2023 VCE Industry and Enterprise external assessment report

General comments

The 2023 VCE Industry and Enterprise written examination provided students with the opportunity to link their knowledge of the course with their structured workplace learning. Examiners were impressed by the range of relevant, interesting and well-expressed responses to questions asking students to demonstrate skills and knowledge learnt in class through by relating that learning to practical workplace experience. Time management during the examination appeared to be a challenge for some students. Students are encouraged to avoid writing more than is required in low-mark questions as this can often limit their ability to prepare more comprehensive responses to high-mark questions and Question 7. Students should enter the examination centre with a precise idea of how many minutes they should devote to each question, according to mark allocation.

It is important to consider each of the following when approaching the examination:

* Students should develop an understanding of the key terms used in the course and how to use these appropriately in responses. For example, ‘workplace’ and ‘work settings’ refer to a physical location, or in some cases a virtual environment, where individuals come together to perform work-related activities as part of their employment. An example of a question about a work setting is Question 2b. ‘Industry’ refers to a category of economic activity that involves the production and manufacturing of goods or the provision of services within a specific sector of the economy. Question 4 is an example of a question that requires a response about an industry.
* Students must write legibly to enable assessors to both read and appreciate their responses. Use of paragraphs and signposting will also improve readability and maximise exam performance.
* Students must read each question carefully. In approaching a question, they should establish the knowledge link to the course within the question, its complexity, ascertain the requirements of the command term and deduce the approximate length of the response required by these factors, along with the number of lines and the marks allocation.
* While students may write in any blank space below a question they should not write outside of the margins.
* If using the allocated extra space, students must reference this at the bottom of the page and clearly indicate the question number in the extra space.

Specific information

Note: Student responses reproduced in this report have not been corrected for grammar, spelling or factual information.

This report provides sample answers or an indication of what answers may have included. Unless otherwise stated, these are not intended to be exemplary or complete responses.

The statistics in this report may be subject to rounding resulting in a total more or less than 100 per cent.

Question 1a.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | Average |
| % | 9 | 45 | 46 | 1.4 |

This question was generally answered well, with many students able to explain key features of ‘lifelong learning’. These included that lifelong learning:

* is a voluntary and self-motivated pursuit of knowledge and personal development throughout one's entire life
* develops knowledge and skills that are transferable from one context to another
* emphasises that learning is not confined to formal education settings or specific stages of life but rather is a continuous and evolving process
* recognises that individuals have both the capacity and the responsibility to acquire new skills, knowledge, and insights at any age or stage of their lives.

Higher-scoring response provided more depth and breadth than lower-scoring responses.

The following is an example of a high-scoring response.

Lifelong learning refers to the process of employees continuously learning new skills, attributes, competencies and behaviours. This occurs through their involvement in the work tasks at their workplace and allows employees to continuously learn through each day they work until they retire. Therefore this involves learning new skills through the day-to-day operations of the workplace.

Question 1b.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | 3 | Average |
| % | 14 | 19 | 37 | 29 | 1.8 |

Formal training refers to a structured and organised learning process that follows a predetermined curriculum and is typically delivered through established institutions, programs or courses. Informal training refers to learning that occurs without a structured curriculum. It is often spontaneous and driven by the learner's own initiative and the natural demands of a situation.

While many responses showed some knowledge of the types of training, many struggled to accurately and comprehensively respond to the ‘distinguish’ command term. This required students to explicitly state the differences between the two items or the concepts stated in the question. In addition, some responses did not demonstrate a clear understanding of both types of training.

Lower-scoring responses typically only briefly described a key feature of each type of training, while higher-scoring responses were able to accurately apply the key knowledge to identify the key differences between the types of training.

Possible answers include:

Another difference between the two types of training is that formal training follows a predefined curriculum with specific learning objectives, topics, and a systematic progression of content. This contrasts with informal training which generally lacks a formal curriculum. It tends to be based on responding to situations as they arise in the workplace and is based on hands-on experiences, trial and error, or self-directed exploration.

Question 1c.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | 3 | 4 | 5 | 6 | Average |
| % | 2 | 1 | 6 | 23 | 27 | 17 | 24 | 4.2 |

To obtain full marks, students needed to identify two work-related skills, and explain how the students developed or could have developed the skills in a work setting through training and workplace learning. This required students to be able to show clear causal links between development of the skills and the work setting’s training and workplace learning.

Most students were able to identify and describe two related skills they developed at work. However, a significant number of otherwise high-quality responses did not clearly link this to the work setting’s approach to training and workplace learning. A number of students gave a description of the nominated work-related skill which was not required within the question. Students who did this could not be awarded marks for it and therefore had wasted time that could have been more productively applied to other questions.

The following is an example of a high-scoring response.

Adaptability refers to be flexible and adapt effectively to specific changes and adversity in a workplace. I have developed this skill through training at Chatime in which I completed online modules to understand the difference recipes to the various drinks. This developed adaptability in my work setting as I was able to adapt to customer preferences in their drink.

Question 2a.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | Average |
| % | 3 | 42 | 55 | 1.5 |

Students generally handled this question well. To achieve full marks they were required to demonstrate an understanding of teamwork and outline why they believed it was an important employability skill. Students were required to comment on why the skill was important. Many students did not do this and instead described the skill, which was not required.

Possible answers include:

Teamwork is an extremely important skill in most workplaces as the collaboration of a group of people in a workplace improves several important areas. When people work in teams, they tend to get more done, increase productivity and achieve more outcomes. In a workplace that promotes enterprise culture a strong team culture will promote shared leadership, communication, problem solving and adaptability. In addition, each contributing individual in the team is likely to enhance their skills set.

Question 2b.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | 3 | 4 | Average |
| % | 6 | 9 | 28 | 31 | 25 | 2.6 |

Students generally handled this question well. Students were expected to draw on their structured workplace experience to illustrate how the experience assisted in the development of their teamwork skills. Lower-scoring responses could, generally, identify an activity but not elaborate on how that activity assisted them in developing their skills.

The following is an example of a high-scoring response.

One way I developed teamwork within my work setting was through the pre-assigned partners we have during periods of stock take. This involves working together to count the various items of inventory that the business has in storage. This ability to work together towards a common goal of the total number of items within the business helps achieve the goal in a more productive and error free manner, as individuals are not fatigued and tired as they would be if they did it by themselves.

Question 2c.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | 3 | 4 | Average |
| % | 7 | 21 | 43 | 21 | 9 | 2.1 |

For, full marks, students were required to:

* demonstrate an understanding of the concept of leadership
* demonstrate an understanding of enterprise culture
* discuss how leadership supports the development of an enterprise culture
* apply this explicitly to Xanh’s workplace.

Some lower-scoring responses to this question seemed to confuse leadership with management. Generally accepted features of leadership are that it is the ability to create and communicate a vision, to motivate and support others to adopt the vision.

Possible answers include:

An enterprise culture is one that proactively meets challenges, supports the development of a range of capabilities and is embedded in all areas of a workplace. Leadership is a driving force in the development of this type of culture. As Xanh is establishing a business and building the workforce, leadership will be vital in establishing this culture. By articulating a clear vision, making consistent decisions, and fostering effective communication, Xanh can create an environment where the desired culture can flourish.

Question 3a.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | 3 | 4 | Average |
| % | 15 | 22 | 29 | 28 | 7 | 2.0 |

For full marks students were required to demonstrate a reasonably detailed understanding of research and development. This could include comments on some of the following: research and development refers to the process of gathering knowledge and testing an idea or innovation. The research and development phase frequently involves: brainstorming; planning and costing; development, for example, prototype development and testing and commercialisation.

In addition, full-mark responses also made logical links between research and development and solar technology innovation, and provided evidence from the source material to support the response.

Many students found this question challenging. Lower-scoring responses failed to clearly communicate accurate knowledge about research and development. A number of responses confused research and development with academic research. These responses could not be awarded any marks.

Possible answers include:

Research and development can help Australia develop its solar technology. This is because the research and development process involves testing ideas, seeing what works and problem solving to make the innovation more efficient. Australia has lots of solar, wave and wind power that it can use – but it needs to find ways of improving the technology. As the cost of turning sunlight into electricity has fallen by 90% over the past decade there is much more incentive for Australian businesses to undertake research and development. This could include making prototypes of ideas and looking at how they can make things such as windfarms more efficient, which would help Australia develop its solar technology.

Question 3b.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | 3 | 4 | Average |
| % | 10 | 28 | 39 | 13 | 10 | 1.9 |

For full marks students were required to:

* indicate understanding of the key terms: research and development and innovation. Innovation refers to the process of creating, developing, and implementing new or improved products, services and processes. It involves the application of creative thinking and problem-solving, to explore novel approaches to address challenges or meet evolving needs
* demonstrate understanding of the ‘discuss’ command term by composing a clear, considered and balanced argument that identifies issues and shows strengths and weaknesses
* apply knowledge of research and development and innovation to explore the relationship between the two.

This question challenged many students. Lack of knowledge about research and development negatively impacted many students’ responses, as they seemed not to understand the scope of research and development and were unable to discuss its relationship with innovation. Most high-scoring responses used examples from coursework to provide evidence to support points made. Although this was not required to be awarded full marks, this evidence supported and enhanced the points made.

The following is an example of a high-scoring response.

Research and development (R & D) can act as the baseline for all successful innovation. Through the process of thorough investigation and experimentation, organisations conducting research and development are able to which ideas for new or significantly improved products/processes would succeed in modern markets. R &D helps business to become more confident in investing in innovation as the risky process would be supported by R & D.

Question 4

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | 3 | 4 | 5 | 6 | Average |
| % | 17 | 18 | 11 | 25 | 13 | 9 | 7 | 2.6 |

Many students struggled to examine an industry’s response in the required detail. Students wrote about a wide range of relevant and interesting sustainability practices, including Future Feed (the use of seaweed as a feed source for cows); renewable energy transitions such as wind power, electric vehicle innovations, waste management and recycling, including a reduction in single-use plastics; carbon emission targets, including implementation of energy-efficient technologies; optimising production processes and exploring alternative materials that have a lower environmental impact. Students should be aware that a ‘recent response’ means that the response must have occurred in the past four years.

Lower-scoring responses were usually limited to descriptions of the selected sustainability practice. Higher-scoring responses applied their knowledge and understanding to write a logical argument and come to a conclusion supported by evidence.

Possible answers include:

Some businesses in the building industry now use recycled material, to reduce the demand on new building materials and reducing CO2 emissions. One business has uses waste materials including newspaper, polystyrene and glass to create “all-in-one” finished prefabricated walls that contain the frame and polystyrene core, with cavities for services, such as electrical services. This approach required additional training for employees so they could adapt processes. This business also had to conduct research to ensure that these materials conformed to legislative requirements.

Question 5a.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | 3 | 4 | Average |
| % | 48 | 18 | 18 | 14 | 1 | 1.1 |

This question was not handled well by the majority of students. Many did not understand the question and wrote about ‘tradesmen’ rather than ‘Australian trade’. These responses were not awarded any marks. High-scoring responses focused on several changes in Australia’s pattern of trade, including the role of exchange rates, free trade agreements and trade policies of other countries, most frequently China, impacting Australia’s trade. In general, the high-scoring responses were supported by clear evidence.

Possible answers include:

The pattern of trade is influenced by various factors, including comparative advantage, economic policies, technological advancements, and changes in global demand. Free trade agreements (FTA) have a significant impact on the pattern of Australian trade. Australia has approximately 20 FTA. The most recent are between Australia and India and the United Kingdom. FTAs aim to reduce or eliminate barriers to trade, such as tariffs and quotas, between participating countries. They have opened up new export opportunities for Australian businesses by providing preferential access to partner countries. This has been particularly notable in sectors such as agriculture, minerals and services. However, while FTAs create opportunities for Australian exporters, they also expose domestic industries to increased competition from imports.

Question 5b.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | 3 | 4 | 5 | Average |
| % | 38 | 15 | 17 | 15 | 13 | 3 | 1.6 |

To be awarded full marks responses were required to:

* demonstrate an understanding of being internationally competitive; for example, the ability of a country, industry or business to effectively participate and succeed in the global marketplace
* identify an industry that trades internationally
* demonstrate an understanding of the terms ‘pressures’ and ‘opportunities’
* draw out the implications and impacts of the pressures and opportunities for the industry to be internally competitive.

Students generally found this question challenging. Lower-scoring responses were frequently limited to a brief outline of the meaning of international competitiveness and descriptive comments on some trading activities of an industry or, in some instances, a business in an industry.

The following is an example of a high-scoring response.

The Australian beverage industry has faced many challenges and opportunities to be internationally competitive. With the recent Free Trade Agreement between Australia and the UK there has been an increase in exporting of wine to overseas buyers… Due to the pressure of tariffs imposed by China Australian wine makers have looked to grow their markets elsewhere ….

Question 5c.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | Average |
| % | 36 | 26 | 38 | 1.1 |

Most students identified a relevant stakeholder, usually employees, and provided an outline of how that type of stakeholder, in the industry selected in Question 5b., could have been affected. Lower-scoring responses generally did not make links to the previous question.

Question 6a.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | Average |
| % | 20 | 39 | 41 | 1.2 |

Most students selected one of the three work-related skills identified in the question. Lower-scoring responses did not provide an accurate description of the skill.

Possible answers include:

Planning and organising is the ability to arrange tasks, resources and time to achieve specific objectives. This skill includes the ability to effectively prioritise, schedule, and coordinate activities to increase productivity and accomplish desired outcomes.

Question 6b.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | 3 | Average |
| % | 11 | 23 | 45 | 21 | 1.8 |

This question required students to explain how they developed, or could have developed, the work-related skill selected in the previous question through their structured workplace learning. Low-scoring responses either simply described the skill or made only brief comment about how they developed the skill. Some students wrote about a different work-related skill and could not be awarded any marks.

Possible answers include:

I worked in the office of a local member of parliament during my work placement. The work was very diverse. Concerned that I would not be able to ‘be my best self’ I took steps to develop my planning and organising skills. I spoke with the office manager, who was my mentor, to establish SMART goals for each week. I used this to help me prioritise tasks and create a daily ‘to do’ list so that I could manage tasks. I was then able to allocate realistic time slots to each task. Knowing that the workplace was unpredictable I built in unallocated time to allow the flexibility to respond to the unexpected.

Question 6c.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | 3 | Average |
| % | 9 | 20 | 46 | 26 | 1.9 |

This question required students to select one of the work-related skills in Figure 1, explain its importance and link the explanation to a workplace they were familiar with. Lower-scoring responses failed to meet one or more of these requirements. Some low-scoring responses selected a work-related skill not mentioned in Figure 1, or described the skill instead of responding to the question.

The following is an example of a high-scoring response.

In the workplace of Furphy's Engineering, which specialises in metal fabrication of steel tanks, the use of technology is essential in their ability to work effectively. Indeed, classed closely to a science industry in that of Engineering the desirability score of 4.5 is essential in operating the businesses at its optimal capacity. Implementing a laser cutter from overseas, employees had to learn to use technology in order operate the machine both safely and effectively. In doing so, employees were able to produce more cut panels and in shorter amount of time, and reduce all human error that may have otherwise occurred.

Question 7a.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | 3 | Average |
| % | 11 | 30 | 37 | 22 | 1.7 |

To be awarded full mark students needed to identify a relevant work-related skill other than technology and refer to the sources to explain how that skill could assist employees at the naturopathy business in the management of quality.

The question was generally well handled. Most responses identified a relevant work-related skill and effectively used material from the sources. Lower-scoring responses usually did not address the management of quality.

Possible answers include:

The work-related skill of self-awareness will assist employees at the naturopathy business in the management of quality. Self-awareness involves an understanding of personal strengths and weaknesses. In quality management, recognising one's limitations can prevent overconfidence and facilitate seeking input from others who have complementary skills or expertise. In the business this might be in the employee’s ability to use the new technology, including the operation of the cooling room and the scales as well as in stock rotation.

Question 7b.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | 3 | 4 | 5 | 6 | Average |
| % | 28 | 15 | 16 | 13 | 18 | 4 | 6 | 2.2 |

Quality control involves the inspection and testing of products or services at various stages of the production or delivery process. This can include raw materials, intermediate components and the final output. Quality assurance is a systematic and comprehensive approach to ensuring that processes, products and services meet specified standards and requirements. It aims to prevent defects before they occur.

Many students struggled with this question. Some responses did not demonstrate an accurate understanding of quality control or quality assurance. In addition, many responses did not move beyond descriptions of the quality processes to comparing them by explicitly explaining their similarities and differences.

Possible answers include:

A fundamental difference between quality assurance and quality control is that quality assurance is a proactive response which, by trying to control all aspects of the production process, aims to prevent defects from occurring. Quality control, on the other hand, is reactive because it focuses on identifying and correcting defects once they have occurred.

Question 7c.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | Average |
| % | 23 | 16 | 61 | 1.4 |

Students handled this question well through identifying examples of innovation from the source material. To be awarded full marks students needed to establish that the example selected was innovative.

Possible answers include:

The team meetings are innovative as they build on the stereotypical meeting by expanding the role of participants from the passive to the active. Source 2 states that all staff are encouraged to ‘contribute ideas and make suggestions for improvements in all aspects of operations.’ This collaborative approach meets improving process element of innovation,

Question 7d.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | 3 | 4 | 5 | Average |
| % | 20 | 10 | 24 | 25 | 15 | 6 | 2.2 |

Many students found this question challenging or did not attempt it. Students are reminded that they do not have to respond to the exam in question order and that Question 7 typically includes an extended response. Low-scoring responses often described rather than analysed and often wrote about a workplace they were familiar with as well as the naturopathy. In the latter case only the first response could be marked.

High-scoring responses established how the development of a range of work-related skills assisted in the development of an innovative culture.

The following is an example of a high-scoring response.

While both Quality control and quality assurance both focus on achieving minimum standards. Quality control is the checking and evaluating of processes and procedures to ensure a businesses meets minimum production standards and is done internally. While, Quality assurance is the accreditation and certification of a workplace's systems and process being at minimum standards such as Australian standards. Unlike quality control, quality assurance is proactive and focuses of improving processes and procedures to improve quality. In contrast to quality control is reactive and focuses on finding defects in quality during the production process.