Evaluation of the Subject Area Syllabuses Curriculum Development Project

Final Report November 2002

Prepared for the Queensland Studies Authority by





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Executive Summary

The Syllabus Development Project:

Within the framework of the curriculum for Years 1 to 10, Queensland Studies Authority (QSA) is developing syllabuses and guidelines for five subject areas:

- Agriculture Education
- Business Education
- Home Economics Education
- Industrial Technology and Design Education
- Information and Communication Technology Education.

Each of these includes selected outcomes from the key learning areas as well as outcomes specific to the subject area.

A subcommittee of the Subject Area Syllabuses Advisory Committee (SAC) was created for each of the five areas, and online consultative networks established with practitioners. Writers were contracted to develop initial syllabus drafts, which were extensively reviewed. The resulting second consultative drafts were made available to schools and teachers with an invitation to trial a syllabus and provide feedback to the project team. A formal trial was not conducted.

The Evaluation:

The external evaluation of the Subject Area Syllabuses project relates to the second consultative drafts of the subject area syllabus and guidelines documents for the five subject areas. The purpose of the evaluation was to provide advice on:

- the appropriateness, effectiveness and efficiency of the subject area syllabuses and guidelines
- their articulation with other curriculum materials and their positioning in relation to students' total curriculum experience
- the advantages and disadvantages of the processes used to develop the subject area syllabuses and guidelines.

Data collection consisted of:

- structured interviews with key personnel associated with each subject area syllabus
- structured interviews in visits to selected schools
- a web-based survey, supported by telephone interviews, for school teachers and administrators.

Findings:

Agriculture Education:

In terms of appropriateness, the results suggest that the draft syllabus and guidelines document:

- reflects current and emerging views about education in Agriculture well
- is quite appropriate to current curriculum offerings in schools
- matches the needs of students adequately
- matches the needs of teachers less than adequately.

In terms of efficiency, the results suggest that the draft syllabus and guidelines document:

- is quite effective in describing the fundamental learnings in agriculture education
- quite effectively describes a progression of learning

- is adequate in assisting teachers with assessment planning and teaching
- is less than adequate in assisting teachers with assessment.

The problems with effectiveness seem to derive from difficulty teachers have with understanding the document and how to use it, apparently due to the absence of sufficient specific examples for teachers.

The issue of similarities and differences between the five subject area syllabuses did not appear to be seen as an important one for Agriculture Education.

In terms of articulation and positioning, the Agriculture Education syllabus and guidelines document was seen to articulate well with the other subject areas and the junior secondary curriculum generally, but was not thought to provide preparation for senior secondary studies in any specific sense. The subject area was positioned in a variety of ways in schools' programs, indicating that the syllabus and guidelines document is adaptable to a range of curriculum structures.

In terms of suggested changes, the data indicate that the syllabus and guidelines document needs to be supplemented with teaching examples and elaborations to provide greater levels of specification and explanation for teachers.

Business Education:

In terms of appropriateness, the results suggest that the Business Education draft syllabus and guidelines document:

- matches the needs of students well
- adequately reflects current and emerging views about business education
- matches the needs of teachers adequately
- is adequately appropriate within the range of curriculum offerings in schools.

In terms of effectiveness, the draft syllabus and guidelines document seems:

- highly effective in describing the learnings that are fundamental for a course in business education
- highly effective in assisting teachers with planning
- · quite effective in assisting teachers with teaching
- adequate in describing a progression of learning
- less than adequate in assisting teachers with assessment.

The less favourable results in describing a progression of learning or helpfulness for assessment seem to be due to problems with the organisational format or language.

Consultation with other subcommittees and strict guidelines on terminology for writers provided the mechanisms for taking the other subject areas into account in the development process. Justification of similarities and differences between the subject areas was apparently not an issue.

In terms of efficiency, the draft Business Education syllabus and guidelines document seemed less than adequate in its ease of use for most teachers. Contributing factors to lower efficiency seem to be the absence of elaborations and specific models or examples, as well as the difficulties for teachers in adapting to the outcomes approach.

In terms of articulation and positioning, these seem largely a matter of how a school organises the curriculum.

The results taken together seem to indicate good articulation with the other subject areas and the junior secondary curriculum generally, but the syllabus was not thought to provide preparation for senior secondary studies in any specific sense. The syllabus and guidelines document would seem to be robust with respect to wide diversity in positioning within the school curriculum.

In terms of suggested change, teachers need assistance interpreting the central learning outcomes and translating them into planning and assessment through the provision of elaborations, examples and models.

Home Economics Education:

In terms of appropriateness, the results suggest that the Home Economics Education draft syllabus and guidelines document:

- reflects current and emerging views about home economics education very well
- meets the needs of teachers well
- meets the needs of students adequately
- is adequately appropriate within the range of curriculum offerings in schools.

In terms of effectiveness, the draft Home Economics Education syllabus and guidelines document seems to be:

- quite effective in describing the fundamental learnings for a course in home economics education
- quite effective in describing a progression of learning
- quite effective in assisting teachers with planning
- adequate in assisting teachers with teaching
- less than adequate in assisting teachers with assessment.

According to the data, the central learning outcomes effectively describe the fundamental learnings in home economics education and are moderately effective in describing a progression of learning, but are difficult to translate into practice. Teachers saw the outcomes as too general without access to elaborations and specific examples to explain them. The draft syllabus was seen as limited in its helpfulness for assessment, apparently because it is overly general.

The key participants expressed doubts about the way the other subject areas were taken into account in the development process, but did not see similarities and differences between the subject areas to be a major concern.

In terms of efficiency, the results indicate that the draft Home Economics Education syllabus and guidelines document is less than adequate in terms of ease of use. Many of the teachers indicated that it would be more efficient if it were accompanied by elaborations and examples for teachers as well as direct support with the task of learning what it means and how to use it.

In terms of articulation and positioning, the draft syllabus articulates well with the other subject areas, with the junior secondary school generally and with senior secondary studies. It has been positioned in a wide variety of ways within the school curriculum.

In terms of suggested change, the results reinforce the need for teachers to have assistance, through the provision of elaborations, examples and models, to interpret the syllabus, plan for teaching and design assessment processes.

Information and Communication Technology:

In terms of appropriateness, the results suggest that:

- the rationale is highly appropriate in reflecting current and emerging views in information and communication technology education
- the syllabus and guidelines document generally is quite appropriate in reflecting current and emerging views

- the draft adequately matches the needs of students and teachers
- the draft syllabus and guidelines document is highly appropriate to current curriculum offerings in schools.

In terms of effectiveness, the draft Information and Communication Technology Education syllabus and guidelines document seems:

- highly effective in describing the fundamental learnings for a course in information and communication technology
- adequate in describing a progression of learning
- adequate in assisting teachers with planning and teaching
- less than adequate in assisting teachers with assessment.

In terms of efficiency, the results indicate less than adequate efficiency in ease of use, without any consistent explanation for teachers' difficulties with the draft.

In terms of articulation and positioning, the results indicate that the draft Information and Communication Technology Education syllabus and guidelines document articulates well with the other subject area syllabuses and with the school curriculum generally; and articulates adequately with relevant studies in Years 11 and 12. There is good evidence that the draft syllabus can be positioned within a very wide variety of curriculum organisational patterns.

In terms of suggested change, the results reinforce the need for teachers to have assistance through the provision of examples and models, in interpreting the syllabus and designing assessment processes.

Industrial Technology and Design Education:

In terms of appropriateness, the results indicate that the draft Industrial Technology and Design Education syllabus and guidelines document:

- reflects current and emerging views in the subject area very well
- matches the needs of students very well
- matches the needs of teachers adequately
- is very appropriate within the range of curriculum offerings in schools.

In terms of effectiveness, the results indicate that the Industrial Technology and Design Education draft syllabus and quidelines:

- adequately describe the fundamental learnings in the subject area
- adequately describe a progression of learning
- adequately assist teachers with planning, teaching and assessment.

Apparently, the development process took the other subject areas into account through limited consultation among writers, subcommittees and the project team. Differences between the subject areas guidelines were seen to be sufficiently justified by the different contexts in which the five subject areas address similar outcomes.

In terms of efficiency, the results indicate that the draft is less than adequate in terms of ease of use in schools, mainly due to difficulty for teachers in developing an understanding of the syllabus, often because of the language used or the organisational structure.

In terms of articulation and positioning, the draft syllabus and guidelines document seems to articulate well with the broader junior secondary curriculum but only to a low extent with senior studies. There was diversity of opinion among teachers about the role of junior secondary studies in this area in preparing for senior secondary. The draft was reported to be positioned within a range of different types of school curriculum organisation.

In terms of possible changes, the most frequent suggestions referred to aspects of the organisational format or the need for more examples for teachers.

The five subject areas:

The draft syllabuses and guidelines in the five subject areas seem to be quite appropriate and generally effective, with general agreement on the direction taken in the rationale. The syllabus and guidelines appear to reflect current and emerging views about education in the subject areas well, and seem to meet the needs of students. Each subject area seems to be appropriate to current curriculum offerings in schools.

Similarities and differences among the subject areas are generally not seen as an important issue given the unique contexts.

The draft syllabus and guidelines documents seem to be less effective in meeting teachers' needs and appear to lack efficiency in terms of ease of use in schools. A recurring concern is that they lack sufficiently specific guidance on assessment.

Changes suggested most often are to state outcomes in more specific terms; provide more elaborations and examples for planning, teaching and assessment; and provide specific guidance for assessment.

Syllabus development processes:

The main advantage of the development processes seems to be that syllabuses have been provided to meet an apparent need, and which have held up well on most criteria of the present evaluation. That is to say, the intended products have been realised and their quality has been judged as adequate or better on most aspects. Other advantages relate to matters of expediency, including savings in cost and time.

The main disadvantages are the workload expected of teachers involved in the review and trial processes, and possible future inconvenience to teachers adopting syllabuses that have not been fully proven in formal trial/pilot processes. Other disadvantages are possible negative effects on the credibility and status of the subject areas through budget restriction, and limitations on the extent and breadth of input from teachers through the use of the Internet and small review teams.

Whatever the processes, it seems that management is the key if they are to work well.

1. Introduction

1.1 The Subject Areas Syllabuses Curriculum Development Project

Within the framework of the curriculum for Years 1 to 10, Queensland Studies Authority is developing syllabuses and guidelines for five subject areas:

- Agriculture Education (Ag)
- Business Education (Bus)
- Home Economics Education (HEc)
- Industrial Technology and Design Education (ITD)
- Information and Communication Technology Education (ICT).

Second consultative drafts for the subjects have been published on the QSA website.

1.1.1 The Syllabus and Guidelines Documents

These subject area syllabus and guidelines documents are based on an outcomes approach and contain learning outcomes for Levels 4 to Beyond Level 6. Some of the learning outcomes come from some of the Years 1 to 10 key learning area syllabuses, while others are specific to the subject area. The syllabuses were developed for schools to use in planning courses of study including specialised learning experiences in specific contexts.

When the project began under the Queensland School Curriculum Council in year 2000, it represented the first instance of syllabuses other than the Years 1 to 10 syllabuses for each of the eight key learning areas (KLAs). The key learning area syllabuses describe core learning outcomes for 10 years of schooling, but in Years 8 to 10 many schools offer increasing curriculum choice including specialised studies in specific contexts. The subject area syllabuses were developed to assist schools in providing subjects or units of this kind.

The subject areas are all related to the Technology key learning area, but include outcomes from other key learning areas. Each syllabus contains "central learning outcomes" as well as "supplementary learning outcomes" for Levels 4, 5, 6 and Beyond Level 6. The central learning outcomes include some of the core learning outcomes from the key learning areas. Display 1 shows how the five subject areas include core learning outcomes from the Technology key learning area and some from other key learning areas including SOSE, HPE, Science and The Arts.

Display 1: Core learning outcomes from the KLAs included in Subject Area Syllabuses Central Learning Outcomes

Subject	Numbers of core learning outcomes from key learning area syllabuses						
Area	Technology	HPE	The Arts	SOSE	Science	Totals	
Ag	8	4		8	7	27	
Bus	31			19		50	
HEc	16	24		3		43	
ICT	16		12	8		36	
ITD	24		7		8	39	

1.2.2 Project Management

A Subject Area Syllabuses Advisory Committee (SAC) was established in March 2000 to oversee the development of the syllabus and guidelines in the five subject areas. This group comprised nominees of five professional associations, school authorities, teacher unions, parent and community associations and other stakeholders.

A subcommittee of the SAC was created for each of the five areas, chaired by the relevant professional association representative on the committee. Subcommittees comprised up to 10 members who were subject area specialists.

1.1.3 Syllabus Development Processes

Writers or writing teams were contracted to develop initial syllabus drafts, which were reviewed by the subcommittees and project officers.

Online consultative networks were established in each subject area. These networks had broad membership, including practitioners in diverse centres across the State. Through this mechanism, interested persons could have access to the drafts of the syllabuses, keep up to date with project progress and provide reaction to the materials and other issues raised by the project team.

First consultative draft subject area syllabuses were published on the web in October 2000. Consultation on these drafts was conducted until Term 1, 2001. During this time, the project team conducted meetings with teachers, administrators and other interested persons. More than 1000 people attended consultative meetings convened for the five subject areas in 11 locations throughout Queensland. Participants were invited to provide feedback on the first consultative draft syllabuses via an online survey.

The feedback from the meetings and survey informed development of the second consultative drafts. These were made available to schools and teachers with an invitation to trial a syllabus and provide feedback to the project team during the consultative period Term 1 to Term 3, 2002. During the consultative period, the project team worked with school authorities and professional associations to gather sample courses of study, learning experiences and other materials produced by teachers for possible inclusion as online support materials.

The syllabus and guidelines documents will be revised further before publication.

Aspects of the syllabus development process varied from the previous Years 1 to 10 the key learning area curriculum development projects in several ways:

- the use of online processes including publication of syllabus drafts on the web and collection of feedback using web-based and email surveys (rather than distribution of printed documents, mail surveys and visits to schools by project officers)
- a smaller project team (initially two fulltime officers working under the supervision of a project manager) and a smaller budget
- the engagement of contract writers or writing teams with guidance from the subcommittees and review teams created from the subcommittees (rather than writing by a fulltime project team working to a syllabus advisory committee and consultative network)
- an informal trial process whereby teachers or schools volunteered to try various aspects of the draft syllabuses (rather than formal trial and pilot processes)
- absence of sourcebook guidelines and modules during the informal trial phase.

2 The Evaluation

2.1 Purpose

In mid 2002, QSA commissioned an external evaluation of the Subject Area Syllabuses Project. The evaluation relates to the second consultative drafts of the subject area syllabus and guidelines documents for the five subject areas.

The purpose of the external evaluation was to provide advice on:

- the appropriateness, effectiveness and efficiency of the subject area syllabuses and guidelines
- their articulation with other curriculum materials and their positioning in relation to students' total curriculum experience
- the advantages and disadvantages of the processes used to develop the subject area syllabuses and guidelines.

2.2 Evaluation Methodology

The main stakeholder for the evaluation is:

Queensland Studies Authority

Other stakeholders are:

- Education Queensland
- The Association of Independent Schools of Queensland Inc.
- Queensland Catholic Education Commission
- relevant professional associations of teachers
- administration, staff and clients of Queensland schools.

The focus questions for the evaluation are shown in Display 2. Appendix 1 indicates how the data collection processes relate to the focus questions.

The fundamental approach in the evaluation was the systematic collection, analysis, interpretation and reporting of information on the opinions and experiences of:

- teachers and administrators in schools taking part in the informal trial processes
- key personnel associated with each subject area syllabus, namely the contracted writers, chairs of subcommittees, professional association presidents and nominated tertiary contacts.

Data collection consisted of:

- structured interviews with key personnel associated with each subject area syllabus
- structured interviews in visits to schools
- a web-based survey, supported by telephone interviews, for school teachers and administrators.

2.3.1 Evaluation Design

A major consideration for the evaluation design was the need to obtain and report information in each of the five subject areas separately. In effect, there were five parallel evaluations in relation to most of the focus questions. The same survey was used for each subject area. The interview questions were the same except for references to the subject area concerned.

Display 2: Evaluation focus questions

Appropriateness

- 1. To what extent does the draft rationale of each subject area syllabus reflect current and emerging views of education and of educators in the subject area?
- 2. To what extent do the draft syllabus and guidelines in each subject area syllabus reflect current and emerging views of education and of educators in the subject area?
- 3. To what extent do the draft subject area syllabuses and guidelines match the identified needs of students, teachers and school administrators?
- 4. How appropriate is the set of five subject areas to current curriculum offerings in schools?

Effectiveness

- 5. How well do the draft learning outcomes describe the learnings in subject areas that are fundamental for students taking a course of study in the subject areas?
- 6. How well is the progression of learning described by the draft learning outcomes?
- 7. How well do the various sections of the draft syllabuses and guidelines assist teachers in planning, teaching and assessing?
- 8. To what extent are the similarities and differences between the subject areas guidelines justified?

Efficiency

9. How accessible are the syllabuses and guidelines in terms of ease of use for planning and implementing subject area courses of study?

Articulation and positioning

- 10. To what extent is there articulation between the draft subject area syllabuses and guidelines, and articulation with Board of Senior Secondary School Studies syllabuses?
- 11. To what extent are the draft subject area syllabuses and guidelines positioned within students' total curriculum experience?

Development processes

- 12. What advantages and disadvantages are there in the manner in which the subject area syllabuses and guidelines have been developed, particularly the:
 - a) online processes used
 - b) smaller project team (and budget)
 - c) use of contract writer; subcommittees; review teams
 - d) absence of a formal trial pilot
 - e) absence of sourcebook guidelines and modules?

Suggested changes

13. In the light of answers to the above, what changes, if any, might be made to the intent and content of the draft syllabuses and guidelines?

Another design consideration was the short time frame for the evaluation (from July to November 2002), necessitating data collection processes that could be carried out within that period.

A third consideration was the finite numbers of persons who participated in the development process including the informal trial arrangement. This necessitated efforts to ensure that as many people as possible provided information.

The centre of the design was a survey of the teachers who had indicated interest in working with the draft syllabus and guidelines during 2002. Additional information was collected in a limited series of visits to a selection of these teachers. A third component was a set of interviews with people who had been directly involved in the development process for each subject area.

There was overlap among the three data collection processes, providing some degree of triangulation, but some focus questions were covered in only one of the processes. The school-based interviews were limited in number, but were intended to provide information to assist in the interpretation of the survey responses.

The data collection processes are described in more detail below.

2.3.2 Survey and Interview Participants

The survey and interview participants consisted of:

- key participants in the development process
- teachers or administrators in schools identified by the project officer as having responded to the invitation to trial a syllabus and provide feedback to the project team.

The key participants were identified by the project officer. They were, for each subject area:

- a contracted writer
- the chair of the subject area subcommittee
- the president of the relevant professional associations
- a nominated tertiary contact.

Of a potential 20 interviewees, 13 took part in interviews. Some overlap occurred, with the same person being identified in more than one category. Some were not available for interview during the data collection period.

For the survey, the project officer identified 71 schools that had responded to the invitation to trial a syllabus and provide feedback. The schools covered all areas of the State and included State, Catholic and Independent schools.

In these schools, 86 teachers or administrators were identified, each as an initial contact for one or more subject areas, distributed as follows:

- 9 for Agriculture Education
- 25 for Business Education
- 25 for Home Economics Education
- 18 for Information and Communication Technology Education
- 25 for Industrial Technology and Design Education.

Each of these people was contacted by mail with a request to take part in the survey or to pass on the invitation to another person in the school for the particular subject area. The same person could make survey responses for more than one subject area.

In addition, at the request of the project officer, an invitation to respond to the survey was issued by email to the members of the consultative networks for the project. Some of these people took the opportunity to respond to the survey. The numbers and sources of the responses to the survey are summarised in Display 3, which indicates an overall return of 59 surveys from 102 invitations plus 35 from the invitation to the consultative networks.

Display 3: Survey response table

Subject area	Invitations to participate)	Responses from invitations	Other responses ¹	Total responses
Ag	9	5	4	9
Bus	25	11	7	18
HEc	25	18	8	26
ICT	18	10	13	23
ITD	25	15	3	18
Totals	102	59	35	94

¹ These responses came as a result of the invitation to the consultative networks

The numbers of survey responses were relatively small for a given subject area, but the invitations to participate correspond with the known population of schools that had indicated an interest in the draft syllabus for each subject area. Therefore, even though the actual numbers of responses were small, they represent reasonable proportions of the known populations. Nonetheless, results for separate subjects should be interpreted with care.

In consultation with the project officer, 19 of the 86 school contact persons were identified for interviews to be conducted during visits to their schools. These were people in schools where the project officer was aware that significant engagement with one or more of the draft syllabuses had occurred. Ultimately, visits were made to 17 schools. Interview participants were requested to return a survey as well.

School visits covered:

- the five subject areas
- the South East, Central Queensland, Wide Bay and Burnett, Darling Downs and Gold Coast areas of the State
- State, Catholic and Independent schools.

Interview participants were requested to return a survey as well.

2.3.4 Data Collection Processes

The survey:

The survey consisted of 7 background items, 18 multiple-choice items and 6 short response items. Two forms were prepared, one web-based, the other hard copy. The hard copy version of the survey is reproduced in Appendix 2.

Invitations to participate in the survey were mailed to persons identified by the project officer as having indicated an interest in working with the draft syllabus and guidelines documents. A subsequent invitation was emailed to members of the five consultative networks. The mailed invitation provided a way to check the email address for each potential survey participant and gave advance information on the purpose of the survey.

A subsequent email included a link to a web page that would initiate the survey. This page linked to the survey form to be completed online, as well as a printable document that could be filled out and returned by mail or fax. The page also contained contact details with an invitation for people to arrange a telephone interview if they preferred that method. Several reminders were sent by email, and then non-returnees were contacted by telephone with an offer to complete the survey by phone.

The response choices for most of the survey items included "cannot say", which was the default choice in the online version. This means that small numbers of "cannot say" responses may be expected and have been treated simply as non-responses or "missing data" in this report. On some items however, high frequencies of "cannot say" have been interpreted more literally.

The school visits:

The interviews took approximately 30 minutes and followed a structured format. The line of questioning was the same for each of the five subject areas but a separate version was prepared for each.

The interview questions are included in Appendix 3.

The key participant interviews

Each of the key participants identified by the project officer was contacted by mail and subsequently by phone or fax to arrange an interview. Interviews took about 30 minutes and consisted of questions closely related to the evaluation focus questions, with an emphasis on the development process and the appropriateness issues. Interviews took place in the interviewees' offices except for one, which was responded to by email.

The interview questions are included in Appendix 3.

3. Results - Syllabus and Guidelines Documents

All results are discussed below.

Section 3 deals, for each subject area in turn, with the appropriateness, effectiveness and efficiency of the draft syllabus and guidelines documents, as well as their articulation with other curriculum materials and positioning within students' total curriculum experience.

Section 4 deals with the advantages and disadvantages of the processes used to develop the respective syllabus and guidelines documents.

The survey results are summarised in Appendix 4.

3.1 Agriculture Education

3.1.1 Appropriateness

Survey items 8-12 and 26 referred to appropriateness. The results for items 8-12 are summarised in Display 4.

Display 4 indicates that according to the teachers, the draft Agriculture Education syllabus and guidelines document:

- reflects current and emerging views about education in Agriculture well
- is quite appropriate within schools' current curriculum offerings
- matches the needs of students adequately
- matches the needs of teachers less than adequately.

Display 4: Agriculture Education survey items 8-12 – appropriateness (N=9)

To what extent	Cannot say ¹	No extent	Limited extent	Some extent	Great extent	Very great extent
does the rationale in the draft syllabus reflect current and emerging views	0	0	0	3	6	0
about education in the subject area?	0%	0%	0%	33%	67%	0%
do other aspects of the draft syllabus and guidelines reflect current and emerging	0	0	0	3	5	1
views about education in the subject area?	0%	0%	0%	33%	56%	11%
10do the draft syllabus and guidelines meet the needs of your students?	0	0	1	5	3	0
	0%	0%	11%	56%	33%	0%
do the draft syllabus and guidelines meet the needs of teachers of the subject	0	1	2	3	3	0
area?	0%	11%	22%	33%	33%	0%
12are the syllabus and guidelines appropriate within the range of current curriculum	1	0	0	3	3	2
offerings in schools?	11%	0%	0%	33%	33%	22%

0% to 19%	20% to 39%	40% to 59%	60% to 79%
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[The number of responses was 9 for Agriculture Education, so percentages need to be interpreted with great care.]

Survey item 26 asked respondents to "comment on the appropriateness of the draft syllabus and guidelines as a component of the school curriculum". The responses were mostly positive (6 of 8). One referred to the need for sourcebooks and another took issue with content selection, but the comments support the finding that the draft Agriculture Education syllabus and guidelines document is appropriate as a component of the schools' curriculum.

The key participants were asked to what extent the rationale and the draft syllabus and guidelines in general reflect current and emerging views about education in the agriculture education. Results were positive for both.

3.1.2 Effectiveness

Survey items 13-17 and 27 referred to effectiveness. The results for items 13-17 are summarised in Display 5.

Display 5 indicates that according to the teachers, the draft Agriculture Education syllabus and guidelines document:

- is quite effective in describing the fundamental learnings in agriculture education
- quite effectively describes a progression of learning
- is adequate in assisting teachers with planning and teaching
- is less than adequate in assisting teachers with assessment.

¹ The response choices "cannot say", was the default choice in the online version. Small numbers of "cannot say" responses have been treated simply as non-responses or "missing data".

Display 5: Agriculture Education survey items 13-17 – effectiveness (N=9)

To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
are the draft learning outcomes effective in describing the fundamental learnings	2	0	2	1	4	0
in the subject area?	22%	0%	22%	11%	44%	0%
14are the draft learning outcomes effective in describing a progression of learning?	1	0	2	1	5	0
	11%	0%	22%	11%	56%	0%
15are the draft syllabus and guidelines helpful for planning a course of study in the	0	0	1	4	3	1
subject area?	0%	0%	11%	44%	33%	11%
16are the draft syllabus and guidelines helpful in teaching a course of study in the	3	0	2	2	2	0
subject area?	33%	0%	22%	22%	22%	0%
17are the draft syllabus and guidelines helpful for assessment of students in the	0	0	4	5	0	0
subject area?	0%	0%	44%	56%	0%	0%

0% to 19% 20% to	39% 40% to 59%	60% to 79%
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[The number of responses was 9 for Agriculture Education, so percentages need to be interpreted with great care.]

Survey item 27 called for comments on how well the draft syllabus and guidelines describe the fundamental learnings of the subject area. Of the 9 responses, 4 were positive ("quite effective", "good") and 5 indicated that the lower ratings on survey item 13 can be explained by difficulty with understanding or using the document. For example:

- Elaborations are needed.
- Not too bad but you did have to read the document several times.

The school-based interviews indicate that the rationale and outcomes are appropriate, but the assessment section may need to be more specific.

The results from the key participant interviews indicate that the other subject areas were taken into account by means of:

- management and advice by the project team, with specifications of format
- meetings between the writers
- · SAC meetings.

The key participants did not appear to see the issue of similarities and differences among the five subject areas as an important one for Agriculture Education.

3.1.3 Efficiency

Survey Items 18 and 28 related to efficiency issues. The results for item 18 are shown in Display 6.

Display 6: Agriculture Education survey item 18 – efficiency (N=9)

Diopiay of Agriculture Education			01110101		,	
To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
18are the draft syllabus and guidelines easy to use?	0	0	1	4	4	0
	0%	0%	11%	44%	44%	0%

0% to 19%	20% to 39%	40% to 59%	60% to 79%

[The number of responses was 9 for Agriculture Education, so percentages need to be interpreted with great care.]

Display 6 indicates that according to the teachers, the draft Agriculture Education syllabus and guidelines document:

is adequately efficient in terms of ease of use by teachers.

Survey item 28 called for comments on the efficiency of the draft syllabus and guidelines in assisting teachers with planning and teaching in the subject area. All 6 of the relevant comments were positive, for example:

- I found it very useful and easy to link.
- Efficient examples of courses of study could be adopted readily or easily modified.
- Appears to fit well and may be a good alternative to Science in some school settings.

3.1.4 Articulation and Positioning

Survey items 19 and 29 relate to articulation. The results for item 19 are shown in Display 7.

Display 7 indicates that according to the teachers, the draft Agriculture Education syllabus and guidelines document:

• is less than adequate in preparing students for transition to related studies in senior secondary education.

Display 7: Agriculture Education survey item 19 – articulation and positioning (N=9)

To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
19do the learnings and learning outcomes prepare students for transition to related	2	0	2	5	0	0
Senior secondary studies?	22%	0%	22%	56%	0%	0%

0% to 19%	20% to 39%	40% to 59%	60% to 79%

[The number of responses was 9 for Agriculture Education, so percentages need to be interpreted with great care.]

Item 29 asked for comments on "how well the draft syllabus and guidelines fit into the broader curriculum". Of the 7 relevant comments, all indicated a good fit.

In the interviews, one teacher commented that the syllabus and guidelines could be used in many subject areas in junior secondary, and that there was a reasonable link with senior secondary.

The key participants saw the syllabus as "distinct from, but complementary to, the other syllabuses in the set". As to preparation for senior secondary courses, the comments were:

- I believe the learnings based on outcomes from this syllabus would prepare students well for year 11/12 courses in Agriculture but it would depend entirely on the selection and quantity of agriculture outcomes contributing to a student's junior school experience. Preparation for 11/12 agriculture is entirely a school based decision.
- Find it's OK given that there are a lot of processes from senior school that are used in the junior school. The junior school is using these well. I don't think the task of a syllabus is to prepare someone to go to year 11/12. Junior Agriculture needs to be an entity on its own. However there are many outcomes that give kids good skills for 11/12.

Survey items 6 and 7 relate to positioning of units or courses of study within the school curriculum. Item 6 asked, "If you have been developing courses or units of study based on the draft syllabus and guidelines, how are they positioned within the student's total curriculum?" One or more options could be selected.

The results included all options except the Years 8/9/10 course:

Year 8 introductory course of study

Year 8/9 course of study

Year 8/9/10 course of study

0

Year 9/10 course of study 5

Year 10 specialised course of study 1

Other 0

Have not been developing courses or units

Item 6 asked for more detail in relation to the answer to item 6. A range of positioning types emerged – across year levels, integrated within existing subjects and as the basis for a full program:

- Looking at introductory Ag Sc type module based on selected outcomes.
- As part of existing units taught within Agricultural Science and Animal Husbandry.
- Units developed in conjunction with science. Agriculture activities are providing extended learning experiences within science units. These include chicken growth trials and vege gardens.
- We have trialed a 10-week unit in Year 8 and four 10-week units in year 9.
- I have implemented the Ag syllabus for 3 terms with a small group of year 9/10 students. I have developed units of work around a few outcomes and a central topic with a culminating activity at the end of each.
- I have started to re-write my junior Ag program, using the new syllabus. I will implement for the first time in 2003.

In summary, the results taken together suggest that Agriculture Education articulates well with the other subject areas and the junior secondary school generally, but was not seen as adequate in providing preparation for senior secondary studies. Agriculture Education was positioned within the junior secondary curriculum in a variety of ways, indicating that the syllabus and guidelines can be adapted to a range of school program structures.

3.1.5 Suggested Changes

Survey item 31 asked "What changes (if any) do you suggest for the syllabus and guidelines?"

Of the 6 responses, 4 called for more specific guidance in various forms, for example:

- Actual exemplars of school's programs, assessment tasks would have assisted greatly.
- More specifics and the production of sourcebooks and example assessment tasks to help teachers in the implementation of the outcomes process.

Another comment related to complexity in the mechanics section, and the other indicated general satisfaction within the context of the outcomes approach.

These results indicate that the main changes needed are to make the syllabus and guidelines document more specific and to include teaching examples and elaborations.

3.1.6 Summary of Findings

In terms of appropriateness, the results suggest that the draft syllabus and guidelines document:

- reflects current and emerging views about education in Agriculture well
- is quite appropriate to current curriculum offerings in school
- matches the needs of students adequately
- matches the needs of teachers less than adequately.

In terms of efficiency, the results suggest that the draft syllabus and guidelines document:

- is quite effective in describing the fundamental learnings in agriculture education
- · quite effectively describes a progression of learning
- is adequate in assisting teachers with assessment planning and teaching
- is less than adequate in assisting teachers with assessment.

The problems with effectiveness seem to derive from difficulty teachers have with understanding the document and how to use it, apparently due to the absence of sufficient specific examples for teachers.

The issue of similarities and differences between the five subject areas did not appear to be seen as an important one for Agriculture Education.

In terms of articulation and positioning, the Agriculture Education syllabus and guidelines document was seen to articulate well with the other subject areas and the junior secondary curriculum generally, but not as providing preparation for senior secondary studies in any specific sense. The range of positioning types described by the teachers indicates that the syllabus and guidelines is adaptable to a range of program structures.

In terms of suggested changes, the most frequent suggestions were that the syllabus and guidelines document needs to be specified and explained with the use of teaching examples and elaborations.

3.2 Business Education

3.2.1 Appropriateness

Survey items 8-12 and 26 referred to appropriateness. The results for items 8-12 are summarised in Display 8.

Display 8 indicates that, according to the teachers, the draft Business Education syllabus and guidelines document:

- matches the needs of students well
- matches the needs of teachers adequately
- reflects current and emerging views about business education adequately
- is adequately appropriate within the range of curriculum offerings in schools.

Display 8: Business Education survey items 8-12 – appropriateness (N=18)

To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
8does the rationale in the draft syllabus reflect current and emerging views	2	0	0	8	7	1
about education in the subject area?	11%	0%	0%	44%	39%	6%
do other aspects of the draft syllabus and guidelines reflect current and emerging	2	0	0	6	9	1
views about education in the subject area?	11%	0%	0%	33%	50%	6%
10do the draft syllabus and guidelines meet the needs of your students?	1	0	1	4	10	2
	6%	0%	6%	22%	56%	11%
do the draft syllabus and guidelines meet the needs of teachers of the subject	1	0	3	6	7	1
area?	6%	0%	17%	33%	39%	6%
12are the syllabus and guidelines appropriate within the range of current curriculum	1	0	1	7	8	1
offerings in schools?	6%	0%	6%	39%	44%	6%

Survey item 26 asked respondents to "comment on the appropriateness of the draft syllabus and guidelines as a component of the school curriculum". Of the 17 comments made, 10 were positive and 7 expressed concerns. None of these concerns related to the issue at hand but tended to deal with practical issues such as finding a place within the timetable or problems understanding the document itself.

The key participants were asked to what extent the rationale and the draft syllabus and guidelines in general reflect current and emerging views about business education.

For the rationale there was approval, but one interviewee suggested more emphasis on ethical practice, one wondered whether the language carried too much of a social science flavour and one praised the decreased emphasis on specific job skills.

For the syllabus and guidelines in general, there was diversity of opinion – one interviewee had high praise but the other two saw problems gaining acceptance of changes in emphasis from the past, for example:

• Teachers are split. They tell me they are fairly divided on whether or not it is too "SOSEy". Some want more technology. There is a skills versus a broader approach at the moment. Links with technology work well.

These results indicate that the key participants accept, with some reservations, the appropriateness of the Business Education draft syllabus and guidelines.

To sum up the results for appropriateness, the Business Education draft syllabus and guidelines document is quite appropriate in matching the needs of students, and adequate in terms of matching the needs of teachers. It reflects current and emerging views about business education and appropriateness within the range of curriculum offerings in schools.

3.2.2 Effectiveness

Survey items 13-17 and 27 referred to effectiveness. The results for items 13-17 are summarised in Display 9.

Display 9: Business Education survey items 13-17 – effectiveness (N=18)

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To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
13are the draft learning outcomes effective in describing the fundamental learnings	3	0	3	2	10	0
in the subject area?	17%	0%	17%	11%	56%	0%
14are the draft learning outcomes effective in describing a progression of learning?	1	0	3	7	6	1
	6%	0%	17%	39%	33%	6%
15are the draft syllabus and guidelines helpful for planning a course of study in the	0	0	1	5	11	1
subject area?	0%	0%	6%	28%	61%	6%
16are the draft syllabus and guidelines helpful in teaching a course of study in the	3	1	2	4	8	0
subject area?	17%	6%	11%	22%	44%	0%
17are the draft syllabus and guidelines helpful for assessment of students in the	1	2	6	7	2	0
subject area?	6%	11%	33%	39%	11%	0%

|--|

Display 9 indicates that, according to the teachers, the draft Business Education syllabus and guidelines document is:

- highly effective in describing the learnings that are fundamental for a course in business education
- quite effective in assisting teachers with teaching
- adequate in describing a progression of learning
- highly effective in assisting teachers with planning
- less than adequate in assisting teachers with assessment.

Survey item 27 asked for comments on the effectiveness of the draft syllabus in describing the fundamental learnings of the subject area. Of the 14 comments, half were positive without reservation; close to one-third (4) expressed doubts about the wording; and the others (3) raised issues of emphasis. For example:

- Fundamental learnings are well covered in the four strands.
- Very effective. Clearly expresses whilst remaining general enough to be implemented in ways appropriate to individual school settings.
- Some concern that the sophisticated wording of the outcomes misrepresents the depth of learning anticipated.
- The most useful part of the guidelines were the elaborations without these it is often difficult to ascertain what exactly is meant for the content area and outcomes
- Very good. While technology is integrated throughout, I feel there is still not enough inclusion – I have found some teachers try not to use any technology at all, and have said they don't need to because the syllabus does not state it clearly under each topic.

These comments tend to explain some of the lower ratings of effectiveness as probably due to problems with wording in the syllabus and guidelines document. Another factor may be the balance among the key learning areas or the content selection. As indicated above, some issues of scope and balance remain unresolved.

The school-based interview comments suggest that the outcomes seem the most effective component for teachers, especially with the help of elaborations.

The key participant interviews indicated that consultation with other subcommittees and strict guidelines on terminology for writers provided the mechanisms for taking the other subject areas into account in the development process. Justification of similarities and differences between the subject areas was apparently not an issue.

3.2.3 Efficiency

Survey Items 18 and 28 related to efficiency issues. The results for item 18 are shown in Display 10.

Display 10: Business Education survey item 18 – efficiency (N=18)

To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
18are the draft syllabus and guidelines easy to use?	0	1	2	10	5	0
	0%	6%	11%	56%	28%	0%

0% to 19% **20% to 39% 40% to 59%** 60% to 79%

The results for item 18 indicate that according to the teachers, the draft Business Education syllabus and guidelines document is:

adequately efficient in terms of being easy to use.

Survey item 28 called for comments on the efficiency of the draft syllabus and guidelines in assisting teachers with planning and teaching in the subject area. Of the 14 comments received, almost half (6) stressed the need for elaborations or specific guidance in the form of examples or sourcebooks. The other 8 comments were divided equally between criticism and praise. For example:

- I would like to see the elaborations and some sourcebooks etc available so that a few ideas can be thrown into the boiling pot.
- The inclusion of sourcebooks and guidelines would assist in the planning and teaching area. Sample modules or units of work would also assist here.
 Teachers will spend a lot of time working from the learning outcomes back to the development of courses and units of work - guidelines and samples would assist this process.
- I think the team was perhaps too narrow and have drafted a syllabus that
 presumes too much on the understanding of past business activities and
 classes and does not spell out enough of what needs to be considered under
 each section to enable students to "know and do" in practical areas or translate
 that to future possibilities in business.
- Very efficient. Well thought out and worthwhile.

The interview results stress the importance of elaborations and specific models or examples, as well as the difficulties in adapting to the outcomes approach.

3.2.4 Articulation and Positioning

Survey items 19 and 29 relate to this focus question. The results for item 19 are shown in Display 11.

Display 11: Business Education survey item 19 – articulation and positioning (N=18)

_(11=10)						
To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
19do the learnings and learning outcomes prepare students for transition to related Senior secondary studies?	2	1	3	9	3	0
	11%	6%	17%	50%	17%	0%

0% to 19% **20% to 39% 40% to 59%** 60% to 79%

Display 11 indicates that according to the teachers, the draft Business Education syllabus and guidelines document:

• is adequate in terms of preparation for senior secondary studies.

Item 29 asked for comments on "how well the draft syllabus and guidelines fit into the broader curriculum". Of the 12 comments, 10 were positive and 2 indicated concerns. For example:

- School has vertical curriculum so fitted in very easily.
- Quite well, they cover a lot of areas that the kids want to know, skills they need to survive out there. They are necessary areas of study for their general knowledge.
- Clear cross links are provided to other key learning areas.
- Difficulty in integrating with KLA areas. Is it technology, SOSE or out there on its own?
- There appears to be some difficulty here as a result of the overall structure of the KLAs. Schools which insist upon a form of delayed specialization, with students' subject choices restricted by the KLA structure, are forcing some students into subjects which hold little interest for them.

In the interviews, two questions dealt with compatibility with the other subject areas and preparation for senior secondary. The results were quite diverse, but a reasonable conclusion would be that articulation with other subject areas or with senior subjects is seen to a large extent as a matter of the way a school organises the curriculum.

The key participants saw the Business Education syllabus as compatible with those in the other subject areas. Comments on the extent to which the learnings and learning outcomes in the draft Business Education syllabus prepare students for transition to related senior secondary studies were:

- In Business Education the opportunity is there for schools and teachers to build worthwhile units in the junior years to lead into senior. In the 4 strands chosen there is sufficient for teachers to get students a taste of what's in the senior areas.
- Syllabus does that fairly well. Examples in back of syllabus give teachers ways to link to senior. Strands form nice link with senior.
- BOM is offered by few schools and yet there is heavy emphasis on it in the
 junior syllabus. This is good that there are not a lot of BOM senior schools, then
 the repetition will not be too great. Many teachers will not touch economics, only
 those kids who do senior economics. BCT not a lot in there, yet it is probably
 very popular in senior. Not a lot of legal studies coming out, yet business often
 covers legal studies under its umbrella.

Survey items 6 and 7 relate to positioning of units or courses of study within the school curriculum. Item 6 asked "If you have been developing courses or units of study based on the draft syllabus and guidelines, how are they positioned within the student's total curriculum?" One or more options could be selected. The results covered all options:

Year 8 introductory course of study

Year 8/9 course of study

Year 8/9/10 course of study

Year 9/10 course of study

Year 10 specialised course of study

3

Other 4

Have not been developing courses or units 2

Item 7 asked for more detail in relation to the answer to item 6. A wide range of positioning types emerged – across year levels, integrated within existing subjects and as the basis for a full program. A few examples were:

- We have been using the Bus Stud syllabus to develop a one-year elective course for Yr 9 with the expectation that in 2004 it will be more generally studied in Yrs 8 & 9.
- Our school uses a unitised approach. Students will be working in Units 1-3. We will incorporate the Business Education Syllabus into future units.
- We are currently restructuring the Years 9/10 program, to have a more enterprising nature. While doing this we have also looked at all the other areas of our course and looked at what outcomes fit into the content and skills that we would like students to achieve.
- Last year at another school I developed the new year 9/10 program based on the draft syllabus. This year I am HOD at my new school and we run a level 1 and level 2 course under vertical curriculum.
- In 2001 we developed an introductory course for year 8 students for a trimester. We are operating under the umbrella of technology, with year 8s rotating through Business Technology, Industrial Technology and Textile Technology.

Diversity was also a feature of the school-based interview results.

The results, taken together, seem to indicate good articulation with the other subject areas and the junior secondary school generally. The syllabus was not seen as providing preparation for senior secondary studies in any specific sense. The syllabus and guidelines document would seem to be robust with respect to a wide diversity of positioning within the school curriculum.

3.2.5 Suggested Changes

Survey item 31 asked "What changes (if any) do you suggest for the syllabus and guidelines?" Of the 10 suggestions received, 6 mentioned the need for specific examples or models for teachers. Some typical suggestions were:

- The inclusion of a sample unit for each strand developed for varying levels (eg level 4, level 6) and across levels (level 4 - 6) would assist teachers with planning and teaching. The inclusion of sample assessment instruments and ideas on how to record achievement of learning outcomes would also be advantageous.
- More examples to be included in guidelines.
- Possibly some anticipated student benchmark responses.

- The second draft is quite Economics heavy. Need detailed elaborations/ guidelines to better guide teachers as to what is expected. The development of some sample assessment pieces/folios to show teachers how to assess under the new program (outcomes based). Overall, I think the program is very good and flexible enough to fit in to most schools. A job well done.
- The legal and the globalisation or international trade, and it should be more compulsory.

These responses suggest that teachers need assistance, through the provision of elaborations, examples and models, interpreting the central learning outcomes and translating them into planning and assessment.

3.2.6 Summary of Findings

In terms of appropriateness, the results suggest that the Business Education draft syllabus and guidelines document:

- matches the needs of students well
- adequately reflects current and emerging views about business education
- matches the needs teachers adequately
- is adequately appropriate within the range of curriculum offerings in schools.

In terms of effectiveness, the results suggest that the draft syllabus and guidelines document seems:

- highly effective in describing the learnings that are fundamental for a course in business education
- highly effective in assisting teachers with planning
- quite effective in assisting teachers with teaching
- adequate in describing a progression of learning
- · less than adequate in assisting teachers with assessment.

The less favourable results for progression of learning or helpfulness for assessment seem to be due to problems with wording.

Consultation with other subcommittees and strict guidelines on terminology for writers provided the mechanisms for taking the other subject areas into account in the development process. Justification of similarities and differences between the subject areas was apparently not an issue.

In terms of efficiency, the draft Business Education syllabus and guidelines document seemed less than adequate in its ease of use for most teachers. Contributing factors to lower efficiency seem to be the absence of elaborations and specific models or examples, as well as the difficulties for teachers in adapting to the outcomes approach.

In terms of articulation and positioning, these seem largely a matter of the way a school organises the curriculum. The results taken together seem to indicate good articulation with the other subject areas and the junior secondary school generally, but the syllabus was not seen as providing preparation for senior secondary studies in any specific sense. The syllabus and guidelines document appears to be robust with respect to wide diversity in positioning within the school curriculum.

In terms of suggested change, the most frequent suggestions indicated more assistance for teachers, through the provision of elaborations, examples and models, enabling them to interpret the central learning outcomes and translate them into planning and assessment.

3.3 Home Economics Education

3.3.1 Appropriateness

Survey items 8-12 and 26 referred to appropriateness. The results for items 8-12 are summarised in Display 12.

Display 12 indicates that, according to the teachers, the draft Home Economics Education syllabus and guidelines document:

- reflects current and emerging views on home economics education very well
- · meets the needs of teachers well
- meets the needs of students adequately
- is adequately appropriate within the range of curriculum offerings in schools.

Display 12: Home Economics Education survey items 8-12 – appropriateness (N=26)

To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
does the rationale in the draft syllabus reflect current and emerging views	3	0	1	4	12	6
about education in the subject area?	12%	0%	4%	15%	46%	23%
do other aspects of the draft syllabus and guidelines reflect current and emerging	2	0	0	4	17	3
views about education in the subject area?	8%	0%	0%	15%	65%	12%
10do the draft syllabus and guidelines meet the needs of your students?	1	0	1	8	12	4
	4%	0%	4%	31%	46%	15%
do the draft syllabus and guidelines meet the needs of teachers of the subject	1	0	3	10	11	1
area?	4%	0%	12%	38%	42%	4%
12are the syllabus and guidelines appropriate within the range of current curriculum	1	0	1	10	10	4
offerings in schools?	4%	0%	4%	38%	38%	15%

0% to 19%	20% to 39%	40% to 59%	60% to 79%
1 070 10 1970	20 /0 tO 33 /0	40 /0 10 33 /0	00/010/3/0

Survey item 26 asked respondents to "comment on the appropriateness of the draft syllabus and guidelines as a component of the school curriculum". The responses were predominantly positive (17 of 22), but difficulties of various kinds were reported in 5 responses. Of the difficulties, only 2 related to the issue:

- In relation to our school program it is slightly difficult. We run a junior curriculum semester option. We can never run it as is because it does not fit into our structure. A student may choose a Home Ec subject once in three years.
- There still needs to be much consultation with other areas to ensure there is not too much doubling up.

Examples of the majority of comments are:

- I see this draft syllabus as fitting well with other aspects of the junior school curriculum.
- Provides an excellent base for developing our units of work from the KLAs in a Home Economics context.
- Very important, well overdue, very welcome.

These survey responses indicate that the Home Economics Education draft syllabus and guidelines document can form a very appropriate component of most schools' curriculum offerings.

The key participants were asked to what extent the rationale and the draft syllabus in general reflect current and emerging views about education. For the rationale, support was at a high level, supporting the survey results.

3.3.2 Effectiveness

Survey items 13-17 and 27 referred to effectiveness. The results for items 13-17 are summarised in Display 13.

Display 13: Home Economics Education survey items 13-17 – effectiveness (N=26)

(11-20)						
To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
13are the draft learning outcomes effective in describing the fundamental learnings	0	0	1	9	13	3
in the subject area?	0%	0%	4%	35%	50%	12%
14are the draft learning outcomes effective in describing a progression of learning?	2	0	1	10	11	2
	8%	0%	4%	38%	42%	8%
15are the draft syllabus and guidelines helpful for planning a course of study in the	0	0	2	9	14	1
subject area?	0%	0%	8%	35%	54%	4%
16are the draft syllabus and guidelines helpful in teaching a course of study in the	0	0	3	13	8	2
subject area?	0%	0%	12%	50%	31%	8%
17are the draft syllabus and guidelines helpful for assessment of students in the	3	2	8	8	5	0
subject area?	12%	8%	31%	31%	19%	0%

0% to 19%	20% to 39%	40% to 59%	60% to 79%
0,010.0,0		.0,010 00,0	0070 00 1070

Display 13 indicates that according to the teachers, the Home Economics Education draft syllabus and guidelines document seems:

- quite effective in describing the fundamental learnings for a course in home economics education
- quite effective in describing a progression of learning
- quite effective in assisting teachers with planning
- adequate in assisting teachers with teaching
- less than adequate in assisting teachers with assessment.

Survey item 27 called for comments on the effectiveness of the draft syllabus and guidelines in describing the fundamental learnings of the subject area. Of the 22 responses, more than half (13) were positive. The others were supportive but expressed reservations (5) or indicated problems in practice (4). The critical comments usually referred to lack of specificity in the outcomes or the need for elaborations and examples to facilitate their interpretation. For example:

- Effective, but without the elaborations, many would be ambiguous.
- Too difficult to actively use in our context. The actual philosophical information and the actual curricula are good but I have to manipulate it.
- If you are referring to the body of content that is to be studied, then new teachers would have a number of problems in trying to decide what is expected.
- Difficulty with concept of nesting in reference to outcomes.

- My staff are of the opinion that a lot of the outcomes are very broad, and some have asked exactly what it is we will be teaching!
- I found it difficult to write study plans. Examples of plans would have been helpful.
- Very clouded, open to too broad an interpretation.
- Very thorough brings together many principles of learning in one document and true to the underlying philosophy of Home Economics as a subject.
- I feel that the draft syllabus will be a great tool to use when planning and teaching home economics.
- Adequately describes and gives guidance to develop contemporary courses with depth not breadth.

To summarise the responses to survey item 27, most teachers found that the syllabus and guidelines effectively describe the fundamental learnings in home economics education, but some found difficulty translating them into practice because the outcomes were too general without elaborations and specific examples.

The school-based interview comments indicate that the rationale is very clear; the outcomes are effective – especially in conjunction with elaborations; but the assessment section lacks specificity. The guidelines for courses of study section was seen as effective.

The key participant interviews included two questions related to similarities and differences between the subject areas.

One question was "How did the development process take the other subject areas into account?" Responses indicated doubts over the effectiveness of the way this was done:

- In terms of early days, used to have meetings with other writers and talk about technology outcomes and structures for syllabuses. Good to sit and discuss issues. But some had ploughed on and done a lot of work and then asked to go to meetings that discussed this.
- Did not do this very well I don't think. Amazed that syllabuses turned out so well. Poorly conceived (under resourced, poorly managed) but a good example of people working well together. QSA now need to use the value of these documents to take the whole process further. It is a good way of stopping Years 11/12 driving down.
- We were more tied to Technology and HPE because we had to use outcomes from there. As a sub-committee we had so little time to get through Home Ec without looking at other areas.

Another question was "To what extent are similarities and differences between the subject areas guidelines justified?" The two responses here seem to indicate that this need not be a major concern.

- Fine. They are only guidelines.
- I don't think there should be a need to be the same or different. Strands, outcomes, elaborations this sort of structure should be similar and consistent. Provided they can find their way around the syllabus and guidelines that's OK. There will always be differences between how we do things and I hope there is.

Thus, while the key participants expressed doubts about the way the other subject areas were taken into account in the development process, they did not see similarities and differences to be a major concern.

3.3.3 Efficiency

Survey Items 18 and 28 related to efficiency issues. The results for item 18 are shown in Display 14.

Display 14: Home Economics Education survey item 18 – efficiency (N=26)

To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
18are the draft syllabus and guidelines easy to use?	0	0	3	16	6	1
	0%	0%	12%	62%	23%	4%

0% to 19% **20% to 39% 40% to 59%** 60% to 79%

The results for item 18 indicate that, according to the teachers, the draft Home Economics Education syllabus and guidelines is:

• less than adequate in terms of being easy to use.

Survey item 28 called for comments on the efficiency of the draft syllabus and guidelines in assisting teachers with planning and teaching in the subject area. The 24 relevant comments were divided equally between those who were unreservedly positive (8); those who referred to the need for examples or other forms of support to understand the document (8); and those who found the document difficult to understand and use (8). For example:

- Fairly useful, although we "picked out" the outcomes that suited the curriculum framework we devised.
- When comparing this syllabus with that of other KLA syllabus that I have had to study this one is just as easy to read etc.
- Some exemplars would be great, in particular for assessment and recording data.
- [Needs] some more opportunities for teachers to discuss implementing it to discuss ways to present it. Need opportunity to network.
- It is excellent if you are Home Ec. trained, but ideally in the real world we do not all have this luxury!
- Teachers are finding it very difficult to use and interpret too many different answers to questions from people who are supposed to KNOW the syllabus.

Clearly, the data indicate that the draft Home Economics syllabus and guidelines would be more efficient if accompanied by elaborations and examples for teachers as well as direct support in learning what it means and how to use it.

3.3.4 Articulation and Positioning

Survey items 19 and 29 relate to this focus question. The results for item 19 are shown in Display 15.

Display 15 indicates that, according to the teachers, the draft Home Economics Education syllabus and guidelines document is:

 quite adequate in preparing students for transition to related senior secondary studies. Display 15: Home Economics Education survey item 19 – articulation and

positioning (N=26)

To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
19do the learnings and learning outcomes prepare students for transition to related	4	0	2	8	11	1
Senior secondary studies?	15%	0%	8%	31%	42%	4%

0% to 19%	20% to 39%	40% to 59%	60% to 79%
0 /0 10 10 /0	20/01000/0	-10 /0 to 00 /0	00/0 10/0

Item 29 asked for comments on "how well the draft syllabus and guidelines fit into the broader curriculum". Nearly all (21) of the 23 relevant responses were positive, the other 2 comments relating to difficulties finding a place within the school's curriculum organisation.

In the school-based interviews, two questions dealt with compatibility with the other subject areas and preparation for future studies in senior secondary. Responses were positive and support the survey results, in that the draft Home Economics syllabus and guidelines document articulates well with the other subject areas and with senior secondary studies.

The key participants' responses seemed to express the belief that compatibility with the other five subject areas is not an important issue. The learnings and learning outcomes were seen as providing good preparation for senior secondary studies.

Survey items 6 and 7 relate to positioning of units or courses of study within the school curriculum. Item 6 asked "If you have been developing courses or units of study based on the draft syllabus and guidelines, how are they positioned within the student's total curriculum?" One or more options could be selected. The results showed that the only option not indicated was the Year 10 specialised course:

Year 8 introductory course of study 3

Year 8/9 course of study 2

Year 8/9/10 course of study 9

Year 9/10 course of study 7

Year 10 specialised course of study

Other 7

Have not been developing courses or units 1

Item 6 asked for more detail in relation to the answer to item 6. A range of positioning types emerged – across year levels, integrated within existing subjects and as the basis for a full program. A selection of responses is shown:

- Developing units of work that are semester-based for the Year 8 10 time frame but they may only do one semester or they may do six.
- At our school we have Home Ec from Yr 4 so the units we have planned are just a continuation of our course.
- We run semester units of junior classes (incorporating 8, 9 and 10 students in one class).
- The program I have written is for Years 8 & 9. I have gone for a transitional course to link in with grade 10. For my Year 10 Home Ec course I have been looking at the senior course and have watered it down for the Year 10.

- I actually have a Year 7 introductory course on textiles and a food full semester course. Also an 8/9/10 textiles course that I am going to run and an 8/9/10 food study course.
- Following whole school decision on 'Curriculum Futures' we will be implementing the SAS -in a unitised approach - in Year 8 & 9 in 2003.
- Our school is a new school and introduced a unitised vertical curriculum last Year. All our junior units needed to be written from scratch, so we used outcomes from the syllabus to do this.
- We have been using this syllabus since the start of 2001 for middle schooling. Units are developed from syllabus and assessed and reported in outcomes.
- Year 8 students study home economics for one semester and we used the new syllabus to plan this course.

The school-based interviews revealed similar diversity in positioning of courses or units, indicating adaptability to a very wide range of positioning options.

3.3.5 Suggested Changes

Survey item 31 asked, "What changes (if any) do you suggest for the syllabus and guidelines?" More than half of the suggestions (12) called for more specific guidance, including models and examples, with three quarters of these (9) specifically mentioning assessment.

Other suggestions included simplified language (3), or access to support networks or inservice (2). For example:

- I think there needs to be more clarity in assessment, what's expected, the amount of evidence we need to collect needs to be clarified. Some sample resources they consider to be perfect.
- No changes as such other than possible tidying up of the wording in various sections but there needs to be some back up examples of units of work and processes for assessing and collecting data to match the outcomes.
- More information on assessment and outcome education. Unit examples with ways of assessing and observing outcomes. Examples of how to structure a course, examples of ways to record outcomes and profiles.
- A very heavy document to read and unpack. Extremely information rich. Would certainly be something that many teachers, especially those unfamiliar with the KLAs, would need to be walked through.

These responses reinforce the need for teachers to have assistance, through the provision of elaborations, examples and models, to be able to interpret the syllabus and, in particular, to design assessment processes.

3.3.6 Summary of Findings

In terms of appropriateness, the results suggest that the Home Economics Education draft syllabus and guidelines document:

- reflects current and emerging views about home economics education very well
- · meets the needs of teachers well
- meets the needs of students adequately
- is adequately appropriate within the range of curriculum offerings in schools.

In terms of effectiveness, the results suggest that the draft Home Economics Education syllabus and guidelines document is:

- quite effective in describing the fundamental learnings for a course in home economics education
- quite effective in describing a progression of learning
- quite effective in assisting teachers with planning
- adequate in assisting teachers with teaching
- less than adequate in assisting teachers with assessment.

The interview results indicate that the central learning outcomes effectively describe the fundamental learnings in home economics education and are moderately effective in describing a progression of learning, but can be difficult to translate into practice.

Teachers reported seeing the outcomes as too general without access to elaborations and specific examples to explain them. The draft syllabus is seen as limited in its helpfulness for assessment, being overly general.

The key participants expressed doubts about the way the other subject areas were taken into account in the development process, but did not see similarities and differences between the subject areas to be a major concern.

In terms of efficiency, the results indicate that the draft Home Economics Education syllabus and guidelines document is less than adequate. Clearly, teachers believe it would be more efficient if it were accompanied by elaborations and examples as well as direct support with learning what it means and how to use it.

In terms of articulation and positioning, the draft syllabus appears robust with respect to diversity in positioning within the school curriculum and articulates well with the other subject areas, with the junior secondary school generally and with senior secondary studies.

In terms of suggested change, the results reinforce the need for teachers to have assistance, through the provision of elaborations, examples and models for interpreting the syllabus, planning for teaching and designing assessment processes.

3.4 Information and Communication Technology Education

3.4.1 Appropriateness

Survey items 8-12 and 26 referred to appropriateness. The results for items 8-12 are summarised in Display 16.

Display 16 indicates that, according to the teachers, the draft Information and Communication Technology Education syllabus and guidelines document:

- is highly appropriate to current curriculum offerings in schools
- has a rationale that is highly appropriate in reflecting current and emerging views in information and communication technology education
- is generally quite appropriate in reflecting current and emerging views
- adequately matches the needs of students and teachers.

Display 16: Information and Communication Technology Education survey items

8-12 – appropriateness (N=23)

To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
3does the rationale in the draft syllabus reflect current and emerging views	1	1	1	3	13	4
about education in the subject area?	4%	4%	4%	13%	57%	17%
do other aspects of the draft syllabus and guidelines reflect current and emerging	1	0	1	5	14	2
views about education in the subject area?	4%	0%	4%	22%	61%	9%
10do the draft syllabus and guidelines meet the needs of your students?	4	0	2	9	5	3
	17%	0%	9%	39%	22%	13%
do the draft syllabus and guidelines meet the needs of teachers of the subject	0	1	3	8	9	2
area?	0%	4%	13%	35%	39%	9%
12are the syllabus and guidelines appropriate within the range of current curriculum	1	1	1	4	14	2
offerings in schools?	4%	4%	4%	17%	61%	9%

Survey item 26 asked respondents to "comment on the appropriateness of the draft syllabus and guidelines as a component of the school curriculum". Three quarters of the responses were positive (15 of 20). Difficulties of various kinds were reported in 5 responses with no apparent pattern. For example:

- Highly readable and concise. Flexible in meeting the needs of different teachers.
- Our school has implemented many of the new syllabi. They seem to have a common thread, and this document fits well within the overall curriculum.
- I think it is very well structured, although very hard to follow without human explanation.
- It is generalist; it does not have many specifics and is too slow to come, by the time it is running as a syllabus it will need to be upgraded.

The key participants were asked to what extent the rationale and the draft syllabus and guidelines in general reflect current and emerging views about education in information and communication technology. The one response here was:

• Very well in its current form. Structure and strands fit well together. There is a great deal of cohesion to it. Meets own criteria of stand alone strands or strands that can be integrated.

3.4.2 Effectiveness

Survey items 13-17 and 27 referred to effectiveness. The results for items 13-17 are summarised in Display 17.

Display 17 indicates that, according to the teachers, the draft Information and Communication Technology Education syllabus and guidelines document:

- is highly effective in describing the fundamental learnings for a course in information and communication technology
- adequately describes a progression of learning
- is adequate in assisting teachers with planning and teaching
- is less than adequate in assisting teachers with assessment.

Display 17: Information and Communication Technology Education survey items 13-17 – effectiveness (N=23)

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To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
13are the draft learning outcomes effective in describing the fundamental learnings	0	0	2	5	14	2
in the subject area?	0%	0%	9%	22%	61%	9%
14are the draft learning outcomes effective in describing a progression of learning?	1	0	1	9	10	2
	4%	0%	4%	39%	43%	9%
15are the draft syllabus and guidelines helpful for planning a course of study in the	0	1	1	12	9	0
subject area?	0%	4%	4%	52%	39%	0%
16are the draft syllabus and guidelines helpful in teaching a course of study in the	2	1	2	8	9	1
subject area?	9%	4%	9%	35%	39%	4%
17are the draft syllabus and guidelines helpful for assessment of students in the	0	1	5	10	7	0
subject area?	0%	4%	22%	43%	30%	0%

Survey item 27 called for comments on the effectiveness of the draft syllabus and guidelines in describing the fundamental learnings of the subject area. Of the 20 comments, 70% (14) were positive. No pattern was evident in the problems listed in the other 6 responses.

The school-based interviews indicate that the rationale, outcomes and assessment sections are effective.

The key participant interviews included questions related to similarities and differences between the subject areas. The way that the development process took the other subject areas into account was described this way:

 As chair of the subject area subcommittee and member of subject area committee (one level up) I got information and took it down to the subcommittee. Project officers had a well-structured operation with lots of information flow to us. I fed this to my sub-committee. Had a couple of links that allowed us to take information from one committee to another.

3.4.3 Efficiency

Survey Items 18 and 28 related to efficiency issues. The results for item 18 are shown in Display 18.

Display 18: Information and Communication Technology Education survey item 18 – efficiency (N=23)

To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
18are the draft syllabus and guidelines easy to use?	1	2	3	11	3	3
	4%	9%	13%	48%	13%	13%

Display 18 indicates that, according to the teachers, the draft Information and Communication Technology Education syllabus and guidelines document:

• is adequately efficient in terms of being easy for teachers to use.

Survey item 28 called for comments on the efficiency of the draft syllabus and guidelines in assisting teachers with planning and teaching in the subject area. The 20 responses were mixed, with just over half (11) being quite positive and the others referring to a range of problems or issues. Examples of positive responses were:

- Very efficient a good structure to build on, well expressed.
- Used properly across all schools, it would be the best tool to help ensure consistency across schools within the subjects it could be used to address.
- The strands are easy to plan from it is obvious which are best aligned with particular year levels and abilities in developing a course of study or integrating with other KLAs.

Reported problems in using the draft were diverse, including the need for school-level change, the necessity for teacher support in the initial stages, over generality, the need for elaborations, insufficient links with Technology key learning area, lack of depth or difficulty in aligning with current courses:

- The difficulty is changing the present way we are teaching so that we are more in line with the thrust of this course of study.
- It would have been difficult to use had we not had the excellent briefings at the AISQ meetings.
- Teachers in many schools I visit still have difficulties interpreting the learning outcomes, which has made it difficult for them to plan and implement an effective work program. Unless teachers are familiar with a lot of the ICT jargon, they struggle to correctly interpret the outcomes stated.
- Comprehensive but in some ways airy.
- Again further elaborations on learning outcomes would have assisted with my understanding of what was required by students.
- Syllabus seems to be of little use particularly as the opportunity to link into the Technology KLA has not been utilised.
- Dependent on the approach taken by individual teachers/subjects with regard to integration, as a stand alone subject it lacks depth.
- We have identified very few ICTE outcomes in our current courses. A major rewrite is required.

The school-based interview did not shed any light on the issue of efficiency.

To sum up, the results on efficiency reveal a wide range of opinion, but indicate moderate efficiency in terms of ease of use, without any consistent explanation for teachers' difficulties with the draft. This result may be an indication of diversity of viewpoint among the information and communication technology teaching community, or it could indicate a range of relatively minor problems with the syllabus. Further investigation would be necessary to gain insight into the nature of the problems.

3.4.4 Articulation and Positioning

Survey items 19 and 29 relate to this focus question. The results for item 19 are shown in Display 19.

Display 19: Information and Communication Technology Education survey item

19 – articulation and positioning (N=23)

To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
19do the learnings and learning outcomes prepare students for transition to related	3	2	2	6	7	3
Senior secondary studies?	13%	9%	9%	26%	30%	13%

0% to 19%	20% to 39%	40% to 59%	60% to 79%

In Display 19, the 23 responses are spread across the full range, with just over half (13) indicating either 'some extent' or 'great extent'. Diversity of opinion is evident. Display 19 indicates that according to the teachers, the draft Information and Communication Technology Education syllabus and guidelines document:

• is adequate in preparing students for transition to related senior studies.

Item 29 asked for comments on "how well the draft syllabus and guidelines fit into the broader curriculum". Of the 18 relevant comments, two thirds (12) were positive, indicating good articulation. The other 6 comments expressed doubts or raised issues of various kinds with no apparent pattern emerging.

Examples of positive comments were:

- Our Diocese is using the document to facilitate the process of ICT integration across the curriculum. It provides sufficient assistance in this process.
- Meets an important need and articulates into the senior curriculum nicely.
- ... the syllabus can be used to provide a framework of information, communication and technologies across other subject areas adequately.

Examples of comments raising doubts or issues were:

- Again, there is little specifics in it and it's in some ways difficult for the process to keep updating itself.
- Very difficult to implement/justify under Technology umbrella in KLAs. Would be better if strong links were developed with Technology learning outcomes.
- Our school is still coming to grips with outcomes based education. Although
 cross-curricular learning is a priority, I feel we are still a little way off making it a
 reality.

The school-based interview results supported the survey results, in that the draft Information and Communication Technology Education syllabus and guidelines document articulates well with the other subject areas and with senior secondary.

Survey items 6 and 7 relate to positioning of units or courses. Item 6 asked to select one or more options showing how their courses or units based on the draft syllabus and guidelines were positioned within the student's total curriculum. The results spanned all alternatives except the Year 10 specialised course:

Year 8 introductory course of study 4

Year 8/9 course of study 2

Year 8/9/10 course of study 8

Year 9/10 course of study 8

Year 10 specialised course of study 0

Other 2

Have not been developing courses or units 2

Item 6 asked for more detail in relation to the answer to item 6. A range of positioning types emerged – across year levels, integrated within existing subjects, within a unitised curriculum, as electives, to add to existing programs and as the basis for new programs. A selection of the responses is shown:

- To enrich/validate Year 8 IT program. To provide outcomes for Media-Technology Course in development with year 9/10.
- I have implemented the ICTE syllabus into year 8 and 9. In year 10, I have implemented units, but they will not be assessed using outcomes till next year.
- This year we have introduced a full-year Year 8 IT course, which is introductory, and a half-year Year 9 course which follows on from a half-year Year 8 course last year.
- We offer a unitised curriculum. Students commence these units in second semester Year 8 and complete this process at the end of semester 1 Year 10.
 Semester 2 Year 10 are units that are based on preparation for senior subjects.
- Two units of work have been set at this stage 1 Year 8 combining Science and Technology and 2 - Year 9&10 combining SOSE and Technology. The units developed are each eight weeks and have a combined assignment as assessment.
- I have used the syllabus to help define the style and level of content we should use for year 8 and 9. However, the 2 years of the unit are based around New Basics requirements.
- We run electives in our multi-age year 9/10 structure and this is one of the electives under the subject heading of technology.
- Course of study in Multimedia and Microworlds which is now also being developed into Robotics.
- I have been developing units of work designed to be integrated with other KLAs, SAS with the thinking of ICT being an integrating device that facilitates the effective use of computers in a middle schooling approach.
- For many years, this school has offered junior school computing as either Business Computing (replacing Typewriting) and as Computer Studies. This year we have tried to include strands such as Digital Communication and Technology within our present course e.g. when doing PowerPoint, Publisher etc.

To sum up, the results on articulation and positioning indicate that the draft Information and Communication Technology Education syllabus and guidelines document articulates well with the other subject area syllabuses and with the school curriculum generally, and articulates adequately with relevant studies in Years 11 and 12. There is good evidence that the draft syllabus is adaptable to a very wide variety of curriculum organisation.

3.4.5 Suggested Changes

Survey item 31 asked "What changes (if any) do you suggest for the syllabus and guidelines?" Of the 14 relevant suggestions, over 70% (10) called for specific assistance for teachers, such as more elaborations, examples and models. One of the other suggestions was to start again.

- Bundle with the syllabus, custom software for tracking student progresss.
- Elaborate the elaborations, supply source books, example units and teacher inservice on interpretation.
- Further elaborations on learning outcomes or examples so that teachers have a
 better understanding of what is required. When you are only relying on written
 text to convey meaning it may not be clearly understood. I found the Business
 draft syllabus and guidelines a lot easier to understand what was required and
 implement programs of study.

- I perceive it to be a good document for use in schools. It may be necessary to
 include more exemplar units of works in accompanying documentation. The
 development group needs also to be aware that not all schools are following
 "outcomes" or for that matter any other one approach to learning. This has
 caused a number of schools, particularly in the private sector, to "switch off" the
 SAS.
- It is best if it lists some suggestive areas, provides examples of specifics based on what teachers throughout the state are currently doing. For example video technology references are very old technology is always changing.
- More examples in guidelines.
- More sample units demonstrating how integration across the curriculum can occur.
- More support materials lots of professional development provided by QSA.
- No changes as such, simply extra additions to help teachers plan and prepare assessment with more ease - examples etc.
- Sourcebook guidelines and modules.
- In the strand "interfacing with machines" the key concepts/indicators could be condensed to three. As in the other three strands the key concepts/indicators address, the nature, the technique and the social and ethical. I thought for consistency the "interfacing with machines" strand key concepts/indicators could be revisited.
- Need basic skills in technology included somewhere or they will be lost e.g. keyboarding, computer concepts, etc.
- Official adoption and promotion by EQ.
- Try again, please.

As in the other subject areas, responses reinforce the need for teachers to have assistance, through the provision of elaborations, examples and models, to be able to interpret the syllabus and design assessment processes.

3.4.6 Summary of Findings

In terms of appropriateness, the results suggest that:

- the rationale is highly appropriate in reflecting current and emerging views in information and communication technology education
- the syllabus and guidelines document generally is quite appropriate in reflecting current and emerging views
- the draft adequately matches the needs of students and teachers
- the draft syllabus and guidelines document is highly appropriate to current curriculum offerings in schools.

In terms of effectiveness, the results suggest that the draft Information and Communication Technology Education syllabus and guidelines document:

- is highly effective in describing the fundamental learnings for a course in information and communication technology
- adequately describes a progression of learning
- is adequate in assisting teachers with planning and teaching
- is less than adequate in assisting teachers with assessment.

In terms of efficiency, the results indicate less than adequate efficiency in terms of ease of use, without any consistent explanation for teachers' difficulties with the draft.

In terms of articulation and positioning, the results indicate that the draft Information and Communication Technology Education syllabus and guidelines document articulates well with the other subject areas and the school curriculum generally, and articulates adequately with relevant studies in Years 11 and 12. There is evidence that the draft syllabus is adaptable to a very wide variety of curriculum organisation.

In terms of suggested change, the results reinforce the need for teachers to have assistance, through the provision of elaborations, examples and models, to be able to interpret the syllabus and design assessment processes.

3.5 Industrial Technology and Design Education

3.5.1 Appropriateness

Survey items 8-12 and 26 referred to appropriateness. The results for items 8-12 are summarised in Display 20.

Display 20 indicates that, according to the teachers, the Industrial Technology and Design Education draft syllabus and guidelines document:

- reflects current and emerging views in the subject area very well
- matches the needs of students very well
- is very appropriate within the range of curriculum offerings in schools
- matches the needs of teachers adequately.

Display 20: Industrial Technology and Design Education survey items 8-12 – appropriateness (N=18)

To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
8does the rationale in the draft syllabus reflect current and emerging views	1	0	2	3	11	1
about education in the subject area?	6%	0%	11%	17%	61%	6%
do other aspects of the draft syllabus and guidelines reflect current and emerging	1	0	1	3	12	1
views about education in the subject area?	6%	0%	6%	17%	67%	6%
10do the draft syllabus and guidelines meet the needs of your students?	0	0	1	4	11	2
	0%	0%	6%	22%	61%	11%
do the draft syllabus and guidelines meet the needs of teachers of the subject	0	0	2	12	3	1
area?	0%	0%	11%	67%	17%	6%
12are the syllabus and guidelines appropriate within the range of current curriculum	0	0	2	4	11	1
offerings in schools?	0%	0%	11%	22%	61%	6%

Survey item 26 asked respondents to "comment on the appropriateness of the draft syllabus and guidelines as a component of the school curriculum". Of the 18 responses, over 70% (13) were positive. Of the others, 4 cited difficulties – too new, not specific enough, not aligned with student interests, school staying with KLA – and 1 rejected the idea of separate syllabuses. For example:

- Yes it seems to fit well into the school curriculum.
- The syllabus and guidelines have provided an appropriate platform for the introduction and teaching of the technology syllabus as we currently know it.

- Very appropriate provides an excellent framework for development of a work programme, but difficult to interpret without elaborations.
- The syllabus is appropriate to the needs of teachers in this curriculum area as many need a transition from the old "manual arts" to Technology.
- Aspects of this are too broad and general. Teachers need in these cases where new initiatives are being sought, "classroom level ideas" when trying new stuff. Guidelines are too ambiguous and not specific to actual learning outcomes.
- The school is focusing on the Technology KLA and we therefore can only tap into those learning outcomes from ITD that fit.

The key participants saw the rationale as innovative, appropriate in part, but not well expressed. The syllabus and guidelines in general drew reserved approval from the interviewees:

- Pretty much in line with technology KLA syllabus and it therefore meets new views. Aligned with literature and practice internationally.
- Do to a certain extent. Three strands reflect to a certain extent what will happen in IT & D. Three strands are appropriate and you can build a good course of study from that.
- Syllabus: Content is limited because it has been culled due to too many pages; not conducive to reflecting current and emerging views. We acknowledge that the current syllabus has significant potential to support innovative respected curriculum practice.

The key participants' responses indicate that the basis of an appropriate syllabus is there, but more development is needed.

3.5.2 Effectiveness

Survey items 13-17 and 27 referred to effectiveness. The results for items 13-17 are summarised in Display 21.

Display 21: Industrial Technology and Design Education survey items 13-17 – effectiveness (N=18)

C11CC11VC11C33 (14=10)						
To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
are the draft learning outcomes effective in describing the fundamental learnings	0	0	4	5	8	1
in the subject area?	0%	0%	22%	28%	44%	6%
14are the draft learning outcomes effective in describing a progression of learning?	1	0	1	6	7	3
	6%	0%	6%	33%	39%	17%
15are the draft syllabus and guidelines helpful for planning a course of study in the	1	1	3	9	3	1
subject area?	6%	6%	17%	50%	17%	6%
16are the draft syllabus and guidelines helpful in teaching a course of study in the	1	0	5	6	5	1
subject area?	6%	0%	28%	33%	28%	6%
17are the draft syllabus and guidelines helpful for assessment of students in the subject area?	1	3	5	4	5	0
	6%	17%	28%	22%	28%	0%

Display 21 indicates that, according to the teachers, the draft Industrial Technology and Design Education draft syllabus and guidelines document:

- adequately describe the fundamental learnings in the subject area
- adequately describe a progression of learning
- adequately assist teachers with planning, teaching and assessment.

Survey item 27 called for comments on the effectiveness of the syllabus and guidelines in describing the fundamental learnings of the subject area. Of the 17 relevant responses, nearly all (14) were positive, with 8 of these strongly positive. The other (3) responses cited problems with nestedness, a need for elaborations and a lack of specificity:

- Difficulty with concept of nesting in reference to outcomes.
- With the elaborations it makes sense, without it is not a stand-alone document as many of the outcomes are 'motherhood' statements.
- A little more obscure in its application.

The school-based interview comments, like the survey results, indicate diversity of opinion. The rationale is supported or rejected. The outcomes seem adequate in describing the basic learnings but difficult to use. The assessment section seems to lack sufficient specific guidance. The guidelines for courses of study may be adequate.

The key participants' interview responses indicate that the limited consultation among writers, subcommittees and the project team provided the mechanism for taking other subject areas into account. The different contexts in which the five subject areas address outcomes were seen to provide sufficient justification for similarities and differences between the subject areas.

3.5.3 Efficiency

Survey Items 18 and 28 related to efficiency issues. The results for item 18 are shown in Display 22.

Display 22: Industrial Technology and Design Education survey item 18 – efficiency (N=18)

To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
18are the draft syllabus and guidelines easy to use?	1	0	7	7	2	1
	6%	0%	39%	39%	11%	6%

0% to 19%	20% to 39%	40% to 59%	60% to 79%

Display 22 indicates that, according to the teachers, the Industrial Technology and Design Education draft syllabus and guidelines document:

• is less than adequate in terms of being easy for teachers to use.

Survey item 28 called for comments on the efficiency of the draft syllabus and guidelines in assisting teachers with planning and teaching in the subject area. The results explain most of the low efficiency ratings as due to difficulty in developing an understanding of the syllabus, in some instances explained by the language used. Two-thirds of the responses (12 of 18) were along these lines, for example:

- The biggest difficulty was getting to know the syllabus to be able to navigate around it enough to produce our program. This is not to say however that there was too much information in the publication.
- You have to get your head around the learning outcomes first, the whole lot of them, and the levels. Once you have that, the whole thing is there and the elaborations put it into place.
- Terminology is ineffective at times as terms are used generally and not specifically.
- Very clouded open to too broad an interpretation.
- Outcomes etc are too long winded.

The school-based interviews suggested organisational structure as a problem:

 Not user friendly at all. No structure provided at all. This needs to be a support document. Should be a safety net for those teachers and students who struggle with an open-ended approach.

To sum up the results on efficiency, the Industrial Technology and Design Education draft syllabus and guidelines seems less than adequate, probably because teachers had difficulty developing an understanding of the syllabus.

3.5.4 Articulation and Positioning

Survey items 19 and 29 relate to this focus question. The results for item 19 are shown in Display 23.

Display 23: Industrial Technology and Design Education survey item 19 – articulation and positioning (N=18)

	•					
To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
19do the learnings and learning outcomes prepare students for transition to related	1	1	5	4	3	4
Senior secondary studies?	6%	6%	28%	22%	17%	22%

0% to 19%	20% to 39%	40% to 59%	60% to 79%

Display 23 indicates that, according to the teachers, the draft Industrial Technology and Design Education syllabus and guidelines document:

• is adequate in terms of preparing students for related senior secondary studies, although there was diversity of opinion with both high and low ratings.

The 18 responses are spread across the full range, with similar numbers indicating 'limited extent' (5) and 'great extent' (4). This result may indicate diversity of opinion among teachers about the role of junior secondary studies in this subject area in preparing for senior secondary.

Item 29 asked for comments on "how well the draft syllabus and guidelines fit into the broader curriculum". Of the 15 relevant responses, most (12) thought it fitted well, but the other responses displayed no apparent pattern:

- We are trying. We have been talking about "rich tasks" and how we can address these across the curriculum.
- Again I don't think they should have separate syllabus.
- Maybe more feedback from teachers and industry would have been helpful.

The school-based interview results on articulation with senior secondary were not as diverse as the survey results, indicating good levels of compatibility with the broader school curriculum.

The key participants indicated good articulation with senior secondary, and their responses indicated that the syllabus is compatible with those in the other subject areas, though perhaps somewhat manufactured – there are good reasons for differences between the subjects:

- Different because of content differences. Does leave technology area a bit fuzzy because all would claim they can give all technology outcomes. May leave large technology chunks out.
- Hard to get the essence of each area and write it down or there would not be value in separate subjects. Format is the same. Very little commonality across the 5 subjects. Outcomes mostly different. All use technology practice.

Overlap was caused through restrictions surrounding language terminology –
writers were told "what" terminology had to be used. This constricted writers
and subcommittees in the sense that much of the quality content was denied,
because previously written syllabuses had first right to the use of terminology.
Language used in the Technology KLA Syllabus was disallowed, which
impacted on our ability to participate in meaningful curriculum practice.

The responses for preparation for senior secondary indicate good articulation.

Survey items 6 and 7 relate to positioning of units or courses of study within the school curriculum. Item 6 asked "If you have been developing courses or units of study based on the draft syllabus and guidelines, how are they positioned within the student's total curriculum?" One or more options could be selected. The results spanned all possibilities:

Year 8 introductory course of study 5

Year 8/9 course of study 6

Year 8/9/10 course of study 5

Year 9/10 course of study 4

Year 10 specialised course of study 2

Other 1

Have not been developing courses or units 0

Item 6 asked for more detail in relation to the answer to item 6. A range of positioning types emerged – across year levels, integrated within existing subjects, within a unitised curriculum, as introductory units and as the basis for new programs. A selection of the responses is shown:

- We run a vertical timetable. In the first level Systems and Controls are a mixture of years 8/9.
- I have trialed some units of work in early Year 8 and 9 only.
- Design Folios have used many of the suggested aspects of the syllabus as a basis upon which to develop and organise the design process further.
- Our school is currently trialling a grade 8 unit of work based on the Technology KLAs / ITD SAS. I have taken one of the other units of work in the current grade 9/10 years and integrated learning outcomes into that program.
- 3 Year 8 classes; 1 Year 9 Graphics; 3 Year 9 Product Design; 2 Year 9 Systems.
- Year 8 we have the students for a semester so they get a brief taste of IT&D.
 We run IT&D as product design & manufacture and Industrial systems and control as one subject and Graphical Communication as a separate subject.
 Both areas are based on the learning outcomes from the subject area syllabus.
- Our Year 8s are doing two 70-minute lessons per week for one term using parts of the syllabus in a workshop based ITD course.

To sum up the results on articulation and positioning, the draft Industrial Technology and Design Education syllabus and guidelines document articulates well with the other subject area syllabuses, with the school curriculum generally and with relevant studies in Years 11 and 12. There is good evidence that the draft syllabus is adaptable to a wide variety of curriculum organisation.

3.5.5 Suggested Changes

Survey item 31 asked, "What changes (if any) do you suggest for the syllabus and guidelines?" The 15 responses included suggestions for more examples or elaborations (3) initial support or inservice (3) changes in the organisational format (3) and a range of other specifics (6). An example of each type of suggestion follows:

- As previously mentioned, what is and can be done, examples of what other educational institutions are doing "in the classroom".
- Individual school inservice on a more personal (how does it effect my classes) focus.
- I only really found appendices 1 and 2 after I completed my program. I think they need to be referred to more clearly in the 'learning outcomes' section of the text even though they may be referred to somewhere else in the text. These could be expanded to include more of the P-10 technology syllabus to be more useful. I seemed to spend a lot of time flipping from the technology syllabus to the IT&D syllabus and back.
- The rationale needs to be changed in places, as it seems to shun away from the graphical side of things, and in the 3rd paragraph form needs to be added to the quality of design products.

3.5.6 Summary of Findings

In terms of appropriateness, the results indicate that the draft Industrial Technology and Design Education syllabus and guidelines document:

- reflects current and emerging views in the subject area very well
- matches the needs of students very well
- matches the needs of teachers adequately
- is very appropriate within the range of curriculum offerings in schools.

In terms of effectiveness, the results indicate that the Industrial Technology and Design Education draft syllabus and guidelines:

- adequately describe the fundamental learnings in the subject area
- adequately describe a progression of learning
- adequately assist teachers with planning, teaching and assessment

According to the interviews with key participants, the development process took the other subject areas into account through limited consultation among writers, subcommittees and the project team. Differences between the subject areas guidelines were seen to be sufficiently justified by the different contexts in which the five subject areas address similar outcomes.

In terms of efficiency, the results indicate that the draft is less than adequate in terms of ease of use in schools, mainly because teachers experienced difficulty in developing an understanding of the syllabus, often because of the language used or the organisational structure.

In terms of articulation and positioning, the draft syllabus and guidelines document seems to articulate well with the broader junior secondary curriculum but only to a low extent with senior studies. There was diversity of opinion among teachers about the role of junior secondary studies in this area in preparing for senior secondary. The draft seems able to be positioned within a range of different types of school curriculum organisation.

In terms of possible changes, the most frequent suggestions referred to aspects of the organisational format or the need for more specifics such as elaborations or examples for teachers.

3.6 Overall Summary of Findings for the Five Subject Areas

Display 24 provides a concise summary of the findings of the evaluation for each subject area in relation to focus questions 1 to 10. The findings for focus question 11 (positioning) are similar for all subject areas, namely that the draft syllabus and guidelines documents appeared quite robust with respect to a range of positioning options across Years 8 to 10. The findings for focus question 13 (suggested changes) are similar for all subject areas. The most frequently suggested changes were:

- be more specific in the wording of outcomes
- provide elaborations and examples for planning, teaching and assessment
- provide more specific guidance for assessment.

Display 24 indicates fairly high levels of consistency across the subjects, with:

- adequate or better results on most aspects except assistance with assessment
- comparatively higher results for
 - articulation with other subject areas
 - appropriateness except for meeting the needs of teachers
- comparatively lower results for
 - o assistance with assessment
 - efficiency for planning
 - absence of concerns about similarities or differences between the subjects.

A few points of difference between the subject areas are evident:

- for Business Education, a tendency for lower appropriateness but higher effectiveness for planning and teaching
- for Industrial Technology and Design Education, a tendency towards higher appropriateness but lower effectiveness.
- for Home Economics Education, a tendency towards higher results on most aspects
- for Agriculture Education, a tendency towards lower results on most aspects.

Less than adequate ratings for preparation for senior secondary studies should be weighed against interview comments that this is not seen as an important function for courses of study in the subject areas, and that preparation for senior occurs in terms of study and learning skills rather than exposure to specific skills or content.

In summary, the draft syllabuses and guidelines in the five subject areas seem to be quite appropriate and generally effective. There is general agreement with the direction taken in the rationale. The syllabus and guidelines reflect the current and emerging views about education in the subject area well and seem to meet the needs of students. Each subject area seems to be appropriate to current curriculum offerings in schools.

Similarities and differences among the subject areas are generally not seen as an important issue due to the unique contexts.

The draft syllabus and guidelines documents seem less effective in meeting teachers' needs and appear to lack efficiency in terms of ease of use in schools. A recurring concern is that sufficiently specific guidance on assessment does not seem to be available in the draft syllabus and guidelines.

Changes suggested most often are to state outcomes in more specific terms; provide more elaborations and examples for planning, teaching and assessment; and provide specific guidance for assessment.

Display 24: Summary of results for focus questions 1 to 10 by subject area

	Focus Questions		Ag	Bus	HEc	ICT	ITD
	Appropriateness						
1.	To what extent does the draft rationale reflect current and emerging views of education and of educators in the subject area?		Well	Adequately	Very well	Very well	Very well
2.	To what extent do the draft syllabus and guidelines reflect current and emerging views of education and of educators in the subject area?		Well	Adequately	Very well	Well	Very well
3.	To what extent do the draft subject area syllabuses and guidelines match the identified needs of students, teachers and school administrators?	Students Teachers	Adequately Less than adequately	Well Adequately	Well Adequately	Adequately Adequately	Very well Adequately
4.	How appropriate is the set of five subject areas to current curriculum offerings in schools?		Well	Adequately	Adequately	Very well	Very well
	Effectiveness						
5.	How well do the draft learning outcomes describe the learnings that are fundamental for students taking a course of study in the subject areas?		Well	Very well	Well	Very well	Adequately
6.	How well is the progression of learning described by the draft learning outcomes?		Well	Adequately	Well	Adequately	Adequately
7.	How well do the various sections of the draft syllabus and guidelines assist teachers in planning, teaching and assessing?	Planning	Adequately	Very well	Quite well	Adequately	Adequately
		Teaching	Adequately	Well	Adequately	Adequately	Adequately
		Assessing	Less than adequately	Less than adequately	Less than adequately	Less than adequately	Adequately
8.	To what extent are the similarities and differences between the subject areas guidelines justified?		Not an issue	Not an issue	Not an issue	Not an issue	Justified by the context
	Efficiency						
9.	How accessible are the syllabuses and guidelines in terms of ease of use for planning and implementing subject area courses of study?		Adequately	Adequately	Less than adequately	Less than adequately	Less than adequately
	Articulation and Positioning						
10.	To what extent is there articulation between the draft subject area syllabuses and guidelines, and with senior secondary?	Other SAS Senior	High Low	High Adequate	High High	High Adequate	High Low

4. Development processes

The focus question related to the processes used in developing the subject area syllabus and guidelines documents was:

What advantages and disadvantages are there in the manner in which the subject area syllabuses and guidelines have been developed, particularly the:

- a. online processes used
- b. smaller project team (and budget)
- c. use of contract writer; subcommittees; review teams
- d. absence of a formal trial pilot
- e. absence of sourcebook guidelines and modules?

The survey and interview results showed that many of the teachers and school administrators had little knowledge of the development processes and their effects on the resulting curriculum documents. This is evidenced by the numbers of "cannot say" responses shown in Displays 24-29.

4.1 Online Processes

4.1.1 Survey

Survey items 20, 22 and 30 relate to the online processes used in developing the syllabus and guidelines documents:

The results for items 20 and 22 are shown in Displays 25 and 26.

Display 25: Survey item 20 – web publication strategy (N=94)

					-9) (/		
Subject	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent	Totals
Ag	0	1	4	2	2	0	9
	0%	11%	44%	22%	22%	0%	
Bus	0	1	3	3	7	4	18
	0%	6%	17%	17%	39%	22%	
HEc	1	0	8	5	8	4	26
	4%	0%	31%	19%	31%	15%	
ICT	2	0	0	6	4	11	23
	9%	0%	0%	26%	17%	48%	
ITD	4	3	1	2	3	5	18
	22%	17%	6%	11%	17%	28%	
Totals	7	5	16	18	24	24	94
	7%	5%	17%	19%	26%	26%	
Mean %	7%	7%	19%	19%	25%	23%	

0% to 19%	20% to 39%	40% to 59%	60% to 79%

[The Mean % figure gives equal weight to each of the subject areas.]

The results for item 20 indicate that, according to the teachers:

- in Business Education, Information and Communication Technology Education and Industrial Technology and Design Technology, a majority saw the web publication strategy as feasible to a great or very great extent
- in Agriculture Education and Home Economics Education, a majority indicated some or a limited extent.

This difference in responses may, to some degree, reflect differences between the two groups in terms of the roles of information technology, teachers' computer skills and access to the Internet. Taken together, the results are spread across the full ratings range, indicating that the feasibility of the web publication strategy varies from person to person. The main factors in this variation are probably access to and skills in browsing the Internet.

Display 26: Survey item 22 – online surveys (N=94)

Display	zu. Sui vey	ILCIII ZZ —	Offilitie Sur	veys (11-34	')		
Subject	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent	Totals
Ag	0	1	3	2	1	2	9
	0%	11%	33%	22%	11%	22%	
Bus	4	1	2	7	3	1	18
	22%	6%	11%	39%	17%	6%	
HEc	3	0	3	10	6	4	26
	12%	0%	12%	38%	23%	15%	
ICT	5	0	1	10	4	3	23
	22%	0%	4%	43%	17%	13%	
ITD	2	1	4	3	5	3	18
	11%	6%	22%	17%	28%	17%	
Totals	14	3	13	32	19	13	94
	15%	3%	14%	34%	20%	14%	
Mean %	13%	4%	17%	32%	19%	15%	

0% to 19%	20% to 39%	40% to 59%	60% to 79%

The results for item 22 are somewhat mixed, indicating a spread across the response categories. Taken as a whole, the results are similar to those of item 20, the web publication strategy. This result calls into question the effectiveness of the informal trial process in terms of the information flow to the project team. As many as 14 of the 94 responses were 'cannot say', which can be taken to mean that these people were not aware of the feedback processes. Perhaps at least one third of the teachers did not supply feedback through the online surveys. Of course, this would not be a problem if other means of gathering feedback were used as well.

Item 30 was an open-response item asking the survey participants to comment on the processes used to develop the draft syllabus and guidelines. This item resulted in 74 relevant responses. None of these related to the online processes. A reasonable conclusion is that while the online processes presented a problem for some, they were not serious issues.

4.1.2 School-Based Interview

The teachers and administrators were asked specifically about the online strategies.

Of the 15 who commented on the web publication strategy over 70% (11) approved. A few either had difficulties or preferred hard copy (4). For example:

- Very useful as you have access to up to date information as it is made available.
- Great, readily available.
- That was invaluable. For us we just cut and pasted and we could produce and edit draft programs easily and quickly.
- I don't like working from the computer. I would much prefer hard copy.
- We have had troubles with the elaborations, getting access to them. We would rather have hard copy.

The web and email surveys item elicited a mixed response. Of the 14 who responded, some liked the web and email surveys (5); some had problems or preferred other ways to obtain data (6); and some had no knowledge of them (3). For example:

- These are fine in our area, where teachers are technologically literate.
- Didn't mind it. It was easy to do. Sort of in your face when you look at email. Paper can get lost.
- Shouldn't be a problem except for virus scares and I often don't have time to check my email.
- I have a problem with my computer. I never engage in any web based surveys at all because of that.
- I would much prefer hard copy and talking to people.
- Not done. Do not recall getting anything.

The interview responses indicated broad approval of publication of syllabus documents on the web, but a mixed response to web-based and email surveys. Misgivings about such surveys include:

- Preference for hard copy surveys or interviews
- · No regular access to email
- Computer problems or virus concerns.

4.1.3 Key Participant Interviews

The key participants were asked specifically to comment on the online processes.

The web publication strategy evoked a mixed response among this group. Among the 13 responses, 3 were opposed to web publication on the grounds of equity of access; 6 favoured web publication as long as this issue could be addressed; and 4 were strongly in favour. Most said a hard copy should be available in any case to provide status for the subject or represent an official document. For example:

- It's good in itself but many cannot access the information if that is the only way. Need hard copies.
- Excellent but there still needs to be an official document in schools.
- No fan of that at all. Theoretically it is a concept that a lot of people think works. Teachers
 don't have skills, access or time to do it. Making assumptions that are totally invalid
 regarding access.
- Good. Works effectively as a communication medium. It's a big document and we are shifting costs to schools. Were able to get things out there quickly and to the right desk.

For the web and email surveys (14 responses) 5 of the key participants were unable to comment (not having been survey participants). Of the remainder, 3 said alternatives should be provided; 4 said that such surveys reached a limited sample and 2 said that some people were unwilling to take part in such surveys. For example:

- It's good in itself but many cannot access the information if that is the only way. Need hard copies.
- Only getting feedback from exclusive group of people with access and skills to use. Most teachers not using this as a mode of response yet.
- That's fine. People a little reluctant to use them. Maybe confidentiality is part of the concern.

The results indicate that if web-based or email surveys are used, people should be informed of the survey directly, confidentiality issues should be addressed, and alternative forms of the survey should be provided.

4.1.4 Summary

Online processes used

There was broad approval of the publication of syllabus documents on the Web, although for some it seemed to represent a significant inconvenience. The response to web-based and email surveys was mixed – misgivings about such surveys include:

- preference for hard copy surveys or interviews
- · lack of regular access to email
- computer problems or virus concerns.

The results indicate that if web-based or email surveys are used, people should be informed of the survey directly, confidentiality issues should be addressed, and alternative forms of the survey should be provided.

4.2 Smaller Project Team (and Budget)

4.2.1 Survey

Survey item 21 relates to the size of the project team: To what extent was the size of the project team feasible in the development of the syllabus and guidelines?

The results are shown in Display 27.

Display 27: Survey item 21 -size of the project team and budget (N=94)

Subject	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent	Totals
Ag	6	0	2	1	0	0	9
	67%	0%	22%	11%	0%	0%	
Bus	12	0	1	3	2	0	18
	67%	0%	6%	17%	11%	0%	
HEc	19	1	3	0	2	1	26
	73%	4%	12%	0%	8%	4%	
ICT	18	0	2	3	0	0	23
	78%	0%	9%	13%	0%	0%	
ITD	10	0	2	4	2	0	18
	56%	0%	11%	22%	11%	0%	
Totals	65	1	10	11	6	1	94
	69%	1%	11%	12%	6%	1%	
Mean %	68%	1%	12%	13%	6%	1%	_

0% to 19% 20% to 39% 40% t	o 59% 60% to 79%
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[The Mean % figure gives equal weight to each of the subject areas.]

Results for item 21 indicate that most of the survey respondents had no knowledge of the size of the project team or its effect on the development process. Of those who were willing to respond, most were divided between a limited extent and some extent.

For survey item 30 (comment on the processes) 9 of the 59 relevant comments referred to budget issues, for example:

- Depends on volunteers to form committees for no pay and inconvenient hours. Does not treat teachers as professionals but relies on their good nature and wanting the best for students and their subject.
- More budget was required. A lot of people did lots gratis due to their professionalism.
- Lack of funds was another very serious issue.

4.2.2 Key Participant Interviews

The key participants were asked specifically to comment on the size of the project team and budget.

Most of the 13 responses referred to problems with this aspect of the process. Some (5) talked only of problems, 3 approved of the small team but not the budget, 3 indicated problems but said the final product was good and 2 had only positive things to say. For example:

- Degree of esteem QSA held for these areas is clear when compared with the size of the KLA teams and budgets. Small team has done a good job.
- Need small committee to do the work. Had good team with a wide range of experience. Too big a team often becomes unmanageable.
- No concerns with people on the team. Timeline and budget were a problem. Timeline short with little outside consultation. People dragged in from schools and asked to comment on the spot. That process was obscene.
- Positive. Got to know people very well. Had close working knowledge of whole thing.
 Negative. Lack of dollars. Many times things we should have done [couldn't be paid for] (promotion, professional development, glossy print). This had the chance to sabotage the whole thing.
- Team was a good way to move the syllabus forward quickly. Budget totally inadequate. A ridiculous situation.

To interpret these comments

- small groups can be efficient but may spread work over fewer people or add to others' existing workloads
- a small budget brings savings but can make work or inconvenience for people and reduce desirable options.

4.2.3 Summary

Most of the survey respondents appeared to be unaware of the size of the project team or its effect on the development process. Of those who were, few rated this aspect as feasible to any great extent.

Most of the key participants saw problems with the small project team or its budget. Many said the final product was good, notwithstanding the disadvantages. Other responses were mixed, citing both problems and advantages. Some said it worked well, some that it didn't. It goes without saying that a budget will seldom be seen as enough, but some saw advantages in the smaller project team.

4.3 Use of Contract Writer; Subcommittees; Review Teams

4.3.1 Survey

Survey item 23 relates to the use of contract writers with subcommittees and review teams in developing the syllabus and guidelines documents:

The results are shown in Display 28.

Display 28: Survey item 23 – use of contract writers with review team (N=94)

Subject	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent	Totals
Ag	5	0	3	0	1	0	9
	56%	0%	33%	0%	11%	0%	
Bus	11	0	3	1	2	1	18
	61%	0%	17%	6%	11%	6%	
HEc	16	0	0	6	2	2	26
	62%	0%	0%	23%	8%	8%	
ICT	10	0	1	6	4	2	23
	43%	0%	4%	26%	17%	9%	
ITD	10	0	1	3	3	1	18
	56%	0%	6%	17%	17%	6%	
Totals	52	0	8	16	12	6	94
	55%	0%	9%	17%	13%	6%	
Mean %	55%	0%	12%	14%	13%	5%	

[The Mean % figure gives equal weight to each of the subject areas.]

The results for item 23 are similar to those for item 21 (size of the project team). Apparently, most of the survey respondents had no knowledge of the use of contract writers or its effect on the development process.

For survey item 30 (comment on the processes) only 2 of the 59 relevant comments referred to the use of contract writers with subcommittees and review teams. This matter seems relatively unimportant to teachers. Use of contract writers with a review team was not seen in either strongly negative or positive terms.

4.3.2 School-Based Interview

The key participants were asked specifically to comment on the writing strategy.

Many of the interviewees were not able or willing to respond to this item (8). Of those who did respond (9) most had misgivings (4) or were opposed (4). For example

- In general Ag teachers were pretty sceptical about the processes with contract writers but it seems to have worked alright. I don't have too much problem with the final product and you have to judge it by that.
- An OK way to do it. Only thing is they easily miss people like us who have been doing a lot of work with it.
- Takes the stress off teachers having to write it. Being an independent body means that the document does not have a bias slant from the writing teacher's viewpoint. But you don't get the teacher understanding of what is involved in each strand and the realisation that in a classroom something may not be viable.
- Writers OK but only if they represent wider community. I don't think they did.
- Use of contract writers in our case a waste of time. Should have used practising class teachers. Could have saved a lot of time by releasing these teachers for one week to do the job thoroughly in the first place.

The results here support the conclusion that the issue was not an important or a visible one for most teachers. No one indicated problems with the product that could be traced to this strategy.

4.3.3 Key Participant Interviews

The key participants were asked specifically to comment on the writing process.

Most of the responses here fell into three categories. Some said this aspect of the process worked well (5) some that it had intrinsic problems (2) and some that problems appeared in practice (5). For example:

- The fact that people who were heavily involved in Home Ec were in the teams or committees was an advantage. In the early stages the contract writers gave evidence of not being fully conversant with teaching and schools, but with the subcommittee and review teams this was overcome to an extent, although limited by the budget restrictions and the fact that you had to go by gut feeling and past experience in the absence of a trial.
- Because outcomes approach is so different I wonder whether writers write to the correct audience. Not sure whether the document is pitched to teacher needs. Good for curriculum people. I insisted on writing this as a writer. I feel the more writers, the slower it gets. Really valued feedback from teachers and reference committee, especially not being in a classroom.
- Writer process reasonable. Timelines mitigated against it being really effective. Not enough time for really valuable responses. Needed more time for discussion.

According to the interviewer, some participants expressed disappointment at the level of consultation, between project team and others involved in the development, during rewrites. Some of the rewrites were seen as quite substantial, and the participants saw the final documents and their content as being a long way removed from those produced during initial consultations.

The indication from these interviews is that the process can be a good one, but needs to be carefully managed for the best effect. The subcommittee members need sufficient time to operate effectively. High levels of consultation need to be maintained throughout.

4.3.4 Summary

This matter seems relatively unimportant or at least invisible to teachers. Use of contract writers with a review team was not seen in either strongly negative or positive terms.

Most responses of the key participants indicate that the process can be a good one, but needs to be carefully managed to obtain the best effect. The subcommittee members need sufficient time to operate effectively and high levels of consultation need to be maintained throughout.

4.4 Absence of Formal Trial/Pilot

4.4.1 Survey

Survey item 24 relates to the absence of formal trial and pilot processes in developing the syllabus and guidelines documents:

The results are shown in Display 29.

Display 29: Survey item 24 – absence of formal trial/pilot (N=94)

Subject	Cannot say	No extent	Limited extent	Some extent Great extent		Very great extent	Totals
Ag	1	0	1	4	2	1	9
	11%	0%	11%	44%	22%	11%	
Bus	6	2	7	1	2	0	18
	33%	11%	39%	6%	11%	0%	
HEc	8	1	3	9	3	2	26
	31%	4%	12%	35%	12%	8%	
ICT	7	2	8	3	3	0	23
	30%	9%	35%	13%	13%	0%	

ITD	11	1	2	1	3	0	18
	61%	6%	11%	6%	17%	0%	
Totals	33	6	21	18	13	3	94
	35%	6%	22%	19%	14%	3%	
Mean %	33%	6%	21%	21%	15%	4%	

0% to 19% 20% to 39%	40% to 59%	60% to 79%
-----------------------------	------------	------------

[The Mean % figure gives equal weight to each of the subject areas.]

The results for item 24 show a high level of "cannot say" response, although not as high as for items 21 and 23. Considering only those who were prepared to give a rating:

- in Business Education and Information and Communication Technology Education, a majority chose 'no extent' or 'limited extent'
- in Agriculture Education, a majority chose 'some' or 'great extent'
- in Home Economics Education, a majority chose at least 'some extent'
- in Industrial Technology and Design Education, ratings were mixed.

For survey item 30 (comment on the processes) only 6 of the 59 relevant comments referred to absence of a formal trial/pilot, all citing disadvantages. For example:

- The best way to find out if something works is to try it and for that reason I think the trial/pilot would be better. That way more support is provided for the schools/teachers conducting the trial pilot and more feedback would be provided. (Bus)
- To draw on experiences of a pilot group would be valuable. (ICT)

As a whole, the survey results indicate some misgivings about the absence of a formal trial/pilot but no indication of widespread serious concerns.

4.4.2 School-based interview

Of the 12 responses to this item, 9 said a formal trial/pilot process was needed, many saying this would avoid unnecessary difficulties for large numbers of teachers on implementation. None pointed to specific problems with the current documents through absence of a formal trial/pilot. For example:

- Teachers want it. I think it is needed, is essential. Great to get teachers together to get commonalities of thought and direction. Otherwise there is confusion.
- A formal trial or pilot usually helps iron out the faults and discrepancies within a new program through a controlled manner. This program may not have any problems, but I think an overall trial or some form of formal reporting will assist with the implementation of the syllabus. It doesn't show up that there hasn't been a trial.
- This decreases the importance of the subject. People don't value it as much if the
 establishment process has been different. Without a formal trial-pilot you can't iron out the
 weaknesses. The absence of the trial and pilot puts an unnecessary strain on teachers
 because problems will not have been sorted out.
- I think that is a disadvantage because very often when you have someone doing a trial pilot arrangement you have one person learning the lessons and not burning out dozens of teachers at the same time. Not having it is a bit dumb.
- I personally think that the curriculum is so informally put together anyway in the junior area that it doesn't really need a formal trial and pilot process. We just need to come back to next year and make changes based on our experience with it.

4.4.3 Key Participant Interviews

The key participants were asked specifically to comment on the absence of a formal trial/pilot.

Of the 14 responses nearly all (12) were critical of not having a formal trial/pilot process. For example:

Does not lend as much credence in schools if there is not a trial period.

- The only way you really find out whether things are good or bad and work is to put them
 into the trial situation. When there is no trial/pilot there is no opportunity to build a base of
 knowledge and experience in the schools and people are then more willing to take it up and
 use it.
- Gets back to budget. Should be a formal trial and formal pilot. Tragic this did not happen.
- People get all trialed and piloted out. An advantage was that it did not put burden on schools. A disadvantage was that people who actually do it were not given the opportunity for feedback to the system.

4.4.4 Summary

As a whole, the survey results indicate some misgivings about the absence of a formal trial/pilot among teachers but no indication of widespread serious concerns.

In interviews, most of the teachers were in favour of a formal trial/pilot process; many saying this would avoid unnecessary difficulties for large numbers of teachers on implementation. None pointed to specific problems with the current documents because of the absence of a formal trial/pilot.

Most of the key participants were critical of the absence of a formal trial/pilot.

4.5 Absence of Sourcebooks

4.5.1 Survey

Survey item 25 relates to the absence of sourcebook guidelines and modules in developing the syllabus and guidelines documents,

The results are shown in Display 30.

Display 30: Survey item 25 – absence of sourcebooks (N=94)

Display 3	o. Sui vey	item 25 – c	inselice of	30ul Cebo	UKS (14-34)		
Subject	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent	Totals
Ag	1	2	2	1	2	1	9
	11%	22%	22%	11%	22%	11%	
Bus	6	2	5	2	3	0	18
	33%	11%	28%	11%	17%	0%	
HEc	5	5	7	5	2	2	26
	19%	19%	27%	19%	8%	8%	
ICT	8	1	9	3	1	1	23
	35%	4%	39%	13%	4%	4%	
ITD	8	1	3	1	3	2	18
	44%	6%	17%	6%	17%	11%	
Totals	28	11	26	12	11	6	94
	30%	12%	28%	13%	12%	6%	
Mean %	29%	12%	27%	12%	14%	7%	

00/ 1- 400/	200/ 4- 200/	400/ to E00/	COO/ 4- 700/
l 0% to 19%	20% to 39%	40% to 59%	60% to 79%

[The Mean % figure gives equal weight to each of the subject areas.]

The results for item 25 indicate high levels of 'cannot say'. Among those survey respondents who gave a rating, the great majority chose either 'no extent' or 'limited extent'. In the overall results, just over one fifth indicated that this strategy was feasible to a 'great' or 'very great extent' and doubts were expressed ('some', 'limited' or 'no extent' ratings) by just over half.

For survey item 30 (comment on the processes) only 4 of the 59 relevant comments referred to the absence of sourcebook guidelines and modules, for example:

- I would have liked to see the elaborations accompany the syllabus. It was difficult initially
 without the elaborations and when they came I felt as though I had interpreted some
 outcomes differently.
- Sample modules and implementation would be useful but that these types of things are usually gained from speaking with other teachers and finding out what they are doing.

Apparently, for most teachers, this was not one of the major problems but many (around 40%) saw the strategy of proceeding without them as having limited or low feasibility.

4.5.2 School-Based Interview

The school-based interviews elicited 14 responses. Of these, half (7) expressed a strong preference for sourcebook guidelines and modules to be available as they worked with the draft materials. Another 3 said it would be an advantage and 4 apparently found this aspect no problem. For example:

- I found this difficult without a structured guideline or elaborations on the outline given.
- Modules would have been really helpful. That would save us a lot of time writing all of our own units - hundreds of hours in a year.
- Woeful not having a sourcebook. Mainly for units of work and, for example, assessment.
 Need just a few examples as guidelines.
- Should definitely have these, they are lacking.
- Examples could have been expanded. The ones given were reasonable.
- Not a big issue for us.

4.5.3 Key Participant Interviews

The key participants were asked specifically about the absence of sourcebook guidelines and modules. All of the 13 responses indicated that these should have been available with the second draft syllabus and guidelines. For example:

- Concerned that there are no support materials. Modules would have been useful.
- Should have been there. When examples are there the whole structure makes sense to teachers. In their absence people will struggle or people will scuttle it.
- Serious concern. Much work is put back on professional associations and teachers. I think there is more that could and should be done for teachers.
- No documents or help for teachers makes it very difficult. Many are lost. Project will die on the vine unless more support is put in place.

4.5.4 Summary

Comments on the survey do not suggest that the absence of sourcebooks during the consultative period was one of the major problems for teachers, but most rated the strategy of proceeding without them as having limited or low feasibility.

In the interviews teachers expressed a strong preference for sourcebook guidelines and modules to be available as they worked with the draft materials.

Most of the key participants said that sourcebook guidelines and modules should have been available with the second draft syllabus and guidelines.

4.6 Summary of Findings – Syllabus Development Processes

Online processes used

The data indicate broad approval of the publication of syllabus documents on the Web, although for some people it seemed to represent a significant inconvenience. The response to web-based and email surveys was mixed – misgivings about such surveys include:

- preference for hard copy surveys or interviews
- lack of regular access to email

• computer problems or virus concerns.

The results indicate that if web-based or email surveys are used, people should be informed of the survey directly, confidentiality issues should be addressed, and alternative forms of the survey should be provided.

Smaller project team (and budget)

According to the data, most of the teachers were not aware of the size of the project team or its effect on the development process. Of those who were, few rated this aspect as feasible to any great extent.

In interviews, most of the key participants saw problems with the small project team or its budget. Many said the final product was good, notwithstanding the disadvantages. Other responses were mixed, citing both problems and advantages. Some said it worked well, some that it didn't. Apparently, small groups can be efficient but may spread work over fewer people or add to others' existing workloads and a small budget brings savings but can make work or inconvenience for people and reduce desirable options.

The use of contract writers with subcommittees and review teams

The data suggests that this matter seems relatively unimportant or at least invisible to teachers. Use of contract writers with a review team was not seen in either strongly negative or positive terms.

Most responses of the key participants indicate that the process can be a good one, but needs to be carefully managed to obtain the best effect. The subcommittee members need sufficient time to operate effectively and high levels of consultation need to be maintained throughout.

Absence of formal trial/pilot processes

As a whole, the survey results indicate some misgivings about the absence of a formal trial/pilot among teachers but no indication of widespread serious concerns.

In interviews, most of the teachers were in favour of a formal trial/pilot process, many saying this would avoid unnecessary difficulties for large numbers of teachers on implementation. None pointed to specific problems with the current documents due to the absence of a formal trial/pilot.

Most of the key participants were critical of the absence of a formal trial/pilot.

Absence of sourcebook guidelines and modules

Comments on the survey do not suggest that the absence of sourcebooks during the consultative period was one of the major problems for teachers, but most rated the strategy of proceeding without them as having limited or low feasibility.

In the interviews, teachers expressed a strong preference for sourcebook guidelines and modules to be available as they worked with the draft materials.

Most of the key participants said that sourcebook guidelines and modules should have been available with the second draft syllabus and guidelines.

The development processes overall

The survey and interview results seem to indicate the following conclusions. The main advantage of the development processes seems to be that syllabuses have been provided to meet an apparent need, and which have held up well on most criteria of the present evaluation. That is to say, the intended products have been realised and their quality has been judged as adequate or better on most aspects. Other advantages relate to matters of expediency, including savings in cost and time. The main disadvantages are the workload expected of teachers involved in the review and trial processes, and possible future inconvenience to teachers adopting syllabuses that have not been fully proven in formal trial/pilot processes. Other disadvantages are possible negative effects on the credibility and status of the subject areas, and limitations on the extent and breadth of input from teachers, through the use of the Internet and small review teams. Careful and skilful management seems to be essential to ensure that all processes work well.

5. Concluding Comments

The findings for focus questions 1 to 11 are summarised in Section 3.6. In short, the draft syllabuses and guidelines in the five subject areas seem to be quite appropriate and generally effective. There was general agreement with the direction taken in the rationale. The syllabus and guidelines were seen to reflect the current and emerging views about education in the subject area well and meet the needs of students. Each subject area seems to be appropriate to current curriculum offerings in schools.

The draft syllabus and guidelines documents seem to be less effective in meeting teachers' needs and appear to lack efficiency in terms of ease of use in schools. A recurring concern in survey comments and interviews was that the draft syllabus and guidelines lack sufficiently specific guidance on assessment.

According to the key participants, similarities and differences among the subject areas guidelines were managed through stipulations of format, committee processes and meetings between contracted writers. These processes seemed to work fairly well, although the key participants generally seemed to feel that the unique context of each area meant that overlap between the subjects was not a matter of great concern.

The findings for focus question 12 (syllabus development process) are summarised in Section 4.6. The processes seemed to be successful in providing appropriate and efficient syllabuses within a limited budget and timeline. Teachers often indicated a strong preference for formal trial/pilot processes and many participants felt that the limited budget created unfair burdens for teachers, committee members and professional associations. Online processes for publication of drafts and collection of feedback seemed to work well for some people and not for others. The data suggest that the quality of feedback using online processes can only be assured if people are informed of the survey directly, confidentiality issues are addressed, and alternative forms of the data collection utilised. In general, careful and skilful management seems to be essential to ensure that all processes work well.

The findings for focus question 13 (suggested changes) were similar for all subject areas – the most frequently suggested changes were

- be more specific in the wording of outcomes
- provide elaborations and examples for planning, teaching and assessment
- provide more specific guidance for assessment.

6. Advice to QSA

The main issues of concern that have emerged from the evaluation data relate to:

- efficiency in terms of ease of use for planning and implementing courses of study
- effectiveness in assisting teachers in assessment.

Perusal of other evaluation reports on other Years 1 to 10 curriculum development projects (available on the QSA website) indicates that these two issues are not isolated to the five subject areas and would apply to the syllabuses in the eight key learning areas.

Based on the data in the present evaluation and experience with evaluations of Years 1 to 10 projects in several of the key learning areas, the evaluator believes that both concerns are largely a function of:

- teachers' unfamiliarity and inexperience with the outcomes approach
- the wording of the outcomes
- a lack of specific guidance on assessment in the syllabuses.

The organisational format of the syllabuses varies from previous curriculum documents in the subject areas – they are organised in levels and presented as sets of learning outcomes. As a result, planning for teaching requires coming to terms with not only changes in emphasis or content, but also quite different approaches to planning and teaching.

The central learning outcomes themselves are cast in necessarily general terms, considering the need to contain the total numbers of outcomes. Therefore, to be able to interpret the outcomes in

the process of designing courses of study and preparing for teaching and learning, teachers need to become familiar with them and understand their purposes within the context of the syllabus rationale. This takes time and effort. Teachers need support with developing the necessary familiarity and understanding, including access to examples of planning and teaching in the subject area context.

The syllabus document in each subject area does include a lengthy section on assessment that provides guidance and suggestions, but the evaluation data indicates that teachers need more specific guidance.

In brief, it seems clear that teachers need time and support to become familiar with the outcomes approach, understand the syllabus rationale, and comprehend the outcomes themselves. They need specific examples in the form of elaborations and sample modules to grasp how the outcomes can be translated into teaching-learning activities and assessment.

Notwithstanding these concerns, the syllabus and guidelines in the five subject areas seem to be basically sound and promise to be valuable for schools with students working towards levels 4 and beyond. They help to provide justification for teaching in the five specialised areas and facilitate the task of designing school programs within the framework of the key learning areas. The development work in the five areas should continue.

The syllabus development process seems to be fundamentally sound and efficient, as long as it is well managed, the demands on participants are kept at reasonable levels and the budget allows sufficient consultation and a quality of presentation in all aspects that is consonant with the status of the subject area.

Ideally, a more formal trial/pilot process should be considered. In this process, participating schools should be identified and commitments sought in exchange for the provision of support. A long period of trial/pilot would not seem to be necessary – possibly one or two semesters.

Before proceeding further, some fine tuning of the rationale and outcomes should be undertaken based on the specific comments made in the evaluation interviews and survey. The results should be discussed at special subcommittee meetings and referred to the consultative networks for comment before finalising the syllabuses.

A priority, before further attempts to apply the syllabus in school settings, is the development of explanatory material including elaborations and sample modules. Such material can be expected to allay many of the problems reported by teachers in the present evaluation.

Appendix 1: Data Collection and Reporting Matrix

	Focus Questions	Teachers & administrators	Key personnel ¹	Separate reporting by subject area
1.	To what extent does the draft rationale of each subject area syllabus reflect current and emerging views of education and of educators in the subject area?	I + W	ı	V
2.	To what extent do the draft syllabus and guidelines in each subject area syllabus reflect current and emerging views of education and of educators in the subject area?	I + W	I	V
3.	To what extent do the draft subject area syllabuses and guidelines match the identified needs of students, teachers and school administrators?	I + W	I	V
4.	How appropriate is the set of five subject areas to current curriculum offerings in schools?	I + W	I	
5.	How well do the draft learning outcomes describe the learnings in subject areas that are fundamental for students taking a course of study in the subject areas?	I + W	ı	V
6.	How well is the progression of learning described by the draft learning outcomes?	I + W	I	✓
7.	How well do the various sections of the draft syllabuses and guidelines assist teachers in planning, teaching and assessing?	I + W		~
8.	To what extent are the similarities and differences between the subject areas guidelines justified?	I	I	
9.	How accessible are the syllabuses and guidelines in terms of ease of use for planning and implementing subject area courses of study?	I + W		v
10.	To what extent is there articulation between the draft subject area syllabuses and guidelines, and articulation with Board of Senior Secondary School Studies syllabuses?	I + W	I	V
11.	To what extent are the draft subject area syllabuses and guidelines positioned within students' total curriculum experience?	I + W	I	
12.	What advantages and disadvantages are there in the manner in which the subject area syllabuses and guidelines have been developed, particularly the:			
	-online processes used -smaller project team (and budget) -use of contract writer; subcommittees; review teams -absence of a formal trial pilot -absence of sourcebook guidelines and modules?	I + W	I	
13.	In the light of answers to the above, what changes, if any, might be made to the intent and content of the draft syllabuses and guidelines?	I + W	I	V

Appendix 2: The Survey

The survey was administered in three formats:

- Internet
- hard copy
- telephone.

The questions were the same in each case. The hard copy version is reproduced below.

SAS Survey

This survey is for teachers and administrators who have been identified by the Queensland Studies Authority as having knowledge of one of the five draft Subject Area Syllabuses (Agriculture Education, Business Education, Home Economics Education, Industrial Design and Technology, Education Information and Communication Technology Education)

The survey is part of a formal, independent evaluation of the Subject Area Syllabuses Project being conducted by EdData under contract to the QSA.

- Please answer for only one of the five subject areas, indicating which in Question 2.
- If you wish to comment on more than one subject area, please do a separate survey for each.
- Please return your survey by mail or fax. If you would prefer to do the survey by phone, call 3841 4026. The survey can also be completed online (www.eddata.com.au/survey).
- There are not many teachers who can comment on a subject area syllabus, so it is vital that as many of you as possible take the time to work through and return this questionnaire.
- Please return the survey by Friday 6 September 2002.

Part A: Background Information

Part A. Background	IIIIOIIIIalioii		
1. Please provide the	following contact information:		-
Name			
School			
2 Which Subject Area	a do your answers refer to [ple	assa salact onal?	1
☐ Agriculture☐ Business	e Education	☐ Industrial Design ar	nd Technology Education mmunication Technology Education
3. To what extent are	you familiar with the subject a	area syllabus?	
☐ To no exte ☐ To a limite ☐ To some e ☐ To a great ☐ To a very	ed extent extent t extent		
	es your engagement with the	subject area syllabus to d	late?
☐ I have loo ☐ I have stu ☐ I have use ☐ I have trie ☐ I have trie	ked through it	courses of study within existing programs a new program	
☐ Below Yea ☐ Year 7 ☐ Year 8	ar 6 Ye	ar 9 ar 10	
6. If you have been de	_	study based on the draft s	yllabus and guidelines, how are they
•	roductory course of study	-	course of study
	course of study	☐ Year 10 sp	pecialised course of study
	10 course of study e Question 7]	☐ Have not b	peen developing courses or units
7. Please provide mor	re detail in relation to your ans	swer to Question 6:	

Part B: Ratings [Please select one answer for each question by ticking one box in each row.]

То	what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
8.	does the rationale in the draft syllabus reflect current and emerging views about education in the subject area?						
9.	do other aspects of the draft syllabus and guidelines reflect current and emerg- ing views about education in the subject area?						
10.	do the draft syllabus and guidelines meet the needs of your students?						
11.	do the draft syllabus and guidelines meet the needs of teachers of the subject area?						
12.	are the syllabus and guidelines appropriate within the range of current curriculum offerings in schools?						
13.	are the draft learning outcomes effective in describing the fundamental learnings in the subject area?						
14.	are the draft learning outcomes effective in describing a progression of learning?						
15.	are the draft syllabus and guidelines helpful for planning a course of study in the subject area?						
16.	are the draft syllabus and guidelines helpful in teaching a course of study in the subject area?						
17.	are the draft syllabus and guidelines helpful for assessment of students in the subject area?						
18.	are the draft syllabus and guidelines easy to use?						
19.	do the learnings and learning outcomes prepare students for transition to related Senior secondary studies?						
20.	was publication of the syllabus and guidelines on the web an effective strategy to make them available to teachers?						
21.	was the size of the project team feasible in the development of the syllabus and guidelines?						
22.	was the use of email and web-based surveys an effective way to obtain feed- back on the syllabus and guidelines?						
23.	was the use of contract writers with a review team effective in the development of the syllabus and guidelines?						
24.	was the absence of formal trial/pilot processes feasible in the development of the syllabus and guidelines?						
25.	was the absence of sourcebook guide- lines and modules feasible in the develop- ment of the syllabus and guidelines?						

Part C: Short Answer Items

26.	Please comment on the appropriateness of the draft syllabus and guidelines as a component of the school curriculum.	
27.	Please comment on the effectiveness of the draft syllabus and guidelines in describing the fundamental learnings of the subject area.	
28.	Please comment on the efficiency of the draft syllabus and guidelines in assisting teachers with planning and teaching in the subject area.	
29.	Please comment on how well the draft syllabus and guidelines fit into the broader curriculum.	
30.	Please comment on the processes used to develop the draft syllabus and guidelines.	
31.	What changes (if any) do you suggest for the syllabus and guidelines?	

Return Information:

Mail: EdData

24 Palmwoods Crescent Runcorn, Queensland 4113

Fax: (07) 3251 0421

Email: tedhobbs@eddata.com.au

Return date: Friday 6 September 2002

Please accept our sincere thanks for taking the time to complete this survey.



Appendix 3: Interview Questions

Two interviews were used: one for teachers and administrators and the other for the key personnel associated with each subject area. Each interview had five versions – one for each subject area. While references to subject areas differed in the five versions, the questions were the same. The Agriculture Education version is shown below for the two interviews.

Interview questions - Teachers and Administrators

- 1. What have you done with the draft Agriculture Education syllabus to date?
- 2. To what extent does the draft Agriculture Education syllabus and guidelines meet the needs of your students?
- 3. To what extent does the draft Agriculture Education syllabus and guidelines meet the needs of teachers in the subject area?
- 4. To what extent does the draft Agriculture Education syllabus and guidelines meet the needs of school administrators?
- 5. How appropriate is the draft Agriculture Education syllabus and guidelines to current curriculum offerings in schools?
- 6. How well do the draft learning outcomes describe the learnings that are fundamental for students taking a course of study in Agriculture Education?
- 7. How well do the draft learning outcomes describe a progression of learning in Agriculture Education?
- 8. How well do the various sections of the draft Agriculture Education syllabus and guidelines assist teachers in planning, teaching and assessing?
 - a. Rationale
 - b. Outcomes
 - c. Assessment
 - d. Guidelines for Courses of Study
- 9. To what extent are the draft Agriculture Education syllabus and guidelines easy to use for planning and implementing courses of study?
- 10. To what extent is the Agriculture Education syllabus compatible with those in the other subject areas? (minimal overlap, consistent terminology, complementary, distinct)
- 11. To what extent do the learnings and learning outcomes in the draft Agriculture Education syllabus prepare students for transition to related Senior secondary studies?

 (For example for transition from lower secondary Industrial Technology and Design to Information Processing and Technology or Information Technology Systems in Years 11 and 12)
- 12. How is the course of study designed from the draft Agriculture Education syllabus and guidelines positioned within the student's total curriculum?

 (For example, is it a course of study that is a specialised Year 10 course or a single unit of study or a two-year course?)
- 13. What are the advantages and disadvantages of these aspects of the way the Agriculture Educationsyllabus and guidelines have been developed?
 - a. the use of contract writers with subcommittees and review teams
 - b. absence of a formal trial/pilot
 - c. absence of sourcebook guidelines and modules
 - d. publication of the syllabus and guidelines on the web
 - e. email and web-based surveys to obtain feedback on the syllabus and guidelines
- 14. What changes, if any, might be made to the intent and content of the draft Agriculture Education syllabus and quidelines?

Interview questions – Key Personnel

- 1. To what extent does the rationale of the draft «Subject» syllabus reflect current and emerging views about education in the subject area?
- 2. To what extent does the draft «Subject» syllabus and guidelines in general reflect current and emerging views about education in the subject area?
- 3. How well do the draft learning outcomes describe the learnings that are fundamental for students taking a course of study in «Subject»?
- 4. How well do the draft learning outcomes describe a progression of learning in «Subject»?
- 5. To what extent is the «Subject» syllabus and guidelines compatible with the other four subject areas? (minimal overlap, consistent terminology, complementary, distinct)
- 6. How did the development process take the other subject areas into account? [subcommittee chairs, writers, project team]
- 7. To what extent are similarities and differences between the subject areas guidelines justified?
- 8. To what extent do the learnings and learning outcomes in the draft «Subject» syllabus prepare students for transition to related Senior secondary studies?

 (e.g. for transition from lower secondary Industrial Technology and Design to Information Processing and Technology or Information Technology Systems in Years 11 and 12)?
- 9. What are the advantages and disadvantages of these aspects of the way the subject area syllabuses and guidelines have been developed?
 - a. the small project team and budget
 - b. the use of contract writer with subcommittees and review teams
 - c. the absence of a formal trial/pilot
 - d. the absence of sourcebook guidelines and modules
 - e. the publication of syllabus and guidelines on the web
 - f. the use of email and web-based surveys to obtain feedback on the syllabus and guidelines
- 10. What changes, if any, might be made to the intent and content of the draft «Subject» syllabus and guidelines?

Appendix 4: Summary of Survey Results

Item 1: Name and school (not shown here)

Item 2: Subject area (included in tables below)

Item 3: To what extent are you familiar with the subject area syllabus?

Subject area	Ag	Bus	HEc	ICT	ITD	Totals
No extent	0	0	0	0	0	0
Limited extent	0	1	3	3	0	7
Some extent	7	12	11	8	8	46
Great extent	0	4	8	9	7	28
Very great extent	2	1	3	3	3	12
Totals	9	18	25 ¹	23	18	93

¹ No answer

Item 4: Which best describes your engagement with the syllabus to date?

Response	Ag	Bus	HEc	ICT	ITD	Totals
I have looked through it	0	1	1	1	0	3 (3%)
I have studied it	0	1	4	5	2	12 (13%)
I have used it for planning new units or course of study	8	9	14	6	5	42 (45%)
I have tried parts of it in classroom within existing programs	0	3	3	7	3	16 (17%)
I have tried implementing it this year as a new program	1	4	4	4	8	21 (22%)
Totals	9	18	26	23	18	94 (100%)

Item 5: In which Year levels have you tried parts or all of the syllabus? [Tick one or more]

Litera en ini	• • • •					
Levels	Ag	Bus	HEc	ICT	ITD	Totals
Below Year 7	0	0	0	2	0	2
Year 7	0	0	4	2	2	8
Year 8	4	7	17	10	12	50
Year 9	5	12	19	16	15	67
Year 10	2	9	13	13	11	48
None	2	4	4	4	1	15

Item 6: If you have been developing courses or units of study based on the draft syllabus and guidelines, how are they positioned within the student's total curriculum?

[Tick one or more]

How positioned	Ag	Bus	HEc	ICT	ITD	Totals
Year 8 introductory course of study	2	3	3	4	5	17
Year 8/9 course of study	3	1	2	2	6	14
Year 8/9/10 course of study	0	3	9	8	5	25
Year 9/10 course of study	5	7	7	8	4	31
Year 10 specialised course of study	1	3	0	0	2	6
Other	0	4	7	2	1	14
Have not been developing courses or units	0	2	1	2	0	5

Item 7: Please provide more detail in relation to your answer to Question 6 (Summarised in main text for each subject area)

Items 8-19: Shown in tables below for each subject area.

Items 20-25: (Summarised in main text for each subject area)

Shading code for items 8-19:

0% to 19%	20% to 39%	40% to 59%	60% to 79%

Survey results items 8-25: Agriculture Education (N = 9)

Survey results items 8-25: Agr	icuiture	= = aucat	1011 (N :	= 9)		
To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
8does the rationale in the draft syllabus reflect current and emerging views	0	0	0	3	6	0
about education in the subject area?	0%	0%	0%	33%	67%	0%
9do other aspects of the draft syllabus and guidelines reflect current and emerging	0	0	0	3	5	1
views about education in the subject area?	0%	0%	0%	33%	56%	11%
10do the draft syllabus and guidelines meet the needs of your students?	0	0	1	5	3	0
44 de the cheft college and college	0%	0%	11%	56%	33%	0%
11do the draft syllabus and guidelines meet the needs of teachers of the subject area?	0	1	2	3	3	0
	0%	11%	22%	33%	33%	0%
12are the syllabus and guidelines appropriate within the range of current curriculum offerings in schools?	1	0	0	3	3	2
	11%	0%	0%	33%	33%	22%
13are the draft learning outcomes effective in describing the fundamental learnings	2	0	2	1	4	0
in the subject area?	22%	0%	22%	11%	44%	0%
14are the draft learning outcomes effective in describing a progression of learning?	1	0	2	1	5	0
	11%	0%	22%	11%	56%	0%
15are the draft syllabus and guidelines helpful for planning a course of study in the	0	0	1	4	3	1
subject area?	0%	0%	11%	44%	33%	11%
16are the draft syllabus and guidelines helpful in teaching a course of study in the subject area?	3	0	2	2	2	0
·	33%	0%	22%	22%	22%	0%
17are the draft syllabus and guidelines helpful for assessment of students in the subject area?	0	0	4	5	0	0
are the draft syllabus and guidelines	0%	0%	44%	56%	0%	0%
easy to use?	0 0%	0 0%	1 11%	4 44%	4 44%	0
19do the learnings and learning outcomes						
prepare students for transition to related Senior secondary studies?	2 22%	0 0%	2 22%	5 56%	0 0%	0 0%
20was publication of the syllabus and						
guidelines on the web an effective strategy to make them available to teachers?	0 0%	1 11%	4 44%	2 22%	2 22%	0 0%
21was the size of the project team feasi-				1		
ble in the development of the syllabus and guidelines?	6 67%	0 0%	2 22%	11%	0 0%	0 0%
22was the use of email and web-based surveys an effective way to obtain feedback	0	1	3	2	1	2
on the syllabus and guidelines?	0%	11%	33%	22%	11%	22%
23was the use of contract writers with a review team effective in the development of	5	0	3	0	1	0
the syllabus and guidelines?	56%	0%	33%	0%	11%	0%
24was the absence of formal trial/pilot processes feasible in the development of	1	0	1	4	2	1
the syllabus and guidelines?	11%	0%	11%	44%	22%	11%
25was the absence of sourcebook guide- lines and modules feasible in the develop-	1	2	2	1	2	1
ment of the syllabus and guidelines?	11%	22%	22%	11%	22%	11%

Survey results items 8-25: Business Education (N = 18)

To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
does the rationale in the draft syllabus reflect current and emerging views	2	0	0	8	7	1
about education in the subject area?	11%	0%	0%	44%	39%	6%
do other aspects of the draft syllabus and guidelines reflect current and emerging	2	0	0	6	9	1
views about education in the subject area?	11%	0%	0%	33%	50%	6%
do the draft syllabus and guidelines meet the needs of your students?	1	0	1	4	10	2
	6%	0%	6%	22%	56%	11%
11do the draft syllabus and guidelines meet the needs of teachers of the subject	1	0	3	6	7	1
area?	6%	0%	17%	33%	39%	6%
12are the syllabus and guidelines appropriate within the range of current curriculum offerings in schools?	1	0	1	7	8	1
ū	6%	0%	6%	39%	44%	6%
13are the draft learning outcomes effective in describing the fundamental learnings in the subject area?	3	0	3	2	10	0
,	17%	0%	17%	11%	56%	0%
14are the draft learning outcomes effective in describing a progression of learning?	1	0	3	7	6	1
45 and the deaft addatus and avoidable as	6%	0%	17%	39%	33%	6%
15are the draft syllabus and guidelines helpful for planning a course of study in the subject area?	0	0	1	5	11	1
-	0%	0%	6%	28%	61%	6%
16are the draft syllabus and guidelines helpful in teaching a course of study in the subject area?	3	1	2	4	8	0
17are the draft syllabus and guidelines	17%	6%	11%	22%	44%	0%
helpful for assessment of students in the subject area?	1 6%	2 11%	6 33%	7 39%	2 11%	0 0%
18are the draft syllabus and guidelines						
easy to use?	0 0%	1 6%	2 11%	10 56%	5 28%	0 0%
19do the learnings and learning outcomes prepare students for transition to related	2	1	3	9	3	0
Senior secondary studies?	11%	6%	17%	50%	17%	0%
20was publication of the syllabus and guidelines on the web an effective strategy	0	1	3	3	7	4
to make them available to teachers?	0%	6%	17%	17%	39%	22%
21was the size of the project team feasible in the development of the syllabus and	12	0	1	3	2	0
guidelines?	67%	0%	6%	17%	11%	0%
22was the use of email and web-based surveys an effective way to obtain feedback	4	1	2	7	3	1
on the syllabus and guidelines?	22%	6%	11%	39%	17%	6%
23was the use of contract writers with a review team effective in the development of	11	0	3	1	2	1
the syllabus and guidelines?	61%	0%	17%	6%	11%	6%
24was the absence of formal trial/pilot processes feasible in the development of the syllabus and quidelines?	6	2	7	1	2	0
the syllabus and guidelines?	33%	11%	39%	6%	11%	0%
25was the absence of sourcebook guide- lines and modules feasible in the develop- ment of the syllabus and guidelines?	6	2	5	2	3	0
ment of the synabus and guidennes:	33%	11%	28%	11%	17%	0%

Survey results items 8-25: Home Economics Education (N = 26)

Survey results items 6-25: noi						
To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
does the rationale in the draft syllabus reflect current and emerging views	3	0	1	4	12	6
about education in the subject area?	12%	0%	4%	15%	46%	23%
9do other aspects of the draft syllabus and guidelines reflect current and emerging views about education in the subject area?	2	0	0	4	17	3
<u> </u>	8%	0%	0%	15%	65%	12%
10do the draft syllabus and guidelines meet the needs of your students?	1	0	1	8	12	4
11do the draft syllabus and guidelines	4%	0%	4%	31%	46%	15%
meet the needs of teachers of the subject area?	1	0	3	10	11	1
12are the syllabus and guidelines approp-	4%	0%	12%	38%	42%	4%
riate within the range of current curriculum offerings in schools?	1 4%	0 0%	1 4%	10 38%	10 38%	4 15%
13are the draft learning outcomes effec-						
tive in describing the fundamental learnings in the subject area?	0	0	1	9	13	3
14are the draft learning outcomes effec-	0%	0%	4%	35%	50%	12%
tive in describing a progression of learning?	2	0	1	10	11	2
15 are the droft cyliphus and guidelines	8%	0%	4%	38%	42%	8%
15are the draft syllabus and guidelines helpful for planning a course of study in the subject area?	0	0	2	9	14	1
16are the draft syllabus and guidelines helpful in teaching a course of study in the subject area?	0%	0%	8%	35%	54%	4%
	0	0	3	13	8	2
17are the draft syllabus and guidelines	0%	0%	12%	50%	31%	8%
helpful for assessment of students in the subject area?	3	2	8	8	5	0
are the draft syllabus and guidelines	12%	8%	31%	31%	19%	0%
easy to use?	0 0%	0 0%	3 12%	16 62%	6 23%	1 4%
19do the learnings and learning outcomes	4	0 %	2	8	11	1
prepare students for transition to related Senior secondary studies?	15%	0%	8%	31%	42%	4%
20was publication of the syllabus and guidelines on the web an effective strategy	1	0	8	5	8	4
to make them available to teachers?	4%	0%	31%	19%	31%	15%
21was the size of the project team feasi- ble in the development of the syllabus and	19	1	3	0	2	1
guidelines?	73%	4%	12%	0%	8%	4%
22was the use of email and web-based surveys an effective way to obtain feedback	3	0	3	10	6	4
on the syllabus and guidelines?	12%	0%	12%	38%	23%	15%
23was the use of contract writers with a review team effective in the development of	16	0	0	6	2	2
the syllabus and guidelines?	62%	0%	0%	23%	8%	8%
24was the absence of formal trial/pilot processes feasible in the development of	8	1	3	9	3	2
the syllabus and guidelines?	31%	4%	12%	35%	12%	8%
25was the absence of sourcebook guide- lines and modules feasible in the develop- ment of the syllabus and guidelines?	5	5	7	5	2	2
on or the synabae and galdelines:	19%	19%	27%	19%	8%	8%

Survey items 8-25: Information & Communication Technology Education (N = 23)

1 /						
To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
does the rationale in the draft syllabus reflect current and emerging views	1	1	1	3	13	4
about education in the subject area?	4%	4%	4%	13%	57%	17%
do other aspects of the draft syllabus and guidelines reflect current and emerging	1	0	1	5	14	2
views about education in the subject area?	4%	0%	4%	22%	61%	9%
10do the draft syllabus and guidelines meet the needs of your students?	4	0	2	9	5	3
	17%	0%	9%	39%	22%	13%
11do the draft syllabus and guidelines meet the needs of teachers of the subject area?	0	1	3	8	9	2
	0%	4%	13%	35%	39%	9%
12are the syllabus and guidelines appropriate within the range of current curriculum offerings in schools?	1	1	1	4	14	2
	4%	4%	4%	17%	61%	9%
13are the draft learning outcomes effective in describing the fundamental learnings in the subject area?	0	0	2	5	14	2
14are the draft learning outcomes effec-	0%	0%	9%	22%	61%	9%
tive in describing a progression of learning?	1	0	1	9	10	2
15are the draft syllabus and guidelines	4%	0%	4%	39%	43%	9%
helpful for planning a course of study in the subject area?	0	1	1	12	9	0
16are the draft syllabus and guidelines	0%	4%	4%	52%	39%	0%
helpful in teaching a course of study in the subject area?	2	1	2	8	9	1
17are the draft syllabus and guidelines	9%	4%	9%	35%	39%	4%
helpful for assessment of students in the subject area?	0 0%	1 4%	5 22%	10 43%	7 30%	0 0%
18are the draft syllabus and guidelines						
easy to use?	1 4%	2 9%	3 13%	11 48%	3 13%	3 13%
19do the learnings and learning outcomes prepare students for transition to related	3	2	2	6	7	3
Senior secondary studies?	13%	9%	9%	26%	30%	13%
20was publication of the syllabus and quidelines on the web an effective strategy	2	0	0	6	4	11
to make them available to teachers?	9%	0%	0%	26%	17%	48%
21was the size of the project team feasi- ble in the development of the syllabus and	18	0	2	3	0	0
guidelines?	78%	0%	9%	13%	0%	0%
22was the use of email and web-based surveys an effective way to obtain feedback	5	0	1	10	4	3
on the syllabus and guidelines?	22%	0%	4%	43%	17%	13%
23was the use of contract writers with a review team effective in the development of	10	0	1	6	4	2
the syllabus and guidelines?	43%	0%	4%	26%	17%	9%
24was the absence of formal trial/pilot processes feasible in the development of the syllabus and guidelines?	7	2	8	3	3	0
25was the absence of sourcebook guide-	30%	9%	35%	13%	13%	0%
lines and modules feasible in the develop- ment of the syllabus and guidelines?	8	1	9	3	1	1
ment of the synabus and guidennes:	35%	4%	39%	13%	4%	4%

Survey results items 8-25: Industrial Technology & Design Education (N = 18)

Survey results items 6-25: ind	<u></u>		. .		- 0 0 0 0 0	• (=
To what extent	Cannot say	No extent	Limited extent	Some extent	Great extent	Very great extent
8does the rationale in the draft syllabus reflect current and emerging views	1	0	2	3	11	1
about education in the subject area?	6%	0%	11%	17%	61%	6%
 do other aspects of the draft syllabus and guidelines reflect current and emerging views about education in the subject area? 	1	0	1	3	12	1
10do the draft syllabus and guidelines	6%	0%	6%	17%	67%	6%
meet the needs of your students?	0	0	1	4	11	2
11do the draft syllabus and guidelines	0%	0%	6%	22%	61%	11%
meet the needs of teachers of the subject area?	0 0%	0 0%	2 11%	12 67%	3 17%	1 6%
12are the syllabus and guidelines approp-						
riate within the range of current curriculum offerings in schools?	0 0%	0 0%	2 11%	4 22%	11 61%	1 6%
13are the draft learning outcomes effec-						
tive in describing the fundamental learnings in the subject area?	0 0%	0 0%	4 22%	5 28%	8 44%	1 6%
14are the draft learning outcomes effec-	1	0	1	6	7	3
tive in describing a progression of learning?	6%	0%	6%	33%	, 39%	3 17%
15are the draft syllabus and guidelines						
helpful for planning a course of study in the subject area?	1 6%	1 6%	3 17%	9 50%	3 17%	1 6%
16are the draft syllabus and guidelines						
helpful in teaching a course of study in the subject area?	1	0	5	6	5	1
17are the draft syllabus and guidelines	6%	0%	28%	33%	28%	6%
helpful for assessment of students in the subject area?	1	3	5	4	5	0
18are the draft syllabus and guidelines	6%	17%	28%	22%	28%	0%
easy to use?	1	0	7	7	2	1
19do the learnings and learning outcomes	6%	0%	39%	39%	11%	6%
prepare students for transition to related Senior secondary studies?	1 6%	1 6%	5 28%	4 22%	3 17%	4 22%
20was publication of the syllabus and	4	3	1	2	3	5
guidelines on the web an effective strategy to make them available to teachers?	22%	17%	6%	11%	17%	28%
21was the size of the project team feasi- ble in the development of the syllabus and	10	0	2	4	2	0
guidelines?	56%	0%	11%	22%	11%	0%
22was the use of email and web-based surveys an effective way to obtain feedback	2	1	4	3	5	3
on the syllabus and guidelines?	11%	6%	22%	17%	28%	17%
23was the use of contract writers with a review team effective in the development of	10	0	1	3	3	1
the syllabus and guidelines?	56%	0%	6%	17%	17%	6%
24was the absence of formal trial/pilot processes feasible in the development of	11	1	2	1	3	0
the syllabus and guidelines?	61%	6%	11%	6%	17%	0%
25was the absence of sourcebook guide- lines and modules feasible in the develop- ment of the syllabus and guidelines?	8	1	3	1	3	2
ment of the synabus and guidelines!	44%	6%	17%	6%	17%	11%