2017 VCE Industry and Enterprise examination report

General comments

Most students communicated a good grasp of key knowledge and key skills in the 2017 Industry and Enterprise examination. Most students handled middle- to lower-order questions such as Question 3b. and Question 5b well; however, the examination proved challenging for many students.

Questions requiring an extended response were answered in insufficient detail by many students. Such responses were purely descriptive and did not address all the elements of the question. Many also did not specifically address the requirements of the task word in the question. It is important to note that when students are asked to 'discuss' or 'evaluate', detailed responses are required in order to gain full marks. Responses should be expressed in paragraphs that develop logically, address the concepts in the key knowledge and key skills and, where relevant, be supported by evidence from case studies and the student work placement. Students struggled to produce these types of responses to questions such as Question 1a. and Question 6.

Students are strongly advised not to pre-prepare answers for the examination. Each outcome in the study design lists key knowledge and key skills dot points. Students can best prepare for the examination by working consistently to learn and write responses to these dot points. Students should refine and develop their knowledge of the study, as well as the ability to communicate this knowledge through responses to a variety of questions. Students are also encouraged to provide a response to all questions on the examination as marks are not deducted for incorrect answers.

It is vital that students use the reading time to carefully read all questions as well as any stimulus material provided. During the reading time students should think about the precise knowledge and skills that their response must provide in order to address all parts of each question and therefore be awarded full marks. Reading time should be used to consider whether their initial thoughts on a proposed response will address a question comprehensively. Students should also consider the order in which they answer questions and how they can successfully incorporate stimulus material into their responses.

Specific 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	3	4	Average
%	17	19	29	19	16	2

Many students struggled with this question. While most could identify two work-related skills, a large percentage of responses simply outlined how the student had developed or demonstrated the skill, instead of describing the key elements of the skill as required by the question. These responses could not be awarded full marks.

The *VCE Industry and Enterprise Study Design 2012–2018* describes 'work-related skills' as the umbrella term for a suite of skills considered essential for effective participation not only in work but in life generally. Work-related skills include capabilities such as adaptability, initiative, communication, managing and leading, problem-solving, teamwork, planning and organising, self-awareness, learning and the ability to work with technology.

The following is an example of a possible response.

Problem-solving and adaptability are two work-related skills. Problem-solving is the ability to respond to an issue or conflict that an individual or team is confronted with. This requires the ability to explore the problem, consider alternative responses and then decide on, and implement, the best course of action to eliminate or reduce the problem. This requires a knowledge and skills base, and problem-solving under pressure allows it to be turned into an opportunity. Adaptability is the ability to be flexible, embrace change and respond to situations in an innovative way so that desired outcomes can be achieved.

Question 1b.

Marks	0	1	2	3	4	Average
%	6	8	34	27	25	2.6

Students were required to explain how they had demonstrated any two work-related skills. Many students drew skilfully on their structured work placement to clearly explain how the selected skill was developed and displayed. The most popular skills mentioned in responses were communication – most frequently verbal – and problem-solving.

Question 2a.

Marks	0	1	2	3	4	Average
%	33	20	21	15	12	1.6

Students needed to correctly identify quality control as the quality system or process that Ella implemented in Cupcakes in Magicland. Students were then required to explain the key features of this process. Quality control is an ongoing process of inspection to ensure that a manufactured product or performed service meets a defined set of quality requirements. This may include identification of the specific standards to be met by Ella as well as the percentage of items to be tested; recording and reporting on items that fail to meet the set standard; decisions on corrective action – repair or reject; planned response – possibly improved technology or training. Many high-scoring responses were strengthened by the inclusion of precise points from the stimulus material.

The following is an example of a possible response.

Ella Russell is using quality control at Cupcakes in Magicland. Quality control is the process of checking against a predetermined standard to ensure that acceptable quality standards are met. It involves identifying and picking up defects in production as they occur, before they reach the end consumer. Defects are eliminated from the production process and are identified and/or controlled

through processes such as weighing, measuring, testing, tasting, observing/inspections, customer surveys (feedback for improvement) and smelling. Quality control measures are put in place to prevent sub-quality products from reaching the end consumer, and to recognise and eliminate flaws in the production process or provision of services.

Question 2b.

Marks	0	1	2	3	Average
%	36	25	22	17	**1.2**

Students needed to precisely explain how work-related skills assisted the management of quality processes in order to achieve full marks. A variety of possible skills could have been used to respond to this question. These include initiative, communication, teamwork and managing and leading. It was acceptable to use more than one skill; however, students should consider how well the skill fits the question before they begin writing. Some skills were, however, easier to justify in terms of a relationship to quality processes than others.

The following is an example of a possible response.

If Ella, or an employee, has well-established problem-solving skills they will be able to respond to defects or quality issues as they are identified. They will notice the defect, communicate the issue to others, be able to assess the quality issue, and possibly devise a strategy to fix the problem and potentially prevent the recurrence of the defect in future. This can potentially lead to less wastage, faster production times, higher profit margins and/or enhanced customer service.

Question 2c.

Marks	0	1	2	3	Average
%	9	13	48	30	**2**

This question was generally well answered. Students first needed to identify two relevant stakeholders of Cupcakes in Magicland – such as the owner, customers, employees or suppliers – then describe possible benefits to one of the identified stakeholders of a quality system or process.

Many students described benefits for both stakeholders. In these cases, the first response was assessed. Detailed descriptions that were relevant to the identified stakeholder scored highly.

The following is an example of a possible response.

Customers and the owner are stakeholders of Cupcakes in Magicland. The owner will benefit from a quality system as it will assist the provision of consistent high quality cakes, leading to higher levels of customer satisfaction and increasing customer loyalty. A quality system will also reduce waste and lower costs, allowing Ella to decrease the price and increase sales, market share and profit.

Question 3a.

Marks	0	1	2	Average
%	40	26	35	**1**

Low-scoring responses to this question were vague and incomplete. High-scoring responses stated a definition that was both precise and detailed. Students who are concerned that they have written a short answer that may not be awarded full marks could include a relevant example to illustrate the definition.

The following is an example of a possible response.

An industry-specific competency is a skill that is required in a particular industry. Competency is the consistent application of knowledge and skill to the standard of performance required in the industry. For example, a competency that would be required in the hospitality industry is the ability to consistently handle food in a hygienic way.

Question 3b.

Marks	0	1	2	3	Average
%	6	19	41	34	2.1

Students generally handled this question well. A large number of responses demonstrated that students were able to make strong links between the key knowledge and key skills and their work placement. Most students were able to identify and describe a type of formal or informal training. Types of training identified included mentoring, coaching, induction, on-the-job and off-the-job training, as well as a variety of course-based training programs.

The following is an example of a possible response.

One type of training is 'brown bag lunch training'. This type of training would be classified as informal and was sometimes used at my workplace in an insurance business. The training is internal and generally a short one-off session. At my workplace these sessions were sometimes held at lunchtime, and the supervisor provided lunch. The topics for the training varied and included providing information on how new products worked and how to use a new module on our computer system.

Question 3c.

Marks	0	1	2	3	Average
%	22	18	26	34	1.7

Student responses needed to demonstrate knowledge of the meaning of functional flexibility and show the link between training and increasing the level of functional flexibility in order to achieve full marks. Functional flexibility is the ability of employees to move to other duties and tasks within the workplace. Training is a key strategy to improve the level of functional flexibility.

Question 3d.

Marks	0	1	2	3	Average
%	33	36	12	19	1.2

Many students struggled with this question. To achieve full marks students were required to explicitly demonstrate knowledge of the similarities and differences between formal and informal training. Students who scored highly structured their responses in paragraphs highlighting and discussing both similarities and differences. Similarities included that both formal and informal training increase the knowledge and skills of employees, assist the business to achieve outcomes and can be delivered in a variety of ways and over different lengths of time. Differences included that formal training usually leads to certification and is often delivered offsite, while informal training, such as mentoring, is often linked to relationships between employees.

The following is an example of a possible response.

One of the main similarities between formal and informal training is that they both aim to assist the firm to meet its objectives. They both increase the skill level of the employee and make them more employable in the future. Both types of training can increase the level of functional flexibility in the workplace. Some key differences between the two are that formal training tends to be more

organised and delivered to larger groups. It frequently involves external certification. Informal training does not lead to certification and is often completed on the job.

Question 4a.

Marks	0	1	2	Average
%	27	29	44	1.2

High-scoring answers linked the concepts of enterprise and culture. Culture concerns the values, beliefs and dominant ways of behaving. Enterprise capabilities include initiative, problem-solving, adaptability, communication, and forward and lateral thinking. Students were expected to cite accurate and comprehensive definitions of key terms in the study design.

The following is an example of a possible response.

An enterprise culture is one where the values and ways of behaving in a workplace consistently promote an open and proactive approach characterised by planning and organising, adaptability and problem-solving. As there is employee empowerment in this type of workplace, employees, managers and owners will all be demonstrating these capabilities.

Question 4b.

Marks	0	1	2	3	Average
%	25	31	22	22	1.4

To achieve high marks, students needed to show knowledge of the development of both leadership and teamwork and link that knowledge to development of an enterprise culture in a workplace or community setting they were familiar with. There were many responses where students presented a logical explanation but most did not fully develop and explain the points made. Another common error made was confusing the nature of leadership. Many students did not explicitly show an understanding of leadership and teamwork. Leadership is the ability of an individual to influence the behaviour of others – to motivate and inspire. Any member of the workplace or community setting has the potential to show leadership. Teamwork is about working collaboratively and supporting each other to achieve a common goal. In an effective and efficient team individual strengths will reinforce and strengthen outcomes.

The following is an example of a possible response.

Leadership and teamwork are two important elements in developing an enterprise culture. Teamwork is the ability of a group to work together – to apply individual skills, cooperate and communicate to achieve an objective. Team building in the workplace significantly contributes towards an enterprise culture by supporting worker motivation and building trust among the workers, thereby ensuring higher productivity, honesty and acceptance of responsibility by all. A leader is someone who influences the behaviour of others. In the workplace this could be a manager, supervisor and/or an employee. Aside from acting as a role model for workers, the leader often recognises the strengths of team members and by delegation provides opportunities for workers to contribute to an organisation. This can strengthen the enterprise culture by encouraging and supporting others to show their initiative, problem-solving skills and other enterprise capabilities, thereby increasing the level of enterprise.

Question 4c.

Marks	0	1	2	3	Average
%	26	25	27	21	**1.5**

Most student responses identified a workplace or community setting they believed had an enterprise culture; however, lower-scoring responses were not able to articulate the reasons for the selection – they made vague, general and often unsupported points and did not develop their responses logically. Most high-scoring responses supported their contention with evidence, commenting on specific elements of the enterprise and showing how the specific workplace demonstrated the element cited.

The following is an example of a possible response.

I believe that Streats has an enterprise culture. This social enterprise was established to provide employment and training for disadvantaged young people in the hospitality industry. I believe that they are enterprising for a number of reasons. Firstly, they have a diverse board consisting of social workers and educators, as well as people with industry expertise. Any of these individuals, as well as employees, is encouraged to show leadership. Secondly, they have found an innovative and practical way to address social issues. Thirdly, they actively promote the development and application of work-related skills, including enterprise capabilities like adaptability, planning and organising. Finally, they promote lifelong learning by encouraging and supporting participants to undertake further training.

Question 5a.

Marks	0	1	2	Average
%	11	34	56	**1.5**

This question was well answered overall, with the majority of responses providing a detailed definition of innovation.

The following is an example of a possible response.

Innovation is a broad term that revolves around the introduction of new ideas, methods or technology into an organisation in order to increase the effectiveness and/or efficiency of the organisation. The change can be to the products, processes, technologies or services offered, or to the ways these are created or provided. This improves outcomes for stakeholders, including increased profit for the organisation.

Question 5b.

Marks	0	1	2	3	Average
%	9	40	24	27	**1.7**

This question was handled well by most students. The majority of responses explained in detail at least one way that governments can support innovation. Responses could have been limited to one example or a number of ways governments could support innovation explained in less detail. The most common government strategy was grants. Other ways governments can support innovation cited were through tax incentives, provision of mentoring and advice services, tax breaks, providing access to public data to create new products and providing business models.

The following is an example of a possible response.

Government can play an essential role in creating the conditions for innovation and in supporting the innovation process in Australian industry. This can be done on a number of levels. The government can provide funding and financial relief for industries and organisations to research

and develop an innovative idea. For example, the current R & D tax incentive is a major component of the Commonwealth Government's business innovation program. In addition, the current government provides a system of awards to recognise innovative effort and to encourage other organisations to innovate. Governments are attempting to address skills shortages, which limit the ability to innovate. They are promoting and providing funding to secondary schools in the STEM (Science, Technology, Engineering and Maths) areas, where Australia currently has relatively low participation rates at the senior secondary level, particularly by women. In the medium term, they hope that this will increase interest and skills, leading to a greater number of tertiary graduates in these areas. These graduates will be needed to address skill shortages in these areas.

Question 5c.

Marks	0	1	2	3	4	Average
%	11	15	37	20	17	**2.2**

Although students were able to select any two work-related skills, they should have thought about the suitability of their choice in the context of the question. Responses needed to be comprehensive and show clear links between the selected work-related skills and innovative culture. Student responses generally established links for each separately, but they could have been combined. Lower-scoring responses described the skill and did not demonstrate an understanding of the importance of the skill in the context of innovation in the workplace setting.

Question 6

Marks	0	1	2	3	4	5	6	Average
%	20	18	17	16	9	10	9	**2.5**

This question was not well answered. The relationship between innovation and an enterprise culture is explicitly noted in Outcome 2 of Unit 4. The concepts of innovation and an enterprise culture are complementary and supportive – one encourages the development of the other. Many responses were unsure about this relationship. Students with high-scoring responses outlined their understanding of the concepts. Their responses were comprehensive and detailed discussions of the relationship between enterprise and innovation. Examples were used and linked well to support points raised.

Some students were unable to structure a logical response and support this with specific examples from industry, as required by the question.

The following is an example of a possible introductory paragraph.

An enterprise culture is one where the patterns of behaving and thinking of all employees and management consistently demonstrate enterprise capabilities, including adaptability, initiative, problem-solving, communicating, and leading and managing. Innovation refers to changing or creating more effective processes, products and ideas. A key to becoming innovative is to create a culture that encourages creative ideas, structured risk-taking and problem-solving on an ongoing basis. If you seriously want your business to innovate, you have to establish these capabilities as a strategic imperative. Enterprise culture is the catalyst for generating an innovation culture as it identifies, develops and supports the capabilities that will allow innovation to occur and be sustainable.

Question 7a.

Marks	0	1	2	Average
%	27	30	43	1.2

This question was generally well answered. Most responses referred to the need to use resources in a way that did not deplete them so that future generations would not be deprived of them.

Question 7b.

Marks	0	1	2	Average
%	3	16	81	1.8

This question was generally very well answered. Most students selected and described relevant information from the stimulus material to demonstrate how the Australian cotton industry had become more economically sustainable.

The following is an example of a possible response.

The industry has reduced the amount of water used to 8 megalitres per hectare, which compares favourably to other agricultural industries and represents a 40% increase in productivity within 10 years. The industry has also reduced insecticide use by 92% and increased research into environmental sustainability.

Question 7c.

Marks	0	1	2	3	4	Average
%	10	17	30	25	18	2.3

To achieve full marks students needed to explain how environmental sustainability is both a pressure and an opportunity for change and link this to the case study. Low-scoring responses tended to make general statements that were not developed and/or supported by evidence from the stimulus material or the study. High-scoring responses specifically explained why environmental sustainability is both a pressure and an opportunity for change for the Australian cotton industry in terms of its competiveness or viability.

Pressures included:

- cost and time, including lags from idea to implementation
- the need to divert focus from other objectives
- lack of expertise in the industry, to respond to the pressure
- changing social values, which may lead consumers to change their purchasing pattern to more environmentally responsible alternatives.

Opportunities included:

- responding to changing values may increase demand for their product within Australia and globally
- the ability to increase the sustainability of the industry
- increases the skills of the employees
- potential decrease in operating costs through reduced use of resources due to better reputation as a sustainable producer and reduced operating costs
- potential increase in profit and market share
- assists the development of an enterprise culture.

Question 7d.

Marks	0	1	2	3	4	Average
%	15	27	26	18	15	**1.9**

Most high-scoring responses linked knowledge of research and development to the cotton industry using stimulus material to support and enhance their responses. Lower-scoring responses tended to define research and development, but did not explain how it could assist or has assisted the industry to improve sustainability.

Question 7e.

Marks	0	1	2	3	4	5	6	Average
%	17	12	23	17	13	7	11	**2.6**

Many students found this question challenging. Answers needed to demonstrate knowledge of responses to the pressures and opportunities of environmental sustainability in the context of the industry selected. They also needed to be able to evaluate that response.

While most students showed some knowledge of environmental sustainability, many struggled to address all aspects of the question. Low-scoring responses tended to describe a response to the pressures and opportunities, rather than answer the question asked. High-scoring responses used a variety of industry contexts, including logistics, the agricultural industry, the power industry (Hazelwood), and the manufacturing industry, often the Tesla car. These responses were both precise and comprehensive in terms of content. They also developed points in logical paragraphs and came to an evidence-based conclusion about how effectively the industry had responded.

The following is an example of a possible concluding paragraph.

Overall the dairy industry has made very significant moves to be environmentally sustainable. The identification of targets and performance indicators allowed them to develop a framework for action. The annual Progress Report assisted them to monitor and celebrate progress and identify the challenges that remained. In general, Australia's dairy farmers and manufacturers demonstrate a whole-of-industry commitment to increasing prosperity for industry and communities, caring for people and animals, and minimising their environmental footprint. The latest progress report shows that there have been several areas of improvement, including that the intensity of waste sent to landfill by manufacturers has dropped 46% since 2011, exceeding the target for 2020. However, there are other areas where the industry's performance has declined, such as the proportion of people who recognised dairy as a quality product, which slipped to 69% from a baseline of 72% (the 2020 target is 80%).