expressed far less often, even though students were frequently asked about their motivations in the interviews. Generally, the students' self-regulatory efforts were quite limited, and not all students made such efforts. The nature of the strategic approach also varied between tasks, but not as markedly as for the deep approach. For example, alertness to assessment for the examinations involved students focusing on the course text (as this was the source of the questions), whereas for essay writing, alertness to assessment commonly involved paying attention to tutors' advice and feedback.
The extent and nature of the students' development

Having described the nature of the students’ approaches to studying, the next step was to consider how those approaches changed during the course of the research. The review of the literature illustrated how students’ beliefs and self-regulation often seem to develop during their degrees, from a mainly externally directed position, to one in which the students saw themselves as more active and responsible participants in the construction of meaning. This suggests that students would come to take more deep and strategic approaches over the course of their degrees, but the extent to which this has been demonstrated in the prior literature is limited. This is perhaps partly due to problems in the design of the studies which make it difficult to distinguish the influences of change in context from fully established development.

Recent research reported by Vermetten and colleagues (1999) is, however, able to provide better evidence that students’ approaches may develop in parallel with these other aspects of their learning. Vermetten reports a longitudinal study of change in students’ scores on Vermunt’s ILS inventory, from the end of the first to the end of the third semesters of their studies. Over this time span, the students’ use of deep processes increased significantly. These changes were paralleled by changes in students’ self-regulation, learning orientations, and mental models (conceptions of learning), which would be expected to enhance the deep approach. This being the case, it seems unlikely that the change in the students’ learning processes was purely a temporary response to a change in the learning environment, although the research does illustrate that changes in the context were also likely to have influenced the students’ learning. The effect sizes for these changes were, however, generally fairly small and the authors note that the findings should be treated with some caution, given that the response rates were quite low and that the findings could only refer to students who continued their studies (Vermetten, 1999; Vermetten, Vermunt and Lodewijks, 1999).

Despite these new findings, there is still little research which explores in detail the extent and nature of the change in students’ approaches over the course of the first year. The research reported in this thesis helps to fill this gap in the literature. This section recapitulates the main findings in relation to the changes in the students’
learning which appeared to be established development, as opposed to temporary reactions to particular tasks.

**The nature of developmental change in the first year**

Rigorous efforts were made in the analysis to identify changes in students’ learning, but typically students had made only minor developments in their approaches. There was little evidence either that they were generally motivated to try to change. Where development did occur, it most commonly involved improvement within students’ ability to carry out particular learning processes. Within the strategic approach, most of the students’ development was in relation to time management. For example, some students came to realise that they worked better if they organised their time in large blocks and tried to arrange their work to take advantage of this insight. The development of the deep approach most often involved an improvement in the students’ ability to select and summarise relevant material.

Where students did develop their learning, that was most often in relation to the essay writing task which seemed to provide a context within which students could develop their understanding of the academic discourse of psychology, as represented by the conceptions of essay writing. Well-developed conceptions would provide the potential for the students to enact a deep or strategic approach more fully. For example, being ‘alert to assessment’ requires that students understand the assumptions underlying the advice they are given. However, while the students did show some development of their conceptions, by the end of the study most had not reached the level of understanding expected by their tutors. Generally, the students seemed to find it difficult to use evidence appropriately and critically and to integrate their own views into their essays. None of the students in this study showed conceptions of essay writing where their own interpretation was central, unlike the more experienced psychology students interviewed by Hounsell (1997). In addition to changes in conceptions, a few students seemed to have begun to show the initial stages of a profound shift in the deep approach in relation to essay writing; they began to make tentative efforts to develop more personal understandings of topics in psychology for their later essays.
The case studies reported in Chapter 7 described five students who differed from the general pattern of limited change, combined with limited efforts to change. Two of these five, Leane and Gail, showed more profound development in their deep approach than was common for other students in the study. The improvement in their ability to be critical, to monitor their understanding, and to strive for more personal understandings was striking. Susan’s case, by contrast, was an example of a student who was keen to develop but found it difficult to do so successfully. Alistair and Kirsty presented a different picture again, they illustrated that students may not develop their learning at all, even when this seems desirable.

In the introduction to this thesis, it was suggested that the combinations of deep and strategic approaches provided a proxy for the type of learning that would be required for students to perform well in higher education. Given the relatively limited nature of the approaches of the students in this study, and the general lack of change in their learning, it seems that there was a potential for development during the first year which had not been fulfilled. Whilst the students in this study were still inexperienced, the better developed approaches of some of the students in the group, and the comparison with the approaches of the more experienced students interviewed by Entwistle and Entwistle, suggest that there is a need to explain why the students’ learning was more limited, despite their having received relevant advice (Entwistle and Entwistle, 1991, 1992; Entwistle, 1995, 1998a).

It might be argued that expecting highly developed approaches from the majority of students is unrealistic. It is true that this sample, and also the more experienced students interviewed by Entwistle and Entwistle, were atypical, given that they came from institutions with particularly high entrance requirements. In other institutions difficulties might be even more in evidence, caused by the wider range of backgrounds from which students are now entering higher education, the variety of their needs and goals, and the extent to which many of them have other pressures in their lives such as supporting families, or engaging in part-time work (Silver and Silver, 1997). It is also important to bear in mind the limitations on the resources available to support students, this latter point is taken up further later as part of a discussion of the practical possibilities for supporting students.
Nevertheless, the ability to take deep, strategic, approaches still seems important. While many students will not work within the discipline they study as undergraduates, the ability critically to evaluate and to develop a thorough conceptualisation of a topic, as described by the deep approach, is vital within a society where there is an increasing emphasis on the need for lifelong learning (NCIHE, 1997; Bouhuys, 2000). Likewise, the ability to organise and regulate learning, as described by the strategic approach, is important in this context. Whether or not all students can be expected to show the most sophisticated level of the approaches, it is important to understand what might help and hinder students in developing them as far as possible. The next section of this discussion addresses these issues.

**Influences on development in the first year**

The review of the literature suggested that approaches were best seen as one component of a multifaceted interacting system, encompassing both student characteristics – such as beliefs, aims and regulatory ability - and all of the aspects of the teaching-learning environment. The review also suggested that the pattern of interaction might vary between groups or individuals and discussed the potential importance of both the broader, and the more detailed, aspects of the context. The findings reported in this study support and develop this picture, providing a specific focus on development which has previously been lacking.

In order to understand fully the learning and development of the students in this study, it is necessary to see them as individuals with complex and idiosyncratic needs and perspectives situated within a specific context. Both the broader elements and the fine-grained details of this context are relevant to understanding the students’ learning. This section of the discussion begins by considering some of the most salient contextual influences on development to provide the background against which the individual nature of influences on development can be described.

**Contextual influences on development**

One of the most worrying issues raised throughout the study was how little most students seemed to seek, or benefit from, help with their learning. This was despite evidence that there was room for development, that the advice given was pertinent to
students’ problems, and that at least some students perceived the advice as relevant. In Chapters 5 and 6 it was suggested that this might be partly explained by bringing together the findings to show how students were immersed in an environment which was less supportive of development than might have been hoped.

The first theme to consider in this regard is the apparently limited nature of the goals held by most of the students and the relative ease with which they seemed to reach them. Most students aimed to complete specific tasks, to achieve a basic understanding of course materials, and to obtain reasonable grades. It seemed that the students’ predominant focus was on their assessed tasks, rather than on developing an understanding of psychology more generally. The students were often able to achieve reasonable grades without having well-developed approaches or conceptions of their learning tasks. Satisfaction with their grades and other achievements seems to have limited any perception of a need for change. It may be that such an attitude is adaptive in first year, where students are having to face up to a wide range of changes in their lives and may therefore be less able to cope with changing their ways of learning. On the other hand, the time and effort wasted through ineffective approaches may also cause pressure.

The students tended to come from school backgrounds where developing their learning was not made an explicit focus, and this continued to be the case in their first year in psychology. The advice the students received about learning was limited, and varied both within and between departments, perhaps giving an implicit impression that developing skill in learning was not seen as an important issue. Even the lectures on student learning were marginalised, as they were not covered in the course textbook, the tutorials, or the class examination. Generally, it was rare for learning development to be explicitly discussed and problematised. A specific manifestation of this general theme could be seen in relation to the essay writing tasks. There were discrepancies between students’ conceptions of essay writing and those expected by their tutors, even though the students were given advice that was relevant to developing their conceptions. The assumptions underlying the advice were not explicitly discussed and the students often appeared to be unaware of the need to develop in this regard. This seems to have hindered students from using the advice and feedback provided to reach more sophisticated conceptions.
The nature of psychology as a discipline more generally also seems relevant to understanding why the students' deep approaches did not develop further. The students in this study often found it difficult to begin to develop personal perspectives on topics in psychology, or to use evidence critically and appropriately in supporting their arguments. In psychology, research evidence tends to be valued highly as compared with personal experience or opinions. The insistence on critical use of evidence may restrict inexperienced students' efforts to develop a more personal understanding, particularly when they lack confidence in their ability to evaluate psychological research. The findings raise the issue that an understanding developed through strong reliance on course materials may lead to a better piece of assessed work in the short-term, but perhaps, in the long term, efforts to develop a more personal perspective would be more productive.

The individual experience of development

While the students were no doubt influenced by the general contextual factors discussed, the importance of exploring influences on development at the individual level was clear. The case studies highlighted how students' development seemed to be strongly influenced by idiosyncratic combinations of experiences, abilities, beliefs, attitudes, and motivations. There was an element of continuity in the students' beliefs in that some of them seemed to come to their studies in higher education with well-established individual views about learning which had a significant impact on their later development. The case studies also illustrated how students' specific experiences of the fine-grained details of the learning context, such as particular essay titles or discussions they had with their tutors, were sometimes central to their development.

Based on these unique sets of influences, certain students apparently became more receptive to opportunities for change than others, making them able to take advantage of certain critical incidents in order to develop more profoundly than other students in the study. This can be seen, for example, in Gail's reaction to advice about critiquing articles in her nursing tutorials. This receptiveness to change is not one simple ability, but instead seems to be an idiosyncratic combination of factors which support change, and the absence of elements which could hinder change. In contrast, it seems that some students can also be particularly resistant to
development. This reaction could be seen strongly in Alistair’s and Kirsty’s case studies, where their beliefs about learning, and their individual problems, made them feel unable to benefit from advice.

(Alistair) I wouldn’t take any notice of (advice about learning), I don’t think ... I assume if I went to the study skills books, or a study skills workshop, it would tell me to organise my time better, and to write notes in this way, and to do this, that, and the other, to improve it ... What makes me take no notice? Bloody mindedness I suppose. For example, if it said to organise my time better and just do an hour a night, I would think, 'Well that’s nice, but I don’t want to'. I may start ... (but) I would just give up on it ... It would say things which I’d think, ‘Ah it’s very sensible’ ... but I wouldn’t take any notice of it... It always comes down to whether you can stick to that plan yourself ... Most of the time I won’t be able to.

(Kirsty) I tend to avoid study skills, ‘cos I know I don’t have them ... I suppose I’m a bit cynical about the likelihood that I will adhere to any sort of study skills system ... I suppose I should, ‘cos that’s where I’m lacking... I did find (the student learning lectures) interesting and, yeah, there are bits that you think you know do relate, (but) I feel that I really know what my problems are with studying ... It’s basic laziness, that’s all it is really, so I don’t think that much about approaches to studying or whatever ... I suppose I don’t really like to, you know, mask it in any deeper ideas about why I don’t do it; I’m sure it just is laziness...

It was the use of a case study approach which made it possible to describe clearly these issues of continuity in students’ learning and of resistance and receptiveness to change. The potential importance of these findings for considering how best to support students suggests the need for further research of this kind to explore the ways in which students’ difficulties might be resolved. Case studies which follow students over a longer time period might provide important insights in this regard.

Other influences on development

In addition to the general context and the individual nature of students’ development, there were also some specific themes worth noting. For example, the research reported in this thesis adds to the literature by providing an explicit qualitative account of the links between self-regulation and the development of students’ approaches to studying. Monitoring and regulation processes were one of the more common ways by which students developed their learning. These independent metacognitive, or self-regulatory, processes generally led to quite minor changes, although for a few students they seemed more important. Additional qualitative studies are needed to explore further the link between self-regulation and development, to ascertain whether the ability to regulate development improves over time and to explore what might support this ability.
There was no clear overall link between students' development and their wider aims and goals, but the case studies suggest that these aspects can be important. In terms of negative influences, some of the students seemed to depend strongly on external pressure, such as deadlines, in order to motivate themselves. This may well have limited their ability to change, as they tended to leave work to the last minute, giving little time for experimentation or reflection. Other students held specific negative attitudes towards advice about learning which limited their potential for development.

Certain implications arise from the findings reported in this section. There are issues about the value of different levels of description for understanding students' learning. This theme is taken up in the next section. The research also leads to suggestions about how students' learning might best be supported, which is taken up in the final section of the chapter.

**Levels of description in research into student learning**

In the literature review, it was explained that understanding the development of students' learning related to wider questions about how learning and its interaction with the teaching-learning context can best be understood. The discussion of the boundaries of approaches, introduced above, is one aspect of this wider question. This section focuses on another aspect – the strengths and limitations of different levels of description for understanding students' learning.

Much of the literature in this area is based on descriptions which are both rooted in, and yet to some extent distant from, the day-to-day reality of individual students' learning. For example, both the phenomenographic interview analyses, and the factor analytic methods commonly used to develop inventories, create simplified structures to explain the variation in students' learning. Phenomenographic analyses may capture the main variations among students in the ways they study, but they cannot account well for the idiosyncratic aspects which might be important to an individual student's learning. Exploratory factor analysis is the most common method used to analyse inventory data in this type of research. By its nature, exploratory factor analysis will identify a relatively small number of latent variables which explain as much as possible of the variation in a given set of data. This is valuable as a means
of parsimoniously representing the central themes, but such analyses cannot identify more complex inter-relationships, nor can they represent the learning of individual students, or small groups of students within a larger data set (Loehlin, 1992; Hair et al., 1995).

It is apparent from the nature of such analyses, that concepts such as approaches, or conceptions of learning, must be considered to be analytic abstractions, rather than representations of individual students’ learning. Other forms of abstraction include schemes or models which set out in general, for a sample or samples, the influences on students’ development or the interaction between different aspects of their learning. The literature review made clear the value of such abstractions for understanding students’ learning, but they do also have limitations. This section begins with a discussion of the strengths and limitations of the analytic categories for the research reported in this thesis. This is followed by a discussion of studies from the wider literature which explore some of these issues.

Findings in this study

For this study, the main value of approaches to studying was that they provided a well researched picture of the kind of learning which would seem to be required to learn well in higher education. By comparing the approaches of the students in this study against the approaches of more experienced students, as described in the literature, it was possible to get a sense of what development might be expected or required. Approaches also provided a framework within which the changes in the students’ learning could be explored and displayed. Approaches did, however, have their disadvantages for understanding individual students’ learning and development. The approaches categories were never intended to provide full representations of individual students’ learning, but it is nonetheless important to explore the extent of their limitation in this regard, as this has implications for how students’ learning might best be studied and for how findings can be used to help staff and to support students.

As explained earlier, the case studies showed how these students’ development seemed to be dependent on a complex and idiosyncratic combination of influences. The cases also illustrate how students can have one main problem, which might only
be touched on by one aspect of approaches, but which is central to understanding their learning. Kirsty’s inability to get down to work provides an example of this kind. Further, the case studies picked up important aspects of the students’ learning which were not represented by approaches. For example, Susan’s sense of herself as being a ‘fighter’ who would not give up on her studies, and her sense of her family’s pride in her achievements, would not be addressed. While aspects of these students’ learning do map well onto categories or models derived from the literature, neither approaches, nor any generalised abstraction, could provide a complete account of their learning.

Another illustration of the limitations of the most general abstractions is that both the case studies and the wider analyses show that the way aspects of students’ learning are grouped within approaches does not always provide a good representation of learning at the individual level. For example, Alistair showed some aspects of the strategic approach quite strongly, while other aspects were clearly missing. Finally, it is worth returning to the points made in the first section of this chapter, about how approaches to studying had to be reconceptualised to reflect the discourse of psychology and the learning of this particular group of students. This again points up the limitations of the more general conceptualisation, and suggests the need for additional, more disciplinary specific, aspects to be covered.

The wider literature

In the wider literature, the value of more abstract levels of description is shown, for example, by the way in which approaches generalise across research methods, inventories, and contexts, and by the insights approaches and other concepts and categories provide into the effects of the teaching-learning environment and the reasons for students’ learning outcomes (Entwistle and Ramsden, 1983; Svensson, 1984; Van Rossum and Schenck, 1984; Biggs, 1987; Trigwell and Prosser, 1991; Entwistle, 1998b; Tait, Entwistle and McCune, 1998). Research, originated by Meyer, into the phenomenon of ‘dissonance’ simultaneously illustrates the strengths and weaknesses of analytic schemes. ‘Dissonance’ involves instances where individuals or groups of students do not show the expected pattern of relationships between aspects of their learning and their perceptions of teaching-learning environments (Meyer, 2000). The general schemes are necessary as a contrast
against which to understand dissonance, but at the same time the lack of fit of these schemes for certain groups of students shows their limitations. One example of dissonance is a theoretically uninterpretable combination of scores on the ASI, where all of the approaches scales loaded on the same factor for one group of students (Entwistle, Meyer and Tait, 1991). Dissonant groupings of elements from the most recent version of the ASI have also been illustrated in cluster analyses (ASSIST, Entwistle, Tait and McCune, 2000).

The value of these studies of dissonance is that they provide insights into a range of important issues, for example, they often identify weak or failing students. Further, recent research into dissonance has provided important insights into students’ development. In studies with Vermunt’s ILS, it seems that the underlying factor patterns become more coherent, or less dissonant, once students have had time to adapt to a new learning environment (Vermetten, 1999; Vermunt and Verloop, 2000). Vermetten (1999) suggests that initial incoherence may occur because of incompatibility between the students’ prior methods of learning and those required in the new context. For example, students might not know how to enact the learning processes which fit with their mental model (conception) of learning in a new context, and therefore the link between these aspects will weaken in the factor pattern.

Studies of increasing coherence in the factor patterns of the ILS over time have also led Vermunt and Verloop (2000) to suggest that students may progress towards an greater ability to differentiate between different styles of learning. For example, a student may come to make a clearer distinction in their mind between different learning processes and may therefore become better able to adopt learning processes more suitable to their mental model. Again this will lead to less dissonant factor patterns. The processes by which students come to integrate different aspects of their learning, or learn to differentiate between different learning styles, are potentially very important. It would be valuable to add a qualitative account of these changes to the quantitative studies described by Vermetten (1999) and Vermunt and Verloop (2000). Interestingly, in studies with the ASI in which data was collected fairly early in the first year of study, very coherent factor patterns have been repeatedly found
(Entwistle and Tait, 1990; Tait and Entwistle, 1996; Entwistle, Tait and McCune, 2000). This finding may reflect the narrower range of constructs within the ASI.

Qualitative analyses also show the limitations of abstract categories. Beaty, Dall’Alba and Marton (1997) discuss detailed case studies of the development of students’ conceptions of learning. Although students could be seen to progress through a common hierarchy of conceptions, the researchers found that there were also important idiosyncratic threads running through individual cases. For example, within their developing conceptions, two students focused on themselves as people (but in different ways), one on disciplinary knowledge, and one on capability and the skills that come through learning. These personal perspectives were central to the ways in which the students’ learning changed, yet they would not have been addressed by the basic categories describing conceptions. This issue is also seen in the interview extracts reported by Perry to illustrate the positions in his scheme. Two examples from the ‘initial commitment’ stage are given below to indicate how different students’ experiences may be within the same stage.

I started dating a girl ... and we did a lot of talking, not along these lines exactly, but more or less basic philosophies. I’d never sat down with anybody and tried to figure out, you know, exactly how I felt in things ... I was frankly amazed that I had such firm convictions on many things.
(Perry, 1970, p.156-157)

I’ve always had a lot of doctors in my family, and my father meant to be a doctor and then, ah, quit during the depression. And he’d always wanted me to be a doctor, at which I had rebelled ... I had a board and room job this year, taking care of kids ... it just came to me slowly that this is really what I want ... I’d like to go into pediatrics.
(Perry, 1970, p.157)

The findings of the study reported in this thesis, and of the other research discussed in this section, have important implications for understanding the limitations of certain theoretical perspectives on students’ learning. The research illustrates that, while abstractions such as approaches have made significant contributions to understanding students’ learning, they also have their limitations. It is important to bear in mind while studying students’ development that ‘the map is not the territory’ (Taylor, 1986, p.70). In other words, the categories and schemes do not provide a full picture of the underlying complexity of students’ learning. Specifically with

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1 Taylor makes this point based on the work of Korzybski (1933).
respect to approaches, it is important to understand that approaches are analytic groupings; they are not real entities which exist within students’ learning.

It is clear from this study that, to more fully understand students’ learning and development, it is necessary to go beyond abstract categories or schemes and consider in detail individual students in interaction with the fine-grained details of the learning context. This suggests the value of more extensive use of case study methodology than has been common in research in this area. Which methodology and form of analysis is appropriate for a given study will, of course, depend on the goals of the research. The researcher needs to consider the tension between clarity and parsimony as opposed to faithfulness to the complex and idiosyncratic nature of students’ day-to-day learning in context. These issues are also relevant to considering the ways in which staff and students might best be supported. This is taken up in the following section, which looks in more detail at the wider implications of the research.

**Implications of the findings**

This section begins by considering the strengths and limitations of the findings. The first step is to look at the extent to which the findings might be generalised to other settings. Next follows a discussion of the impact of the research methods and focus taken in the study. The section moves on to consider the implications of the findings for supporting students. The study has suggested the limitations of the transmission of generic advice about learning and this leads on to a consideration of what sort of support might be more effective.

**Strengths and limitations of the research**

Any attempt to consider the wider implications of this research depends on the extent to which the findings are likely to apply to other settings and other groups of students. The sample for this study was small and restricted to one subject area. This was a strength in so far as it allowed a thorough and detailed examination of one context, without which the particular insights given into students’ development would have been lost. Nonetheless, it does place limitations on the extent to which the findings can be generalised, in the traditional sense of that term. Typically, generalisability is considered as the extent to which findings can be extended to other
populations, settings, treatments or measures, and this is often addressed through consideration of statistical sampling (Campbell and Stanley, 1963; Schofield, 1993). The concept of ‘fittingness’ has been suggested by some qualitative researchers as a more appropriate replacement for generalisability, and involves exploring the extent to which the situation studied relates to other situations of interest, to assess how well the findings would apply (Schofield, 1993). The concept of ‘fittingness’ suggests that findings from qualitative studies, such as this one, are useful in understanding different contexts through their capacity to provide rich descriptions. The detail given about the situation under study allows readers to assess the extent to which different aspects of the findings might also fit the setting in which they are interested.

It is necessary to bear in mind, nonetheless, that higher education in the UK is changing in ways which make the setting studied in this research less typical. For example, assessment procedures are diversifying rapidly (Hounsell, McCulloch and Scott, 1996; Nightingale et al., 1996). Further, the students involved in the research are atypical in that the entry qualifications for the institution were higher than for many others in the UK. Despite these limitations, the findings from this study do still seem to have the potential for fairly wide applicability. For example, the complexity and individuality of students’ ways of studying, and their difficulties engaging with the academic discourse, would be relevant to any assessed work. Further, the categories and explanations given in this study often show parallels with the wider literature, suggesting their relevance beyond the setting in which they were derived. For example, the approaches categories are similar to those identified in a wide range of settings, and the problems that students have in coming to terms with the discourse of their discipline, in relation to essay writing, have also been echoed in a range of contexts (Entwistle and Ramsden, 1983; Biggs, 1987; Norton, 1990; Prosser and Webb, 1994; Entwistle, 1997a; Hounsell, 1997; Campbell, Smith and Brooker, 1998; Merry, Orsmond and Reiling, 1998).

Chapter 2 explained why this study was focused on the fine-grained details of students’ experiences of development, and Chapter 3 illustrated how the research methods and context chosen were the most appropriate option given this focus. Nonetheless, these choices did place limitations on the findings. The focus of this
study - on the details of individuals’ experiences within a single course - meant that several of the influences on students’ approaches picked out in the literature review were not brought to the fore here. For example, understanding the effects of course design, or resources, on development would really require comparison between courses which differed on these criteria.

Chapter 4 explained the rigorous efforts made to ensure the quality of the analysis, but also pointed out that other perspectives on the data would be possible, and that self-report data cannot provide a complete picture of students’ learning. Confidence in the use of self-report methods in this type of research can be drawn from the links, illustrated in the literature review, between students’ self-reported approaches and their learning outcomes and aspects of the teaching-learning context. Overall, however, it is important to bear in mind that the findings of any single qualitative (or quantitative) study should be considered as tentative and incomplete (Huberman and Miles, 1994). It is only the combination of many studies, and complementary methods, which can provide a relatively complete and convincing picture.

*Implications for supporting students*

The findings from this study can be brought together with the wider literature to provide suggestions as to how students might best be helped to develop towards fully deep, strategic, self-regulated study. Although there is a need for further research, the following points do seem to be important. Firstly, the approaches sought by staff need to be supported by the whole teaching-learning environment. It may also be the case that learning development needs to be treated as an *explicit* goal by staff. In addition, it seems that the environment should provide some challenge to students’ existing ideas or ways of learning, but care must be taken not to ask them to make too large an adjustment at any given time. Ideally, the advice provided to students should involve dialogue related to their learning tasks within their disciplines, rather than the simple transmission of advice. This dialogue should take into account students’ individual needs, generic help may be less useful. It should also make the norms and values of the discipline explicit. This part of the chapter discusses each of these assertions, looking at what evidence there is to support them, and what research
is still needed. This is followed by a discussion of the practical possibilities for putting these suggestions into practice.

The review of the literature (Chapter 2) illustrated how students' perceptions of many different aspects of the teaching-learning environment can influence the approaches which they adopt. The research by Ramsden, Beswick and Bowden (1987), described in the review, illustrates how an intervention designed to support students in taking a deep approach failed because students perceived the wider learning environment as promoting a surface approach. This finding supports Biggs' (1996) suggestion that, to promote high quality learning, it is necessary to have 'constructive alignment' between the different aspects of the environment, such that the system as a whole supports students' active efforts to develop high-level understanding.

This perspective also seems to be borne out by the findings of the present study. For example, the students received relevant advice about approaches to studying and worked on repeated essay-writing tasks, both of which might be expected to promote development of the deep approach, and yet this did not generally occur. This may have been, in part, because other aspects of the environment were less supportive of change. In particular, development was not treated as an explicit issue, and students were often able to achieve their goals without developing their approaches to any great extent. It is important to bear in mind, however, that not all aspects of the teaching-learning environment will be equally important within the system. For example, the students in this study were generally very focused on their assessed tasks, which suggests that changes to the assessment system might have a substantial effect whether or not other aspects of the teaching-learning environment were aligned. Further research would be required to explore whether, for example, the lack of an explicit emphasis by teaching staff on learning development is a key influence for change.

A number of studies have suggested the importance of challenges to students' ideas or beliefs in provoking development; the work of both Perry and Taylor, discussed in the review, supports this perspective (Perry, 1970; Taylor, 1986; Perry, 1988). Säljö (1982) suggests that the conceptions of learning of some of the students in his
research were changed by their realisation that the learning that was now required of them differed from the methods of learning they had used in the past. These sorts of influence were not generally apparent for the students interviewed in this study, although Gail and Leane could be said to have developed due to such challenges to their ideas.

There are several possible reasons why such effects did not come out strongly in this study. Perry (1988) notes that, if students' worldviews have changed, it can be very difficult for them to realise that this has happened. It may thus require a larger sample, and a longer time span, than in the present study to pick up many incidents of such effects as they are occurring. Another possibility is that the students' ideas about learning were perhaps not strongly challenged because they were able to achieve their goals without much change in their learning. The students' reactions to study skills advice suggest that they may react to potential challenges to their ideas about learning by developing unjustifiably negative views of this advice, by rationalising challenges away, or by choosing not to recognise them. There were, however, only a few examples of each of these possibilities in the present study and so this finding should be treated with caution. Further research into this issue might provide important insights into how students' development can best be supported.

Snyder (1971) notes that students' sense of their progress in relation to tasks in higher education can have a powerful effect on their sense of their worth as students and, at times, on their sense of their worth as people. This being the case, challenges to first-year students' beliefs about learning are likely to be particularly difficult for them, as they are starting out in a new system and will have had little chance to build confidence in their ability to cope. The students in Taylor's (1986) study, who seemed to cope well with such challenges, were generally older and more experienced than the students in this study. Further, it seems likely that the extent to which students feel able to respond positively to challenges to their ideas about learning will depend strongly on what is happening outside the university context. The first-year at university is a time when students are often facing many changes in their lives generally. For example, it may be the first time that students have lived away from home, or managed their finances, and they may also be forming new relationships. This suggests that any efforts to challenge students' ideas about
learning must be very sensitive to the extent to which inexperienced students are able to cope with these pressures.

Vermunt and Verloop (1999) suggest that challenges to students’ ways of learning can be brought about by creating what they describe as ‘constructive friction’ between the teaching provided and students’ ways of learning. These authors illustrate how teaching and learning activities can be seen as a mirror image, with each learning or regulatory process potentially being carried out by either the teacher or the learner. Constructive friction occurs where the teacher takes over less of these functions, challenging the student to develop their learning. The authors suggest, however, that if the teacher provides too little support, the students may be unable to bridge the gap to the sort of learning that is required and ‘destructive friction’ may occur. This issue is described diagrammatically in Table 8.3. Vermunt and Verloop note that, while there is some evidence to support this theoretical perspective, there is a need for further research into how the transition from teacher to student regulation can be brought about in practice.

Table 8.3: Constructive and destructive friction
(adapted from Vermunt and Verloop, 1999, p.270).

<table>
<thead>
<tr>
<th>Degree of student ability to regulate learning</th>
<th>Degree of teacher-regulation of learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Destructive friction</td>
</tr>
<tr>
<td>Intermediate</td>
<td>Destructive friction</td>
</tr>
<tr>
<td>Low</td>
<td>Constructive friction</td>
</tr>
</tbody>
</table>

The need for advice to students which involves dialogue rather than transmission of advice, given in relation to their learning tasks, is suggested by the marked extent to which students may be focused on their assessed work, and by the difficulties inherent in communicating the underlying assumptions and values of academic disciplines. Both of these issues came out strongly in the present study. Almost all of the students were very task focused and the difficulty of communicating the underlying assumptions of psychology was clear in the problems that students had in interpreting the advice and feedback given on their essays. As mentioned earlier, similar problems in coming to terms with the assumptions underlying assessed work have been reported in a number of contexts (Norton, 1990; Prosser and Webb, 1994;
Gaining access to the discourse of a discipline seems to be a gradual and difficult process. For example, Hounsell (1987) explains that it often requires profound changes in students’ thinking and thus cannot be ‘made’ to happen. He suggests this process would be best facilitated through dialogue which takes the students’ perspective into account in exploring and developing these ideas, and argues that simple information-giving is unlikely to be sufficient. There is a need for further research to explore how such dialogue might best support students’ development. Anderson (1997) illustrates how students only gradually gain access to the practices of a discipline over the course of years of tutorials in which tutors gradually challenge and shape their understanding. The extent to which this process could be facilitated by more explicit discussions about the assumptions underlying assessments is not yet clear, but some such process is needed to overcome the difficulties that students have in understanding the feedback they are given.

The need for dialogue and personalised support is also illustrated by the case study findings which demonstrate the individuality of students’ needs. For example, Kirsty could not benefit from advice about learning which did help her with her inability to get started on her work. Any advice given to Alistair would need to deal first with his negative attitudes to study skills support, and his belief that he would not take advice on board. Support provided to Susan would have to have addressed her difficulties in adjusting to the university context and in managing her time. It appears that none of these students would be able to benefit from generic advice which did not address their central concerns. In the wider literature, Perry (1988) emphasises the importance of individualised advice in suggesting that teaching should adjust to students’ individual stages of intellectual development and the emotional problems caused by challenge to their current developmental stage. The research reported in the literature review demonstrated that students’ aims and goals, beliefs, self-regulatory efforts, and approaches all interact. This being the case, it seems important that advice provided to students should take into account all of these aspects of their learning, rather than simply focusing on changing their approaches: a similar point is made by Vermetten (1999).
It is one thing to state the type of support that would be desirable, but the difficulties involved in putting these ideas into practice are considerable. Such support would ideally require staff with a considerable knowledge of both the discipline in question, and of research into student learning. These staff would need to work with students in fairly small groups. As was pointed out in the introduction, there are increasing pressures on staff in higher education which make it difficult to see how this ideal might be achieved (NCIHE, 1997). High student numbers, and the way in which research is favoured over teaching in funding provision, mean that it would be hard for most staff in the disciplines to engage fully with research into student learning.

There is, however, evidence to suggest that some aspects of such support might be successfully carried out in a realistic manner, although there is a need for further research. Looking at the practical possibilities for incorporating the principles of constructive alignment into university settings, Biggs (1996) discusses a course where these principles were put into action. This involved setting out clearly what forms of understanding were required, then having teaching methods and assessments which promote this sort of understanding. The students’ learning outcomes suggested that this attempt had been successful.

Biggs’ example was a relatively small class of 82 third-year students, but he suggests that the basic principles can be applied in other contexts. Putting these principles into practice in day-to-day university settings is, however, still likely to be problematic. Biggs himself designed and taught the course described and was therefore able to draw on his very extensive knowledge of the relevant literature to provide an appropriate context. For example, he used his SOLO taxonomy (Structure of Observed Learning Outcomes - Biggs and Collis, 1982) to describe the desired ‘performances of understanding’; most academic teaching staff would not have this sort of knowledge. Biggs also points out that institutional practices can often work against this sort of innovation.

Courses have also been developed in which students are taught about, for example, conceptions of learning and self-regulation, and are trained in using appropriate learning processes well. Crucially, the students are taught these things in relation to the work that they are doing in their academic disciplines. The idea is that there is a
gradual transfer of learning functions from the teacher to the learner to promote constructive friction. These courses are brought together under the heading ‘process-oriented instruction’ (Vermunt, 1995; Vermunt and Verloop, 1999).

It seems to be possible to carry out aspects of this type of teaching successfully using a relatively small number of tutorials and a diagnostic inventory. Vermunt describes a process-oriented instruction intervention carried out in this manner in an introductory psychology course. The students completed the ILS and were given a booklet which helped them to interpret their scores. The students also participated in two tutorials where they discussed their ILS scores and their ways of studying in psychology. The students practised selecting the main points from one of their textbook chapters and worked on representing these ideas schematically. The students’ responses to an open-ended questionnaire given after the programme suggested that they had become more aware of the need to use deep processes and wanted to make more use of these strategies and of self-regulation in their learning. The students who had participated in the course also gained better grades in their examinations. Vermunt notes that it was possible that the students in the test group gained better grades because more motivated students had volunteered to participate in the programme, but points out that other research has illustrated that the ‘relating and structuring’ deep process shows a particularly strong relationship with examination grades, and it was this strategy which was most affected by the intervention (Vermunt, 1995).

Volet and her colleagues (1995) point out that there are few examples in the literature of experimental studies being successfully transferred to real-life settings. They decided to explore whether a process-oriented instruction course, which had given good results when implemented by a tutor who was knowledgeable about the relevant research and involved from the start in the design of the innovation, could be used successfully by university tutors if they were given detailed guidelines but minimal training. The researchers found that the programme was not nearly as successful under these conditions, and it did not have any effect on the students’ examination results. Unfortunately, the results of this study were equivocal as there were several confounding factors. For example, a post-hoc examination of the grades
of the control group on their other courses suggested that this group were generally stronger academically than the experimental groups (Volet, McGill and Pears, 1995).

It seems, therefore, that there is a need for further research into how well such innovations can be transferred to everyday academic settings, and for researchers to report the background of the tutors involved in innovations and the extend to which they were trained; the authors of some studies in this area do not make this clear (for example, Schatteman et al., 1997). There is also a need for research which explores how well these programmes would work for students like Alistair or Kirsty, who are resistant to development, and for studies which consider the extent to which process-oriented instruction can compensate for learning environments which are not strongly supportive of deep, strategic, approaches.

**Conclusion**

*Refining the general conceptualisation of approaches*

Previous research into approaches has often focused on describing their general characteristics. Similar general descriptions could be drawn from the research reported here but there were also certain differences. The findings from this study suggest the need to add a specific monitoring element to both the deep and strategic approaches. *Monitoring understanding and related regulation* would be added to the deep approach and *monitoring time and efficiency and related regulation* would be added to the strategic approach. It seems difficult to imagine how approaches would be carried out successfully without these aspects, but they were not included explicitly in earlier conceptualisations.

The findings also suggest that the competitive element included in some earlier descriptions of the strategic approach may not be important for certain groups of students. This aspect had been omitted from the most recent version of the ASI, and the findings of this study provide qualitative support for that decision. Prior to this research, the only qualitative account of the strategic approach had been that provided by Entwistle and Ramsden (1983). Their findings brought out the competitive element more strongly, perhaps because the students interviewed were at a later stage in their degrees and more male students were involved than in the present study. There is, therefore, a need for further qualitative research into the
aspects which should be included within the general definition of the strategic approach.

The extent and nature of development in the first year

Prior to this study, very little was known about the development of students’ approaches to studying, particularly in the first year. The earlier longitudinal research had been mainly quantitative in nature, typically focusing on change over the whole degree. Such research could not fully describe the details of students’ development. The research reported in this thesis has begun to address this gap in the literature. Although there seemed to be potential for improvement in the students’ approaches, few of them made significant changes in their ways of learning; nor were they strongly motivated to do so. Many students did, however, make more minor adjustments in the ways in which they carried out their learning processes. There were also a few students who made more profound changes in their deep approach, particularly in relation to their efforts to develop more personal understandings.

Understanding influences on development

The study also provided new insights into influences on students’ development. It seems that, to understand students’ development, it is important to see them as unique individuals interacting in complex ways with a particular context. In this study, potentially important elements of the context were the apparent ease with which the students reached their somewhat restricted goals and the lack of an explicit emphasis by staff on the need for development. The repeated essay writing task seemed most supportive of change, but the students did not generally reach an understanding of the task which matched their tutors’ expectations. A key problem seems to have been the difficulties the students had in coming to terms with the discourse of their discipline, and the limitations this placed on their approach to the task.

The case studies illustrated how unique combinations of experiences, beliefs, attitudes, abilities and motivations influenced students’ development. They also demonstrated continuity in students’ learning, in that some of them started their university career with well-established views about their strengths and weaknesses, and also about the extent to which those characteristics could be changed. Based on
these individual sets of influences, some students seemed to become particularly receptive to opportunities for change, whilst others were much more resistant.

The limitations of abstractions and the value of detailed case studies

The findings of this study suggest that, despite their usefulness, the more abstract categories or models used in research in this area do tend to mask the underlying complexity of students’ learning. They illustrate how important it is to bear in mind that ‘the map is not the territory’ (Taylor, 1986, p.70). This was shown by the complexity of the influences on students’ development, and by the importance of the fine-grained details of the context. Neither of these themes would be addressed by general models. The difficulties involved in describing individual students’ learning using approaches also bring out the limitations of analytic abstractions. The approaches categories had to be adjusted to suit the discipline, the students’ level of experience, and particular learning tasks. Despite this refocusing, the categories still did not fully capture the central aspects of individual students’ learning.

This research suggests the importance of fine-grained case study analyses looking at individual students. The cases picked up important issues, such as receptiveness to change, which would not have been easily identified in less detailed analyses. In the past, the approaches categories have mainly been used for description and prediction. If a shift is to be made towards understanding the individual, and helping students to improve or develop faster, more detailed analyses become important. Research in this area must consider the tension between clear, parsimonious, accounts and doing justice to the day-to-day realities of students’ learning.

Recommendations for practice

The findings of this study illustrate the potential limitations of simply transmitting generic advice, even where that advice is relevant and grounded in research. Although further research is necessary, some suggestions about how students should be supported can be made based on this study and the wider literature. The main recommendation is that advice should be provided which involves an element of dialogue with students in relation to assessed tasks in their disciplines. This dialogue should take into account students’ individual perspectives and should address the underlying norms and values of the discipline. Ideally, this should be carried out
within a teaching-learning context which is broadly supportive of the desired approaches. This environment needs to challenge students sufficiently for them to see the need for development. The extent to which such support can be enacted successfully in typical university contexts in the UK, however, awaits further research, although innovations based on process-oriented instruction and constructive alignment currently seem promising. It will be important to explore whether such interventions are effective for students who are resistant to development.
References


Appendix 2.1 - Scales and sub-scales from the most recent version of the ASI
(ASSIST, Entwistle, Tait and McCune, 1999)

Deep Approach

Seeking meaning
I usually set out to understand for myself the meaning of what we have to learn.
When I am reading an article or book, I try to find out for myself exactly what the author means.
When I am reading I stop from time to time to reflect on what I am trying to learn from it.
Before tackling a problem or assignment, I first try to work out what lies behind it.

Relating ideas
I try to relate ideas I come across to those in other topics or other courses whenever possible.
When I'm working on a new topic, I try to see in my own mind how all the ideas fit together.
Ideas in course books or articles often set me off on long chains of thought of my own.
I like to play around with ideas of my own even if they don't get me very far.

Use of evidence
I look at the evidence carefully and try to reach my own conclusion about what I'm studying.
Often I find myself questioning things I hear in lectures or read in books.
When I read, I examine the details carefully to see how they fit in with what's being said.
It's important for me to be able to follow the argument, or to see the reason behind things.

Interest in ideas
Regularly I find myself thinking about ideas from lectures when I'm doing other things.
I find that studying academic topics can be quite exciting at times.
Some of the ideas I come across on the course I find really gripping.
I sometimes get 'hooked' on academic topics and feel I would like to keep on studying them.

Strategic approach

Organised studying
I manage to find conditions for studying which allow me to get on with my work easily.
I think I'm quite systematic and organised when it comes to revising for exams.
I'm good at following up some of the reading suggested by lecturers or tutors.
I usually plan out my week's work in advance, either on paper or in my head.

Time management
I organise my study time carefully to make the best use of it.
I'm pretty good at getting down to work whenever I need to.
I work steadily through the term or semester, rather than leave it all until the last minute.
I generally make good use of my time during the day.

Alertness to assessment demands
When working on an assignment, I'm keeping in mind how best to impress the marker.
I look carefully at tutors' comments on course work to see how to get higher marks next time.
I keep in mind who is going to mark an assignment and what they're likely to be looking for.
I keep an eye open for what lecturers seem to think is important and concentrate on that.

Achieving
It's important to me to feel that I'm doing as well as I really can on the courses here.
I feel that I'm getting on well, and this helps me put more effort into the work.
I put a lot of effort into studying because I'm determined to do well.
I don't find it at all difficult to motivate myself.

Monitoring effectiveness
I go over the work I've done carefully to check the reasoning and that it makes sense.
I think about what I want to get out of this course to keep my studying well focused.
Before starting work on an assignment or exam question, I think first how best to tackle it.
When I have finished a piece of work, I check it through to see if it really meets the requirements.
Surface-Apathetic Approach

Lack of purpose
Often I find myself wondering whether the work I am doing here is really worthwhile.
There's not much of the work here that I find interesting or relevant.
When I look back, I sometimes wonder why I ever decided to come here.
I'm not really interested in this course, but I have to take it for other reasons.

Unrelated memorising
I find I have to concentrate on just memorising a good deal of what I have to learn.
Much of what I'm studying makes little sense: it's like unrelated bits and pieces.
I'm not really sure what's important in lectures, so I try to get down all I can.
I often have trouble in making sense of the things I have to remember.

Syllabus-boundness
I tend to read very little beyond what is actually required to pass.
I concentrate on learning just those bits of information I have to know to pass.
I gear my studying closely to just what seems to be required for assignments and exams.
I like to be told precisely what to do in essays or other assignments.

Fear of failure
Often I feel I'm drowning in the sheer amount of material we're having to cope with.
I often worry about whether I'll ever be able to cope with the work properly.
I often seem to panic if I get behind with my work.
Often I lie awake worrying about work I think I won't be able to do.
Appendix 3.1 - schedule for the first interview in the first phase
Main themes considered in every interview are marked in bold. The additional prompts are simply suggestions, they were not all used in every interview and the researcher could follow-up additional themes. Nonetheless, the majority of the topics covered by the prompts were addressed in most of the interviews.

First interview

I'd like to start by talking a bit about your experiences of education before coming here. I see you went to..............what was that like?
- big small, mixed, did many go on to university from there?
- any time out if so what done?
- studied psychology or anything similar before?

How about choosing your university and courses did your school/ college help?
- why university?
- why Edinburgh?
- what main subject/ why?
- why psychology?

At last school/ college etc. did you do any preparation for coming to university?
- what was it?
- was it helpful, why/why not?

Did you write essays at school/college etc., do you think any of your previous essays will be like psychology essays, which subjects?
- describe example, what steps and why starting with choosing title, notes, plan, the writing, revising?
- areas of disagreement? If so how resolved?
- most important things about writing that kind of essay?
- difficulties, how resolved?
- thoughts about writing essays at university?

Did you do exams at school/ college?
- multiple choice exam before? What subject? Or some other recent exam?
- describe preparation from start, what done and why?
- difficulties what/why how resolved?
- plan out time, how and why?
- problems with time, getting on with work. If so how resolved?
- how assess how well your studying is going?

Generally how are you finding your initial experiences of learning here as opposed to ............?
- describe examples?
- feel prepared, if not any action?
- what motivated work hard at school, and now?
- have to work as hard in first year as at school? What about later years at uni.
- time for other activities?

How are you finding psychology lectures so far?
- as expected?
- what note taking methods and why?
- likes dislikes?
- problems, how resolved?
- any reading yet, what activities and why e.g. how is reading selected?
- any help, was it useful, why/why not?
Do you have any sort of feel yet for what psychology is all about?
- describe
- how is psychology different from other subjects?
- what do you like/dislike about the subject?

You've just started but how do you feel you are getting on/how do you think you will get on with psychology?
- how are they (would they) judging that?
- initial thoughts on keeping up with the work, timetable, distractions etc.?

Have you thought about how well your lectures and reading are going generally?
- think they need help?
- been to anything - freshers week or lunch time sessions - why/why not?
- helpful, why/why not?
- read anything on study skills, survival guide, other books etc. Why/why not?
- helpful, why/why not?
- think much about how to study yet?

Finally how are you finding the whole experience of coming to university in these first few weeks?
- what affects how they feel about it and why?
Appendix 3.2 - schedule for the second interview in the first phase
Main themes considered in every interview are marked in bold. The additional prompts are simply suggestions, they were not all used in every interview and the researcher could follow-up additional themes. Nonetheless, the majority of the topics covered by the prompts were addressed in most of the interviews.

Second interview

How do you feel now about your choice of University and choice of courses?

I’d like to talk now about the essay you’ve just written for psychology.
- describe example, what steps and why, starting with choosing title, notes, plan, the writing, revising?
- aware of areas of disagreement between texts? If so how resolved?
- was there any study you disagreed with/ didn’t make sense (why/ why not, what ways might you criticise a study?)
- did your essay reflect your own views about this topic?
- most important things about writing that kind of essay?
- how did you get on, do you feel you can improve for the next essay, how?
- tutors comments, what did you think of them and why?
- is this similar to writing essays in your other subjects? Do you have particular way of writing essays?
- was writing this essay like what you expected, why? Changes from school essays, why?
- did you get stuck at all, how did you cope? Other difficulties, how resolved?
- do you need to get into a particular mood/ frame of mind to write essays, how do you do it?
- do you like to work in a particular setting, why?
- how did you organise your time, why, did this work?
- now that you’ve written this essay can you sum up for me what you know about the topic?

Preparation for the psychology class exam?
- describe preparation from start, what done and why?
- difficulties what/why, how resolved?
- plan out time, how and why?
- problems with time, getting on with work. If so how resolved?
- do you need to get into a particular mood/ frame of mind to study, how do you do it?
- do you like to work in a particular setting, why?
- how assess how well your studying is going?
- did you always revise like this? (if you have changed why is this)

Last time we talked a bit about what psychology was all about how would you sum that up now?
- how is psychology different from other subjects?

How do you feel you are getting on with psychology now?
- how do they judge that?
- main likes and dislikes?
- anything else we haven’t discussed that stands out as important?
- any other changes?

Finally how are you finding the whole experience of university now?
Appendix 3.3 - schedule for the third interview in the first phase
Main themes considered in every interview are marked in bold. The additional prompts are simply suggestions, they were not all used in every interview and the researcher could follow-up additional themes. Nonetheless, the majority of the topics covered by the prompts were addressed in most of the interviews.

Third interview

How do you feel now about your choice of University and choice of courses?
Have your plans changed at all?
Main goals?
Intending to continue with psychology? (see their sheet)

How are you finding psychology lectures now?
- as expected?
- what note taking methods and why?
- likes dislikes?
- problems, how resolved?
- reading and related activities and why e.g. how is reading selected?
- any help, was it useful, why/why not?
- changes?

I'd like to talk now about the essay you've just written for psychology
- describe example, what steps and why, starting with choosing title, notes, plan, the writing, revising?
- aware of areas of disagreement between texts? If so how resolved?
- was there any study you disagreed with/ didn't make sense (why/ why not, what ways might you criticise a study?)
- did your essay reflect your own views about this topic?
- most important things about writing that kind of essay?
- how did you get on, do you feel you could have improved on your grades? Could you improve next year?
- what do you think difference is between yourself and people who do better/ worse than you?
- tutor's comments, what did you think of them and why?
- is this similar to writing essays in your other subjects? do you have a particular way of writing essays?
- was writing this essay like what you expected, why, why changes from previous psychology essays, why?
- did you get stuck at all, how did you cope? Other difficulties, how resolved?
- do you need to get into a particular mood/ frame of mind to write essays, how do you do it?
- do you like to work in a particular setting, why?
- how did you organise your time, why, did this work?
- now that you've written this essay can you sum up for me what you know about the topic?

Last time we talked a bit about what psychology was all about how would you sum that up now?
- how is psychology different from other subjects?

How do you feel you are getting on with psychology now?
- how do they judge that?
- main likes and dislikes?
- anything else we haven't discussed that stands out as important?
- any other changes?
- what do you think you've gained from psychology (other than grades, more personal gains?) and why?
Study skills materials or courses, asking for advice (if this has not come up earlier).
Have you done any of these things yet. Why/ why not?
If you did was it helpful. Why/ why not?
Student learning lectures - did they relate to your learning? Why/ why not. Did they influence your studies? Why/ why not?

Finally, I wanted to ask you about some of your answers to the inventory you filled out in the lectures.
Appendix 3.4 - schedule for the first interview in the second phase
Main themes considered in every interview are marked in bold. The additional prompts are simply suggestions, they were not all used in every interview and the researcher could follow-up additional themes. Nonetheless, the majority of the topics covered by the prompts were addressed in most of the interviews.

First interview

Can you tell me a bit first of all about your reasons for coming here?
- why university?
- why Edinburgh? all reasons? relative importance of reasons?
- what main subject/ why?
- why psychology, studied anything like psychology before?

At last school/ college etc. did you do any preparation for coming to university?
- what was it?
- was it helpful, why/why not?

Did you write essays at school/college etc., do you think any of your essays will be like psychology essays, which subjects?
- describe example, what steps and why starting with choosing title, notes, plan, the writing, revising?
- most important things about writing that kind of essay, define good essay (try to get full elaboration on these issues),
- areas of disagreement? If so how resolved?
- did essay reflect own views on issue?
- other difficulties, how resolved?
- problems understanding, solutions? what meant by understanding?
- did you spend much time looking over teachers comments, re-reading past essays?
- did you think much about how you went about doing essays, did you discuss this with anyone?
  could you have done things better, how?
- main motivation to work on essay, problems with motivation, getting started, how resolved?
- mood/ frame of mind needed for writing essays? If you're not in it?
- prefer to work in particular setting?
- plan out time? how/why?
- write essays differently in different subjects, why?
- thoughts about writing essays in psychology? discussed in tutorial? Or with anyone else?
  like school? any differences?

Did you do exams at school/ college?
- Have you done a multiple choice before? What subject? Or some other recent exam?
- describe preparation from start, what done and why, how organise material?
- difficulties what/why, how resolved?
- plan out time, how and why?
- how do you assess how well your studying is going?
- problems understanding, solutions? what is meant by understanding?
- areas of disagreement? If so how resolved?
- other difficulties, how resolved?
- did you think much about how you went about revising, did you discuss this with anyone?
  could you have revised better, how?
- main motivation to revise, problems with motivation, getting started, how resolved?
- mood/ frame of mind, if you're not in it?
- work in particular setting?
- plan out time? how/why?
- revise differently in different subjects, why?
- thoughts about preparing for exams in psychology? like school? any differences?
How are you finding psychology lectures so far?
- as expected?
- what note taking methods and why, any changes?
- any reading yet, what activities and why, e.g. how is reading selected?
- do anything/ plan to do anything to go beyond what is given in lectures?
- how organise time/ plan to organise time during week?
- think much about methods of working yet, or is it too early? Talk to anyone about this?
- problems understanding, how resolve/intend to resolve, what meant by understanding?
- agree with ideas encountered, question them? develop own ideas at all?
- maintain concentration, if not?
- other problems, how resolved?
- any help with any of this, was help useful, why/why not?
- main motivations to work on psychology, strength of motivation - how important is it/will it be, problems with motivation?

Impressions of first tutorial?
- what was done in it?
- role of tutorials/tutor?
- thoughts on getting most from tutorials?
- thoughts on preparation for tutorials?

Do you have any sort of feel yet for what psychology is all about, initial impressions?
- describe
- how is psychology different from other subjects?
- how are ideas/ theories developed in psychology?
- what do you like/ dislike about the subject?
- find ideas gripping/ exciting?

You've just started, but how do you feel you are getting on/ how do you think you will get on with psychology?
- how are they (would they) judging that?
- what is learning in psychology all about for you?
- anything else you'll need to start doing/ do differently than at school beyond what discussed earlier when we talked about essays/exams?
- do you talk to anyone about these sorts of things?

Study skills materials/ talks?
- been to [read anything] - why/ why not?
- helpful, why/ why not?
- how do you feel about idea of developing learning/study skills? Can you change?
Appendix 3.5 - schedule for the second interview in the second phase

Main themes considered in every interview are marked in bold. The additional prompts are simply suggestions, they were not all used in every interview and the researcher could follow-up additional themes. Nonetheless, the majority of the topics covered by the prompts were addressed in most of the interviews.

Second interview

Can you tell me a bit first of all about your main reasons for being at university now?
- reasons for being at university now, any change? all reasons? relative importance reasons?
- why psychology now, is it main subject, has this changed?

Essay you've just written for psychology?
- describe, what steps and why starting with choosing title, notes, plan, organising material, the writing, revising?
- most important things about writing that kind of essay, define good essay (try to get student to elaborate fully)?
- areas of disagreement? If so how resolved?
- study you disagreed with or didn't make sense? How can you criticise studies?
- essay reflected own views on issue?
- other difficulties, how resolved?
- problems understanding, solutions? Anything else you do to help understanding?
- what meant by understanding?
- did you think much about how you went about doing essays, did you discuss this with anyone?
- could you have done things better, how?
- did you get advice from your tutor beforehand, what was it, was it helpful, why/why not?
- tutors comments, what did you think and why, will they help with next essay/ did you (will you) spend much time thinking about them?
- changes from school essays, why?
- main motivation to work on essay, problems with motivation, getting started, how resolved?
- mood/ frame of mind, if you're not in it?
- plan out time? how/why?
- work in particular setting?

Preparation for psychology class exam?
- describe preparation from start, what done and why, how organise material?
- difficulties what/why how resolved?
- plan out time, how and why?
- how assess how well your studying is going?
- problems understanding, solutions? anything else you do to help understanding? what meant by understanding?
- areas of disagreement? If so how resolved, did you agree with/ criticise the material you were learning?
- did you think much about how you went about revising, did you discuss this with anyone?
- could you have revised better, how?
- main motivation to revise, problems with motivation, getting started, how resolved?
- mood/ frame of mind, if you're not in it?
- work in particular setting?
- plan out time? how/why?
- changes, why?
Impressions of tutorials?
- role of tutorials/tutor?
- what do you feel you are getting out of tutorials?
- thoughts on getting most from tutorials?
- thoughts on preparation for tutorials?
- changes?

How do you feel you are getting on/ how do you think you will get on with psychology?
- how are they (would they) judging that?
- what is learning in psychology all about for you?
- do the different parts of the course seem to link together, have you done anything to help this?
- able to relate psychology to self, to wider world?
- do you develop your own ideas?
- anything else you'll need to start doing/ do differently beyond what discussed earlier when we talked about essays/exams? Do you do other work beyond what needed for assessed work and tutorials?

Study skills materials/ talks?
- been to /read anything - why/ why not?
- helpful, why/ why not?
- how do you feel about idea of developing learning/study skills? Can you change?

Finally, I wanted to ask you about some of your answers to the inventory you filled out in the lectures.
Appendix 3.6 - schedule for the third interview in the second phase

Main themes considered in every interview are marked in bold. The additional prompts are simply suggestions, they were not all used in every interview and the researcher could follow-up additional themes. Nonetheless, the majority of the topics covered by the prompts were addressed in most of the interviews.

Can you tell me a bit first of all about your main reasons for being at university now?
- reasons for being at university now, any change? All reasons? Relative importance reasons?
- why psychology now, is it main subject, has this changed?

Essay you've just written for psychology?
- ever done essay question on approaches?
- describe, what steps and why starting with choosing title, notes, plan, organising material, the writing, revising?
- most important things writing psychology essay, define good essay (try to get student to elaborate fully)?
- areas of disagreement? If so how resolved?
- study you disagreed with or didn't make sense? How can you criticise studies?
- problems understanding, solutions? Anything else you do to help understanding?
- what meant by understanding?
- did you think much about how you went about doing essays, did you discuss this with anyone?
- did you use the feedback from the previous essay, why/why not? Examples?
- did you get advice from your tutor beforehand, what was it, was it helpful, why/why not.
- tutors comments this time, what did you think and why, did you (will you) spend much time thinking about them?
- grade, what do you think of it, do you think you could do better if you had another essay?
- changes from previous psychology essays, why?
- main motivation to work on essay, problems with motivation, getting started, how resolved?
- mood/frame of mind, if you're not in it?
- plan out time? how/why?
- work in particular setting?

How are you finding psychology lectures so far?
- as expected?
- reading, what activities and why e.g. how is reading selected?
- how organise time during week?
- changes to any of this, why?
- think much about study methods, talk to anyone about this?
- problems understanding, how resolve/intend to resolve, what meant by understanding?
- agree with ideas encountered, question them? develop own ideas at all?
- maintain concentration, if not?
- any help with any of this, was it useful, why/why not?
- main motivations to work on psychology, strength of motivation - how important is it/will it be, problems with motivation?

Impressions of tutorials?
- role of tutorials/tutor?
- what do you feel you are getting out of tutorials?
- thoughts on getting most from tutorials?
- thoughts on preparation for tutorials?
- changes?
Do you have any sort of feel yet for what psychology is all about, initial impressions?
- describe
- how is psychology different from other subjects?
- how are ideas/theories developed in psychology?

How do you feel you are getting on/ how do you think you will get on with psychology?
- how are they judging that?
- what is learning in psychology all about for you?
- do different parts of the course seem to link together, have you done anything to help this?
- able to relate psychology to self, to wider world?
- examples of above?
- anything else you'll need to start doing/ do differently beyond what discussed earlier? - do you do other work beyond what needed for assessed work and tutorials?
- any other changes?

Study skills materials/talks?
- been to/read anything - why/ why not?
- helpful, why/ why not?
- how do you feel about idea of developing learning/study skills? Can you change?
- if they did essay on approaches - did that affect them, why/why not?

Finally, I wanted to ask you about some of your answers to the inventory you filled out in the lectures.
Appendix 3.7 – extracts to illustrate interviewing style

Extract 1 – from a students’ third interview in the first phase of the study

Student (S) - It was for this essay, and we’d had lectures on that topic, so I looked at my lecture notes, so that I knew the sort of areas that the topics was going on and I had a basic knowledge.

Interviewer (I) - So what makes the basic knowledge important?

S: Just so I know what the topic’s about, if you start in deep analytical literature before you know the general scope of the topic then I think you just get confused and you get, you know, can’t see the wood for the trees, sort of thing, you’re just sort of going right in there and you don’t really know what it’s about. So, I looked at that and then we had a sort of small tutorial on it and that didn't really provide anything in depth, just a chat about where this essay is leading. Then I went to the library and started, and we got a reading list for some interesting articles about it, and it was about learning, so I put learning into the computer and got out a few more titles and went and looked at those books.

I: So how were you selecting what to read there?

S: Partly on what's in the library, cause quite often you type in all these titles and there's nothing there. And it was very much based, it was quite a narrow title, it was on student learning, so I selected it on what was relevant to that, and having already done two psychology essays you sort of know how deep you need to go, you've got to be slightly deeper than superficial, you've got to, you know, get some good experiments in and all that sort of thing, but you can't get too clogged down on certain experiments and all that sort of thing.

I: Can you elaborate a bit more, you seen to have sort of like learned something new there.

S: Well, I've learned that you need to include quite a lot of different experiments, different peoples’ work, different sort of ways that people have approached the same subject, and the different way they've experimented on it. Not take one persons work, for example, and get bogged down on a certain experiment, because um that can, you know, then you're just giving one dimension. You can do that, I don't know, if you were writing, I don't know, a six thousand word essay, really analyse what every person has done. So that's what I was looking for, lots of different approaches to, you know, back up similar, sort of, proposals.

I: And how did you, what got you to learning that?

S: Well I did very well on the second essay and that's what I did. Cause the first essay that was the criticism, I hadn't used enough references, I hadn't draw on so many different things. Then I drew on hundred and hundreds for my second essay and got a very good mark for that, so I tried again the same thing for the third one.
I: And does it make sense to you that sort of way of doing things, can you see why that's a good way?

S: Um yeah I can, definitely, but it came, it was quite surprising for me, cause really in the psychology one essays it's completely irrelevant what you think, it's always virtually every second sentence you have to put in brackets someone's said this. It doesn't really, if you get a general impression about something, it counts for absolutely nothing, it's you need concrete - someone has actually done the experiment and shown that's the case.

I: Hold on I'm just going to shut this window it's a bit loud out there.

S: So, I did find that quite strange, that I was basically just using other peoples information, whereas I'm used to, say for English or whatever at A level, used to writing what I think, and my opinions, and my interpretation.

I: So is there any way of getting yourself into the essays at all?

S: Not really, you're just, only in the way that the material you choose to include, and the way you structure it, and the way you link it all together. Basically, most of the sort of words of the ideas are not yours at all.

Extract 2 – from a students' second interview in the second phase of the study

I: OK em, yeah, I know you probably don’t want to talk about the class exam, but we’ll just talk about it a little bit. Can you tell me, sort of, like how you have gone about preparing for the class exam.

S: I predicted that I would be preparing by looking over my lecture notes, which they are quite, I mean I’ve got most of the lectures in my notes, but it turns out that the class exam is all from (the course text). So what I’ve done is with -- lectures on Learning and Instinct I have gone through the whole chapter on learning in (the course text) and got all the words in bold and defined them in my own terms, and tried to learn them, so that when the exam comes along - it’s multiple choice, I think, that’s kind of what I am expecting with what I’ve seen in the previous questions - it’s a question of knowing what certain principles and things are, and what they mean, and not how you find them, and not how you manipulate them, but just what they mean. That’s just the question of learning lots and lots of definitions, which you get from working out what the words involved are.

I: So what’s the, kind of, purpose of putting it into your own words?

S: So that it goes into your head, because I think if you just copy it down from the book by rote it wouldn’t work, but I haven’t tried that. There’s not a lot of point in trying when you know it’s never going to work. And the other ones with statistics, my lecture notes are awful for that, I just couldn’t really follow in the lectures. By the time I got to statistics I was completely lost for most of it, and then I looked over (the course text) this weekend and I found that most of the stuff is there, and I have done most of the stuff, but it’s all just expressed in a completely different way, which is really really confusing, and if I hadn’t gone over statistics I don’t think I would have had much chance of getting ahead with any of it. It took me about two years to get my head around standard deviation and stuff and all of a sudden I can find it here
and all it is is that. It's not just that there's so much more to it - so I mean I don't know what it would be like if you hadn't done the subject before, but I wouldn't like to have done.

I: So how do you think you are going to deal with it now? If the lectures have been confusing, and it's all different in the textbook, how are you going to cope with that.

S: Well what I have done is to kind of get it back to terms that I can make sense of. Like with the z score stuff, I hadn't come across (it) before, but I learned that in forms of standardising the normal distribution. It wasn't a question of finding out the z score. For some reason I never put the two and two together and, for example, I mean all these other things, where all there is is that, but it's in these terms and you just can't make head nor tail of it, but then you find out somehow just by thinking about it that actually all there is to it is what you have done in stats, but it's just getting your head round it.

I: So how have you been getting your head round it, or like putting two and two together? Like what were you I suppose doing to get that?

S: It was partly reading through it and just thinking about it, and it just sort of. And then the other one was phoning up my mum, who is a Maths teacher, and seeing if she had heard of any of these terms before and invariably she hadn't. So it was quite reassuring. Em, yeah, no, she was very helpful actually, and kind of explained things in terms that I could relate to 'A' level Maths, and about things that were coming up here. Yeah, that was useful. She helped me out in some of the clarification.
Appendix 3.8 - information collected from students on recruitment

Student Learning Interviews

These interviews will be about your experiences of learning in first year at university. I won't be asking any personal questions but all the information you give me will be kept confidential. Please complete the details below including your availability for interview next week. The interviews should last about one hour. Many thanks for your help.

NAME..................................................................................................................
ADDRESS.............................................................................................................
PHONE....................................................................................................................
EMAIL....................................................................................................................
BEST WAY TO CONTACT YOU? EMAIL/ POST AT TERM ADDRESS*
AGE .................................................................
SEX .................................................................
FACULTY ...........................................................
MAIN SUBJECT (IF KNOWN) .................................

MOST RECENT EDUCATION BEFORE UNIVERSITY (SCHOOL, COLLEGE, OTHER?) .................................
YEARS MOST RECENT EDUCATION ENDED? .................
* delete as applicable

Please tick three possible times that would suit you for an interview next week. I will not be asking everybody to come next week, I'll contact some of you later in the year to see how you are getting on then. Grey blocks are times that I am not available.

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Appendix 3.9 - information collected from students at first interview

Student Learning Study - Student Information Form

Name ...........................................................................................................

Matric No.........................................................................................

Staying? At home/ in halls / in a shared flat / other .................................*

Name of the school / college etc. where you last studied
............................................................................................................

Please list your entry qualifications:

Highers (with grades and year) ................................................................
............................................................................................................
............................................................................................................

A levels (with grades and years) .................................................................
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SYS (with grades and years) .................................................................
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Other? ....................................................................................................
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* delete as applicable
Appendix 4.1 - Coding Sheets

These pages were used to bring together all of the evidence of development and all of the explanations for development, or lack of development, for each student.

Student coding sheet - student

1) Reasons for entering and valuing higher education

Code I1 I2 I3 to boxes.

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Comments, any development within categories, aspects of reasons which don't fit any category, missing coding with text units
2) Reasons for choosing and valuing psychology

Code I1 I2 I3 to boxes

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Comments, any development within categories, aspects of reasons which don't fit any category, missing coding with text units.

3) School essays - anything that seems particularly relevant to development with text units
4) psychology essays (conceptions already coded)

Code I1 I2 I3 to boxes

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Comments, any instances of competitiveness in intention to reach standard, anything that doesn't code with text units, missing coding with text units, any development within categories.
B) Processes - essays

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C) Metacognition and self-regulation essays

Code I1 I2 I3 to boxes

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D) Essays - general comments - any themes relevant to development, any other examples of development (feedback already covered). Anything additional on what is a good essay?

5) Anything that stands out from school exams as relevant, with text units
6) psychology lectures and related reading

Code I1 I2 I3 to boxes

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C) Metacognition and self-regulation lectures

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D) Lectures - general comments - any themes relevant to development, any other examples of development (feedback already covered).
7) Tutorials - any themes relevant to development all themes with text units

8) Students attitudes to study skills materials and to the student learning lectures - all themes with text units
8) Cont'd
### 9) Class exam

**Code I2**

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C) Metacognition and self-regulation exam

Code 11 12 13 to boxes

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D) Exam - general comments - any themes relevant to development, any other examples of development.

10) **Student overall**

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Comments
11) Any other themes relevant to development, any other examples of development, triggers for development, dissonance, with text units
Appendix 4.2 - Category descriptions for elements of approaches to studying

This appendix gives a more detailed description of all of the categories developed in relation to the approaches to studying. The categories are listed alphabetically. Certain categories were excluded from the final description of the approaches, as they did not fit conceptually within deep or strategic. Where appropriate, these categories were included in other sections of the findings, for example, as part of the explanation for the lack of development of students’ approaches.

Alertness to assessment

This category describes students’ attempts to focus their effort on getting better marks in their assessed work. Unlike items from the ASSIST scale of the same name, there is little evidence that the students are aiming to please a specific marker. Apart from this difference, the category is similar to the scale, in that the students did try to work out what topics were most important and did try to improve on their essays based on their tutors’ comments.

In terms of selecting important topics, many students pointed out that they focused their work on the main course text, as they knew that the class examination questions would come from that text. They also focused selectively on statistics, as that had more questions assigned in the examination. In addition, some students bore in mind the type of examination when they were revising, explaining that they would revise differently for a multiple-choice examination, for example, by practising those sorts of questions. It was quite common for students to test their revision in some way, either by using the course study guides or by devising their own tests.

With their essays, most of the students paid some attention to the feedback given by their tutors in an attempt to get better grades next time. Typically this took the form of picking up on specific points, rather than deeper reflection on the ways they wrote their essays. Most common were attempts to improve writing style, but other changes were also made, such as trying to be more relevant, including more examples, and improving referencing. A few students mentioned other themes related to improving their essay marks, for example, choosing more recent textbooks or aiming to display the breadth of their reading. The students also checked their essays before they handed them in, most often the students mentioned checking spelling, grammar, stylistic aspects, clarity or sense, and structure. Interestingly, the students did not typically mention checking their overall conclusion, or the evidence for the points they had made. The student quoted below shows typical alertness to assessment for this group:

I: Can you maybe like tell me a bit about how you have been preparing for the class exam? ...

S: ... the (textbook) Study Guide that is really good, they’ve got they’ve got all the parts you should know, they say what you should know, so I have been going through that writing down all the things I should know and then doing the multiple choice questions they’ve got.

I: And when you were writing this essay were you able to use the feedback from the previous essay, did you find it was helpful?
S: Yeah definitely because one of my problems was in my first essay I was writing I think this I think this my view is. I didn’t do that at all in these essays. I kind of did it more, I still put in sometimes I said like I thought, but I didn’t put it in the form I think. It was just kind of ‘It appears’ or something like that.

I: And like what did you think about your feedback on your third essay. How did you find that?

S: Well the second one my tutor said to use more research evidence. In my third one I had done that and (he) noted that on my third essay that I had done more research evidence.

(Jane, various interviews)

**Extrinsically motivated by assessment**

This category refers to students being motivated to work by the pressure of approaching examination or essay deadlines. Students with this motivation often comment that they are unable to get themselves to work until a deadline is approaching. They also comment that they will work less if they are not going to be assessed, for example, when they have an exemption, a trial essay, or when they have tutorials where they feel they can get away without doing the reading. In addition, there can be a sense that assessed work is a chore, something that just has to be done. Many of the students mentioned pressure of assessment as one of their motivations, but a few showed this motivation in an extreme form, as is illustrated by the student quoted below.

Hopefully I am just going to keep doing what I am told to do and not slack off, but I say that, I have big intentions... He has set us this thing to do ... two people in the group go off (to) research it and come back and talk about it, and everyone else can read about it and try and be able to contribute to the conversation ... the problem with that system is that it just works well for the two people involved and the other guys haven’t actually got any motivation for that. There is no reason for really going off and doing the reading, but I am intending to do it, and I will do, but I wouldn’t be surprised if I just don’t get round to it, because I know that I can get away with it...

At the moment with psychology I think I’ve got a distinction, ‘cos my tutor said ... So yeah so he’s told me right at the start of term you don’t need to go to any lectures and you know why should I then, sort of thing. Which is a bit of a shame.

(Martin, various interviews)

**Finding suitable conditions for work**

A number of students realised that they needed particular environmental conditions in order to study well and aimed to meet those conditions where possible. As shown in the extract below, the conditions sometimes varied depending on the type of work that the students were doing. It did not appear that students spent much time reflecting on the best conditions for studying, rather they noticed a few things that suited them and bore that in mind when choosing where to work.

I: Is there a particular place or setting you like to work in?

S: I found out last night. I was trying to do work last night, there was a lot of distractions in the flat, the ‘phone was ringing about every 10 minutes or so. There’s always the TV on, or the Hi Fi, so there’s always music. If you go to the library there’s nothing like that there. The only thing (is) you might meet other people, if you meet other people they might be able to help you. So I actually quite like the library now ...
can work in the flat, I quite like working in the flat because if I want something to eat I can go through and get something, or a drink, or whatever ... I think if it's more if I want to concentrate I am better going to the library. If it's less if its less sort of concentrated work I do it in the flat.

(Donald, second interview).

Getting an overview
Quite a number of students mentioned the importance of getting an overview of a topic. This typically came up in relation to essay writing. Students began by reading their lecture notes, or more general textbooks, to get an overview of the area. This helped them decide what to include, and made it easier to understand other texts. Sometimes the course text was used to help gain an overview of lecture topics, when the students felt this was missing from lectures. Generally the students were looking for an overview within an essay or lecture series, rather than of the course as a whole.

Intention to take the easiest path
This somewhat unusual motivation shows up repeatedly for these students, mainly because there is a possibility of an exemption on the psychology course. A number of students commented that one of the reasons they worked hard on a piece of work was in order to get an exemption, and some of these students went on to add that they would work less and have an easier time if they succeeded. The extract below illustrates how this theme also reappeared when students were talking about their choice of essay topic; some students deliberately picked out the topic that they considered to be the easiest option.

When they say evaluate or discuss, then you have to maybe come up with some of your own ideas on the subject, and say what you think. But this was just asking you to basically put down something about what Piaget's theory was, without any of your own thoughts on it, or anyone else's thoughts on it ... that's the sort of essay I like because you know you can just you get the books you need, and you know it's quite easy you don't have to struggle over complicated ideas ... it's more appealing to me in that, it's not necessarily what I would enjoy the most, but knowing that I don't tend to put too much work towards my essays, it's the sort of title that I enjoy getting, because I know that there's more chance that I can do it with the minimum of effort ... I found this sort of thing when I was doing the questionnaire ... it was saying do you like books that are straightforward and give you what you need to know, or do you like ones that encourage you to like go beyond what the lecturer might have, and I do like books like that, but for my convenience I prefer the other sort you know. But it's not necessarily that I do prefer them, it's just knowing the way I work they suit me better.

(Kirsty, third interview)

Intention to understand
Most students mentioned understanding as one of their aims when they were studying for psychology. Generally this was limited to developing a basic understanding of their lecture notes, the relevant materials in the main textbooks, and the texts that they used in writing their essays. Most of the texts students chose to use in their essays were the simpler textbooks, with some of the students explicitly noting that they would avoid more complex materials. Students' attempts to understand the lectures and main textbook were almost always limited to trying to understand a particular topic or group of lectures, rather than trying to do a more
wide scale integration. These findings perhaps explain why most of the students commented that they did not generally find understanding to be a problem. They might struggle with one or two sets of lectures, but generally found they could deal with this by using the textbook. It was rare for students to go beyond these limits, although one or two students did talk about developing a wider understanding, as in the first quote below. Also, a few students seemed to be looking for a more in depth understanding within their work on the lecture series and their essays, as in the second quote below.

By the end of the first year I want to have revised and everything, and I want to have an understanding of what psychology is. So that maybe I could, so maybe once I’ve done my revision and everything, I could if somebody asked me what psychology was, I could draw a spider diagram or a mind map or something of all the ideas that we’d come across. But to do that then I have to understand each bit...

(Gail, third interview)

I’m trying to understand all the terms, for example in learning, and I need to know all the terms to start with. I need to know what classical conditioning is; what the Puzzle box was, and who Thorndike and Skinner and Pavlov, who they all were. So you know all the terms, and then further to that actually understand what it’s about. OK I know the name Pavlov, but who was he, what did he do, and why what does it mean why was he important. So actually if I’m reading I’ll go oh yeah Pavlov oh yeah dogs oh yeah light or something, but then that’s maybe all I’ve got on my lecture notes. I’d have to re-read it and go oh so that’s what happened, and then sort of relate it to (to) I don’t know, to increased tolerance of drugs, or to being scared when someone flashes a light in your face or something, relate it to you know phobias of snakes or whatever, it relates to us in real life. Which I hadn’t, well for that particular topic, I just hadn’t grasped at all from the lectures. I needed to go to the book read it and note it.

(Sean, second interview)

**Intention to reach an academic standard**

This category describes students who have set an academic standard for themselves, which forms part of their motivation to carry out their academic work. There are two groups within this category, one group who are aiming to get the best possible grades, and another group who aim to achieve an acceptable or reasonable grade. Neither of these two groups described the competitiveness that is often seen with achievement motivation. Even the first group, who were aiming to get the best possible grades, were more concerned with doing the best they could manage, rather than trying to do better than others. A number of the students in this first group talked about personal pride, or reaching their potential, as illustrated in the extract below.

I: So what sort of things is it that is driving you? Obviously you have thought a lot about it, and put a lot of work into it, but like what is motivating that?

S: I think because I am very determined ... obviously this year I have passed all my exams so far and OK you know my grades haven't been great, I think the best mark I have had was 70 something for an essay...which I was really pleased about ... I am trying you know I have to improve on my study techniques, and you know the amount of time I am spending on a given subject and managing my time... you know I have got a real determination and drive, I really want to do well ... I am going to do my best you know, and that’s all I can do at the end of the day, is work really hard and do the best that I can ... (Susan, third interview)
Interest

Interest was generally mentioned as a factor in students' work in psychology. In some of these cases, the main role of interest seemed to be in directing students to choose particular essay topics, or to focus on particular reading. For about half of the students, however, interest also played a role in motivating them to work, or in sustaining their motivation once they had begun. This is illustrated in the first quote below. Typically students' interest motivated them to do the work that was required by the course, rather than being strong enough to motivate them to do additional work. Some students noted that their interest varied between topics, which affected the way they worked. It was also clear that students' interest was not always sufficient motivation to keep them working hard, as illustrated in the second quote.

I found it very interesting. That's been one of my main motivations this whole year ... the subject and everything was quite interesting. I mean I read the question and thought 'Oh no', but then I started reading the first book and it was like 'Oh this is quite interesting' and after that I was just reading on the bus, and reading when I was eating, reading between lectures. That was my main motivation, I just found it interesting.

(Gary, second interview)

I'll start out with good intentions, like if it gets onto a topic that I'm more interested in, and if there's a book that is mentioned you know I'll go out and buy it and I'll start reading it. But I don't do it systematically, I used to at the start, but I knew I wouldn't be able to stick to that. Hopefully over the Easter break I'm planning on catching up on reading then, I've been a bit too complacent this term ... so I feel that I've definitely gotten behind ... I am really interested in the lectures we've been having this term, so I would be interested you know to read up on it.

(Kirsty, third interview)

Memorising with understanding

For their class examination in psychology, quite a number of the students talked about carrying out a combination of work involving both trying to understand and memorising course materials. Most often the students began by working to understand their notes and once that was done they then tried to memorise the material, as in the quote below. Sometimes this memorising was carried out by repetition, for example, repeatedly reading over notes, but these students also made efforts to understand the material.

Well in psychology, I have only been doing this for psychology, before each lecture I have been reading the relevant parts from (the textbook) beforehand to understand it before I go to the lecture, because when I am writing notes I find it very hard to kind of start as I am writing it. So I have been doing that, and after the lecture, some lectures, I felt that I hadn't understood it, so I have been going back to the textbook again and writing my own notes ... So I have been doing that all along, so when it came to the point now that I have got to revise I haven't been having to go to (the textbook), I have just been able to keep to my notes. So I have been going through my notes again and writing more notes on my notes, and more defined notes of the more relevant parts, and then the (textbook) Study Guide ... I have been going through that writing down all the things I should know, and then doing the multiple choice questions they've got. Then just revising all the stuff I've got written down ... I have always found it hard trying to memorise things, so I write a lot of notes because I find that writing it down is consolidating it in my own head ... maybe just the last night beforehand I'll try and memorise it then...
Relating, organising and structuring

These aspects are brought together in one category, as they were so often inter-related in the students' descriptions. For example, in writing an essay plan, the students were often considering how different points were related, in order to structure the points within the essay. The students described planning their essays in a variety of ways, such as writing headings, drawing mind maps, and highlighting or numbering related materials. The plans were sometimes quite simple, sometimes more complex, and varied in their complexity. For their lecture notes, reading, and revision, the students brought together different parts of a topic from different parts of the text or their notes. Again, mind maps or lists of headings and subheadings were used for these purposes. For almost all of the students this relating and organising was going on within one essay or revision topic, it was rare for students to try to make links beyond that. Some typical examples from one student are given in the following extracts:

(Essay writing)... It kind of arises from finding out different main areas. As you are reading through it, you see similar things that are relative and you make a sort of a mental note 'Right there is an area here, and there is an area here, and these two areas would link on to each other'. So you can put one after the other. Although they are different areas, you need to have a logical structure because it wouldn't have worked if I just took paragraph after paragraph of similar sort of areas, and it was a question of trying to find out what followed next.

(Revision)...I mean for me it's classical conditioning comes before operant conditioning, and that goes before all the other stuff that I have been doing ... It all kind of flows and it's easier to define things when you know where they lie ... You are thinking well that's there and you know where to find it kind of thing... So you kind of relate it to classical conditioning, to say latent learning, because sandwiched in between you find it, then you think about Skinner and your key words key phrases in Skinner, that sort of thing.

(Martin, second interview)

Selecting and summarising

For essays students worked on constraining their reading and writing to stay relevant to the title, and to work at the appropriate depth for the word limit. Several of the students achieved this by writing a plan for their essay early in the reading process in order to direct their work, as in the extract below. Maintaining focus in essay writing was something that was picked up as a problem by a number of students. In lectures, students aimed to select the main points in order to summarise what the lecturer was saying. They had various strategies for doing this, such as working mainly from the overhead, or only writing down points which they knew were not in the textbook. Knowing what material to select was another issue that a number of students mentioned as being problematic. Students also summarised and selected main points in their reading and revision.
S: ... I put down the key ideas that led to thinking that it was inherited, down under sort of one side of paper or whatever, and for the others for the environmental factors, the Kamin, then I did the same.

I: So you made a plan that directed your reading quite early on?

S: Yeah.

I: Is that what you would have done before?

S: No I'd have, I think before I left it more open 'cos I always hope to find something more from the reading ... I didn't really think about structuring my reading, but this time because I was a bit more short on time, and because I just wanted to get it done and out of the way, then I think I thought a bit more about what I actually had to do, and from the essay title then I knew that one bit would be nature and one bit would be nurture... So I thought a bit more about how I'd set it out earlier on.

(Gail, third interview)

Taking easier or more efficient options

This category overlaps with the intention to take the easiest path category described earlier, but is dealt with separately because students may pick an easier option for other reasons, such as trying to get the best possible mark. The category refers mainly to students' essay writing, for example, several students picked essay topics that looked easier or quicker, that had literature readily available in the library, or that their friends had found be straightforward. In their reading for the essays, a number of students looked for books that would be easy to follow, or that covered all of the main points. One student mentioned that for the class examination she was aiming to get a basic minimal understanding to allow her to answer multiple choice questions, but noted that she would not be learning well enough to write essays, as there was no need for this. This sort of comment is also related to alertness to assessment.

Task focused

The students were generally very focused on the tasks related to the course, whether or not they were assessed. This category groups extracts where students chose to only carry out work that related directly to their tasks on the psychology course - that is lectures, essays, revision, and tutorials. This overlaps the syllabus boundness category in the ASSIST inventory, in that the students are focused on doing the required work, but differs in that the students are not limiting what they do to just what would be required to pass. The students talk, for example, about only doing the reading set by lecturers or about only reading when it is required for essays or to understand the lectures. In reading around the lectures, the students focused mainly on the course text, and used that text to build on their lecture notes. This could involve either filling in material that they had missed, or clarifying materials that were not understood. This category applies to almost all of the students; there was only one student who read widely beyond what was needed for course tasks.

Thinking for yourself

This category describes students' tentative attempts to develop their own thinking about topics in psychology. Only five students showed some evidence of this category, all of them in relation to essay writing. The sense is that students are trying to go beyond just understanding what they have read or heard, to develop their own
thinking on a topic. This may be the initial stages of the development of personal understanding, which is seen more clearly with some students in their final year of study (Entwistle, 1998). The quote given below illustrates the limited and tentative nature of what students are doing:

S: ...it was really interesting actually. It was the sort of reading initially, I thought gender would be a bit dull but I liked actually reading. It was fascinating it was just so good, I just spent not weeks, most of my time reading and then hardly any time writing it out but that's the way it goes sometimes... I thought this time actually to do it in a slightly different way, I thought to have ideas about it myself and then back them up with some actual theories or whatever and try and do it from my own point of view more.

I: So what prompted that?

S: I don't know really. I just got, I sort of felt that I was writing down other people's ideas and going this is this person's idea then reflecting on that, I don't know. It was probably the same really ... but it was just I felt I wanted to think myself what I actually thought about this, and see if anyone else agreed at all.

I: ... Did you start right at the beginning with your own ideas first or what did you do?

S: ... Yeah I sort of thought about things. Actually what I thought about was what everyone talks about anyway. Nature, nurture, evolution sort of things ... so what I was thinking was what they were writing about ... So I kind of wrote down it was just like five words. Just thoughts that came into my mind about each topic meaning given. Not topic, but each bit given, and then read lots of books. Not lots, but quite a few and got ideas out of that.

(Shona, third interview)

**Time management**

The students in this study had a variety of methods by which they managed to get their work completed on time. These ranged from quite detailed schedules, through a less structured awareness of what work had to be done in a given time, to simply starting work very early, so that there was no need to plan to get finished on time. Within these methods, the students often prioritised more difficult, or more important, materials. Some students also found it helpful to have regular times set aside for studying. All of these methods seemed to work well for some students.

Where time management went wrong, the most common problems were time wasting and getting distracted by other options, such as social engagements. A number of students also ran into difficulties because they had not planned their time and had difficulties such as having several pieces of work to complete at once. Only one student got into serious difficulties due to taking too long over pieces of work.

Another aspect of students' time management was that quite a few students planned their time to take account of the way they studied. For example, a student who was easily distracted would schedule work into times when there would be few distractions. Students who felt they were more productive working in shorter or longer blocks scheduled to suit that.
Publications related to the thesis

Permission has been obtained from the publishers for the inclusion of these publications in this thesis.


Introduction

Although there has been considerable research in recent years into the ways in which first year students learn and study in higher education, very few studies have considered how students' learning develops throughout these early experiences. This paper describes progress in a longitudinal study of the ways in which first year students carry out, and think about, their academic tasks. The main research focus is the nature and extent of this development, also of interest are factors which influence development, and relationships between development and outcomes. Following students' progress throughout the year in this way allows in depth exploration of students' experiences as they happen, and lets the researcher consider the order in which events and changes occur. This gives greater potential for understanding how and why students' learning develops during the first year.

Data collection for the study is being carried out in two phases, in the 1995-1996 academic year three semi-structured interviews were carried out with a group of 18 students taking Psychology 1. The first of these interviews was conducted as early as possible in the first term. The second and third interviews were timed so as to coincide with events likely to influence students' development, such as essay writing and examinations. A matched group of students was interviewed only at time three, in order to explore the effects of the repeated interviews on students. Finally, the Approaches and Study Skills Inventory for Students (ASSIST, Tait, Entwistle and McCune, 1997) was presented to the entire psychology first year group mid way through the year. The second phase of the main study data collection is in progress at present, it will mirror the first phase except that the ASSIST inventory will be presented twice, to allow development to be explored in both quantitative and qualitative data.
To date only initial analysis of one third of the repeat interview data can be described. One purpose of this analysis was to explore how concepts identified from the literature were represented in this data. A range of concepts are relevant in this context, but the present paper will discuss only a subset of these. In their course work the first year psychology students are expected to write essays which show their understanding of a topic, to gain high marks, students are expected to be able to relate disparate material and show that they have thought about the topic for themselves. This being the case, it seems likely that a deep approach to studying will be important in this context. The defining features of a deep approach are an intention to understand for oneself and an active interest in course content, coupled with methods of processing that content. These forms of processing include, relating ideas to previous knowledge and experience, looking for patterns and underlying principles, checking evidence and relating it to conclusions, and critically examining logic and argument (see, for example, Entwistle, 1997).

Although this general description of a deep approach is well established, the exact nature of a deep approach will vary depending on context (Marton and Säljö, 1997). It is therefore important to establish what a deep approach to learning in first year psychology might be before one can consider how that approach develops. The initial analysis suggests the aspects described in the following section, but these categories may shift when additional interviews are incorporated into the analysis.

**Aspects of a deep approach**

An intention to understand course content appears in the analyses, although the emphasis is often more towards understanding what a lecturer means, or what a section of a textbook means, rather than on understanding for oneself. The interview analyses also picked out the interest aspect of a deep approach. Looking at deep processes, students related ideas to their previous knowledge, although they tended to be relating ideas only within topics in psychology, rather than between topics or subject areas. Students also thought critically about materials, often doing this by considering the strengths and weaknesses of evidence, and how this evidence was related to conclusions.
These categories map clearly onto previous descriptions of a deep approach. Two additional categories describing action on content were also identified which seemed to fit within a deep approach: *selecting important ideas* and *organising* material. *Selecting important ideas* describes students choosing what to include in their notes, rather than copying everything down. Important ideas may be what students see as the main points in a topic, but material may also be selected based on interest or novelty.

(If) I've really not heard about it before or ... it's something that just I don't know anything about I'll listen carefully to what he's saying and write it all down. If he's talking more in general, I'll maybe write down the odd piece of information but just the key things ... We're talking at the moment about chimps and ... I don't write down all the names of the various chimps or what they can do themselves, just the basic conclusions and disagreements about what chimps can and cannot do.

*Organising* describes students arranging materials for themselves by drawing diagrams or maps, writing plans or drawing together related materials from different sources.

I get my categories and use maybe a highlighter pen and sometimes I'll even number (concepts) ... I'll decide what links onto what and I'll have them all sitting in front of me, you have to have a huge desk for this, and I'll have the categories highlighted and then I'll have a note of what colour I'm going to do first, maybe four different highlighted sections.

It seems conceptually justifiable to see *selecting important ideas* and *organisation* as processes that would be associated with an intention to understand. *Selecting important ideas* maps fairly closely onto the scale selecting main ideas, described by Weinstein, Palmer and Schulte (1987), which has previously been linked to a deep approach (Tait and Entwistle, 1996). A similar category to *organisation* is described in the Motivated Strategies For Learning Questionnaire, analyses of which link organisation to subscales whose items clearly overlap items previously used to describe a deep approach (Pintrich, Smith, Garcia, and McKeachie, 1991).

**Aspects of metacognition and self-regulation**

As well as processing content, students must take decisions about the ways in which they process content. This in turn implies awareness and monitoring in relation to that content. These themes of monitoring in relation to content and directing processing of content are implied by a deep approach, but more explicitly describe aspects of self-regulation and metacognition. Metacognition is most often defined in
terms of knowledge of one's cognition and monitoring and regulation of one's cognitive activities (Vermunt, 1998; McKeachie, 1990; Brown, 1987; Weinert, 1987). In the context of student learning, self-regulation refers to individuals monitoring, controlling, and directing aspects of their learning for themselves. Self-regulation therefore overlaps metacognition but is broader, taking into account monitoring and regulation of aspects of learning other than cognition, such as mood, goals, and resources (Pintrich, 1995). Self-regulation or metacognition in relation to content might involve, for example, being aware when material is not understood, trying to discern why there are difficulties in understanding, changing one's study processes to enhance understanding, and selecting content material for oneself (Pintrich, Smith, Garcia, and McKeachie, 1991; Vermunt, 1998).

For students in this study, these aspects of metacognition and self-regulation are emerging in several categories. Self-regulation of content involves students selecting the reading they do based on their own interests, rather than simply reading all of what they are told to read. Students may select reading from within the syllabus or go beyond it. Monitoring understanding and related regulation describes students modifying their studying where they are having difficulties understanding, for example, by doing further reading in that area or by working on their notes in that area.

Awareness of content and related regulation refers to students monitoring the content material being collected or used during a study task, based on awareness of what content is required to complete the task. Students then regulate based on that monitoring. For example, they may monitor and regulate the material they are noting for an essay in relation to their essay plan and the content of the notes they have already made. The previous two categories refer to 'on-line' monitoring and regulation. Reflecting on success describes students considering the success of their processing or regulation of content. This may occur some time after a task is completed. For example, students may decide subsequently that mind maps are better for relating ideas, or that gaining an overview is helpful in selecting content for an essay.

One book I read ... it didn't really give any of the other story, and if I'd had that and maybe one of the others that was like that, then I wouldn't have got a full picture of
what the debate was really about... I think you've got to know, maybe from one of the
general psychology books like Gleitman, who the main theorists are... then go and
find their work in books in the library... If you have something like that for your essay,
it gives a good overview of what you are going to be covering, and then you can just
go on in more detail.

Developmental aspects of studying

In addition to these more developed categorisations it is possible to give some
further, tentative, suggestions based on the interview analysis. It seems that, in
general, the students did not make great changes in the ways they carried out and
thought about academic tasks. They might modify some details but clear
development of approaches, self-regulation or metacognition was rare. Where
students had changed, it was typically by working things out for themselves, or
through advice from friends or tutors; students rarely took advantage of study skills
materials or courses. The following quote comes from one student who had show
development, in that she began to think critically using evidence, which she had not
done previously. This change seemed to have been caused by detailed advice from a
tutor, on how to think critically when reading.

I think I question things more and also the tutorials that I've had, we always have an
article or a chapter of a book to read before the tutorial, and then we go in and
discuss it. We've been questioning a lot more how the writer goes about (it). From the
introduction whether they actually cover the points that they've said they'd cover, and
questioning whether the author is biased, and I found that that's really made me think
a lot more about what I'm actually reading... I have to keep remembering with
Psychology that they're only ideas, and psychologists' views on something, and it's
not actually dead set. Whereas before with my A levels most of what I've been
reading is actually fact, so yeah I think that's helped me...In a way, it makes me less
trustworthy of what I'm reading, but in a way it makes me feel more independent in
my work, it makes me feel less like I'm being taken in by what they're writing. If I
actually think well, why (are they saying) what they are saying.

Some possible reasons have emerged to suggest why this sort of development is
unusual, and why there is a low uptake of study skills materials. Students often held
negative attitudes to materials giving advice, believing that such materials would not
add to what they already knew about studying. They often felt that their current
methods were working well enough, and therefore did not see any need to make the
effort required to change them. Some students saw themselves as fixed in their
methods, unable to change even should they wish to do so.
Future directions

The categories established suggest that recognisable aspects of a deep approach to studying, of self-regulation and of metacognition have been identified during the interviews. These and other categories will be developed further using the full set of interview data. Given this basis, later analyses will describe in detail how these aspects of students' learning develop, or do not develop, during the first year. Once development has been described, the analysis can focus on influences on development, systematically exploring their effects.

Acknowledgements

The research described in this paper is supported by an Economic and Social Research Council Postgraduate Training Award.

References


Overview
This paper presents a subset of the findings from a longitudinal interview study of first year psychology students' learning. The students' conceptions of essay writing were described in terms of three related hierarchies - referring to evidence, structure and conclusions. All of the students showed some development in their conceptions across the first year, but only one student reached the highest levels on all three hierarchies. The help and feedback students received for their essay writing was relevant to their conceptions, yet students often saw this help as being of limited importance. This provides further support for Hounsell's (1987) suggestion that differences in conceptions between tutors and students may lead to difficulties in communication, causing students to see feedback as less helpful. Students generally perceived their grades as fair, and as indicating that they were progressing satisfactorily. Students may be less inclined to develop their conceptions where this is the case.

Introduction
Course work essays allow students to examine a wide range of material in depth, and to integrate and critically evaluate what they read, in order to develop their own thinking about a topic (Hounsell, 1997). Both course work essays and examination essays are more likely to promote deep over surface approaches to studying when compared with multiple choice examinations (Thomas and Bain, 1984; Scouller, 1998). Learning to write essays for a particular discipline can also be seen as a way in which students are inducted into the academic discourse of that discipline (Prosser and Webb, 1994). Despite its importance and potential value, there has been little systematic research into essay writing in higher education, or into the ways in which students perceive the feedback and grades they have received.

The existing research suggests that students' conceptions of essay writing are important in determining how they go about writing their essays, the quality of those essays, and their interpretations of essay feedback (Hounsell, 1987, 1997; Prosser
Hounsell (1987) found that essay writing had a distinctive meaning for students, which went beyond individual essays, and which had qualitatively different forms. For example, among the psychology students in his study, there were two overall conceptions of essay writing - 'relevance' and 'cogency'. Students holding a 'relevance' conception saw essays simply as an ordered discussion of relevant material. These students' own thoughts about the topic were not central to their essay writing and the aim of establishing meaning was absent. The students treated sub-components of essay writing - 'interpretation', 'organisation' and 'data' - as discrete, and the conclusion of the essay was treated as an afterthought or a requirement to be met. By contrast, for students holding a 'cogency' conception, their own interpretation was the dominant aspect. Their interpretation consisted of a consolidated view on the topic, developed through their reading, which determined the evidence they used in their essay and the way it was organised. These students were concerned with making meaning, and developing a distinctive view of the topic based on a firm empirical foundation (Hounsell, 1987, 1997).

The 'cogency' conception seems far closer to what staff would wish from students in psychology, and yet the 'relevance' conception still persisted with some of these second year students. A disparity between the ways students conceptualise essay writing and the conceptions expected in their disciplines has also been identified by other research with first year psychology students (Norton, 1990), first and third year education students (Campbell, Smith and Brooker, in press) and first year sociology students (Prosser and Webb, 1994). This is therefore not an isolated problem.

One potential reason that these difficulties persist is that the conceptions students hold influence their interpretation of any advice, feedback and grades they are given. Hounsell suggests that tutors and students must share the assumptions underlying the advice given before that advice can be effective. Yet, advice about academic discourse cannot easily be made precise and unambiguous and it is therefore easily misinterpreted. Hounsell adds that this may mean that students come to see feedback as marginal, or not relevant beyond a given essay, and may thus become disenchanted with the whole essay writing process (Hounsell, 1987). Additionally,
there is some evidence that students' conceptions of essay writing may include misinterpretations, or simplifications, of assessment criteria (Norton, 1990; Campbell, Smith and Brooker, in press).

As yet, we know little about how students' conceptions are developed or maintained, beyond the likelihood that feedback and essay advice are important. Campbell, Smith and Brooker found that the third year students in their study had a more sophisticated conception of essay writing than the first year students and this was closer to the accepted academic discourse in their discipline. They suggest a developmental pattern which might be related to students' epistemological development, but could not test that hypothesis in their cross sectional study.

The present study aims at developing these findings by considering how students' conceptions of essay writing in psychology develop during the first year. The interplay between students' conceptions, and the advice, feedback and grades they receive on their essays, is then considered.

**Context, Design and Methodology**

The research was carried out in two phases, in the 1996-1997 and 1997-8 academic years. The Psychology students complete three course work essays, the second and third contributing to the student's overall grade. Students were interviewed at the beginning of the year, before any assessment had been completed, again after their first essay had been completed, then finally after their third essay. 10 students participated in all three interviews in phase 1; 9 students in phase 2, giving response rates of 56% and 53% respectively. In the second phase only, the three tutors who marked the students' essays and provided their essay advice were interviewed. Advice sheets given to the students and copies of students' essays were also collected.

The semi-structured interviews were conducted in a similar manner to previous phenomenographic research into student learning (see for example, Entwistle, 1984, 1997a,b; Marton and Booth, 1997). Students were asked to describe how they went about writing their essay and to explain why they had done things in this way. Students were also asked to reflect on the help and feedback they had received for
that essay and were asked to describe any changes that had come about in their essay writing. Finally, students were asked what a good Psychology essay should be like. The interviews with tutors were conducted in a similar manner to the student interviews. The tutors were asked to describe and explain the advice and feedback they gave to students on essay writing, and to give their description of a good Psychology essay.

**Analysis and Findings**

The initial analysis considered how best to categorise students' thinking about their essay writing. This stage was based on all of the interviews, 57 in total. It involved identifying qualitatively different aspects of students' experiences in a similar manner to research in the phenomenographic tradition (Entwistle, 1997a,b; Marton, 1994; Marton and Booth, 1997). As the analysis continued, it became apparent that the categories formed part of a developmental sequence. The logical relationship between the categories was then used to help clarify their central features and the distinctions between them.

The outcome of this stage was three hierarchically organised sets of categories describing aspects of students conceptions of essay-writing in psychology, which seemed to delimit the main variations in students' thinking - 'evidence', 'structure' and 'conclusion'. These were not nested hierarchies, higher categories did not necessarily subsume lower ones.

**Evidence**

The first set of categories, summarised in Table 1, refers to students' use of evidence in psychology. The highest level category in the hierarchy - *using evidence to support arguments* - is illustrated by the following quotes which show students beginning to use evidence to support arguments, but still in a tentative way. This is not the fully developed and articulated thinking one might expect from a student in later years, but it is an account which shows that the students' ideas are essentially in line with what is expected in the discipline (as shown in the analysis of the tutor interviews).
I:...What do you think is the difference between ... you and somebody that's done not as well on psychology essays... ?

B/3: ... I think a lot of it is using lots and lots of different sources, and backing everything you say up with an experiment ... I won't put forwards a proposal, unless there is some experiment to back it up. So that makes your essay pretty much watertight, cause everything you've said you've been able to show it, so you know it's true, or it's alleged to be true... they've gone some way to showing it could well be true.

I: And what makes them that way, what makes the convincing ones convincing?

E/3: Just how the samples have been taken, and how pairs of twins had been chosen, and whether some twins that had been brought up had actually been brought up in similar environments... One of the books maybe wouldn't say about this, but one of the other books would criticise it and say, well, the twins actually were brought up with relatives, ... so the environment would actually be quite similar. I think because I'd been more critical with my tutorial reading, then that's helped me write a better essay as well, because I'm more critical of the actual research that goes into the essay, and I'm more likely to give both sides of the argument ... I'm better at being able to say there are problems with this study, whereas before I wouldn't have had had the confidence to do that, and I wasn't sure whether to put that into the essay.

(each student is identified by a letter or a number, followed by the number of the interview, for example, B/3 refers to student B interview 3)

Table 1: hierarchy of categories related to evidence

<table>
<thead>
<tr>
<th>vague ideas about evidence</th>
<th>information from psychological studies needs to be used in essays, no description of how the evidence is used.</th>
</tr>
</thead>
<tbody>
<tr>
<td>including different viewpoints</td>
<td>different viewpoints or arguments should be included in essays, but students do not talk about evaluating them. They may add that it is important to give a balanced account of these different views.</td>
</tr>
<tr>
<td>precursors to using evidence to support arguments</td>
<td>realising that it is necessary to make evaluation of viewpoints, but problems persist. For example, students may be confused about how they can bring their own ideas into an essay. They may suggest that conflicting views should be resolved by favouring the most modern evidence, or by seeking another opinion.</td>
</tr>
<tr>
<td>using evidence to support arguments</td>
<td>students see that evidence is used to support or evaluate arguments, with none of the difficulties expressed in the previous category. They are sometimes able to suggest criticisms of research studies.</td>
</tr>
</tbody>
</table>

There is one further category relating to evidence, which does not fit within this developmental hierarchy, rather it could be seen as a move away from developing an appropriate conception of evidence. This problems with evidence category generally takes the form of using evidence selectively to support a preconceived opinion, or evaluating evidence based on personal opinion.

**Structure**

The next set of categories, described in Table 2, refers to students' ideas about structure in essays. The highest level category in the hierarchy is illustrated by this
quote, where the student is able to explain in depth how the structure is appropriate to the content material.

B/2: It was about dealing with the biology of hunger. Well obviously people need to eat to stay alive so that was hard and fast. Then you go onto (the) obesity thing and that was very much again to do with the body. But it has a slight aspect of people wanting to eat to feel comfort, which again is quite a lot a chemical thing but then also a social thing... Then that led itself very well on to anorexia which is perhaps a bit of a chemical thing, but very much more a social thing. Then it's sort of going from one extreme, the chemical definite biological, to anorexia which was much more a social thing but (also) a bit of a chemical thing.

Table 2: hierarchy of categories related to structure

| Vague ideas about structure - essays should be well structured, but no comment about where the structure comes from. May suggest that the essay should be 'flowing' or 'logical' but do not expand on that. |
| Structure from textbook and structure from question - are seen as level in the hierarchy, student gets the structure for their essay either by lifting a structure from the textbook, or by setting up a simple structure based solely on the parts of the essay question. |
| Structure from content - students describe developing a structure for themselves, based on the reading for their essay, which is appropriate to the content they have read. |

Conclusion

Table 3: hierarchy of categories related to conclusion

| Unsure about conclusion - realise that the conclusion of an essay is an issue, but unsure as to how to conclude it. |
| Conclusion as summary - conclusion as a summary of the points in the essay, but nothing more than that. |
| Precursors to drawing conclusion from evidence - seems to be moving towards - drawing conclusion from evidence. Students suggest that the conclusion should be a summary with something more, for example, that they should also include their own opinion. |
| Drawing conclusion from evidence - students explain they have actually drawn a conclusion from the evidence which they presented in their essay. |

The final set of categories, shown in Table 3, refers to the conclusion of the essay, and even in the highest level category the students draw a conclusion from evidence at quite a simplistic level. It is not the detailed evaluation of the weight of different arguments that might be expected in later years.

6/2: I think it was a case of weighing up the pros and cons. You can get a good conclusion even if there isn't an answer by saying "this is a conflicting debate and so much study has gone on in it that there is no way of really finding out what's right and what isn't, but a lot of research is showing that there is a link, although some of the studies slightly disprove it"... I mean some of the studies done over a long period of time were quite reassuring, but then other ones were a little (weak), and just sort of
weighing up the evidence at the end, but saying its still up in the air a bit. I think that's still a good conclusion, as long as you can back up the fact that it's up in the air.

**Developmental progression**

The remainder of the analysis was carried out with only the phase two interviews, during which additional information had been collected. The coding for each student's interviews is shown in Table 4. It is clear from this table that, at least for some students, there is a developmental progression up the hierarchies as the year progresses. Excluding moves from no conception to no mention, and counting only examples where all of the changes were upwards as development, we find that seven of nine students had developed the 'structure' component of their conception; three of nine students the 'evidence' component; six of nine students the 'conclusion' component (none of the students began at highest level of any hierarchy). All of the students showed some development. Four students reached the highest level for 'structure' in at least one interview, two students reached the highest level for 'evidence' in at least one interview and three students reached the highest level for 'conclusion' in at least one interview.

Spearman correlations between students' grades and their positions on these hierarchies showed no significant relationships, except for a significant positive correlation between position on the conclusion hierarchy at interview 3 with grade for essay 3 (\(\text{rho}(9) = .70, p<.05, 1\text{-tailed}\)). The lack of further significant correlations may be due to the low variability in the students' grades or the small sample size. Looking at how the three hierarchies are manifested within the sample there were significant positive correlations between position on 'structure' and 'evidence' (\(\text{rho}(27) = .62, p<.01, 2\text{-tailed}\)) and between position on 'structure' and 'conclusion' (\(\text{rho}(27) = .44, p<.05, 2\text{-tailed}\)). There was a non-significant positive correlation between position on the 'evidence' and 'conclusion' hierarchies. This suggests an overall conception of essay writing across the three hierarchies.
Table 4: Development of students' conceptions of essay writing

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- **E1** - no conception (student states that they do not know what is required);
- **E2** - no mention (student does not mention evidence);
- **E3** - vague ideas about evidence;
- **E4** - including different viewpoints;
- **E5** - using evidence to support arguments;
- **E6** - drawing conclusion from evidence;
- **S1** - no conception (student states that they do not know what is required);
- **S2** - no mention (student does not mention structure);
- **S3** - vague ideas about structure;
- **S4** - structure from textbook or structure from question;
- **S5** - structure from content.

This is not seen as part of the developmental sequence.
Tutors influences on essay writing

The tutors conceptions of essay writing and the feedback and handouts the students received were summarised in relation to the student hierarchies for conceptions of essay writing, but care was taken not to force the analysis to fit these categories. It was found that the tutors conceptions and the advice on the handouts was generally consistent with the top of the student hierarchies, although tutors were able to explain in much more depth. For 'structure', the tutors conceptions and the handouts were better described in terms of structure arising from an interaction between the content and the question.

The essay advice students had received was then considered in relation to their developing conceptions, and to any comments they had made in the interviews about this advice. Temporal ordering was used, drawing on the fact that a comment could only cause a change if it preceded that change. Overall there was little to suggest that the advice received affected the students' conceptions (this does not preclude the tutors' comments having been helpful in other aspects of the students' essay writing).

Students' perceptions of handouts, grades and feedback

The students were not all asked directly about the handouts in the interviews, but they were asked about any help they had had in essay writing, and also about the reasons behind the ways they wrote their essays. Some students did not mention the handouts at all, and none of those who were prompted were able to provide much detail about them. Most of the students who mentioned the handouts either said they had not paid much attention to them, or else felt that the handouts contained little that was new to them. Yet none of these students had well developed conceptions when the handouts were received and all of the handouts contained advice which was relevant to students' conceptions of essay writing, as well as other relevant advice.

Students generally saw the feedback given as reasonable and made minor changes based on it. None of the students were able to discuss the written feedback in great depth, nor did they report major changes in their essay writing based on it. There is a general sense that students did not give the written feedback a great deal of attention. The students' reporting of the feedback was generally accurate, in that it related well
to a basic description of what was written, but students did not go beyond this to explore underlying meanings.

The findings regarding students' perceptions of their grades should be considered tentative, as three of the nine students did not talk directly about their grades. Only one of the students mentioned making a change in essay writing based on her grade. On the whole, the students felt their grades were fair and indicated that they were doing quite well on the course. Two students were confused about the reasons for some of their grades, but did not follow this up with the tutor.

**Discussion**

Further research is necessary to extend and confirm the findings of this small scale study. Nonetheless, the analyses suggest that first year Psychology students' conceptions of essay writing can be described in terms of their position on the three related hierarchies: 'evidence', 'structure' and 'conclusions'. The conceptions described here differ from those identified in previous studies, but this is not surprising as this research was carried out either in a different manner, or in different contexts, from all of the previous research. Nonetheless, if the conceptions are valid, some overlap would be expected between the studies, especially those which look at Psychology students.

The elements of essay writing seen as important by students and tutors in this study clearly overlap those identified by Norton (1990). Looking at Hounsell's categories for Psychology students, the pivotal role of the student's own interpretation in the 'cogency' conception was not identified in this study. It is suggested that this difference is due to the students in Hounsell's study being in the second year of their studies. The students in the present study often had doubts about how their own views were to be included in essays, so they may not have been ready to show the 'cogency' conception, as they did not see their own interpretation of the evidence as central. Hounsell's 'organisation' sub-category does not map directly onto the present findings, but a related concern with 'structure' is present. The use of data in the 'cogency' conception seems to relate well to the higher conceptions of 'evidence' in the present study. The use of data in Hounsell's 'relevance' conception does not map
on so directly, but seems related to the lower conceptions of 'evidence' in the present study.

It is important to bear in mind that descriptions of students' thinking about essay writing in terms of a small number of categories are necessarily simplified. For example, the evidence hierarchy in the present study touches on a number of complex issues, which are important in understanding students' essay writing. There is the issue of the status of students' own views, both from personal experience and based on research evidence. Students may be confused as to the place of their views and may resent the necessity to write in the passive voice and the privilege given to certain forms of evidence (Lea and Street, 1998). They may wonder how their own thinking can be involved in an essay at all when they are novices in a subject and all they have learned comes from expert sources. All of this is connected with confusion about referencing and about the meaning of plagiarism, both of which are often problematic for students (Lea and Street, 1998). Further, students may be writing for several disciplines, all of which have their own different requirements which may not be made explicit (Sambell and Johnson, 1998; Lea and Street, 1998). The same terms used in feedback may mean very different things in different subjects (Lea and Street, 1998).

The findings in the present study support Campbell, Smith and Brooker's (in press) suggestion that there is a developmental pattern in students' conceptions of essay writing. From the ways in which students talked about the help and feedback they had received on their essays, it seems that these did not have a substantial impact on their conceptions of essay writing, which might explain why only one of the students reached the top of all of the hierarchies, even after three essays had been completed. Yet, as most students did develop, it is possible that the help provided had some further effect on their conceptions, which the students were unable to relate in interview. An alternative explanation is provided by Campbell and colleagues, who suggest that the development of students' essay writing may be related to their wider epistemological development.

Hounsell (1987) suggests that differences between students' and tutors' conceptions of essay writing might lead to difficulties in communicating about essay writing,
which, in turn, could cause students to see feedback as marginal, and to have a negative attitude towards essay writing. There is some evidence for this in the present study, in that students' and tutors' conceptions did differ, and students did make little use of essay feedback and advice. On the whole, this difference in conceptions does not seem to have affected students' perceptions of their grades, as the majority of students felt their grades were fair and showed that they were progressing well. This is potentially problematic, as students are less likely to reflect on their essay writing if they feel there are no significant problems.

This study suggests that, although these students seemed to be progressing, further help for students in developing their conceptions would be beneficial. Teachers of first year students have to address many issues in their feedback and have to take time to correct more basic problems, such as students not answering the essay question. Any solution to such difficulties needs to be straightforward and time efficient. The discipline-specific nature of the problem means that generic help would be difficult. The attitudes of students in this study suggest that additional written help would not be used effectively, nor does it provide the opportunity for misunderstandings to be unearthed and resolved.

Perhaps the most simple solution would be to explicitly discuss students' essay writing with them in tutorial classes. One possible method would be to use examples of tutors' comments as objects of discussion in tutorials. Alternatively, the first author has had some success in her tutorials using topics from the semi-structured interviews for this study as starting points for discussion. So, for example, students are asked to work in groups to come up with an explanation of what a good Psychology essay would be. Then the groups report back to the tutorial as a whole, giving the tutor the opportunity to ask students to develop their points and to clear up misunderstandings.

In one sense this seems a simple exercise which need not provide a great additional burden, as staff will already be familiar with what is expected for essay writing in their discipline. At another level it is more difficult, staff would need to see the provision of this sort of help as one of their roles, and would need to be aware that students do not necessarily share their conceptions even after written advice. Ideally
they would also need to be sensitive to students' difficulties with adapting to the requirements of several different disciplinary contexts, and the emotional impact those adjustments might have for students. The tutors interviewed for this study were all experienced teachers, who were thoughtful about their teaching, and their students' development reflects this. It seems likely, however, that further research in this area and dissemination of this research to staff would be required to fully address the issues surrounding conceptions of essay writing.

Sensitivity to students' conceptions of their learning tasks, which would be required to help students in these ways, might form an aspect of student focused conceptions of teaching. Student focused conceptions of teaching currently include the theme that the teachers are aware of where students are starting from in their learning, and try to encourage conceptual change from that basis (Prosser, Trigwell and Taylor, 1994; Trigwell, Prosser and Taylor, 1994; Entwistle 1999). An awareness of students understanding of their learning tasks would seem to sit well with that framework. Research thus far suggests that student focused conceptions are in the minority in higher education (Prosser, Trigwell and Taylor, 1994; Entwistle, 1999). Achieving these sorts of changes in the current higher education context, where staff are under increasing pressure, would be a difficult task. Such developments would seem worthwhile, however, given that essay writing can form a central part of students' development in their discipline.

Acknowledgements

The research described in this paper is supported by an Economic and Social Research Council Postgraduate Training Award.

References


