# **VCE Systems Engineering**

Developing School-assessed Coursework and linking to VCE assessment principles





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- The process for assessing the progress and achievement of students must be accessible, effective, equitable, reasonable and transparent.
- The purpose of school-based assessment (School-assessed Coursework [SACs] and School-assessed Tasks [SATs]) is to rank your student cohort.





# Purpose of school-based assessment

- The ranking of your student cohort for the SAT may differ from your ranking of student cohort for the SACs as well as for the ranking of student cohorts for the external assessment (examination)
  - Each is regarded as a separate graded assessment (GA).
  - SATs, SACs and exams are different types of assessment so do not expect ranking of student cohort to be same for each GA.







#### VCE assessment should be valid and reasonable

- The curriculum content to be assessed is explicit in each study design and related VCAA documents.
- Assessment instruments should **not** assess learning that is outside the scope of a study design.





#### VCE assessment should be equitable



Assessment should neither privilege nor disadvantage students or exclude them based on gender, culture, physical disability, socioeconomic status or geographical location.





#### VCE assessment should be balanced



- Assessment should provide a range of opportunities to demonstrate, in different contexts and modes, the knowledge, skills, understanding and capacities set out in the curriculum.
- The demonstration of different levels of achievement specified by suitable criteria, descriptors, rubrics or marking schemes must be supported.





#### VCE assessment should be efficient

- The study design will set out the minimum assessments for teachers to make a robust judgment about each student's progress and learning.
- Demands for precision must be balanced with those for efficiency.





Learning and teaching activities should:

- be designed to provide stimulus, engagement and personalisation with respect to the mandated outcomes
- provide opportunities for students to demonstrate these outcome statements and meet the requirements of the study (i.e. obtain an S).





#### **Excursions/ visits**

- Real and virtual
- Local/community





#### **Experiments/demonstrations**

- Real and virtual
- For example, rather than read about NO<sub>x</sub> scrubbers, develop a physical experimental investigation where scrubbers can be implemented and critiqued.





## **Develop simulations and/or models**

Real and virtual





#### **Encourage multimedia**

Video, image, simulation, experiment, interview ...





# Unit 3

Outcomes	Marks allocated	Assessment tasks
Outcome 2  Discuss the advantages and disadvantages of renewable and non-renewable energy sources, and analyse and evaluate the technology used to harness, generate and store non-renewable and renewable energy.	50	Any one or a combination of:  a short written report in the form of a media analysis or a case study or based on structured questions  a multimedia/simulation presentation or report  an oral presentation.
Total marks	50	





# Unit 4

Outcomes	Marks allocated	Assessment tasks
Outcome 2  Evaluate a range of new or emerging systems engineering technologies and analyse the likely impacts of a selected technology.	50	Any one or a combination of:  a written report in the form of a case study or a media analysis or based on structured questions  a multimedia/simulation presentation or report  an oral presentation.
Total marks	50	





## **SAT Q&A webinar**

- A Q&A webinar related to the SAT will be held in Term 1.
   Refer to the VCAA February Bulletin for details of the date and how to register.
- Any questions, information or clarification you would like to be covered during this webinar, please email to Dr Leanne Compton <u>leanne.compton@education.vic.gov.au</u>



