



INTEGRATED APPROACHES TO TEACHING AND LEARNING IN THE SENIOR SECONDARY SCHOOL

To meet the completion requirements of the Western Australian Certificate of Education (WACE) from 2009, students in senior secondary school can select a combination of Curriculum Council course units, vocational education and training (VET) units of competency and endorsed programs. Most students study a combination that prepare them for post-school pathways and enable them to achieve the WACE. Some students may select a combination that provides a meaningful learning program but does not lead to the achievement of a WACE.

To encourage greater levels of engagement from particular students and to help improve their literacy and numeracy skills, schools may integrate two or more course units, VET units of competency and/or endorsed programs. This strategy is particularly relevant in schools delivering re-engagement programs, schools in remote and regional areas, agricultural colleges and for the education of students with disabilities.

1 The purpose of integration

Integration requires a multidisciplinary approach which recognises the importance of the transferability of skill development and application, key concepts and processes. It involves planning a teaching, learning and assessment program drawn from two or more course units, VET units of competency or endorsed programs. The content and assessment required can be taught through thematic, project or topic based approaches, or using a more context focused delivery

Some students engage and learn more effectively when taught using an integrated approach rather than using discrete units as they typically:

- enjoy 'real life' learning opportunities in meaningful and culturally appropriate contexts
- cope better with fewer assessment tasks—where assessment tasks can be appropriately constructed to meet the needs of two or more course units/VET units or endorsed programs
- find it better to deal with fewer teachers—where the same teacher is delivering two units and thus sees the students twice as often
- make the connections between the parts of the program and enjoy its variety
- enjoy participating in partnerships with business, training organizations, community groups and connect with wider community based activities like environmental projects.

2 Delivering an integrated program

Teachers delivering integrated programs need to have experience and knowledge across a range of disciplines. It helps if they possess a wide range of skills, expertise, experiences and a preparedness to 'have a go'.

Although an integrated approach may provide efficiencies in the use of time and resources, it is important to consider that students may tire of a program that is delivered over an extended period or consumes a significant amount of the student's overall program. For this reason, integrated programs are often broken down into shorter, achievable sections or modules.

Where the integrated program is delivered by more than one teacher, the teacher expertise can be 'teamed' to achieve positive outcomes for students, teachers and the school. This approach requires collaboration between the teachers and others involved. Initially, the establishment of an integrated program requires extra time to plan and prepare. However, efficiencies gained in planning, programming, assessment task development, marking, resources and program delivery are worthwhile. Collaborative planning results in the sharing of expertise. The modeling of skilled teaching and effective classroom management is beneficial.

The collaborative process can also operate between schools. The sharing of teaching programs and assessment tasks, particularly between remote schools, can be useful in catering for student mobility.

3 Choosing what to integrate

The course units, VET units of competency and endorsed programs that a school considers for integration will depend on a combination of factors including student needs, teacher skills and the facilities available. When selecting what to integrate, the 'overlap' of content from each course unit/VET unit of competency/endorsed program should be a key consideration as a good proportion of content overlap will help in the development of concepts and tasks. In the integration process the content focus can be blurred or lost so the integration of more than two course units, VET units of competency or endorsed programs requires extensive planning to ensure the development of key concepts, processes and skills in an appropriately sequenced manner.

Well structured planning is required to ensure that the assessment requirements of all parts of the integrated program are met. The assessment program will typically include some assessment tasks that are generated from the integrated content. Other tasks may be generated from only one of the units being integrated. The assessment tasks developed need to reflect the assessment types and weightings from the syllabus of each unit, for example, integrating Stage 1 units of Food Science and Technology with Stage 1 units of Business Management and Enterprise would be relatively easy as they have similar assessment types and weightings.

Although the integration approaches described here are primarily for students in Preliminary or Stage 1 units, the same principles could apply to the teaching of Stage 2 or 3 units (e.g. integration of English 3A/B and Philosophy and Ethics 3A/B)

Appendix 1 provides an example of one approach to planning an integrated program. *Appendices 2 and 3* provide some models and examples of how different course units, VET units of competency and endorsed programs may be integrated.

4 Assessment, moderation and certification

4.1 Enrolling students

Students must be enrolled separately for each course unit, VET unit of competency or endorsed program that is being taught. They are not enrolled in an integrated program.

4.2 Assessment

Regardless of whether course units are being delivered separately or as part of an integrated program, the standard of work required will be the same. The integration of the content and assessment tasks from different course units, VET units of competency and endorsed programs can make it difficult to identify whether the requirements for each are being met. Documentation needs to clearly distinguish between the course units, VET units of competency and endorsed programs that have been integrated.

The teaching program, course outline and assessment requirements provided to students for an integrated program will typically merge but need to clearly show that the different requirements for all parts of the integrated program are being addressed. To achieve this:

- A single assessment outline which merges the assessment requirements for the course units, VET units of competency and endorsed programs can be developed but needs to clearly show that the assessment requirements of each selection are being implemented, including the assessment weightings.
- Assessment records (i.e. marks book) need to clearly reflect the assessment outline/s. Where two or more teachers are involved this may require a common record system.
- The assessment requirements for VET units of competency and endorsed programs need to be met as they would be when they are delivered in a stand-alone format.

4.3 Moderation

The moderation process for integrated course units will follow the same format as for course units that are not integrated. School moderation visits and validations, where materials are sent to the Council, will be conducted by a moderator of integrated programs, who, where required will work in collaboration with specialist learning area moderators.

4.4 Certification

Student's completing units in an integrated manner will have the units/programs listed separately on their statement of results with a result for each.

5 Vocational Education and Training (VET)

VET can be delivered by schools providing they meet Australian Quality Training Framework (AQTF) requirements, including having access to required physical and human resources. Schools can deliver VET either by becoming a registered training organization (RTO) or by working in partnership with an external RTO, which provides the appropriate training. See VET infonet for information about the delivery of VET in schools www.vetinfonet.det.wa.edu.au/home/

6 Support for teachers

To provide support for teachers, consensus moderation meetings will be held with schools that are delivering 'like' integrated programs.

Assessment seminars for teachers delivering integrated programs for the first time will also be held. Attendance at these seminars is not compulsory but is highly recommended.

7. Case studies

The following case studies illustrate how some schools are currently teaching integrated programs.

Case study 1: Using integration to engage students

An innovative approach to the delivery of course units, VET units of competency and endorsed programs is required for some senior secondary students who have not engaged fully with earlier learning opportunities. One or two teachers, often working and planning in isolation, spend much of their teaching time with these students. Programs may be required to develop literacy and numeracy skills, enhance life skills, and improve school attendance and job readiness. A curriculum package for these students for one year includes a mixture of council course units (e.g. Stage 1 English integrated with Stage 1 Workplace Learning), VET units of competency (e.g. units of competency from Certificate I Business Studies integrated with Workplace Learning) and endorsed programs (e.g. Lifeskills, a Department of Education and Training 'Life Skills for Senior School Students' endorsed program comprising of 6 modules designed to assist student engagement).

The integration of 1A English and 1A Workplace Learning will provide a total of 2 units (one unit for each course) for WACE.

Case study 2: Using integration in regional schools

The planning process required for integration assists regional schools in preparing teaching and learning programs. It can bring about professional partnerships, particularly valuable where teachers may be from primary schools or TAFE. Collaboration in the planning of integrated teaching and learning can bring together teacher expertise and school resources. Collegiate planning through professional partnerships enables a higher level of thinking than planning alone. There is the opportunity for inexperienced teachers to benefit from the modelling of skilled teaching and effective classroom management in the senior secondary context.

Regional schools typically have a higher proportion of senior students selecting career pathways leading to apprenticeships and TAFE courses. Schools may choose to integrate two or more course units e.g. the integration of a Stage1 unit in Food Science and Technology

(Hospitality) with a Business Management and Enterprise Stage 1 unit, using enterprising skills, combined with aspects of food production. This process can involve students in a partnership with business or community groups.

Case study 3: Using integration for students in remote Aboriginal schools

The courses and endorsed programs selected for integration have been chosen to provide a literacy focus and a numeracy, healthy lifestyle focus. Schools could also incorporate VET units of competency as required.

Integrated programs have been developed to address issues such as mobility of students and the availability of teachers while also allowing for school based flexibility. In the literacy-based integrated program, course units from English as an Additional Language/Dialect have been integrated with course units from Aboriginal and Intercultural Studies. Course units from the Aboriginal Languages of WA have been partially integrated and Lifeskills (an endorsed program) has been integrated over a two year period. Sample lesson plans have been developed to model how the program could be implemented, mindful of the Aboriginal Literacy Strategy for DET schools or the Accelerated Literacy for AISWA and CEO schools. In the numeracy-based program, Physical Education Studies, Mathematics and Life Skills have been used to provide an engaging vehicle for developing numeracy skills.

Programs developed include ideas for teaching and learning activities, task sheets, assessment overviews and references for suggested resources.

Case study 4: Using integration for the education of students with disabilities

The integration of course units, VET units of competency and endorsed programs may assist in delivering literacy and numeracy using real life scenarios. The emphasis is on developing life skills and suitable post school options. For example, the integration of P stage units of English and Career and Enterprise and the integration of VET units of competency with Materials Design and Technology and a personal development endorsed program such as Recreational Pursuits, students may achieve a WACE. With a flexible approach, learning opportunities can be tailored for individual pathway plans.

Case study 5: Using integration to engage students seeking an academic pathway

A contextual approach using the mining industry could be used in the integration of course units for students seeking an academic pathway in senior school. Collaboration in the planning of an integrated teaching and learning program that can bring together teacher expertise from Society and Environment, Science and Technology and Enterprise would be required. Professional partnerships with local mining companies could be established to enable students to engage in related Workplace Learning.

A typical structure may include Economics 2A with a focus on markets where students apply their economic knowledge, reasoning and interpretation skills in the mining context. Integrated within this context can be Chemistry 2B with a focus on chemistry and the environment. Engineering Studies 2A can be also studied with a focus on generating motions and energy within the context of mining.

A curriculum package for these students may include two or more of these units with the possible inclusion of Workplace Learning and a mixture of VET units of competency related to laboratory skills, safety and the mining industry for example, units of competency from Certificate II in Engineering and Certificate III in Laboratory Skills.

Appendix 1

Example of one approach to planning an integrated teaching and learning program

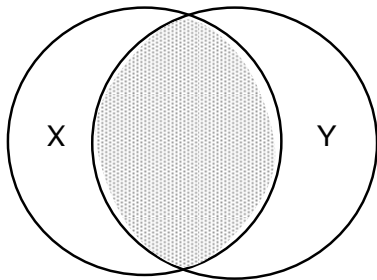
1. Initially identify an event, occasion or real life scenario within the school or wider community.
2. From the package of Council courses, VET and council endorsed programs delivered at the school, select two for consideration in the context of 1.
3. List ideas for 'rich tasks' and authentic learning processes. Select for depth of learning and real life challenges. For example, identify situation of café, graduation dinner, business proposal, environmental investigation, musical production, art festival.
4. Outline assessment tasks, types and weightings for each unit/program.
5. Identify teaching and learning content from the syllabus that will occur in an integrated manner along with appropriate assessment tasks.
6. Consider teacher skills, knowledge, expertise and experience and assess school facilities and resources.
7. Check assessment weightings conform to the syllabus requirements for each unit/program.
8. Develop an assessment outline showing assessment tasks, the relevant weightings and the 'due date'. Establish and distribute this to students before or early in the delivery of the integrated program as per Curriculum Council requirements.
9. When satisfied all requirements have been addressed, collaboratively develop a course outline and/or teaching program in each unit/program and the integrated component.
10. Each unit/program will have a grid line on the timetable. By integrating the units, there may be a saving in number of tasks to be completed. Consider the time 'saved' as an opportunity for extension or enrichment to increase interest.
11. Allocate duties and roles for teachers delivering and supporting the integrated program.
12. Regularly monitor progress of the integrated program.

NOTE: 'Keep it simple', particularly in the early implementation stages of new courses. Highly recommend integrating two units before embarking on more complex levels of integration.

Appendix 2

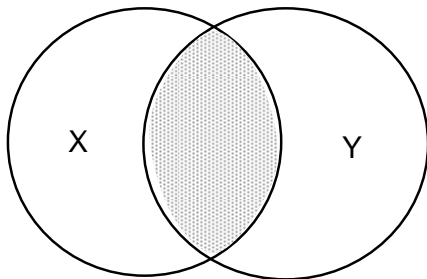
Units/programs considered for integration will depend on a combination of student needs, teacher skills and the facilities available. In selecting units/programs it is important that teachers look for content from each that 'overlaps'.

Example 1



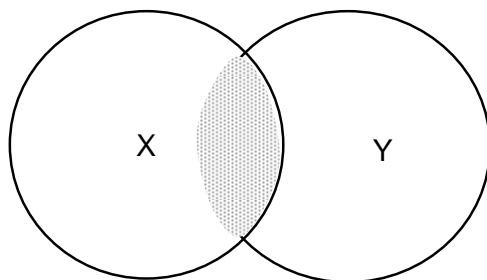
Consider the content of units English (X) and Career and Enterprise (Y). A high degree of common content and similarity between assessment types means the units are relatively easy to 'integrate'.

Example 2



Consider the content of units Applied Information Technology (X) and Materials Design and Technology (Y). Due to overlap of content and the similarity of some of the assessment types, these units may be able to be considered for integration.

Example 3

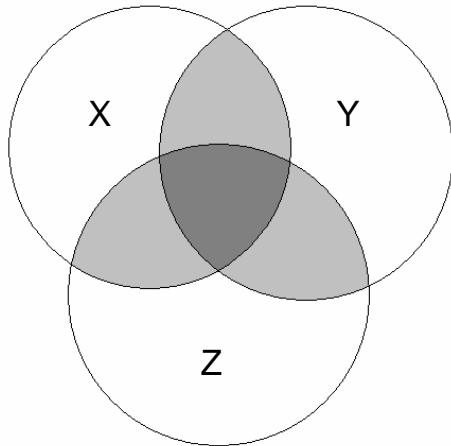


Consider the content of units English (X) and Mathematics (Y). There is little, if no, content or assessment types common, therefore integration should be carefully considered. Working collaboratively, teachers may identify certain assessment tasks within Units X (or Y) to be shared.

Appendix 3

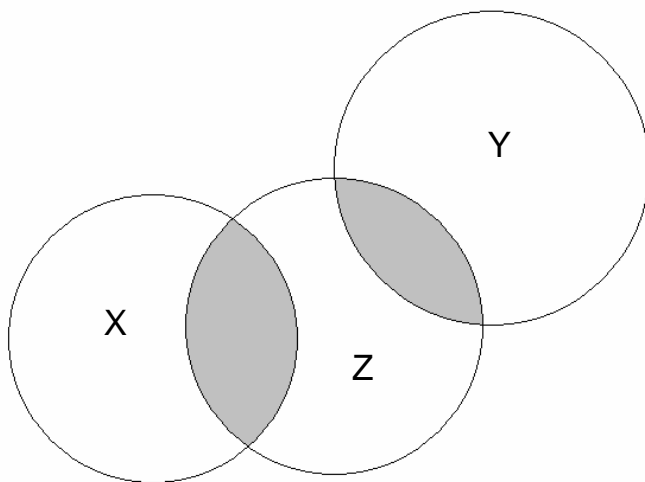
If a school is considering the combination of more than two units it will require collaboration and effective communication among teachers delivering each unit/program and the integrated component. To preserve the integrity of each unit/program and meet the assessment types for each syllabus, is complex to plan and clearly present.

Example 1



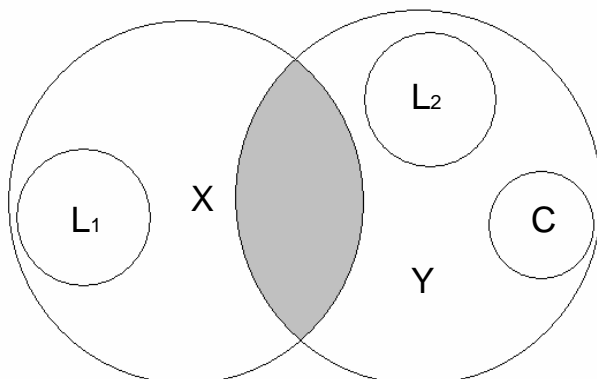
Consider the content of units English (X), Career and Enterprise (Y) and Food Science and Technology (Z). Due to the overlap of content identified these units may be considered for integration. The content and assessment types identified in the area shared by all three units needs to be clearly specified.

Example 2



Units from Health Studies (X) and Physical Education (Z) have been integrated. A unit from Mathematics (Y) is integrated with a unit from Physical Education Studies (Z) only.

Example 3



L₁ = Life Skills module 3
L₂ = Life Skills module 6

X = Unit of English
Y = Unit of Workplace Learning
C = VET units of competency