**Narrator** - These slides and video will go through the changes to unit 4 from a content and assessment perspective. Videos have been provided for all units, so please refer to the VCAA resources and documents for further support as we move into the new VCE PE Study Design. Unit 4, area of study 1. What are the foundations of an effective training programme? This area of study centres around the biophysical elements of performance and also includes some references to psychosocial. For more information on these terms, refer to the VCAA support material.

When gathering data to inform the selection of tests and the development of a training programme, the activity analysis remains an important feature of this area of study. The revised study design for 2025 requires students to participate in the collection of this data in addition to what students do in the current study design, which is analyse the data. Added to the key knowledge wording is the identification of physiological information from the data they collect that will be used to inform fitness test selection and programme design. Specifically, physiological requirements refers to fitness components, energy systems, muscle groups and actions.

While students do not need to know the names of specific muscles or anatomical joint movements in unit 4, students do need to apply specificity of muscle groups and muscle actions when selecting tests, and then apply this information to the next area of study when selecting training exercises. The language around fitness component requirements has been altered to remove the command term define. Students will instead need to apply their understanding of fitness components to justify the test selection from a physiological perspective, and this is a key skill. As well, they will need to use their understanding of fitness components when considering test validity. That is students will embed the key terms that characterise the definitions of fitness components into their justifications or explanations, rather than recall whole definitions as isolated knowledge.

Two fitness components have been removed from the scope of this study design, body composition, and reaction time. And please note that while students will use the term health-related fitness components in unit 2, fitness components won't be differentiated by health-related and skill-related in unit 4. Fitness testing. A few adjustments have been made to the fitness testing requirements. The broader term health screen replaces the more specific PAR-Q. As a PAR-Q is a type of health screen, it's still relevant to this topic and appropriate to teach. Sociocultural considerations have been removed from this area of study, and instead have been included in the participatory element of unit 2 during the considerations of tools for the functional movement assessment selection. Testing accuracy has been included, and validity and reliability remain. The major change to this area of study key knowledge is the removal of the requirements for students to learn and recall the methodology of two tests for each fitness component.

They will still need to explore testing methodology through participation in the testing process, and demonstrate the role of protocols in the validity, reliability, and accuracy of testing. However, in the examination, they will not need to describe the methodology of a test. Instead, they will justify the selection of a particular test based on the physiological requirements of a given activity. To assist schools in determining appropriate tests for students to include in a testing battery for their participation, an updated list of suggested tests has been provided in the VCAA PE resource document.

As noted in the previous slide, there's been a small adjustment to the wording of the first key skill from the last study design to this one. While it was always desirable that students experience the process of undertaking an activity analysis to gather data, the key skill now states this is the requirement. This means that along with being able to interpret data given to them, students need to perform an activity analysis on an athlete. This can be undertaken by methods such as, but not limited to, observing someone in their own class perform, watching a local team, or using a live or digital recording of an elite athlete. Students need to be able to justify a specific test from a physiological and psychological perspective, rather than the sociocultural needs of the participant.

As previously mentioned, this perspective has been moved to unit 2 in the functional movement assessment, which takes a more participatory perspective on movement. Also mentioned in the key knowledge slide, but important to flag again here in the key skills, students still need to explore testing methodology through the participation in the testing process. From this participation, it's expected that students can justify the selection of a particular test from the suggested list based on the physiological requirements of a given activity. Again, reemphasizing that students will not be required to memorise the protocols of specific tests in line with movement towards a greater application of their knowledge.

There's only been a minor change to the wording for the assessment of this area of study task. The task remains a written report that requires the analysis of data to determine the physiological requirements of an activity which students use to justify their selection of fitness tests. The outcome has altered slightly to require students to use data they have gathered from their own activity analysis. So again, this doesn't mean it has to be data gathered from their own practical session. While it can be, it could also be data gathered from an elite sport that's been digitally recorded or another method, but the data cannot be given to the students without their engagement in the activity analysis process. The slight reduction in weighting of this act does not reduce the importance of the content. It has been modified to account for unit 4, area of study 3. Unit 4, area of study 3, will draw on the understandings from this and all areas of studies, and for more information refer to the VCAA resources and webinar, outlining the rationale and requirements for this addition to the study design.

Unit 4, area of study 2, how is training implemented effectively to improve fitness? The changes to this area of study include more contemporary concepts and terminology, and a restructure of key knowledge points, which has enabled a reduction in overall points. The addition of the term wearable technology will include any tool from a basic pedometer to a smartwatch and everything in between. No doubt there'll be significant changes in options for students over the term of the study, and this umbrella term future proofs this rapidly-evolving technology. Tapering has been added as a training principle, and this will support an interdisciplinary approach when considering nutritional strategies to enhance performance such as carbohydrate loading. But please note that periodisation has not been included in the new study design.

Psychological strategies, and nutrition, and hydration have been removed from unit 4 and are now included in unit 3, area of study 1 and area of study 2, respectively. Specific performance outcomes of adaptations have been listed to help contextualise the application of adaptations to case studies, and this directs the content delivery and understandings of this key knowledge point. The performance outcomes are listed, and they are VO2 max, LIP, or lactate inflexion point, speed and force of muscle contractions, and lactate tolerance. The key skills associated with the key knowledge points that have been removed have also been removed, so the nutrition, hydration, and the psychology points. There's been some restructuring of wording in the key skills to emphasise learning through movement, so that's a common theme to the new study design.

The first key skill now explicitly incorporates the use of the reflective folio to record physiological, psychological, and sociological data during or after student participation in training sessions. The requirement for participation in all components of a session, as well as a variety of training methods and principles remain. Students are still required to design a training programme using appropriate principles and methods to maintain or improve fitness components, and are also required to critique the effectiveness of a training programme. Students will need to use their understanding of chronic adaptations to explain the performance outcomes.

For example, an increase in LIP and the other outcomes identified in the previous slide. They will, of course, need to link this back to what the adaptation looks like for a variety of sports and exercises. There's been a reduction in the number of SACs for this area of study from three to two. The case study combines the requirements for the reflective folio and written report in the previous study design. In the case study, students will be given a case study and will be required to draw on their experiences of at least five different training sessions to design a personalised six-week training programme. And that term, personalised, means that it could be for themselves or another person or athlete from a particular sport.

The requirements of this SAC still keeps participation in different training sessions at the forefront for success in understanding, as students will use their movement experiences to prescribe and explain their training choices. The requirement to assess chronic adaptation remains with options for teachers to select from three different assessment types, case study, data analysis, and structured questions.

Thank you for connecting with our VCE PE video introducing the revised study design for unit 4. Please, take the time to review each unit video, which breaks down amendments within each unit, and to connect with further professional learning opportunities in the way of support material and webinars to enhance understanding of the revised study. If at any time you require further assistance, please do not hesitate to contact Chris Clark, the curriculum manager at VCAA for Health and Physical Education, and his details are on the screen.

[Copyright Victorian Curriculum and Assessment Authority](https://www.vcaa.vic.edu.au/Footer/Pages/Copyright.aspx) 2023