**Phil Feain** - Hello and welcome to the VCE Software Development Unit 4 School-based Assessment on-demand video on the Unit 4 Outcome 2 SAC for 2022. The purpose of Video 2 is to support teachers with understanding the background to the Unit 4 Outcome 2 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 capacity to develop compliant, rigorous and engaging VCE assessment tasks in line with the VCE assessment principles and to provide an overview of the Unit 4 Outcome 2 School-assessed Coursework task. In this presentation we will cover: planning, the Unit 4 Outcome 2 task, key knowledge and key skills, VCAA Performance descriptors, designing the assessment task, developing the marking scheme, using commercial tasks and look at the VASS date for 2022. So now we will go through the Unit 4 Outcome 2 SAC and look at how to make it 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 4 Outcome 2 SAC and the Unit 4 Outcome 1 SAT and specific information on the Unit 4 Outcome 2 SAC and the Unit 4 Outcome 1 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 4 Outcome 2 Software Development pages - 43-45. Area of Study statement, Outcome statement, Key knowledge and Key skills. Advice for teachers - Software Development: Unit 4 Area of Study 2 - Sample approaches to developing an assessment task. Software Development: Unit 4 outcome 2 - Performance descriptors. School-based Assessment Audit report and resources: 2022 Software Development Unit 4 Outcome 2 Assessment task development template - Blank. 2022 Software Development Unit 4 Outcome 2 Assessment task development template - Plan. 2022 Software Development Unit 4 Outcome 2 Developing a marking scheme - Sample and the 2022 Software Development Unit 4 Outcome 2 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 respond to a teacher-provided case study to examine the current software development security strategies of an organisation, identify the risks and the consequences of ineffective strategies and recommend a risk management plan to improve current security practises. You need to ensure the SAC task meets this. Next is the assessment task itself. The student's performance will be assessed using one of the following: structured questions, a report in written format and a report in multimedia format. It must be out of 100 marks.

Here's the Key knowledge. These can be used to help develop the case study. The scenario for the case study should only reference these dot 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 4 Outcome 2 Key knowledge dot points. The key skills are how you want to assess your students. Your assessment task needs to enable these key skills to be met. You want your students to be able to: analyse and discuss the current security controls to protect software development practises and to protect software and data, identify and discuss the potential risk to software and data security with the current security strategies, propose and apply criteria to evaluate the effectiveness of the current security practises, identify and discuss the possible legal and ethical consequences to an organisation for ineffective security practises and recommend and justify an effective risk management plan to improve current security practises.

We also have the VCAA Performance descriptors in the Advice for teachers for Unit 4 Outcome 2. 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 or 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 is 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 and the task. These descriptors do not need to be evenly weighted. When using the performance descriptors for the marking scheme or assessment criteria you should also show the marks and weightings clearly within the document. When designing the assessment task students should be advised of the timeline and conditions under which the task is to be completed. The assessment task must directly assess the student's 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 or assessment criteria. And the marking scheme or assessment criteria used to assess the student's 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 case study and determine how student performance will be assessed via structured questions, a report in written format or a report in multimedia format.

This year we've developed a template for teachers to follow and used to assist them with the development of the Unit 4 Outcome 2 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 4 Outcome 2 SAC task on-demand video.

This slide shows a resource that I've put together of a template showing how the key knowledge, key skills and performance descriptors link together. This can be downloaded from the Software Development study page. You can use this to help you to plan and develop your assessment task.

This slide shows a resource that I've put together of a template showing how to develop a case study or scenario around the key knowledge, key skills and performance descriptors for the assessment task. This can be downloaded from the Software Development study page. You can use this to help you to develop your assessment task. At this stage you have developed your task and determined how you want your students to respond to it.

Now you need to consider developing the marking scheme. 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 would use for this particular area. Determining weightings - two factors to consider: 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 or 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 another resource that I have put together of a template showing an example of determining the weighting of the marks out of 100. 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 response in terms of the amount of content, time and detail required. This also helps you to spread your student marks out over 100. This can be downloaded from the Software Development study page.

And now for some advice for developing case studies. The outcome statement requires students to examine the current software development security strategies of an organisation. Not proposed information systems. Case studies should involve an organisation that develops software. Case studies should include details of the current security risks to the software and data during the software development process as well as the use of the software solution. Content within the case study should reference the key knowledge from Unit 4 Outcome 2. And content in the case study should not be outside the scope of the outcome. 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 - 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 are going to use a commercial task for ideas, we have some recommendations to assist you in meeting the VCE 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 or assessment rubric ensure it meets the needs. Sorry. 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. The due date for Unit 4 School-based Assessment scores for the Unit 4 Outcome 2 SAC task is Wednesday the 2nd of November.

In this presentation we covered: planning, the Unit 4 Outcome 2 task, the key knowledge and key skills, the VCAA Performance descriptors, designing the assessment task, developing the marking scheme, the issues with using commercial tasks and the VASS date for 2022.

Thank you 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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