**Leanne Compton:** My name is Leanne Compton. I'm the Curriculum Manager for Design and Technologies at Victorian Curriculum and Assessment Authority. The VCAA has developed a series of on demand videos for teachers of Product Design and Technology. For the delivery of teaching and learning program and assessment program for 2021. Thank you for watching this video and this one will focus in on unpacking the School-assessed Task criteria five to nine. Simon Van Dillen, who is the state reviewer for Product Design and Technology will take you through this presentation so over to you, Simon for this session. Thank you.

**Simon Van Dillen:** Thanks Leanne, and welcome everybody. And thank you for taking the time to watch this presentation. And hopefully, over the next few minutes, we'll be able to answer any questions you have around the SAT criteria five to nine. And the students' requirements on this.

These videos don't, this particular video, sorry, doesn't look at how we're assessing those or how to rank your students. There is another video in this series around ranking students against for the SAT. This video is looking at really how, what those students are required to do for each of these criteria. So let's move on intellectual property statement there.

So once again, the current study design that we have, the accreditation period for this current study design has been extended and expires the 31st of December in 2023. And it should be the study design that you are using for this year. Administrative information from school-based assessment in 2021 can be found on the VCAA website. And this is stuff you're required to do the ranking of your students. And also the criteria that we are going to be looking through reminder of this video is on there.

So the School-assessed Task. Units three to four. The School-assessed TAsk is worth 50% of the study score. It commences in Unit 3 and finishes in Unit 4. It's the mandated assessment criteria are published annually in the VCAA sorry, VCAA Product and Technology study page on the VCAA website. And notification of this always comes out in the bulletin in February. First bulletin for the year. And I believe you go to the website now, you'll find information to this.

Okay, so the School-assessed Tasks, the teachers, the authentication, the 2021 teacher authentication record form is in the, you use pages 18 to 22. This is used to record the information about each student and must be made available if requested by the VCAA. Teachers should be also aware of the dates of submission of scores to on VASS. There's a set of scores due in June and the final set of due in November. So criteria is one to three are due in June and criteria, the remaining criteria are due in November. The particular dates published on the VCAA website. And the other piece of information or administration information to be aware of is that the earliest date that SATs can be returned to students is the 5th of November, 2021. And that's the earliest you can return the SATs, folios and products to the students.

So Unit 3. Applying the product design process. We looked at that on completion of this unit students should be able to document the product design process used to meet the needs of an end-user and the commencement of the production of the product, designed product. The folio comprises, so it's the nature of the task of the folio, comprises of the following areas of sections. And in a previous video, we've gone through a number of these areas and we'll finish the last part of Unit 3 off now.

So in Unit 3, the SAT assessment criteria also, SAT assessment criteria five used this year, it relates to Unit 3. So it's the ability to document understanding of, and judgements about suitable, oh, sorry, the suitability of materials and production processes, tools and equipment, machinery, and identify how the product would be manufactured in industry. That was what this criteria is assessing. So our indicators. Documents suitability of materials and production processes, tools, equipment and machinery. And then also identifies how the product would be manufactured in industry.

So, we'll look into the first indicator there. Documents suitability for materials and product and production, processes, tools and equipment and machines. So the keyword, if you look at the criteria sheet, so students who achieve a very high in this, in this indicator, the student needs to assess and that's the word that's written there. Assess the suitability. So for them to do this is, you know, this could include, and, but of course not limited to doing primary research through material and process testing. So that's where you'd see a student for why they'd be undertaking those process and process and material tests. And maybe too that a student knows that a particular process which they might not have access to at school or they may know would be more beneficial to increase the quality of their product. They're going to have to outsource part of their product. They can still show they're assessing this through using secondary information or and through secondary information. And then having been able to, I guess, critique it, break it down. It may also be that they actually go to the person who, or organisation or business that is going to do the outsourcing and do the primary research for them and they'd be speaking to them. So the student doesn't actually need to be able to do the process themselves, but they need to assess why that process is the better process for this particular product. And look at it in that fashion.

Okay. Identifies how the product will be manufactured in the industry. So students should be referring to the scales of manufacturing on page 24 of the study design. Looking at those scales of manufacturing and then looking at their product and going, okay, how would my product be manufactured in industry. And then writing to that, or to, instead of you writing, they're providing information to that in part of their folio explaining and how that is and why they would use that and how they go about that. So we'd want to see students have an understanding here of those scales of manufacturing and different processes that is used in an industry and how that might about. Go to the next one. So we're now moving on. So that was the last, I guess, last criteria that relates to Unit 3.

We're now moving into Unit 4 and Unit 4 Outcome 2. On the following criteria are going to relate to this. So on completion of this unit, students should be able to apply a range of production skills and processes safely to make the design product in Unit 3 and manage time and resources effectively and efficiently. So the nature of these task is production work accompanied by the completion of a folio. So that folios comprising of a record, of record of the completion. Sorry, record of the production process and documentation of any modifications with justification to these changes. So it could be text, it could be images, it could be videos that could be included, how they want to go about it. And the other part of this, the other, is the functional product, another task required, that conforms to the standards and qualities indicated in the design brief outlined in the context. Now, refer back to when it says functional product. You need to refer to the study design and what the study design indicates a functional product to be. When you are deciding on, the student's choice of product is that [sorry, for my movement then].

Okay. SAT assessment criteria six. Skills in application of appropriate processes including risk management and recording of this progress. So indicators here follows the scheduled production plan. Demonstrates record of progress including end-user feedback. Use appropriate processes where, with a level of complexity, demonstrates risk management. So the first indicators follows a scheduled production plan. So this is a teacher observing during production. Checking against the student's production plan and the document of modification and changes. So recording on your evaluation or sorry, in your authentication sheet, how the student's going along through production. How they following their scheduled production plan. And if they're not, have they documented any modifications and changes that have happened to this and adjust, you know, why. Demonstrates record of progress including end-user feedback. So this could be any format. It doesn't have to be a written document. Students may want to use examples online want to do electronic and when we do hard copy, et cetera. There's no rules around how they record their progress. They just need to make sure that they've recorded it but they've also included that end user feedback. So once again, end user feedback doesn't have to be written. It could be an online, it could be electronic, it could be through surveys, however they want to go about it. But just then they've recorded that progress. And important, they've got end user feedback here. Use appropriate processes with a level of complexity.

Okay. So the students must independently undertake these processes. To get a very high, they need to independently undertake these processes. However, the teachers may need to teach the processes to the students first. So you might have students come into the study who have not done that particular, use that particular material since might never have, or from earlier on in the learning, their schooling time. So there'll be processes that they haven't done before. So a teacher teaching a student how to do a particular process, isn't aided. That isn't, you don't look at that as being aided. Okay. So there's teacher. So the idea is the teacher will teach it explicitly to those students, that student or that group of students may have to teach a couple of times. They may do observe the students doing it and giving them feedback around doing it. And then when the student goes and does that process on their product, that they're actually able to do it independently themselves. So they're actually able to do that. It also doesn't mean that, I'll use resistant materials as an example, a student is clamping up timbers to and laminating timbers together and clamping them together that they need a couple of people will give an extra pair of hands. An extra pair of hands helping to do a process is not aided. As long as the student is actually directing the others on what they need to do. So just making sure that they do this. There also needs to be a level of position and technical skill needed here too. So we need to make sure that whatever they're doing is actually, there is, the decision is there and they've got that technical skill, their ability.

Now you're going to have students that are going to outsource some of these processes with little complexity. You can't give them marks towards that here. You can't look at that process and say, Oh yeah, that's a level of complexity They knew that that was going to be great for the product. And deem that they've a very high because of actually done those. Students need to actually, undertake the process themselves. Then using the outsourcing for particular processes is to help with I guess the quality probably the quality of their final product. And they can't just be given marks here because they think that's going to be the best way. You do actually need to see them do processes with complexity. And look, it's a question around that too is what's considered a complex process and what's not considered a complex process. You need to be looking at your cohort of students. You need be looking at once again, you going to be ranking these cohort of students.

So if you've got a cohort of students that have worked with this material all the way through their schooling and do processes that have high level of complexity already, well, then you would be expecting that most of their processes are at that level. If you've got a group of students who, you know, that they're new to this material that they're working with, that they've got processes in there of complexity but they might not have as many as what another cohort would have, but that doesn't matter because you're ranking your group of students as long as you can rank your cohort of students later on. So you need to compare that.

You might have a student that class, in your class that's got, that uses six, seven high level complex processes. Or of course, they're going to be ranked higher than the student that only uses one or two in your particular class. So you've just got to make sure it's fair the way that it's been, what they're using, what they're doing. Teachers, so risk management. So the teacher observes during production. So you're just observing students are allowed to take in their risk management. Are they checking their controls? Documenting this on the authentication sheet So you've got reference to go back to later when you're doing your assessment.

Okay. So criteria seven. Skills in project management and justifying modifications in the realising of the preferred option. Indicators. Use project management skills and justifies modifications including end-user feedback. So both indicators on the one page here. On the one slide. The use of project management skills. So manage your time and demonstrate organisation. So they might still finish the project by the particular date that they said they would but you want to look at the whole process. Did they use their time wisely? Did they manage their time wisely? Did they demonstrate organisation? Or did they come in at the last week and putting a lot of hours and finally produced a product? Where would you mark them on this? So you can only do that as a teacher observing as I go through putting your notes on your sheets. Your authentication sheets, and how they've gone along noting that they're not as far along as what they probably should be at week two or three, and then at week seven, depending on how many weeks, the weeks that you're giving the students. So that way you've got evidence there when you are marking these students later on, but they need to be how are they use their time management across the whole product of the whole time that might available.

Justify modifications, including end-user feedback. So they're required to produce the preferred option. So you can't have a student who's made a totally different product to what the preferred option was. And then any modifications that have happened through the management of it and that sort of stuff. At least has been documented as well. Sometimes things are going to change, and they're not going to be able to make it exactly the same or to the level that it was meant to be at. But they've at least justified those and they've used end user feedback. So they've spoken to the end user about that as they've gone through.

Okay. Criteria eight. Skills in developing a quality product that is creative and innovative. Indicators. Produces a quality product that's creative and innovative. Links product to the design brief and follows scheduled production plan and modifications. So produces a quality innovative product. So quality matches what the students stated in the design brief. In previous video, we talked about the fact that it has to be a realistic quality. So, you know, what can that student produce? And so making sure that the quality that they've put in their design brief is realistic. Innovative and creative. What makes it different to other products on the market? So look at it and go, okay, we really simply, Can I see this in a catalogue? Could I purchase this somewhere else? What makes it different to other products that are out there already? And talked about in the previous videos as well with criteria one to four, if a student's end-user wants something that isn't creative, that isn't innovative, you can't award the student marks at this point because their end user didn't want that. The students, this should have been identified really back in the beginning. And the students saying actually the problem that you're giving me doesn't allow me to be innovative or creative enough or the situation or the need doesn't allow me to be creative and innovative enough. I'm going to have to find another need or problem. And that should be done where all the way back in criteria one. So they are, the product is innovative and creative, what makes it different to the product that's on the market. Links to design brief. So that it meets the design brief and all the constraints and considerations. And if it doesn't meet all the constraints and considerations that there's been documentation of modifications for why and this documentation there. Does it meet the requirements?

So sorry, the next, follows scheduled production plan and modifications. So does it make the requirements of the production plan and the modifications? So when you look at it, they've documented that they've made these modifications. Does it make that? Did they follow the production plan as it gone through? Okay, so in Unit 4, Outcome 3, our last criteria is linked to this. And on completion of this unit students should be able to evaluate the finished product through testing and feedback against criteria. Created, criteria created end user, and create, sorry, create end user, instructions or care label and recommend improvements on future products. So the nature of the task here, it's a written report that includes evaluation of the product. And relevant end user instructions or care labels, which highlight the features, assembly care and or repair of the product and it could be of any, following any of the following formats. Video tutorials, annotated image of the product, or other multimedia formats. So it doesn't have to be just a drawn image. Real photo of the image has just been annotated. Students could be very creative here. And your cohort of students and allowing your cohort of students to work with where their strengths are best at.

So, SAT assessment criteria nine. Skills in evaluating finished product, user instruction slash care label which communicates the product features, care and use and or assembly. So the indicators we're looking for here evaluates the finished product, using evaluation, using criteria, and then user feedback. Identifies areas improvement and creates user instructions/care label to communicate the product features, care and use and or assembly. So at first indicator. Evaluates finished product using criteria and end user feedback. This evaluation is, so using the evaluation criteria, that's written in four parts, which the students developed in criteria one. So right back at the beginning of the year where students created the evaluation criteria. They're using these now. They must undertake testing. So the testing that they wrote in their four-part evaluation criteria is how are they going to test the product is what they're now undertaking. So early in the year, this is how I'm going to test it. And now we're seeing that. And to achieve a very high in this area, students need to assess the results of each test and present their findings. So they need to demonstrate, to undertake the test, collect data from those tests, present that data. So that there's clearly evidence there of that, and being able to make justification of how the product has actually met that criteria or not. So they have been able to talk about that. And user feedback can be part of this as well. Helping them assist that part of their testing as well.

Okay. Identifies areas of improvements. So to achieve a very high here, they need to justify and say that word. This may be using the collection of data from the testing of the product beforehand. It may be using feedback from the end users, et cetera. And students can look at the entire design process and see areas which could have been enhanced to improve, sorry, to produce an improved product. So not just looking at, okay, what could have been improved on the final product but looking at was there areas in my research that could have helped me improve this product? Was there areas in the writing of the design brief? Did we really meet the need or were there missing constraints and considerations that there should have been, other constraints, considerations put in. And justify and areas of improvement. It's not until after they've gone through the whole process that they know what they're missing. So it doesn't have to be just the final product. They can then talk about this here, and this will help you. Your top student will be able to talk well about this and provide evidence around this really, really well. And then your mid range students will be giving you information about the final product itself and what should have been improved on it and what they might have done differently during the production process where your top students will look more at the whole design processes in its entirety. And here, and be able to give you information about that.

So finally, it creates a care, sorry, creates a user care, sorry, instructions care label to communicate product features, care use and or assembly. So needs to show an understanding of the features. The care and use in their assembly. And be able to communicate the relevant information the end user may require. So you should be looking at that and there should be no questions. If an end user was going to use that product, is there any questions that they have? How does it, you know, if it's a garment, how do I put it on? Or how does it need to be cared for? How should it be stored? How should it be looked after? Does it need to be assembled at all? How does that be assembled? And how do we put that together and so forth. So all that information needs to be there for that end user and that relevant information there. And so, let's come to the end of this video and those criteria.

Hopefully, we've been able to answer your questions as we've gone through, but if not, there is going to be a SAT information webinar. It's going to be held on Monday the 22nd of February between 3:45 and 5.00 p.m. And the idea, this is going to be a bit of Q and A. So questions that you have, we can then answer. So if you've got any questions or information or clarification that you'd like, please email those through to Leanne and her email address is on there but you can also find it on the VCAA website. But if you've got those questions through before Wednesday, the 17th of February would be fantastic. So we can make sure that those, all questions and information or clarification are added into it. The other thing too is that information about this being able to register for this webinar will come out in the first Bulletin of the year.

And any other further information that you require, please contact our Curriculum Manager, which is Dr. Leanne Compton. And her email address is below.

Thank you for your time and good luck.

Dr Leanne Compton, Curriculum Manager - Design and Technologies, tel: 9059 5145,
email: **Leanne.Compton@education.vic.gov.au**

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