Hello and welcome to the VCE Software Development School-based Assessment on-demand video on the Unit 4 Outcome 2 SAC for 2021. The purpose of this video is to support teachers with understanding the School-assessed Coursework task for Software Development. My name is Phil Feain and I'm Curriculum Manager for Digital Technologies with the VCAA.

Copyright in this presentation is owned by the Victorian Curriculum and Assessment Authority or in the case of some materials, by third parties. No part may be reproduced by any process except in accordance with the provisions of the Copyright Act 1968 or with permission from the Copyright Officer at the Victorian Curriculum and Assessment Authority.

The purpose of this session 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 session we will cover: The VASS date for 2021. Planning. The Unit 4 Outcome 2 task. Key knowledge and key skills. VCAA Performance descriptors. Designing the assessment task. Developing the marking scheme. Issues coming out of the 2020 audit and advice.

So now we'll 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.

The due date for Unit 4 School-based Assessment scores for the Unit 4 Outcome 2 SAC task is Wednesday, the 3rd of November. When planning it is a good idea to consider how your task and marking scheme will meet the four VCE assessment principles of: valid and reasonable, equitable, balanced and efficient. You can refer to the Unit 4 School-based Assessment on-demand videos for further information regarding the assessment principles.

When you sit down plan to develop the assessment task, the following documents or resources will be useful to you: Applied Computing Study Design - Unit 4 Outcome 2 Software Development - pages 43 to 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 2020 and resources: 2021 Software Development Unit 4 Outcome 2 Assessment task development template - Blank. 2021 Software Development Unit 4 Outcome 2 Assessment task development template – Plan, and 2021 Software Development Unit 4 Outcome 2 Developing a marking scheme - Sample.

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 consequences of ineffective strategies and recommend a risk management plan to improve current security practises. Next is the assessment task itself. The student's performance will be assessed using one of the following: structured questions or a report in written format or 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 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. Analyse and discuss the current security controls to protect software development practises and to protect software and data identify and discuss the potential risks 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 recommended 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/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 in the task. These descriptors do not need to be evenly weighted. When using the performance descriptors for the marking scheme/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/assessment criteria and the marking scheme/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 or a report in written format or a report in multimedia format.

This slide shows a resource that I have 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 have 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/assessment criteria.

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 students' marks out. This can be downloaded from the Software Development study page.

Over the next few slides we will look at some issues coming out of the 2020 audit. Looking at issues with the case study. Case studies lacking in sufficient detail for students to respond appropriately to the structured questions or in the written report. Organisations, such as small businesses, that were not involved in the developing of software. Content included that was outside the scope of the outcome. Use of terminology that was inconsistent with the current study design and key skills or VCAA performance descriptors not being referred to when developing the task. Looking at issues with the structured questions/prompts. Some structured questions were too simple and awarded one mark for responses, and some case studies had too many questions worth only a few marks each for students to complete within a very short timeframe. Structured questions that listed the specific content for students to write about, such as security controls, risks or data integrity characteristics. Students unable to analyse the case study and select relevant details to write about in their responses because the case study lacked detail and structured questions and prompts that did not enable students to respond with the sufficient level of detail, with a range of marks on offer to enable the top students to achieve at their highest level and to spread student marks out over the 100 marks available for the task.

Looking at issues with marking schemes. Many of the submitted tasks included the VCAA performance descriptors. The link between the performance descriptors and marks for the structured questions or prompts were not always clear in the submissions received. Several tasks had marking schemes that did not total 100 marks or did not indicate how they were to total to 100 marks and the weighting of marks was also an issue, with several schools indicating the same number of marks for each set of descriptors referenced in the performance descriptors.

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. Terminology used in the case study should be consistent with the outcome statement, key knowledge and key skills from the current study design and case studies need to include sufficient detail for students to respond to the structured questions or prompts in a written report.

Looking at advice for developing structured questions and marking schemes. Develop appropriate structured questions and prompts to enable students to respond with a sufficient level of detail, with a range of marks on offer to enable the top students to achieve at their highest level. The number of marks and their weighting for a question or prompt should reflect the depth, complexity and detail required of students when responding to the case study and the appropriate weighting of marks also helps to spread student marks out over the 100 marks available for the task. Looking at advice on meeting requirements. Teachers are encouraged to check their assessment tasks and marking schemes against the outcome statement, key knowledge and key skills when developing the case study and the structured questions or prompts for the written report. Check again when completed and ask the question - does this assessment task and marking scheme meet requirements?

And finally advice on using commercial tasks or previously used tasks. If you decide to refer to a commercial task or a previously used task for ideas or to actually use one: Check the task against the current study design. Check against the outcome statement, key knowledge and key skills. Ensure it addresses the current study design. Commercially-produced tasks need to be altered. They need to be significantly modified in terms of context and content. Previously used tasks will also need to be altered. Check the marking scheme/assessment rubric and ensure it meets the key skills and performance descriptors. Ensure the task indicates the marks to be awarded and how they contribute to 100 marks. Consider the weighting of marks. And don't just stick the VCAA performance descriptors after the task. These need to clearly relate to the task. They may need be to be modified.

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.

Phil Feain, Curriculum Manager – Digital Technologies, tel: 03 9059 5146, email: [Philip.Feain@education.vic.gov.au](mailto:Philip.Feain@education.vic.gov.au)

[Copyright Victorian Curriculum and Assessment Authority 2021](https://www.vcaa.vic.edu.au/Footer/Pages/Copyright.aspx)