MORAY HOUSE COLLEGE

POST-GRADUATE CERTIFICATE IN EDUCATION (SECONDARY)

"HOME ECONOMICS 12 - 16"

- THE ARTICULATION OF S1 AND S2 WITH STANDARD GRADE

by WILMA D. BRYSON

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This project presents a study of Home Economics, comparing S1 and S2 with Standard Grade at Beeslack High School, Penicuik.

In writing this project it is appreciated that the findings are specific to Beeslack High and not generally Home Economics within Lothian Region.
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## BIBLIOGRAPHY
ACKNOWLEDGEMENTS

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(Handwritten notes)

They have been a great pleasure to work with very thoroughly enjoyed and made the process much easier.
SECTION 1 - INTRODUCTION

The purpose of this project is to discover whether articulation occurs between S1 and S2 common course and S3 and S4 Standard Grade. By "Articulation", one means considering whether the common course structure has fluently and coherently joined into Standard Grade.

Having spent six weeks of student placement at Beeslack High, observing and teaching within the Home Economics department, the issue of articulation between courses was a major concern for the following reasons:-

a) The uptake of current S2 pupils for following session - could Home Economics justify a Standard Grade?

b) Have pupils' learning experiences been stunted because of lost opportunities? For example, pupil's task - "To plan a kitchen", if pupils are able to set objectives, identifying areas of relevance to themselves, then the learning process can be transferred to real situations.

When pupils are set objectives and simply follow instructions on how to achieve the correct plan, application of this knowledge to potential problems can be limiting. This project shall therefore discover how to bridge the gap of learning content and applying processes.

...
SECTION 2 – REVIEW OF LITERATURE

2.1 Introduction

The recent trend of redeveloping courses and modifying teaching strategies has led to the publication of a range of topical articles.

The following review includes articles from a journal, a newspaper and an educational package. Each have been specifically selected for the most up to date information.

2.2 The Guardian – "How to teach the learning"

When promoting a specific method of teaching one is open to a host of criticism from supporters of other teaching methods in the teaching spectrum.

This article points out the need to consider desired outcome and then select an appropriate method of achieving this. "The aim of education should determine the teaching method" - since education comprises of a variety of aims then teaching methods would be more extensive.

Research based on classroom observation questioned the validity of formal versus informal classifications, since a mixed style of teaching seemed to produce the best results. (As no explanation or methodology is used in the research to determine "best results", the validity of this statement appears debateable).

An awareness of the complex problem of "learning with understanding" has to be solved in the classroom situation. The author suggests that teachers can facilitate pupils learning by guiding pupils to explore individual ideas. Motivating pupils to obtain goals which are feasible can then enable progression of concepts and future transference of skills.

An awareness to regularly assess pupils for relevant feedback is only part of the solution. Teachers experiencing a change in teaching approach will also require feedback - perhaps in the form of reflection or peer discussion to improve the effectiveness of their learning.

In conclusion, before we can teach the learning, we have to be able to teach the facilitating.

2.3 Biggs J.B. (1973) – "Content to Process"

The Australian Journal of Education

Two contemporary learning forms were identified; viz content and process.
Content learning places emphasis on subject matter. The transfer of knowledge from the more knowledgeable person to the learner is by instruction and focuses on the assimilation of knowledge.

Process learning is defined as "The learning experiences that affect the extent to which the learner copes effectively and autonomously with novel situations". (Biggs 1973 p 225)

The suggestion that content and process learning "co-exist" has implications for a balanced curriculum. Biggs believes the curriculum is dependent on society, in order for learners to cope effectively they require sufficient knowledge and a built in awareness. (Biggs 1973 p 226). Such a balance on the curriculum would seem unequal if one considers how dynamic society has become, hence how useful is yesterday's knowledge for application in today's problem?

The balance becomes heavily weighted towards process learning. As teachers are more familiar with content strategies of mastery learning, preset objectives and formative criterion referenced evaluation, more time requires to be spent emphasising process.

In order for a pupil to become more "autonomous" and "effective" in problem solving, Biggs has established seven aspects within process learning, viz:-

1. Possessing or being able to locate relevant information - this would involve content mastery and strategies.
2. Application of highly generalizable skills and operations - including reading, writing and practical skills.
3. General strategies of problem solving - use of a classificatory scheme or plan.
4. Setting one's own objectives - initially instructional objectives but acknowledgement of expressive objectives for creativity.
5. Evaluating the products of learning - autonomy is achieved when reflection can occur.
6. Motivation, including extrinsic (desired reward) and more importantly intrinsic (providing a stimulating task).
7. Possessing an appropriate self concept - the process learner needs confidence in his own competence.

These seven aspects can be used as a checklist for process learning, allowing assessment by behaviour change to be monitored simply.

In order for such a checklist to be employed, pupils have to be given the opportunity to use such learning skills. Course development would have to move towards problem solving activities, case studies, reports - all of which are open enough to allow pupils to pursue their own ideas.

In summarising this article, Bigg's ideal curriculum would enable a pupil to acknowledge, "I'm the one who is responsible for what I do, not my teacher".

The reality of this ideal can only occur when course development incorporates process learning strategies.
2.4 Process in Practice
An educational package

This package was designed to help teachers assume a process based approach to Standard Grade Home Economics.

The format used for this package is on programmed learning incorporating discussion, question and answer sheets and information sheets. Instructional packages surely contradict the whole concept of process learning. A more realistic package could have used practical applications such as short role playing activities.

Specific issues raised in the package weighed heavily on teachers assuming their facilitating role.

Classroom activities were not to be considered in terms of having the teacher perform, but in terms of in what way are significant changes brought about in the pupils' behaviour.

The transition from teacher - as an instructor to an active facilitator can be a difficult concept to apply. (See Appendix 1 pg 20), where the diagram is helpful in summarising possible activities a facilitator can employ).

When teachers are aware of requirements for a facilitating role, then application of process learning within the classroom becomes easier to achieve.

In conclusion, this package is a useful reference for teachers to use, particularly in selecting the correct terminology or process activating verbs. The main learning for teachers/facilitators will occur in the classroom when pupils are given the opportunity to work towards their own goals.
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1. BIGGS J.B. (vol 17 No 3 October 1973):
   "CONTENT TO PROCESS" - The Australian Journal of Education
   (pp 225 - 237)

2. PROFESSORS OF SCIENCE EDUCATION (24.4.90):
   "HOW TO TEACH THE LEARNING" - The Guardian

3. STANDARD GRADE DEVELOPMENT PROGRAMME:
   "PROCESS INTO PRACTICE"
SECTION 3 - APPROACHES TO THE ARTICULATION OF S1 AND S2 WITH STANDARD GRADE

3.1 Introduction

Before discussing issues and approaches pertinent to this topic, a brief historical introduction establishing the background to curriculum development in Home Economics will provide an awareness of current procedures used.

3.2 Curriculum Development in Standard Grade

The publication of the "Munn and Dunning Reports" in 1977 initiated the need for re-appraisal of teaching approaches and assessment systems. Implementation of these aims occurred in 1982 when the Joint Working Party of the Consultative Committee on the Curriculum (C.C.C.) and the Scottish Examination Board (S.E.B.) produced guidelines on "Curriculum and Assessment at S3 and S4".

During 1984 industrial action prevented further curriculum development, coupled with problems of implementing Standard Grade due to its time consuming and complex assessment structure. This was overcome in 1986 when a Review Group published the "McLelland Report" aimed at simplifying assessment and certification.

Finally, in 1987 a Short Life Working Group (S.L.W.G.) and a Home Economics Panel prepared "Standard Grade Revised Arrangements in Home Economics". This arrangement has been offered in and after 1989.

3.3 Curriculum Development in S1 and S2

In 1985 the C.C.C. produced "Bulletin One, Curriculum Guidelines for Home Economics". This outlined the rationale, aims and objectives implicit in all Home Economics courses within secondary schools.

Two years later, during 1987, a second bulletin was published entitled "Bulletin Two, Curriculum Guidelines for Home Economics" - this time outlining the rationale and course objectives that should be implicit in Home Economics courses within Scottish schools. This was used as a basis enabling schools to develop their own courses.

Succeeding reports recommended the need for technological study to be fully implemented within Home Economics.

Conclusion
The rationale for Home Economics can be summarised by (C.C.C. Bulletin 1 1985; para 2.15);
"Home Economics must deal with the position of both content and process within the curriculum and provide guidance on their relative balance. This will be set within the context of the general purpose of motivating
pupils of all abilities at different stages of the secondary school. If such aims and objectives are fulfilled then articulation will occur between $S_2$ and $S_3$.

3.4 Topic Perspective

During term one of school placement, which concentrated on $S_1$ and $S_2$, (common course), various teaching methods, classroom organisations, assessments and resources were observed and utilised.

Term two enabled reflection on term one, allowing further development and progression including $S_2$ and $S_3$ Standard Grade course.

The common course and Standard Grade seemed to lack compatibility of teaching strategies. This became apparent during observation of both courses.

Transferring from the common course to Standard Grade could have several effects on a pupil's learning experiences:

1. If emphasis is placed on a "well developed" common course which motivates the pupil to learn, then when pupils encounter a less structured Standard Grade course, the learning experiences become limited.

2. If emphasis is placed on a "well developed" Standard Grade - encouraging a pupil centred approach, the gulf of being instructed as opposed to being autonomous is too difficult for pupils to come to terms with.

There is also a risk of pupils becoming disillusioned in $S_1$ and $S_2$ and not selecting Home Economics at Standard Grade.

3. If both courses are balanced with a process and content curriculum, this will motivate pupils and push on their learning. Situation three, the balanced approach, provides the most progressive learning situation for pupils to aspire to when opting for Home Economics in Standard Grade.

The development of such a balanced course will require research within a practical teaching context.

By comparing the Home Economics department with other departments - in relation to teaching methodology and assessment, it is hoped to establish whether other departments have successfully integrated a balanced approach to their courses.

The approach used for this research is mainly analytical, in that discussions and observations were then substantiated with analytical investigation to discover whether what was expected to happen, did in fact occur.
REFERENCES

1. C.C.C. (1985): "CURRICULUM GUIDELINES FOR HOME ECONOMICS: BULLETIN ONE"
   - Scottish Curriculum Development Service

2. C.C.C. (1987): "CURRICULUM GUIDELINES FOR HOME ECONOMICS S1/S2: BULLETIN TWO"
   - Dundee College of Education

3. MORAY HOUSE COLLEGE OF EDUCATION: "EDUCATION 10-16 THE BACKGROUND TO CURRICULUM AND ASSESSMENT"


5. S.E.D. (1988): "STANDARD GRADE INFORMATION NOTE FOR SECONDARY SCHOOL TEACHERS, SECOND EDITION"
   - H.M.S.O.
4.1 National and Regional Issues

On a national scale guidelines were issued to schools setting the "standard" for Standard Grade. Home Economics was introduced in phase two of the programme and presently complies with the "Revised Arrangements" document.

National Development Officers for Home Economics identified the needs of the course and published support materials in the form of starter packs, teaching exemplars and staff development materials.

Regional variations implementing Standard Grade occurred depending on the type of resources used for course development. Materials and resources used for the course included Principal Teachers' meetings, Inservice programmes, Advisors or individual departments cooperating.

Lothian addressed the implementation by allowing each department to develop a Standard Grade course which complies with the "Revised Arrangements" and made use of support materials.

Fife developed their course by selecting Home Economists to write specific topics for Standard Grade. These topics are mainly used for reference since many schools did not have the resources or skills to carry out these written objectives, and have adopted more suitable topics.

(See Appendix 2, pg 21 for a Standard Grade course outline from Lothian and Fife). Although no similarities can be directly seen, both courses represent a balance of contexts and feature the ten course objectives (Revised Arrangement p16 para 6.4).

Discussions with teachers in Fife and Lothian have highlighted a growing awareness of the need to articulate the S1 and S2 course with Standard Grade. Development of the present day Standard Grade has been time consuming, therefore teachers agreed that it would be more feasible to reappraise the common course and develop a new one relating to Standard Grade.

4.2 Local School Practice

The project aim is to discover whether there is articulation between S1 and S2 and Standard Grade, therefore analysis of local school practice shall be used to ascertain the extent of such articulation. The school in question is Beeslack High, situated in Penicuik, Lothian.

A comparison of the course outline in S1 and S2 and Standard Grade was used to determine whether outlines varied dramatically in any way (see Appendix 3 pg 22/23 for further details).
In theory there appears to be little difference in course outline, with Standard Grade progressing, the pupils learning experiences by introducing more teaching approaches, pupil activities and resources. The practical application of both courses is, however, different, as the theory does not take into account the frequency or the degree to which each aspect within the outline is used.

Observations within classrooms provided more realistic findings:-

1. **Teaching Approaches**

   Within Standard Grade, pupils worked effectively with pupil centred approaches and became responsible for setting their own objectives, carrying objectives out and evaluating the process.

   For S₁ and S₂ both teacher and pupil centred approaches were used, the latter approach being quite limited in process based learning.

   In order to promote process education, using an inbuilt checklist (see Biggs's checklist p 3) when constructing the course, would provide the necessary aims to follow.

2. **Course Content - Pupil Activities and Resources**

   Neither course seemed to inhibit the motivation level of pupils.

   After selecting options in S₂, two separate classes were asked two questions, viz;

   1. Whether or not they had selected Home Economics. (Yes/No)
   2. Give a reason for answer given.

   From this class survey 26/40 (65%) had selected Home Economics for reasons including: relevant to career choice, future application of skills and enjoyment of course.

   Of the 14/40 (35%) who chose not to select the course, reasons included; not relevant to career choice and a more suitable subject could be selected from the same column.

   Results from this small survey would suggest that the course has an adequate balance of pupil activities and related resources.

3. **Assessment and Recording**

   This aspect did vary dramatically between both courses. Within Standard Grade an awareness of the Grade Related Criteria (G.R.C.) to which pupils were assessed enabled motivation to achieve a desired goal. Feedback from pupil to teacher or pupil to pupil was effective as each could justify why a level or grade was given.

   In S₁ and S₂ there were no visible G.R.C.'s for pupils to strive to achieve. The pupil/teacher checklist (see Appendix 3a p24), did not provide any diagnosis of how pupils could remedy problems.

   On the basis of what has been discussed above, the following section investigates activities carried out within other departments of the
school. This concentrates upon teaching methods, and assessment and reporting in order to learn how Home Economics can improve the integration between the two courses.
REFERENCES


2. S.E.B. (1987): "STANDARD GRADE REVISED ARRANGEMENTS IN HOME ECONOMICS"

SECTION 5 – DEPARTMENTAL FIELDWORK AND IMPLICATIONS

5.1 Introduction

This section concentrates on establishing possible links with other school departments. If other departments can effectively articulate their courses, then analysis of how they succeed should be beneficial if applied to Home Economics. (See Appendix 8 pg 30 for Methodology used).

5.2 The Technology Department
- S3 Design Studies

Observation One: The teacher introduced a task for pupils to carry out – “The production of a toy”, which had to be completed within five lessons.

Pupils set about fulfilling the task by:-
a) Selecting relevant resources
b) Planning a strategy
c) Working at their own pace
Learning was facilitated by the teacher when a pupil requested guidance. Pupils replaced all materials and resources to the correct place before finishing.

Observation Two: To recall the task outline, the teacher instructed each pupil to report their findings to the rest of the class. The reportings outlined progress to date, problems encountered and future alterations. As with the previous lesson, all pupils replaced materials used.

Observation Three: Pupils continued to work at their own level using resources relevant to their needs, such as video tapes on skills, teachers, art department, computer and text books. The pupils were not confined to the classroom during their activities.

Throughout all three lessons, pupils did refer to printed G.R.C’s for practical abilities and design, which were displayed on a wall.

5.2.1 Analysis of S3 Classroom Observations

Teaching Approach

The approach used was predominantly pupil centred as:-
1. Pupils selected their own resources for background information.
2. Pupils set their own objectives within the plan of action.
3. Pupils carried out their planned course of action to produce a prototype.
4. Pupils evaluated the processes applied.
5. Pupils assessed their work using the G.R.C’s.

When the teacher centred approach was used, that is, to inform task objective, time allocation and reporting format, pupils learning situation was not hampered. The reporting situation had two positive results:

a) It generated feedback and alternative courses of action were considered.
b) It stimulated other pupils to try.

Pupils responsibility was effectively carried out by:-
1. Pupils volunteering for a particular task, such as caring for the milling machine or the glue. These duties were listed for all to see.
2. Self assessment using G.R.C.
3. Ability to recognise the teacher as a resource.
4. Self access to assessment sheet for monitoring progress.

Assessment

Each pupil received a “Standard Grade Craft and Design” assessment sheet, (see Appendix 4 pg 26 for layout). These sheets detailed agreed progress and grades.

The following observation and analysis of S, within the Technology department will determine the extent of articulation between the courses.

5.2.2 S, Technology

Observation One: On entering the classroom, pupils interacted with previously set task. Small groups containing three pupils gathered information which was discussed and translated into individual course booklets. After setting guidelines for the next lesson, pupils completed a “class planning sheet”, (see Appendix 5 pg 27) detailing requirements for that lesson. All of the resources were replaced to the correct area, by the pupils.

Observation Two: One pupil issued each pupil’s planning sheet. Working in the same triad, the groups planned a pulley system in theory and then carried out their plan in practice.

Each group’s efforts were labelled and stored for the following session.

Observation Three: Teacher initiated lesson by describing reasons for reporting. Each group presented their pulley system to the class, discussing the advantages and disadvantages of the final system. All resources and materials were dismantled and returned to the/
correct area.

5.2.3 Analysis of S1 Classroom Observations

Teaching Approach

Once again, the approach used was pupil centred as:-
1. Groups selected own resources.
2. Groups devised their own plan for the task.
3. Task was carried out in groups, using their own strategy.
4. Reporting of findings reflected individual styles.
5. Work was assessed by G.R.C. format.
6. Pupils decided on their own learning needs for following lesson.

Reporting was useful in generating feedback, particularly of sharing ideas. The reviewing process employed was an introduction into evaluation technique. Pupil responsibility was developed by:-
1. Pupils volunteering for a task such as quality control, marking (using G.R.C. format), and class planning sheets.
2. Teacher utilised as a resource.
3. Ability to monitor individual progress, with self access to their assessment sheets.

Assessment

Each pupil is given a “Course Plan”, (see Appendix 6 pg 28), which details content for the two years and graphically represents assessable elements. Elements are graded on a scale of one to seven to link into Standard Grade.

5.2.4 Conclusion for Technology Articulation

Based on the above findings, Technology have a well articulated four year course, since:-
1. Both courses emphasize pupil centred approach to learning. Many of the course activities tie into Biggs’s checklist (see p 3).

2. By establishing responsibility in S1, pupils become independent and by S3 no longer require responsibility reminders such as the class planning sheets, since the planning skill has become instinctive.

3. By clearly defining G.R.C. (or similar for S1 and S2), all pupils can push on their learning and become familiar with Standard Grade terminology.

4. Monitoring self progress helps establish an academic and attitude profile for pupil and teacher to analyse.

It would seem that Technology have established a course which Home Economics can learn from.
5.3 The Mathematics Department
S3 Mathematics

Observation One: The whole class worked individually using a standard textbook and covered specific exercises studying "volume". The teacher worked through using the blackboard. Further examples were set for homework.

Observation Two: Each pupil was issued with several problem solving sheets, (see example in Appendix 7 pg 29). Pupils followed the set instructions and 'solved' the problems. Individual assistance was given for pupils who required help.

Observation Three: This lesson was used as a revision exercise for following summative test. The teacher set examples on the blackboard, then pupils working on their own attempted the questions. Pupils were selected at random to give their answers and if they were incorrect then the teacher would show correct answer using the blackboard.

5.3.1 Analysis of S3 Classroom Observations

Teaching Approach

The approach focussed on teacher centred method, where emphasis is placed on achieving the end product, that is, the correct answer.

The problem solving sheets did not allow for pupil centred learning as the sheet had set instructions and guidelines for set outcomes to be achieved. This particular sheet would have been more suitably referred to as an "instruction sheet".

Assessment

Pupils were working towards a summative end of unit test. There was no indication of the criteria to which pupils would be tested on - the teacher marked each pupil's scripts.

Results from tests were filed into the teacher's record book with no further discussion involving the pupil.

Observing S3 Mathematics will enable a comparison of both courses to occur, and in effect determine if any articulation results.

5.3.2 S3 Mathematics

Observation One: Pupils engaged in a problem solving exercise from the course booklet. Pupils were given various
situations and were encouraged to use "educated guesses" which they could apply to each situation. The teacher selected pupils to conduct a practical solution to compare with pupil's answers. Every pupil did participate in some activity. The teacher ended the lesson by summarising the main points raised.

Observations Two and Three: Both lessons followed the same approach described in the first observation, with new situations extending the pupil's learning processes.

5.3.3 Analysis of S1 Classroom Observations

Teaching Approach

Both teacher and pupil centred approach were used. For example, is teacher introduced the topic and then pupils attempted the problems applying their own criteria.

Assessment

This particular module of the Mathematics course is based on continuous diagnostic assessment. The pupils record of work is referred to as a 'profile', although there was no evidence of pupils discussing their thoughts on such progress.

5.3.4 Conclusion for Mathematics Articulation

There seemed to be little evidence of any integration between the two courses.

During S1 and S2 pupils experience a balance of teaching approaches which are then denied to them when entering Standard Grade. Emphasis is given to teacher centred approach, with pupils following instructions in order to provide the required answer. "If the educational environment is not free enough to allow students to operate as self determining agents, then very few will". (Biggs 1973 p 236)

The comparison between continuous assessment and summative testing with Standard Grade exams reinforced the lack of cohesiveness between the courses. Any form of pupil centred learning taken on board within the S1 and S2 course is overpowered by regressive teacher centred learning in Standard Grade. Implications resulting from the effective articulation in Technical should also be applied to Mathematics.

5.4 Implications for Home Economics

The following recommendations would allow the present Home Economics course to develop a consistent link between S1 and S2 and Standard Grade.
1) S1 needs to foster responsibility within pupils, particularly for practical sessions when forward planning is essential.

This could be achieved by formulating a "class planning sheet", suitable for use in the Home Economics department. The sheet would incorporate planning for equipment, ingredients, resources and teacher instruction for a new process or skill.

2) Enabling pupils to volunteer for being responsible for a task such as checking equipment or replacing ingredients, will encourage pupils to develop an awareness for responsibility.

3) Within assessment there is a need for the G.R.C. to be clearly defined and placed for all to see.

Introducing a G.R.C. structure in S1 and S2 enables pupils to become familiar with terminology and format applied in Standard Grade.

4) The "Pupil and Teacher checklist", (see Appendix 3a pp 24) would link into Standard Grade if the seven symbols used for grading were transformed into grades from one to seven.

Comparing the grades used in Technology, a modification of grades six and seven, viz:–

- Grade 6 - Having some difficulty
- Grade 7 - Insufficient evidence

would comply with criteria used in Standard Grade.

Developing the reporting procedure further, would involve incorporating another section to develop "Self Review". The sheet would require two further headings:–

1. What skills did I learn or improve upon when doing this task?
2. Where else can I use these skills?

This incorporates evaluation which Biggs identified as being essential in process based learning.
SECTION 6 – DISCUSSION AND CONCLUSION

In concluding this project, it can be seen that on the basis of what has been examined, there are several inconsistencies between $S_1$ and $S_2$ and Standard Grade, with regard to course structure.

It was established in Section 4 that 65% of pupils in two second year classes had selected Home Economics in their option choice. The pupils had considered the course to be motivating and stimulated their learning on to $S_3$. However, such learning opportunities have proven to be irregular and may even stint the pupil's learning.

Section Five concentrated on identifying reasons for such inconsistencies within Beeslack's Home Economics department. The weak areas identified included: teaching approaches, assessment and reporting. The issue of "pupil responsibility" has wider implications throughout education. If the education process allows pupils to become responsible, then pupils have the ability to become autonomous and cope effectively in every day situations.

"There are important process implications when the learner finds out what it feels like to make his own decisions - whatever they are - and to face up to the consequences". (Glasser 1969)

Future implications which will affect the level of articulation involve the publication of the Working Party report on the "5 - 14 Programme", which incorporates Home Economics.

This report will set guidelines on attainment outcomes, strands (subdivisions of an attainment outcome), attainment targets and the five levels of progression from A to E. However relevant the material is in this report, by not considering Standard Grade or producing the "5 - 16 Programme", the guidelines may in fact hinder any articulation which has occurred to date.

Finally, discussions of the "5 - 14" report raises another possible angle for further research. By considering the teaching structure of Home Economists within the Primary Sector, articulation would be possible from Primary through to Standard Grade or even Revised Higher level.
APPENDICES

APPENDIX 1

Diagrammatic Representation of the range of Teacher/Facilitator activities.

A person whose function is to make (something) easier and/or assist the progress of the pupil.

The following diagram attempts to sum up the wide range of Teacher/Facilitator activities.

Source: Educational Package "Process to Practice"
APPENDIX 2

Standard Grade Course Outline

LOTHIAN – BEESLACK HIGH

Topic 1 – Me and My Health
Topic 2 – What’s Cooking
  – Designability
Topic 3 – Community Spirit
Topic 4 – My Ability
Topic 5 – Healthy Living

PIPE – DUNFERMLINE HIGH

Topic 1 – Explore Home Economics
Topic 2 – You Can Manage
Topic 3 – Getting Away From It All
Topic 4 – The Choice is Yours
  Option 1 – Family Affairs
  or Option 2 – Looking At Others
Topic 5 – Citizen 2000

Sources: Beeslack High School Home Economics Department
          Dunfermline High School Home Economics Department
APPENDIX 3 - COURSE COMPARISON

The comparison between both courses was obtained by analysing the complete course outline and contents along with the teacher's notes for each topic.

**S1 and S2 Course**

1. **TEACHING APPROACHES**
   - Command style (for whole class lessons)
   - Station work
   - Individual Work
   - Resource Based Learning
   - Problem Solving
   - Class discussions

**Standard Grade Course**

- Command style (introduce or summarise lesson)
- Station work
- Individual Work
- Resource Based Learning
- Problem Solving
- Class discussions
- Group discussions
- Case Study

2. **PUPIL ACTIVITIES**
   - Investigation/Experimental work
   - Tasks (written and practical)
   - Assignments
   - Project work

3. **RESOURCES**
   - Text books, video equipment, ingredients, topic booklets, task and solution sheets.
   - Teacher

4. **ASSESSMENT**
   - Continuous diagnostic assessment.
   - Summative unit tests.

5. **RECORDING**
   - Pupil and teacher checklist used for each topic. (See Appendix 3a pg 24)
   - This lists the assessable elements

   Pupil record sheet used for each unit. (See Appendix 3b pg 25)
   - This records the element, course
## S1 and S2 Course

### 5. RECORDING

| of the unit and uses 7 possible skill outcomes. |

## Standard Grade Course

| objective and Grade obtained. Pupils also keep own diary of progress throughout the course. |

Source: Beeslack High School Home Economics Department
APPENDIX 3A

"Pupil and Teacher Checklist"

Note: Please see attached sheet

Source: Beeslack High School Home Economics Department
# PUPIL AND TEACHER CHECKSHEET

**Be a whole person**

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<th>basic understanding</th>
<th>better skill</th>
<th>good understanding</th>
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<th>consistently good</th>
<th>excellent</th>
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<p>| DESIGN AND TECHNOLOGY         |                     |              |                    |           |                   |           |
| Manufacture of weaving sample (F) |                 |              |                    |           |                   |           |
| Efficiency of time            |                     |              |                    |           |                   |           |
| Operation of equipment        |                     |              |                    |           |                   |           |</p>
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Comments
APPENDIX 3B

"Pupil Record Sheet"

Note: Please see attached sheet

Source: Beeslack High School Home Economics Department
# Pupil Record Sheet

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<th>UNIT 2</th>
<th>UNIT 3</th>
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<td>GRADE</td>
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<td>Knowledge and Understanding</td>
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<tr>
<td>Handling Information</td>
<td>(H.I.)</td>
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<tr>
<td>Practical and Organisational Skills</td>
<td>(P. &amp; O.S.)</td>
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</table>

**Course Objective Numbers**

- (C.O.) 1, 2
- (C.O.) 3, 4, 5
- (C.O.) 6, 7, 8, 9, 10

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**Elements**

- Knowledge and Understanding
- Handling Information
- Practical and Organisational Skills

**Course Objective Numbers**

- (C.O.) 1, 2
- (C.O.) 3, 4, 5
- (C.O.) 6, 7, 8, 9, 10
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<thead>
<tr>
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**Elements**
- Knowledge and Understanding (K.U.)
- Handling Information (H.I.)
- Practical and Organisational Skills (P. & O.S.)

**Course Objective Numbers**
- (C.O.) 1, 2
- (C.O.) 3, 4
- (C.O.) 5, 7, 8, 16

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**Elements**
- Knowledge and Understanding (K.U.)
- Handling Information (H.I.)
- Practical and Organisational Skills (P. & O.S.)

**Course Objective Numbers**
- (C.O.) 1, 2
- (C.O.) 3, 4
- (C.O.) 5, 7, 8, 16
APPENDIX A

"Standard Grade Craft and Design Coursework and Project Assessment"

Note: Please see attached sheet

Source: Beeslack High School Technology Department
## Standard Grade Craft and Design Coursework & Project Assessment

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<th>D2</th>
<th>W2</th>
<th>S3 EXAM</th>
<th>COURSEWORK</th>
<th>PROJECT</th>
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**Code**: Plain box - teach and assess. Square in box - teach only, assess if wanted.
**Class Planning Sheet**

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Materials required - kind & size (L,B & TH.)

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Equipment - e.g. scissors

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Machines set up - e.g. Lathes

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Special tools e.g. - MB taps & dies

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Videos or books?

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Instruction by your teacher on a new process or skill?

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Anything else? - tea & biscuits perhaps?

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Person in charge of this Planning sheet

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Source: Beeslack High School Technology Department
APPENDIX 6

"S_1 and S_2 Course Plan"

Note: Please see attached sheet

Source: Beeslack Technology Department
# S1 and S2 Course Plan

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<thead>
<tr>
<th>Grade</th>
<th>1. Consistently very good</th>
<th>Impressive</th>
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<tbody>
<tr>
<td>2.</td>
<td>Generally very good</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Good</td>
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<tr>
<td>4.</td>
<td>Generally good. Adequate</td>
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<tr>
<td>5.</td>
<td>Modest</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Causing concern</td>
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## Graphical Communication

- Use of pencil
- Sketching
- Enhancing sketching
- Orthographic projection/pictorial views
- Reading drawings

## Design / Problem Solving

- Problem
- Specification / Performance criteria
- Analysis
- Generating ideas
- Synthesis
- Solution
- Planning
- Evaluation and modifications

## Craft Skills

- Measuring
- Marking out
- Material removal
- Material joining
- Material finishing
- Machines

## Technology Skills

- Electronics
- Mechanisms
- Structures
- Pneumatics
- CAD/CAM

## Knowledge and Understanding

- Drawing reading and understanding
- The design process
- Craft knowledge
- Technological understanding

## Additional Responsibility

Name: ____________________  Class: _______
APPENDIX 7

"An example of a problem solving sheet"

Note: Please see attached sheet

Source: Beeslack Mathematics Department
When Bob and Fiona moved into their new flat they decided to tile the bathroom wall above the wash hand basin using MIRROR TILES.

At their local DO IT YOURSELF store they collected the following information.

Tiles come in 3 types

Type 1 15 cm x 15 cm plain
Type 2 30 cm x 15 cm plain
Type 3 15 cm x 15 cm patterned
1 (a) Using a scale ... 1 cm represents 15 cm draw a plan of the wall to be tiled on the squared paper provided.

(b) Show how you would arrange the 15 cm by 15 cm plain Tiles on your plan.

(c) Draw a second plan of the wall to be tiled on your squared paper.

Show on the plan how you would arrange the TYPE 2 tiles.

(d) Bob and Fiona want to try to tile the wall with a mixture of Type 2 and the PATTERNED TILES.

Draw a third plan on your squared paper. Make a design which uses both these types of tiles to fit the plan.

**PRICE INFORMATION**

- **TYPE 1 (15cm by 15cm) PLAIN**: Boxes of 12 tiles, £8.99 per box
- **TYPE 2 (30cm by 15cm) PLAIN**: Boxes of 6 tiles, £7.99 per box
- **TYPE 3 (15cm by 15cm) PATTERNED**: Boxes of 12 tiles, £9.49 per box

2 Work out the costs for the 3 plans you have drawn and decide which plan you think Bob and Fiona should choose.

(Explain your reasons)
APPENDIX A - METHODOLOGY FOR FIELDWORK

1. Establishing suitable departments to observe and analyse - This involved discussions with Mr T Wright, Learning Support teacher who has direct contact with every department of the school.

The Technology Department was selected due to the practical, skill emphasis content similar to Home Economics.

The selection of the Mathematics Department was used as a direct contrast to the practical departments.

2. Strategy Used

a) To standardise research, the same $S_1$ and $S_2$ classes were observed.
b) Each session involved a double lesson of one hour and twenty minutes.
c) Three sessions were used in each class to enable a more varied approach to be observed.
d) After each lesson, further discussions (which involved the teacher), enabled a more detailed reflection to occur.
e) $S_1$ and $S_2$ were deliberately selected since $S_1$ should have course development introduced, which takes account of $S_2$.

It is appreciated that if time was available, an extension of each observation class would produce even more validated research.
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