

Tools for review

Agriculture technology

- tools for reviewing teaching and assessment plans, units of work and assessment tasks in Stage 4/5 technology subjects
- key resources and specific policy links

AGRICULTURAL TECHNOLOGY

OVERVIEW

Agricultural Technology is an elective 100 or 200 hour course that enables students to develop an understanding of environmental, social and economic factors affecting the Australian agricultural industry. It focuses on the interactions, development and management of sustainable and marketable plant and animal enterprises.

TEACHING AND ASSESSMENT PROGRAM

Does the teaching program (including course plan and units of work):

- demonstrate how all syllabus requirements are met?
 - for the 100 hour course:
 - students complete all the essential content specified in Core A within a minimum of two agricultural enterprises (syllabus page 17)
 - practical experiences occupy at least 50 per cent of course time
 - for the 200 hour course:
 - students complete all the essential content specified in Core A and Core B within a minimum of four agricultural enterprises (syllabus page 22)
 - practical experiences occupy at least 50 per cent of allocated course time
- contain units of work that are based on experiences that include fieldwork, small plot activities, laboratory work, plant and animal husbandry activities and visits to commercial farms and other parts of the production and marketing chain?
- effectively use the resources available at the school such as staff expertise, facilities, equipment, and organisational structure?
- recognise and build on student interests and prior learning?
- focus on the deep and significant skills and understandings of the course and clearly articulate key concepts?
- demonstrate a logical flow of relevant learning and ideas within each unit and from unit to unit?
- demonstrate a progression of student learning over the course towards more sophisticated, deeper understandings and skills?

Does the assessment program/plan/scheme for the course:

- outline the assessment tasks to be used in each reporting period and directly link to school reporting requirements?
- use a balanced range of assessment strategies that reflect the most significant learning in the syllabus?
- specify the targeted syllabus outcomes/content?
- include a timeframe?
- demonstrate student progression over the course?
- facilitate consistent teacher judgement?
- appear to be manageable for students and teachers?
- address the school assessment and reporting policy and support the allocation of course performance descriptors for the School Certificate?

Does each assessment task:

- focus on specific syllabus outcomes and content?
- focus on depth of understanding and skill of a manageable number of key concepts?
- focus on significant learning in the course?
- assess knowledge and skills that students have had an opportunity to learn?
- provide students with clear expectations about requirements?
- include explicit assessment criteria that identify the features of successful student work?
- allow students to demonstrate achievement at each level of performance?
- allow for meaningful feedback to be provided to the student?

TEACHING PRACTICE

In an effective agricultural technology classroom the following features may be evident:

Students

- each student will be engaged in their work
- at any one time students may be working on different aspects of the class activities as compared to others in the class
- students may be asking for regular feedback from peers and teachers and at times will be having conversations about the tasks they are performing
- students will be applying safe work practices to all practical activities
- students may be moving around the classroom as they get resources, move to different activities or seek feedback from the teacher
- students are responsible for their own work areas and equipment
- students manage their time effectively so as to leave the classroom or school farm on time and in a condition suitable for the next class.

Teachers

- the teacher can clearly articulate what they want the students to learn and why this learning matters
- the teacher can identify the relationship between the lesson and the teaching program and justify any variations to the program
- the teacher is aware of what students know and can do, how student learning is progressing and adjust teaching in relation to this understanding
- the teacher can justify their choice of learning activities in relation to the needs and interests of their students and the programmed learning
- the teacher uses a variety of senses to monitor the classroom and to inform their practice including the look, sounds and smells etc of the classroom
- the teacher assesses risks in an ongoing manner and, if a particular student is identified as unsafe, immediately takes action to change or modify the activity for that student
- the teacher is aware of and provides feedback to students about their progress
- the teacher allows some student direction of ideas and decisions and uses questioning to challenge and identify issues that the student may need to consider
- the teacher may be instructing individual students, small groups or the whole class or may be circulating about the room observing and interacting with students as they work.

Learning environment

- the classroom has available resources such as materials, chemicals, equipment and information that are appropriate to the task
- any equipment or material that may present a hazard has been risk assessed and relevant DET policy and guidance advice followed. eg. chemical storage and use as per the *Chemicals in schools guidelines*
- the relationship in the classroom between teacher and students is productive and the teacher promotes constructive relationships and feedback between students about their project work.

REFERENCES

- **Board of Studies advice:**
Syllabus and support document, assessment advice
http://www.boardofstudies.nsw.edu.au/syllabus_sc/#ablanguages
Assessment Resource Centre
<http://arc.boardofstudies.nsw.edu.au/go/sc/ag-tech/>
- **Curriculum K-12 Directorate programming and assessment advice:**
Programming tools and templates, sample course plans, units of work, assessment plans, assessment tasks and teaching ideas
<http://www.curriculumsupport.education.nsw.gov.au/secondary/technology/index.htm>

DET POLICIES/GUIDELINES

- Teaching and assessment programs and practice should reflect relevant DET policies available at: <https://detwww.det.nsw.edu.au/policiesintra/atoz/search.do?level=>
- Specific policies and related support materials to note include *Occupational health and safety* policy, *Chemical safety in schools and animal welfare guidelines* and *Protection from the sun*.