

Agriculture

Stage 6 Draft Syllabus Package

Consultation Report

1. Background

The preparation of the Agriculture Stage 6 Draft Syllabus Package took into account the instructions described in the writing brief approved by the Board December, 1998.

The Agriculture Stage 6 Draft Syllabus Package has been distributed widely for comment over the period 8/2/98 to 5/3/99. Additionally, consultations on the Agriculture Stage 6 Draft Syllabus Package have involved meetings with the following:

- ⇒ school sector representatives
 - Department of Education and Training
- ⇒ tertiary representatives
 - UWS Hawkesbury
 - Charles Sturt University - Wagga Wagga
- ⇒ TAFE
 - Primary Industries and Natural Resources - Orange
- ⇒ industry education representatives
 - Murrumbidgee College of Agriculture
- ⇒ professional associations
 - NSWAAAT
- ⇒ the Board Curriculum Committee for Agriculture.

Modifications to this draft, following widespread consultations, will enable the syllabus package to be finalised for submission to the Board Curriculum Committee, and the Board.

Thirty seven written responses to the consultation progress report in Agriculture were received. The sample profile is as follows on the next page:

28 Individual responses

Teachers	24				
Rural	14				
Government	9	Catholic	1	Independent	4
Metropolitan	10				
Government	7	Catholic	1	Independent	2
Academics	2				
Others	2				

9 Institution/group responses

Organisation details:

Schools:

Moderate (<500)	-	Medium (500 – 800)	-	Large (>800)	3
Government	3	Catholic	-	Independent	-

Tertiary/post-school:

Universities	-	TAFE	1	Industry/training	1
--------------	---	------	---	-------------------	---

Special Interest:

Parent Groups	-	School Sectors	1	Other	2
Teacher/professional associations			1		

Key Issues

Key Issues for Stage 6 Agriculture arising from the consultation process:	Summary of action taken as a result of these Key Issues								
In the Preliminary course the content based on experimental design and research does not sit well in the Overview and should be incorporated in both the Animal and Plant Production sections.	The content based on experimental research has been incorporated into both the Animal Production and Plant Production sections.								
In light of the above issue, the allocation of time for Preliminary Course should be changed.	As much content has been removed from the Overview section, the allocation of time for the Preliminary Course has been changed to: <table style="margin-left: auto; margin-right: auto;"> <tr> <td>Overview</td> <td style="text-align: right;">15%</td> </tr> <tr> <td>Farm Case Study</td> <td style="text-align: right;">25%</td> </tr> <tr> <td>Plant Production</td> <td style="text-align: right;">30%</td> </tr> <tr> <td>Animal Production</td> <td style="text-align: right;">30%</td> </tr> </table>	Overview	15%	Farm Case Study	25%	Plant Production	30%	Animal Production	30%
Overview	15%								
Farm Case Study	25%								
Plant Production	30%								
Animal Production	30%								
Can an equitable balance be obtained between the project and the electives? Is it going to be easier to get a higher mark by doing the electives than the project?	The Research Project and Electives each have three common outcomes. Marking criteria linked to these outcomes will be distributed in the final syllabus package. This will ensure that the student performance on the optional Research Project is comparable to student performance on two Electives.								
The draft performance bands are quite difficult to understand and do not relate clearly to the draft syllabus.	Another iteration of the draft performance bands will be published in the final syllabus package. Performance bands will not be finalised until 2001.								
The structuring of the content of the draft syllabus has reinforced the impression created in the objectives and outcomes, that this is a theoretical course. The model adopted in some of the other technology syllabuses, such as food technology, where content is presented as 'students will learn about' and 'students will learn to' is strongly supported. It could be applied to this draft syllabus and would remove current concerns expressed by teachers regarding the role of practical experiences.	The content of the final syllabus is presented as 'students will learn about' and 'students will learn to'.								

3. Analysis

3.1 Quantitative Analysis

3.1.1 Agriculture in the Stage 6 Curriculum

Nil Response	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
2	23	0	0	1	0
8%	88%	0%	0%	4%	0%

3.1.2 Pathways for Agriculture Stage 6 Students

Nil Response	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
2	13	10	2	2	1
7%	43%	33%	7%	7%	3%

3.1.3 Aim

Nil Response	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
1	16	11	1	1	0
3%	53.5%	37.5%	3%	3%	0%

3.1.4 Objectives

Nil Response	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
2	14	13	1	0	0
7%	47%	43%	3%	0%	0%

3.1.5 Course Structure

Nil Response	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
3	9	14	3	0	0
10.5%	31%	48%	10.5%	0%	0%

3.1.6 Outcomes

3.1.6a Preliminary course outcomes

Nil Response	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
2	10	14	4	0	0
7%	33%	47%	13%	0%	0%

3.1.6b HSC course outcomes

Nil Response	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
4	8	13	4	0	1
13.5%	27%	43%	13.5%	0%	3%

3.1.7 Content

Nil Response	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
3	9	13	2	1	2
10%	30%	43%	7%	3%	7%

3.1.8 Assessment Components, Weightings and Tasks

Nil Response	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
2	12	12	1	3	0
7%	40%	40%	3%	10%	0%

3.1.9 Agriculture Stage 6 HSC Examination Specifications

Nil Response	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
2	10	13	0	4	1
7%	33%	44%	0%	13%	3%

3.1.10 Post-School Opportunities

3.1.10a Links between courses and training packages

Nil Response	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
3	5	13	7	2	0
10%	17%	43%	23%	7%	0%

3.1.10b Links between courses and VET opportunities

Nil Response	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
2	5	13	8	2	0
7%	7%	43%	27%	7%	0%

3.1.11 Agriculture Stage 6 Sample HSC Assessment Items

Nil Response	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
9	10	10	1	0	0
30%	33%	33%	3%	0%	0%

3.1.12 Agriculture Stage 6 Draft Performance Bands

Nil Response	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
9	7	7	4	2	1
30%	23%	23%	13%	7%	3%

3.1.13 Overall Evaluation

Nil Response	Excellent as is	Good, with fine-tuning	Acceptable with re-working	Unsure	Unsatisfactory in issues treatment
10	0-	13	2	3	2
33%	0%	43%	7%	10%	7%

3.2 *Issues Raised and Writing Team Action*

Syllabus Item	Issues	Source/s	Action
Agriculture in Stage 6 Curriculum	Well written	Distance Education Agriculture Teachers Network	Noted
Pathways for Agriculture Stage 6 Students	Stage 4 Agriculture missing. Agriculture should appear at the top of the subject list - Stage 5. Some confusion remains with arrows. Word 'Other' be changed to 'Other Providers'	Distance Education Agriculture Teachers Network DET NSWAAAT	Agreed. Diagram has been modified in line with the issues. Page 8.
Aim	Lacks clarity	BCC	Noted. Minor modification made. Page 9.

Objectives	Practical requirement of 30% is not reflected by the objectives.	DET	Noted. Minor rewrite of objectives to reflect the 30% practical nature of the course. Page 12.
------------	--	-----	---

Syllabus Item	Issues	Source/s	Action
Course Structure	Change the allocation of time for Preliminary Course to <ul style="list-style-type: none"> - Overview 15% - Farm Case Study 25% - Plant Production 30% - Animal Production 30% 	BCC Teachers	Agreed. Writers have incorporated this change in the final syllabus package. Page 9
Outcomes	The optional components of the HSC course involves a choice between undertaking a research project or studying two electives. The electives all address outcomes H3.4, H4.1 and H5.1. In contrast, the research project only addresses outcomes H4.1 and H5.1. As these options must be comparable then they need to deliver the same outcomes.	DET, BCC and three teachers.	Agreed. Writers have modified the final syllabus so that the Research Project and Electives each have three common outcomes. Page 22

Syllabus Item	Issues	Source/s	Action
Content	<p>The structuring of the content of the draft syllabus has reinforced the impression created in the objectives and outcomes, that this is a theoretical course. By presenting the content as 'Students will learn about', it gives substantial advice to teachers about what topics should be addressed, but inadequate advice regarding what experiences students are intended to have. It also supports the view that the knowledge-based aspects of the course are more valued. The model adopted in some of the other technology syllabuses, such as Food Technology, where content is presented as 'students will learn about' and 'students will learn to' is strongly supported. It could be applied to this draft syllabus and would remove current concerns expressed by teachers regarding the role of practical experiences.</p>	<p>DET, BCC and four teachers.</p>	<p>Agreed. The writers have modified the mandatory content component of the final syllabus. It is presented as 'students will learn about' and 'students will learn to'. In the optional component the stem 'students will learn' has been retained.</p>

Syllabus Item	Issues	Source/s	Action
Content	Research and technology component of the content are poor inclusions - may be difficult for distance education students who may be working unsupervised.	Distance Education Agriculture Teachers Network	Not supported. Access to technology is rapidly improving for isolated students; it is expected that all students of Agriculture are familiar with research and technology associated with modern Australian agriculture.
Course Requirements	No issues		
Assessment components, weightings and tasks	<p>In the optional research project, the 'animal production' component of the preliminary course, and the plant/animal production component of the HSC course, there are significant issues regarding animal experimentation. The syllabus should provide firm advice to schools about the requirements to comply with the Animal Research Act.</p> <p>If the recommended change to weightings for the Preliminary course is supported then the weightings of the assessment components should also be adjusted.</p>	<p>DET, SACEC, BCC and two teachers.</p> <p>Teachers.</p>	<p>Writers have amended the syllabus to provide extra advice to teachers about the requirements on them to comply with the Animal Research Act.</p> <p>Writers have amended the Preliminary course assessment weightings to reflect the change in the course structure.</p>

Syllabus Item	Issues	Source/s	Action
<p>Agriculture Stage 6 HSC Examination Specifications</p>	<p>Teachers expressed concern at the examination specifications for Paper 2, which provides only one question for each elective. It was suggested that consideration be given to providing two questions per option, given the scope for large variations in how each option may be taught in schools.</p> <p>The optional components of the HSC course involve a choice between undertaking a research project or studying two electives. This approach is designed to meet the different interests and abilities of the full range of students and for this reason is supported. However, it raises the question of how the Board can ensure comparability between students who decide to study two electives and those that submit a research project?</p> <p>More information about the nature of the HSC examination is required: -the timing of Paper 1 and Paper 2 -the commencement date for the research project and the electives</p>	<p>Teachers</p> <p>DET and teachers</p> <p>Teachers</p>	<p>Not supported. No action. One question per elective will be maintained. The content statements and questions in the sample examination paper provide a very good guide to the scope and depth expected in the electives.</p> <p>The research project and the two electives will be assessed against three common outcomes. (H3.4, H4.1 and H5.1). Making criteria aligned to each of these outcomes will ensure comparability between the research project and the two electives. Such marking criteria will be provided in the final syllabus package.</p> <p>Noted. Further information about the timing of Paper 1 and 2 will be provided as part of the routine HSC exam timetable information. Current arrangements for the commencement date of the research project will apply.</p>

Syllabus Item	Issues	Source/s	Action
Post-School Opportunities	<p>Figure 1, p41 does not make sense - the AQF levels need to be included to make it clearer.</p> <p>It is important that once the course is finalised in its content that it is linked to course/subjects in the VET sector. The mistake must not be made to try and modify the course to fit in with the VET too much as it will take away some of the academic rigor that the course needs. The VET sector needs to decide what units/outcomes/objectives in the course match their courses, not the BOS try and match the VET courses. Once the linkage has been established, it is important that students are able to apply for RPL into the VET Sector from studying the Stage 6 Agriculture Course</p>	NSWAAT, DET and two teachers.	<p>Noted. The section 'Post school opportunities' has been rewritten.</p> <p>Credit towards a qualification under the AQF and credit transfer to TAFE will be negotiated and published on the Board's website and in the HSC/TAFE Credit Transfer Guide</p>
Glossary	No issues		

Syllabus Item	Issues	Source/s	Action
Agriculture Stage 6 Sample HSC Assessment Items	Question 4c focuses on Aboriginal land management practices which is not a topic in the HSC course	DET	The content of the HSC course has been modified.
Agriculture Stage 6 Draft Performance Bands	The Performance bands are quite difficult to understand. The overall concept of having questions that test at each level of understanding in the HSC exam is a good idea however how will the differentiation between what students know be determined.	DET, NSWAAAT and several teachers.	Work on performance bands will continue through to 2001. Another iteration of the draft performance bands will be published in the final syllabus package. Performance bands will be not be finalised until 2001.
Overall Evaluation	Overall, the Draft Syllabus is quite good. It has incorporated the 2 Unit and 3 Unit course outcomes and content quite well. The electives offer a chance for students to be extended. The overall exam structure is fine.	NSWAAAT, BCC This view is reflected in most of the teacher responses.	Writers have made minor changes to the draft syllabus.

4. Responses

Written responses were received from the following individuals and groups:

Individuals

Name	School/Group
Joanne Taylor	Barham High School
David Morgan	Barker College
George Di Scala	Bidwill High
Peter Osterloh	Bomaderry High
A Kelly	Camden High
Myo Win	Charles Sturt University
Ron Ford	Corpus Christi College
S Moore	Crestwood High
Felicity Michael	Deniliquin High School
Anon	Dubbo Christian School
Don Selway	Frensham
David Robinson	Gloucester High School
Charles Anderson	Griffith Catholic High
Karen Stiles	Independent
Lisle Brown	James Ruse Agricultural High School
Ian Hatherly	Kinross Wolaroi School
Bob Anderson	Knox Grammar
Cyril Wood	Leumeah Tech High
John Hurst	Morisset High school
Trevor Sewell	Moruya High School
Ewen McPhee	Murray High School
Geoff Creek	Murrumbidgee College of Agriculture
Patrick McCann	NSW Agriculture Teachers Association
Peter Napier	Orange High School
T Buckley	Raymond Terrace high
Rob Forsberg	The Armidale School
Ken Langford	UWS Hawkesbury
Anon	Yass High School
David Blowes	Yeoval Central

Groups

Group
Bathurst High School
Board Curriculum Committee Agriculture
Distance Education Agriculture Teachers Network
Moruya High School
NSW Association of Agriculture Teachers
NSW Department of Education and Training
Pennant Hills High School
Schools Animal Care and Ethics Committee
TAFE – Primary Industries and Natural Resources ESD / Orange