**Simon -** Hello, my name is Simon. I'm a Product Design and Technologies teacher. This video is the first of two recordings, related to the School-Assessed Task for VCE Product Design and Technologies, accredited from 2024 to 2028.

This video will unpack the first three criteria, related to the School-assessed Task. The scores for these three criteria are due to VASS in July. The School-assessed Task assesses the content from both Units 3 and 4. It contributes to 50% of the study score of VCE Product Design and Technologies. Assessment of VCE Product Design and Technologies, includes a School-assessed Task. For this assessment, teachers provide to the VCAA, a score representing an assessment of the student's level of performance in achieving Outcome 2 and 3 of Unit 3 and Outcome 1 of Unit 4, according to the criteria published by the VCAA. Details of the School-assessed Task for Units 3 and 4 are provided on page 37 of the study design.

Also, to note, that notifications regarding the assessment criteria, are published in the first bulletin of the new year, currently in February. In review, the School-assessed Task relates to both Unit 3, Ethical product design and development, and Unit 4, Production and evaluation of ethical designs. Information about the School-assessed Task can be found in the study design on page 37, and we will unpack this a little bit further as we go along. This Administrative information contains the Authentication record form. This is always found in the Administrative information that comes out in February. Students need to collect and present a record of evidence to demonstrate skills against the criteria.

The record of evidence can be presented in a range of formats: a hard copy, electronic or a combination of formats. It is multimodal, so the students can use written texts, or other visual formats, video files, audio files, et cetera, to demonstrate their response to the criteria. What works best for the student, is what the student should use. The record of evidence doesn't need to be an A3 hard copy folio. In fact, there has never been a requirement for this format. The record of evidence is a way that students can demonstrate what they have done, made, said, written, drawn to show their skills in relation to the criteria. In conjunction with this, the Authentication record form, which the teacher will be filling out, can collect evidence of the student's work as well, touching what they do, say or make. This evidence can be used with the student's record of evidence as assessing the student's work and making judgement on how the student is ranked. Evidence that is collected by the teacher, as well as the student can be used to make this judgement.

So, let's dive a little bit deeper into the SAT assessment criteria. And starting with criteria 1, Skills in conducting and using research to develop the design brief and criteria. The indicators that students need to meet, is identify research methods. So, this would be looking at how they are going to go about their research. Are they going to do their primary research, secondary research? What methods and formats they're going to undertake to do this research that conducts ethical research and end user's findings? So ethical research is very much looking at the implications of the research and the moral factors around this, regarding the science that the students are trying to undertake.

So, making sure that the research has dignity and that's not putting the people at a cost of the actual research itself. Students look at use of factors that influence design in developing their design brief and criteria. Identifies the design problem that is informed by the ethical considerations. They formulate a design brief, and included in this design brief is the end-user profile and the project scope. Develops criteria and works technologically.

So, for students to achieve a very high for this criteria, they need to propose, explain and undertake ethical research methods to explore market needs and opportunities. The keyword in this one is explain, which makes it different between a high and a medium and a low. These findings from the research need to be gathered, presented and interpreted, all three. Students need to demonstrate that they can draw meaning from the research and determine the significance within the need or opportunity that they are exploring. Students need to use factors that influence product design that are listed in the study design to examine, analyse and critique existing ethical products to inform their research findings. Analysing will enable to students to break down components for understanding.

While critiquing will enable students to undertake a detailed analysis, including positive and negative aspects of existing products with an emphasis on constructive feedback for improvement, refinement or a deeper understanding. Students use the research findings to formulate a design brief that addresses an ethical problem. Students should explain the profile of the end user and the project scope, which is including the constraints and considerations. For example, 40 to 50-year-old females who are attending a gym regularly and work in corporate jobs; this end user is health-conscious, active, engaged in fitness and routines. They're likely to prioritise wellness and may be interested in products that cater for their fitness goals, dress management and overall wellbeing.

Now clear from this example of an end-user profile, there is no face given to the person. There is a broad gap there of who the end user is and how the information, which is relevant to the ethical problem or opportunity or need that the student is undertaking. More information about end-user profiles, or how to do an end user, can be found in some of the other additional teacher support videos. Also, students need to develop criteria to inform, justify, evaluate and critique the graphical and physical product concepts. Students need to develop criteria to evaluate design processes to make the product and criteria to evaluate the finished product. The criteria can be individual for each requirement.

Students need to work technologically. They need to explain the appropriate, explain and apply, sorry, the relationship between the design brief, the evaluation criteria and research activities. It needs to be all connected. Students need to explain the relationship between all of them. And as you read it, as an educator, you have a clear understanding of where the student is heading and what the need or opportunity that they're undertaking. Criterion 2 In this criterion, students need to demonstrate skills in gathering, using and interpreting research and using design thinking to develop graphical product concepts. The indicators that the students need to cover, include gather and use of research, the use of design thinking and acknowledging of the intellectual property.

Now, compared to criterion one, just to be clear, the criteria 1 is around that design problem, market need and opportunity; that's the research the students are doing in that particular criterion. This goes on from what they have learned through their ethical research earlier on to then what they need to actually develop a product concept. The students will use the research to graphically produce product concepts in a form of visualisations, design options, working drawing. The graphical concepts will inform the development of their physical concept. Students need to use design thinking, e.g., creative, critical or speculative thinking.

So, let's have a look at how student achieves a very high for criterion 2. Students need to explain, once again, that's a key word here, explain, the relationship between the research and the graphical product concepts. If a student only collects qualitative and quantitative data, they should be assessed at a very low level. This indicates as a student needs to be using and gathering both types of data for a low to very high scores. Students need to develop graphical product concepts, based on their research. These graphical product concepts should include visualisations and design options, as well as working drawings. The working drawings need to relate to design options, which need to relate to the visualisations, which are development from the research that's been undertaken.

There needs to be a clear link between each part and that you can easily see where the design thinking has been undertaken and how the student has followed a pathway to get to the final product concept. The relationship between the research and the graphical concepts needs to be explained. And once again, that keyword there, explained. Students use creative thinking to develop the visualisations and design options and working drawings. The characteristics of each drawing technique need to be evident when the students are thinking creatively and developing graphical product concepts. They need to use design thinking strategies, such as critical thinking, creative thinking and speculative thinking to help in this. They also need to demonstrate the characteristics of each of the drawings and how they reflect the ethical design.

Students need to use critical and speculative thinking to develop visualisations, design options and working drawings. The characteristics of each drawing technique need to be evident when the students are thinking critically and speculatively to develop graphical product concepts. Following this, students need to ensure that they identify and acknowledge intellectual property, using accepted conventions. Cutting and pasting URLs is not accepted convention and will not only meet this indicator at a very low or low level.

So, it's the teacher's responsibility to make sure that they teach students what are accepted conventions to be used within the school. At the end of the day, this is an assessment task that students need to make sure, they have acknowledged their intellectual property, correctly. So, the final criterion that we're going to discuss in this video is criterion 3. And this relates to the skills in undertaking tests, experimentations techniques, trials and processes. The indicators to assess this criterion are the use of ethical research methods and gathers qualitative and quantitative data. We look at, again, the very high section of this criterion. Students are assessed on working technologically to gather and use qualitative and quantitative data from tests, experimentation techniques, and/or trials, or processes to evaluate characteristics and properties of materials. Materials being explored would be dependent on the individual student's projects.

And so, the characteristics and properties would be dependent on the materials being explored. It is important that students are provided with the opportunity to evaluate the characteristics and properties of these materials. This means students need to make a judgement, based on the information and criteria that they have used. They also need to know what are the characteristics of the material and what are the properties of the material. You can observe characteristics of materials, such as colour, texture, roughness. Properties of materials are a specific measurable attribute of the material, such as the mechanical properties, like elasticity, strength and hardness.

So, the other really important thing to be looking at and following is the command terms. And the teachers understand as they will assist in differentiating students' work. The command terms are across the descriptors to show progressive increasing complexity in the skills. The command terms used at a very high level are reflective of the command terms used in the relevant key skill from the study design. And it's very important that as educators are looking at these and have set ideas of how they're going to assess and when you're cross-marking, there's an agreeance between the two assessors.

So, some important aspects to remember when using the assessment criteria. Teachers have to make an on-balance judgement about the student's performance in accordance to each criterion. They need to be consistent with how they weight the indicators within each criterion. It is important to use each criterion consistently to rank the students fairly. The purpose of the SAT is to rank students, rank the student cohort, so that teachers need to ensure that the criteria they used are there for ranking of the cohort. If the student cohort is being bunched, so we're looking at, we graph them together, they'd be all at one end of the graph, or at the other end of the graph, who might all be sitting in the middle, then they're not being ranked. Your group of students should rank over a continuum. It is needed to consider how to use the criteria best that they can rank the students and to be fair and consistent.

Thank you for taking the time to watch this video. If you do have any more questions, please speak to Dr. Leanne Compton, who's the Curriculum Manager for Design and Technologies.

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