

**Giving students greatest advantage: graded assessment
within a competency-based vocational education and training
framework.**

A Paper for the 34th IAEA Conference

In Australia, vocational education and training (VET) is delivered and assessed within a competency based system. Competency based assessment is focussed primarily on a single judgement: is this student competent as assessed against the national competency standards, or is the student not yet competent?

Across Australia increasing numbers of students in the senior years of schooling are choosing VET certificates as part of their general education program. The reasons for these young people opting for VET are varied and reflect a multiplicity of pathways post school. The academic abilities of these students cover the broadest spectrum.

In Victoria, Australia, for some years now the Victorian Curriculum and Assessment Authority has implemented an assessment regime for senior secondary students undertaking VET, that enables judgements on levels of performance as part of competency based assessment, thereby deriving graded assessments. In this way VET "subjects" contribute to the senior secondary certificate with parity of esteem alongside the traditional academic subjects, maximising student advantage.

The presentation will illustrate the process for deriving graded assessments and will provide data on how these assessments contribute to both student achievement of the senior secondary certificate and to a broad range of post-school outcomes.

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Introduction

The Victorian Curriculum and Assessment Authority (VCAA, Victoria, Australia) is responsible for developing and delivering curriculum and assessment programs for the Preparatory to Year 12 years of schooling. As part of the expansion of senior secondary study options, the Victorian Curriculum and Assessment Authority also manages the credit arrangements for Vocational Education and Training (VET) programs that provide recognition in the Victorian Certificate of Education (VCE). This merger between general and vocational education and training has occurred through a well established national system called “VET in Schools”. Over one third of senior secondary students (between the ages of 15 and 19 years) in Victoria choose to undertake a vocational training program as part of their senior secondary certificate.

To formalise these cross-sectoral recognition arrangements, the VCAA selects and batches units of competence/modules from nationally recognised VET certificates and provides equivalent credit in the VCE. These selected VET certificates that have been attributed with a formal VCE credit recognition are badged “VCE VET programs”. A VCE VET program identifies for schools a training program in a particular industry area that has the support of industry, training and school sector stakeholders.

The formal recognition of VET as contributing to satisfactory completion of the VCE has been instrumental in driving the growth of VET in Schools in Victoria. Within the group of 28 VCE VET programs, 14 programs carry a scored assessment process that enables students to maximize their advantage in undertaking the VET certificates. With the implementation of graded, or scored assessment in VCE VET programs, the environment has been encouraged where students over the full range of abilities choose a VCE VET program because it has equal status with their VCE subjects and has value in its own right. VCE VET programs provide students with subject choices that stand alongside the general education subjects.

With a scored VCE VET program, a student can receive a Study Score that not only contributes to satisfactory completion of their VCE but contributes directly to the calculation of their university entrance ranking. In this way, we counter the perception that VET is a poor second cousin to the general education mainstream.

Principles of scored assessment in VCE VET programs

Why attach a scoring process to competency based assessment?

All students should be entitled to full recognition of their efforts across the spectrum of studies that they select. If we are serious that VET offers parity of esteem and that it is a valuable option for all students, then we should provide access to scores so that students can maximise their achievements. Like all general education, or academic, studies there is recognition of achievement at different levels of performance.

What does scoring do to competency based assessments?

The integrity of competency based assessment is retained because it remains at the centre of the delivery of the VET training program and the assessments against the competency standards. The assessment of student performance in the training programs must continue to be competency based. In order to satisfactorily complete the program students must demonstrate competence in all the units that make up the program. A student who is not assessed competent in all units will not be eligible to receive a Study Score.

Students may choose not to undertake the scored assessment process; this does not affect or alter in any way their attainment of the VET certificate. The achievement of a partial or full VET certificate is still determined by the assessments of the competency standards and the

validation of the Registered Training Organisation that has delivered and assessed the VET certificate training program.

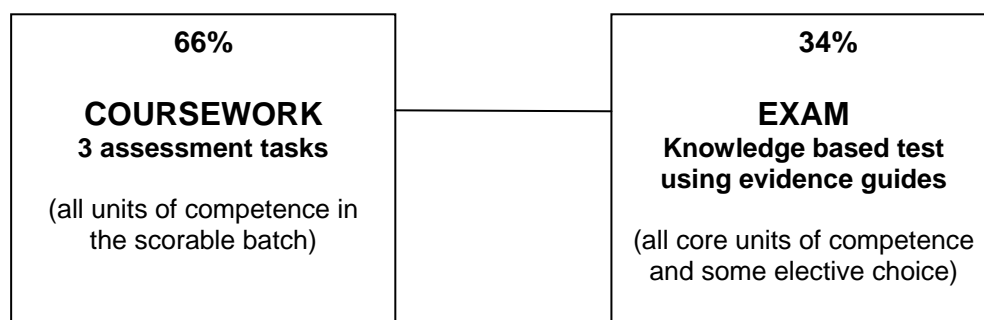
Design and methodology of the scored assessment process

There are two fundamental, non-negotiable principles in the design and implementation of scored assessment for VCE VET programs:

1. That the assessments conducted to determine competence are the same as those conducted to determine levels of performance. The scored assessment process asks assessors to report on the same assessments for dual purposes; the score constitutes a richer form of assessment and reporting.
2. That the scored assessment process deals with whole units of competence. The units of competence must be delivered and assessed in entirety and in compliance with the requirements of the competency standards within the training package from which they are derived.

A Study Score for a VCE VET program is comprised of two components: a coursework score that is derived from 3 individual scored tasks contributing 66% to the final score; and an externally set and assessed examination that contributes 34% to the final score.

Components of a Study Score



Coursework tasks

Four generic task types for coursework mirror the common assessment instruments used in competency based assessment in all training packages. These task types were identified as most commonly used by Registered Training Organisations in the VET sector. Each task type has its own design rules. The task types are:

Work Performance
Work Project
Product
Portfolio

The assessor must select at least two task types to cover the three coursework tasks. An Assessment Plan details this selection; the tasks cover all units of competence in the batch of competencies selected and designated for the scoring process in each VCE VET program.

Definitions: Competence = the specification of knowledge and skills and application of that knowledge and skill to the standard of performance required in the workplace.
Assessment = process of collecting evidence and judging whether competence has been achieved i.e. performance to the standards expected in the workplace.

Assessment plan

	Task 1	Task 2	Task 3
Unit of competence A	✓		
Unit of competence B			✓
Unit of competence C			✓
Unit of competence D		✓	

The rules that apply in the development of the Assessment Plan to ensure the integrity of the competency standards is preserved are:

- Use at least two of the task types
- Aim at an even spread across the units of competence
- The plan must cover all the units of competence in the selected scored program
- The plan must comprise the requisite number of tasks
- Units of competence can't be split
- There must be separate evidence for each task
- The plan is determined by the assessor in consultation with teachers and/or trainers and employer, where relevant
- Weighting rules apply according to the training and assessment hours nominated for each unit of competence.

The tasks must be designed to ensure that both assessment purposes can be met: judgment of the achievement of competence and assessment of the student's level of performance in the program. Maximum flexibility for the assessor in planning, scheduling and conducting assessments is retained, to reflect the range of assessment and delivery contexts in which students are undertaking the training.

To satisfactorily complete a task the student must achieve "S" (satisfactory) for all units of competence assigned to the task in the Assessment Plan.

Examination

The examination for each VCE VET program is drawn from the evidence guides of the units of competence selected for the scorable batch of competencies. The examination is set by the Victorian Curriculum and Assessment Authority and marked by assessors drawn from industry, Registered Training Organisations and schools. The examination is of 90 minutes duration and is conducted at the end of the school year.

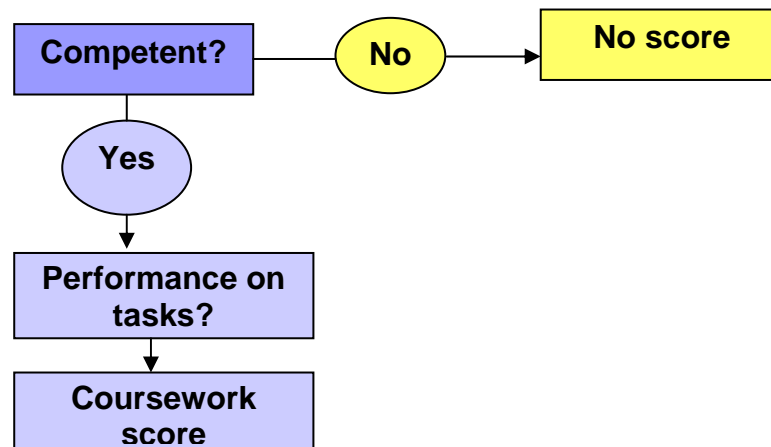
Statistical moderation

To quality assure the school coursework components of Study Scores and to apply a common standard, the coursework scores are moderated against the external scores derived from the examination. Statistical moderation adjusts the level and spread of each school's assessments of its students in a particular study, to match the level and spread of the same student's scores on a common external score.

The scoring process

The assessment of the student's level of performance on the tasks completed during the VCE VET program does not replace the competency based assessment, but is integrated with the usual assessment process. A student cannot receive a score for a coursework task unless the student has also been assessed as competent against the relevant training package competencies.

Integration with competency based assessment



Scoring criteria

In order to derive a score for the individual task, a set of 5 generic scoring criteria apply for each task type. Each criterion in each task type contains performance level descriptors along a 1-5 point scale. These task type criteria are summarised below and apply across all scored VCE VET programs. The assessor is encouraged to contextualize the scoring criteria for the specific industry within which the VCE VET program is located. The VCAA provides examples of contextualized scoring criteria for each program to support consistency of assessment practice.

Work performance

- Application of underpinning knowledge
- Communication, language and interpersonal skills
- Techniques and processes
- Work organisation
- Supervision and performance of work tasks

Work project

- Application of underpinning knowledge
- Expressing ideas and information
- Planning, organisation and implementation
- Collecting and analysing ideas and information
- Coherence and coverage

Product

- Application of underpinning knowledge
- Planning, organisation & implementation
- Problem solving
- Evaluation of product against plan or intended outcome
- Techniques and processes

Portfolio

Application of underpinning knowledge

Planning and organisation

Expressing ideas and information

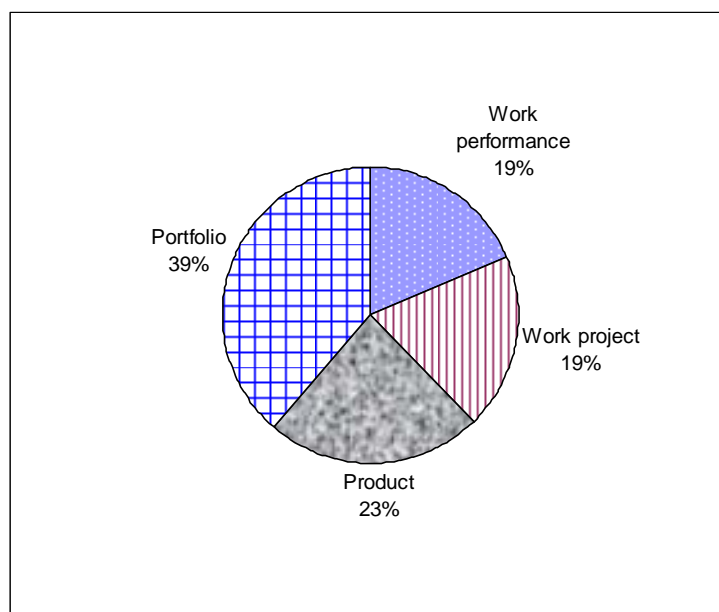
Content

Independence

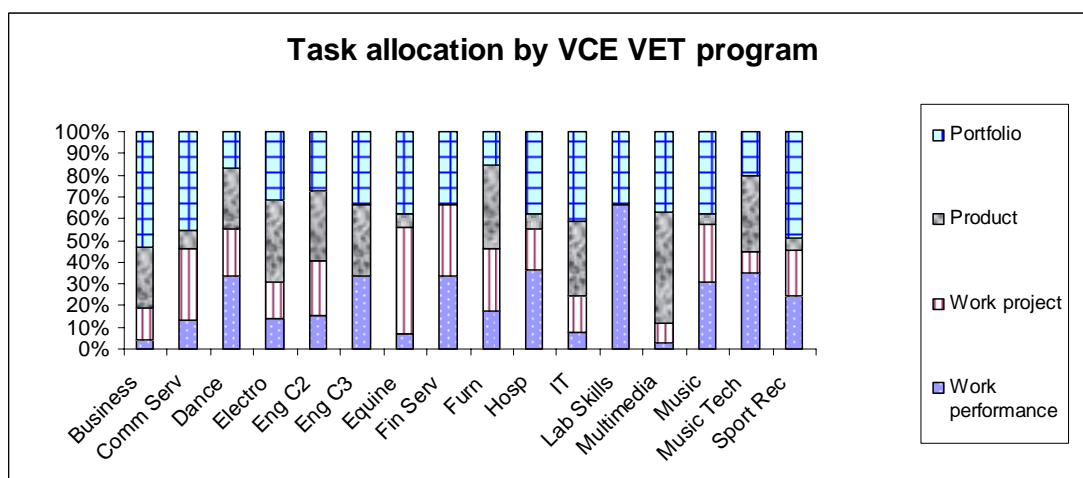
Task type preference - 2007 cohort

The following chart summarises the spread of usage of the four task types for the 2007 scored assessment cohort. It is common for assessors to select the same task type twice within the mandatory three tasks that must cover at least two of the available four task types.

Traditional trade programs (e.g. Electrotechnology, Engineering and Furnishing) are more likely to use a Product whereas other programs (e.g. Business) make wide use of the Portfolio.



However, there is variation in usage across different VCE VET programs.



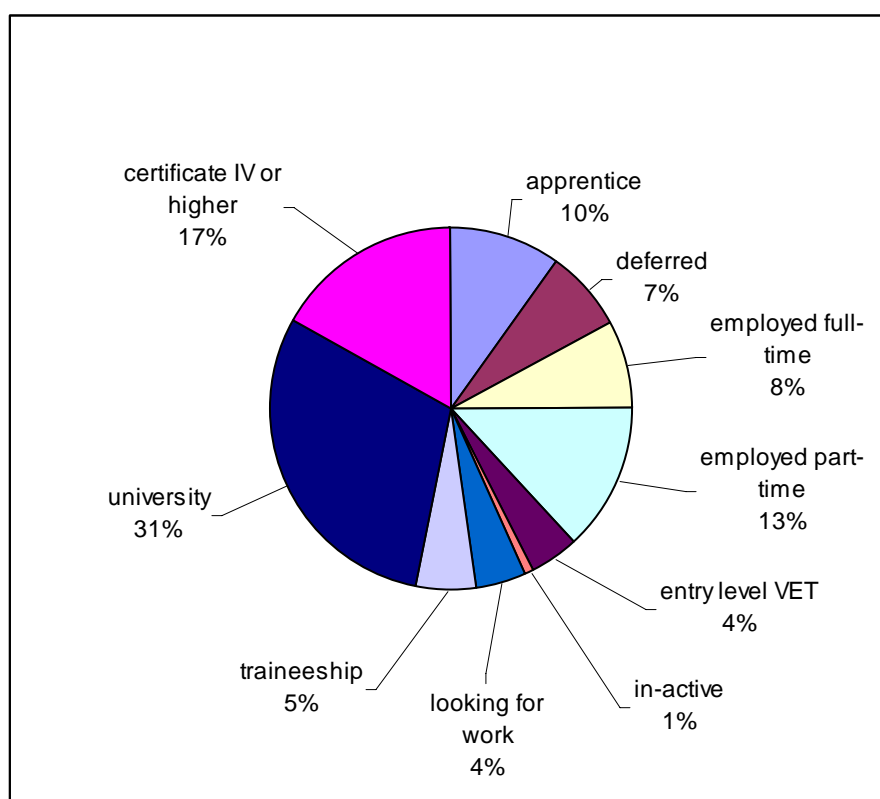
Student outcomes

Contribution to satisfactory completion of the Victorian Certificate of Education and achievement of one or more nationally recognised VET qualifications

A student's VCE may be comprised almost entirely of VET; the only mandatory element of the VCE in terms of subject selection is compulsory English. Scored assessment for VCE VET programs is optional and those students who have no intention of proceeding into higher education may choose to not undertake scored assessment. This decision does not affect the value of the VET training and certification they receive. Many students progress into apprenticeships, traineeships or go straight into employment on leaving school and for these students tertiary entrance requirements may be irrelevant.

The chart below shows the destination outcomes for students who completed school in 2005, who undertook VET programs as part of their senior secondary certificate. A significant proportion of students went on to university or higher level training at Technical and Further Education (TAFE) institutes.

Destination data 2005



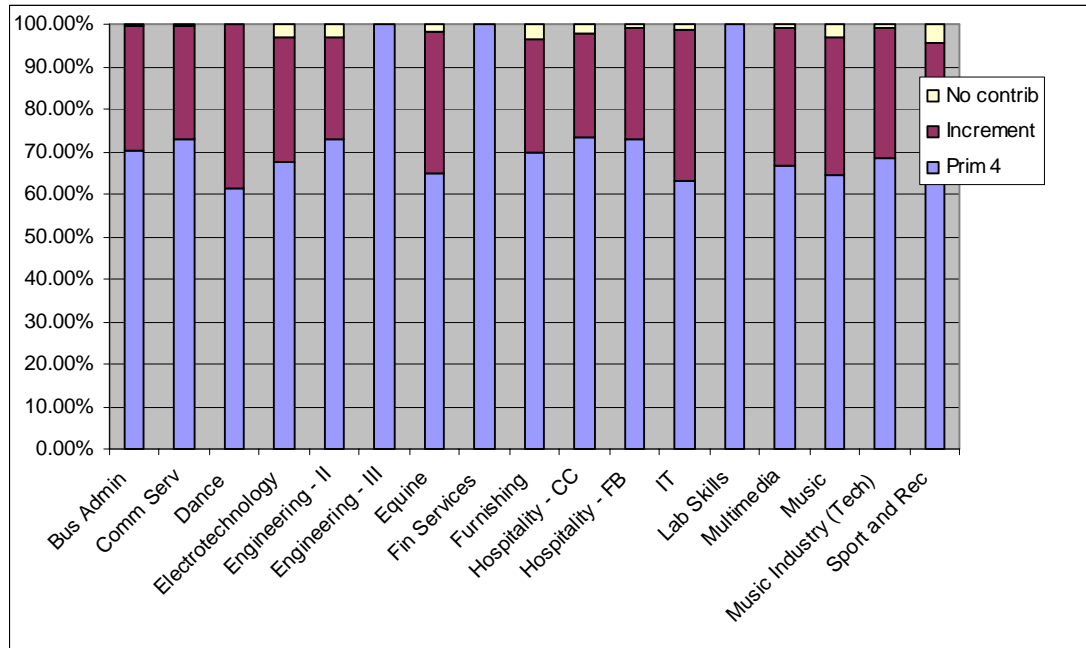
Contribution to eligibility for tertiary entrance and further training

If a student is undertaking scored assessment in a VCE VET program, they can use their Study Score to contribute directly to tertiary entrance. Universities and a number of Technical and Further Education (TAFE) institutes select students into their courses primarily based on the student's place on a ranking scale of all eligible students across the state. This is called the Equivalent National Tertiary Entrance Rank (ENTER).

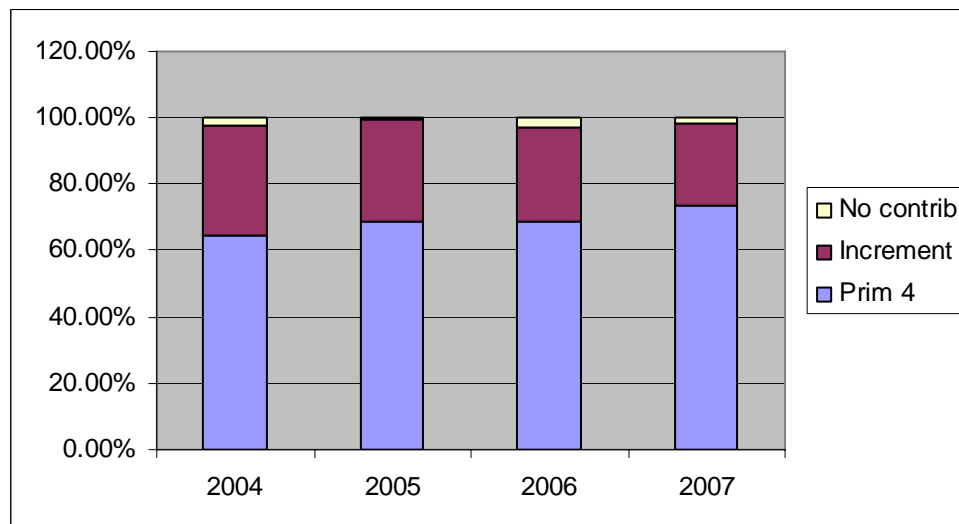
The ENTER is a ranking from 0 to 99.95. It is calculated for each eligible student from the ENTER Subject Scores derived from the Study Scores achieved across their VCE studies and VCE VET programs. Put simply, to be eligible for an ENTER, students must have a Study Score for English and have at least three other Study Scores. No more than six scores may be

used in the calculation of the ENTER; of these, English and the best three other scores (after a scaling process) form “the primary four”. Once the primary four is established, the student receives up to a maximum of two increments for additional Study Scores, and/or VET training programs for which there is no scored assessment process available.

The table below shows that for most students who received a VCE VET Study Score in 2007 and were awarded a 2007 ENTER, the VCE VET score contributed to their primary four.

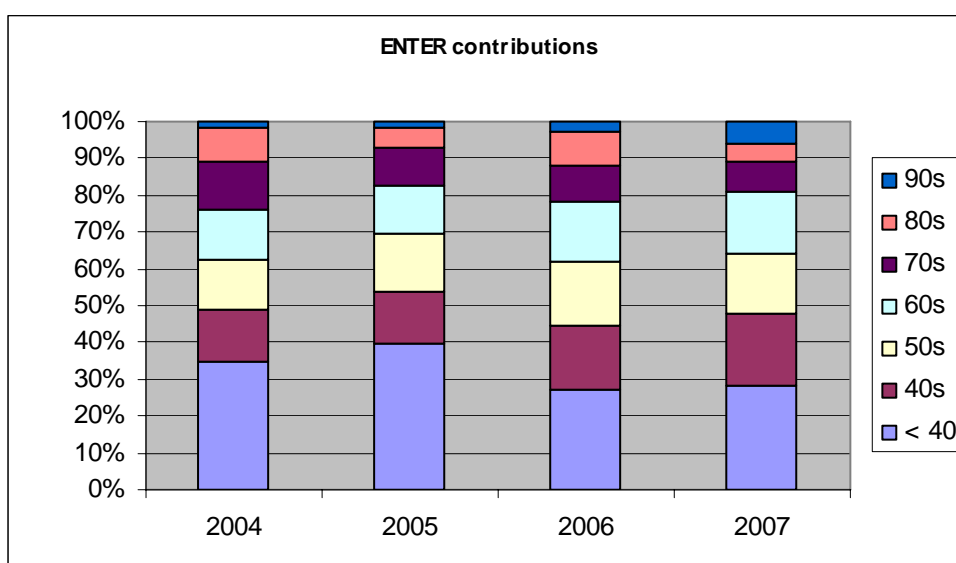


The percentage of students using a VCE VET Study Score in their primary four has increased gradually between 2004 and 2007.



The overall ENTER placement of students who have undertaken scored VCE VET is predominantly at the lower and middle bands of the ENTER range, although there is some variation dependent on the VCE VET program. The data in the table below refers to students where the scored VCE VET program was completed in the year in which the ENTER was calculated.

This data illustrates that although a broad cohort of students undertake a scored VCE VET program, the students who make “best” use of their VCE VET Study Score are those that are generally found in the lower and middle percentiles. In many cases, these students may have just four out of a possible six Study Scores from which to derive an ENTER, so the score achieved in their VCE VET program makes them eligible for an ENTER, thereby broadening their post-school options.



Maximum advantage

A student who receives a Study Score for one or more VCE VET programs achieves:

- a nationally recognised VET certificate, for example, Certificate II in Hospitality, Certificate III in Information Technology or Certificate III in Engineering
- contribution to satisfactory completion of the VCE
- direct contribution to the calculation of the ENTER

In the end, we want all young people to finish school and be able to exit with a qualification that is useful and that enables the young person to have choices about what pathway to follow. The first pathway may not be the one that is pursued in the long term, but having choices at the beginning of adult life engenders confidence to make decisions.