**Phil Feain** - Hello and welcome to the VCE Software Development Unit 3 School-based Assessment on-demand video for the Unit 3 Outcome 1 SAC for 2022. The purpose of Video 2 is to support teachers with understanding the background to Unit 3 Outcome 1 SAC for Software Development My name is Phil Feain and I'm the Curriculum Manager for Digital Technologies with the VCAA.

The purpose of this presentation is to: build the capacity of teachers to develop compliant, rigorous and engaging VCE assessment tasks in line with the VCE assessment principles and to provide an overview of the Unit 3 Outcome 1 School-assessed Coursework task. In this presentation we will cover: Planning. The Unit 3 Outcome 1 task. Key knowledge and key skills. VCAA Performance descriptors. Programming requirements document. Designing the assessment task. Developing the marking scheme. Using commercial tasks and look at the VASS dates for 2022.

So now we will go through the Unit 3 Outcome 1 SAC and look at how to make a compliant, engaging and rigorous assessment task. There's a document that you should consider before you start. Download the School-based Assessment report from the Software Development study page. This report provides advice for the first year of implementation of the study and is based on the findings from the 2020 School-based Assessment Audit for Units 3 and 4. Content includes: General observations on the Unit 3 Outcome 1 SAC and the Unit 3 Outcome 2 SAT. And specific information on the Unit 3 Outcome 1 SAC and the Unit 3 Outcome 2 SAT. This is worthwhile reading before you start writing the assessment task and to have next to you as you develop the task.

When you sit down to plan to develop the assessment task the following documents and resources will be useful to you: Applied Computing Study Design - Unit 3 Outcome 1 Software Development - pages 36-40. Area of Study statement, Outcome statement, Key knowledge and Key skills. Programming requirements document. Advice for teachers - Software development: Unit 3 Area of Study 1- Sample approaches to developing an assessment task. Software Development: Unit 3 Outcome 1 - Performance descriptors. School-based Assessment Audit report. And resources: 2022 Software Development Unit 3 Outcome 1 Assessment task development template - Blank. 2022 Software Development Unit 3 Outcome 1 Assessment task development template - Plan. 2022 Software Development Unit 3 Outcome 1 Developing a marking scheme - Sample and the 2022 Software Development Unit 3 Outcome 1 SAC Task Template.

As the teacher, you have several things to consider. You need to decide on the most appropriate task for your cohort, time and conditions for conducting the task and inform the students ahead of the date. Some other considerations include: the outcome being assessed and the task type, the estimated time it will take to teach the key knowledge and key skills for the outcome, the likely length of time required for students to complete the task, the classroom environment the assessment task will be completed in, whether the assessment task will be completed under open-book or closed-book conditions, any additional resources required by students and when tasks are being conducted in other subjects and the workload implications for students.

Let's have a look at the outcome statement. On completion of this unit the student should be able to interpret teacher-provided solution requirements and designs, and apply a range of functions and techniques using a programming language to develop and test working software modules. You need to ensure the SAC task meets this. There were many issues with several of the Unit 3 Outcome 1 tasks that I've seen over the last two years, particularly where the task did not even meet with the outcome statement.

Next is the assessment task itself. In response to teacher-provided solution requirements and designs, create working modules. And it must be out of 100 marks. Here's the key knowledge. These can be used to help develop the task or tasks. The scenario for the tasks should only reference these bullet points. For teachers wanting activities to assist with their students' learning, we have developed these examples of learning activities in the Advice for teachers.

These learning activities meet with the Unit 3 Outcome 1 Key knowledge bullet points. Your key skills are how you want to assess your students. Your assessment task needs to enable these key skills to be met. You want students to be able to: interpret solution requirements and designs to develop working modules, use a range of data types and data structures, use and justify appropriate processing features of a programming language to develop working modules, develop and apply suitable validation, testing and debugging techniques using appropriate test data and document the functioning of modules and the use of processing features through internal documentation.

We also have the VCAA Performance descriptors in the Advice for teachers for Unit 3 Outcome 1. We have seen teachers using these more and more over the last few years. These can be used to assist you in developing your assessment task and marking scheme/assessment criteria. If you are going to use this, don't just add it to the end of your task or commercial task. Often we see this is included but there's no relationship between the task and the performance descriptors. The assessment task should show the task and the marks for the prompts for what the students are to complete. Consideration should also be given to the weighting of the marks in the task. These descriptors do not need to be evenly weighted. When using the performance descriptors for the marking scheme you should also show the marks and weightings clearly within the document.

The Programming requirements document is available on the Software Development study page. It gives guidance for the programming requirements to be followed by students for the Unit 3 Outcome 1 SAC task. When designing the assessment task students should be advised that the timeline and conditions under which the task is to be completed. The assessment task must directly assess the students' understanding of the key knowledge and key skills, as well as their ability to apply these to the assessment task.

Due dates and duration of assessment is a school-based decision. Students should be given instructions regarding the requirements of the task, including time allocation, format of student responses and the marking scheme/assessment criteria. The marking scheme assessment criteria used to assess the students' level of performance should reflect the VCAA performance descriptors and key skills. When designing a task you need to consider how the Outcome statement, Key knowledge, Key skills and VCAA Performance descriptors connect together. By reading the Key knowledge, Key skills and performance descriptors alongside each other, tasks can be developed for assessment that covers the performance descriptors.

Teachers will need to write a task and provide solution requirements and designs for students to create working modules. Students are required to use an appropriate programming language that meets the programming requirements of the study. This year we have developed a template for teachers to follow and use to assist them with the development of the Unit 3 Outcome 1 assessment task. The purpose of the template is to assist teachers in developing an assessment task that meets requirements. It includes headings and directions for the assessment task development. This is available on the Software Development study page. There is more on this template in the Developing the Unit 3 Outcome 1 SAC task on-demand video.

This slide shows a resource that I have developed that shows the connection between the key knowledge, key skills and the performance descriptors. Teachers could use this resource to plan and develop the assessment task. This can be downloaded from the Software Development study page.

This slide shows a resource that I have developed that shows how to develop a case study or scenario for the assessment task around the key knowledge, key skills and the performance descriptors. Teachers could use this resource to write and develop the assessment task to meet requirements. This can be downloaded from the Software Development study page.

At this stage, you have developed your assessment task. Now you need to consider the development of the marking scheme. Some things you can do. List the VCAA performance descriptors and key skills. For each performance descriptor or key skill, list the activities required to demonstrate competency. Consider how many marks out of 100 that you allocate for each descriptor. Determine the weightings of the descriptors or components of the task. Think of the time expended by students for each part of the task, and allocate marks according to likely student effort areas. Think of the difficulty of specific tasks. Ensure that there is a chance for your struggling students to demonstrate levels of competency in the task. And develop your marking scheme/assessment criteria. You need to have a range of marks allocated for the levels of performance. This helps you to spread your student marks out.

This slide shows a resource that I've developed that shows an example of how you can determine the weighting of the marks out of 100 for the task. It is important to note that the weighting of the marks does not have to be the same for each descriptor or key skill. In this example, the weighting reflects what is expected in the task response in terms of the amount of content, time and detail required for each descriptor. This also helps you to spread your students' marks out over 100. This can be downloaded from the Software Development study page. Commercial tasks can be an issue and often teachers will follow these.

This slide looks at some potential concerns. Teachers often use a commercial task without checking it against the study design to see that it meets the outcome statement, key knowledge and key skills. An unmodified commercial task will more than likely not meet requirements. Teachers often use a commercial task as is without modifying it to suit their cohort. The task may be too easy or difficult for your cohort. Commercial tasks from previous years are often used without any alterations and often unchecked. Solutions are in the public domain and you cannot guarantee authentication. Often content for the assessment task is outside the scope of the outcome. Poor use of marking schemes or rubrics being used. And a lack of understanding of the connection to the task and the marking scheme, and issues with the weighting of descriptors.

If you're going to use a commercial task for ideas, we have some recommendations to assist you in meeting the VCAA Assessment principles. Firstly, you need to check it and modify it. Check the commercial task against the current study design. This includes the outcome statement, key knowledge and key skills. Be very watchful that the tasks address the current study design. Significantly alter the commercially-produced tasks each year in terms of context and content . Check the marking scheme/assessment rubric and ensure it meets the key skills and performance descriptors. And do the task yourself to ensure you are satisfied that it meets requirements and is suitable to your cohort.

These are the VASS dates for 2022. The due date for Unit 3 School-based Assessment - Unit 3 Outcome 1 SAC is Monday the 5th of September. The due date for the Unit 4 School-based Assessment - Unit 4 Outcome 2 SAC is Wednesday the 2nd of November.

In this presentation we: discussed planning, looked at the Unit 3 Outcome 1 task, looked at the key knowledge and key skills, looked at the VCAA Performance descriptors, discussed the Programming requirements document, discussed designing the assessment task and developing the marking scheme, discussed the issues with using commercial tasks and looked at the VASS dates for 2022.

Thank for following this presentation. If you have any questions regarding this presentation you can contact Phil Feain, the Digital Technologies Curriculum Manager at the contact details below.

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