2023 VCE Outdoor and Environmental Studies external assessment report

General comments

Most students attempted all questions in the 2023 examination.

The exam required students to include specific references to outdoor environments. In general, students handled this well, and provided more in-depth responses as a result of this approach. Students who could discuss different concepts with examples from a specific environment or could apply specific knowledge were better able to demonstrate their understanding of the subject throughout the paper.

Students followed instructions well, with the majority of answers being completed on the lines provided. Where additional space was required, responses were mostly clearly labelled in the extra space provided. It is essential that students remember to do this so that their whole response can be considered when allocating their marks.

There are some general areas that students need to focus on during the exam.

* It is essential that the time periods in the study design are observed, and that appropriate groups and conflicts are used. Historical conflicts such as the Franklin River campaign are not appropriate when discussing contemporary environmental conflicts.
* Acronyms used within the study design (for example, VEAC) are acceptable to use without explanation, but as a general rule, if using an acronym, students should write the name out in full in the first instance, then use the abbreviated form. For example, Australian Conservation Foundation (ACF) and then go onto use ACF to save writing time. This is to ensure that students can attain as many marks as possible if using a lesser-known acronym.
* Students should ensure that they read all parts of the question before starting their response to ensure that they are responding appropriately to all aspects of the questions and avoiding repetition.
* Students are encouraged to use the spare writing space to plan out their responses for longer questions. This will help ensure that they cover all aspects of the question and correctly apply the command term.

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 1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Mark | 0 | 1 | 2 | 3 | Average |
| % | 10 | 14 | 36 | 40 | 2.1 |

Students were required to select one of the characteristics specified in the study design, these being Biological Isolation, Climatic Variations or Geological Stability. Students were asked to explain how their selected characteristic influenced an environment they had visited or studied.

High-scoring responses included specific references to features of a visited or studied environment, and the explanation included accurate information relating to the characteristic and how it influenced the formation of the environment prior to human habitation. The reference to the outdoor environment had to include a specific feature (be that geological, plant or animal) and not just the name of a place visited or studied.

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

Characteristic: Biological Isolation

Biological Isolation refers to the idea that since Australia separated from Gondwana 50-60 million years ago, Australian outdoor environments such as the Wathaurong Country have evolved to become unique. The reason for this is because species have evolved largely without interaction from overseas. This has led to many species in Australian outdoor environments being endemic, meaning they can only be found natively in Australia. For example, the Wathaurong Country has been characterised by the presence of Eastern Grey Kangaroos and the Platypus which are unique to Australia.

Question 2a.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Mark | 0 | 1 | 2 | 3 | Average |
| % | 5 | 13 | 30 | 52 | 2.3 |

Students were required to outline three of the four historical events featured in the study design.

When asked to outline, students should provide a brief sentence or two with their response. They should make sure they don’t repeat the question in their response as this will not attract marks.

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

Arrival of first non-Indigenous settlers: In the late 18th century, many non-Indigenous settlers arrived in Australia from Europe, particularly Britain. These people saw Australian outdoor environments as wild and untamed, belonging to nobody (“terra nullius”).

Industrialisation: In the late 19th century, European settlers wanted to apply the knowledge they learned back home to create a prosperous economy. This involved an increase in large scale machinery, logging operations and more common use of steam.

Nation building: After the first and second world war many people in Australia viewed it as a ‘blank canvas’ on which to create a national identity. This involved many large scale infrastructure projects such as the creation of the Princes Highway.

Question 2b.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Mark | 0 | 1 | 2 | 3 | 4 | Average |
| % | 10 | 10 | 19 | 30 | 31 | 2.6 |

Students were required to analyse how one of the historical events from part a. influenced a human relationship with an outdoor environment, using a specific example.

When asked to analyse, students are expected to show cause and effect, in this case how the selected historical event influenced the relationship. Students had to provide correct links between the event and activities to the approximate correct time period for the environment used.

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

After the arrival of non-Indigenous settlers (NIS) humans were encouraged to view the outdoors as an adversary of which to overcome. Many people were encouraged to believe that the environment such as the Wathaurong Country were “wild and untamed,” belonging to nobody (terra nullius). As a result, many people created permanent dwelling and infrastructure such as the Learmonth brothers in Ballarat who created a bluestone homestead. The creation of their new buildings often had a large disregard for native species such as the murnong (Yam Daisy). This ego-centric view which was a result of the arrival of NIS led to the destruction of native ecosystems, causing the eradication of species such as the Yam Daisy, of which they had little concern for.

Question 3a.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Mark | 0 | 1 | 2 | 3 | Average |
| % | 17 | 24 | 31 | 28 | 1.7 |

Students were required to select one of the outdoor environments in the study design and explain the role that it played in the foundation of a historic environmental movement.

Students found this question challenging. Some students were unable to differentiate between the Lake Pedder and Franklin River campaigns and often merged these two environments and subsequent movements together. Many students were unable to provide accurate specific detail, with one common error being confusing Bob Brown and Bob Hawke and the role they both played. Students who chose the Little Desert environment often lacked specific information in their response. In order to attain marks, students needed to demonstrate an understanding of the event that occurred and correctly explain the foundation of the movement. This could include any combination of the following: locations, approximate year, level of success of the movement, key people involved, and specific events that occurred, such as protests, arrests, formalising of groups, merging of groups and so on.

The command term ‘explain’ is a higher-order term and students are expected to include specifics in their response, such as naming people and places and using dates with reasonable accuracy.

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

In 1978, the Tasmanian Hydro-electric commission (HEC) proposed a dam on the Gordon River, where it met the Franklin River. This would cause widespread flooding and severe ecological damage to this wilderness area, leading to the formation of the Franklin River campaign, led by the Tasmanian Wilderness Society (TWS) The TWS included conservationists like Bob Brown, and they were instrumental in the environmental movement that eventually saved the Franklin River from damming, and played a big role in environmental awareness in Australia today.

Question 3b.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Mark | 0 | 1 | 2 | 3 | Average |
| % | 18 | 26 | 34 | 23 | 1.6 |

Students were required to describe how the environmental movement from part a. influenced changing relationships, using a specific example that related to the relevant outdoor environment.

Most students were able to provide some evidence of changing relationships with the outdoor environment but often lacked a specific example or sufficient detail in the description to achieve full marks.

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

The Franklin River campaign (led by TWS) changed people’s perceptions from seeing the environment as a resource for electricity (hydro) to a place of beauty and intrinsic value, in need of protection. This influenced many people to join protests against environmental issues like the No Dam Franklin protests or even the Franklin blockade. Through the images people saw in the media (Rock Island Bend) they were able to form an emotional connection to wilderness environments. This resulted in an increase in tourism to remote areas like the Franklin because people wanted to see what they were fighting to protect. The TWS spread a lot of awareness about environmental issues, resulting in more people wanting to help protect outdoor environments.

Question 3c.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Mark | 0 | 1 | 2 | 3 | 4 | Average |
| % | 29 | 20 | 23 | 20 | 9 | 1.6 |

Students were required to evaluate how the increase in environmental awareness influenced the policies of an Australian political party, referencing an outdoor environment that had been visited or studied.

Students found this question challenging, with many students simply stating current political policies rather than explaining how the increased environmental awareness from the historical campaigns influenced the creation of policies relating to the environment. Some students also found it difficult to apply the command term ‘evaluate’ correctly. In order to attain marks, students needed a number of points of discussion (ideally these would be positive/negative but two positive points or two negative points were also accepted) and then an overall judgement with a value-adding point (not a repetition of information).

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

Due to the increase in environmental awareness, more people started to consider the environment when making decisions like voting. This also led to an increased pressure on political parties to include environmental policies in their campaigns. For example, Bob Hawke (Labor Party) was elected as prime minister in 1983, partly due to his promise to stop the damming of the Franklin River. He legislated the World Heritage Properties Conservation Act 1983, to add legal protection to wilderness areas like the Franklin.

Question 4

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Mark | 0 | 1 | 2 | 3 | 4 | Average |
| % | 14 | 11 | 23 | 31 | 20 | 2.3 |

Students were required to evaluate the impact that commercialisation of outdoor experiences has had on an outdoor environment they had visited or studied.

With the evaluation, students were expected to put forward at least two arguments (any combination of positive or negative), a strong judgement with a value-adding piece of information, and a specific link to an outdoor environment.

Students generally handled this question well, with most students able to access a range of marks. The most common area in need of improvement was the ability to make a strong judgement with an additional supporting piece of information.

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

Commercialisation refers to the process of bringing something into the market. Outdoor experiences like canoeing on the Murray River, are sold as a commodity for participants to buy. This commercialisation around the Murray environment has increased people’s appreciation of the natural environment because they see it as a more accessible venue and are likely to have a positive experience. This could lead to them wanting to participate in conservation efforts on the Murray River in future like assisting with the eradication of the introduced carp species in the river. However, commercialisation of canoeing in this environment has also led to some land clearance to allow for infrastructure like toilets and carparks to be built. This has resulted in some habitat loss and also water contamination. Overall, commercialisation has a negative impact on the Murray River environment as it attracts more visitors who could misuse this environment and contribute to land degradation.

Question 5a.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Mark | 0 | 1 | 2 | 3 | 4 | Average |
| % | 25 | 8 | 17 | 11 | 39 | 2.3 |

Students were required to describe two different societal relationships with outdoor environments that have taken place since 1990.

Students were required to describe two different relationships with accurate links to appropriate environments. Most students used the relationships stated in the study design, these being conservation, recreation, primary industries and tourism. Students who scored well provided a clear distinction between these relationships and provided accurate links to the environment. Students who used tourism and recreation often found it difficult to provide a clear distinction between the two relationships. Primary industries were occasionally confused with the commercialisation of outdoor experiences. Students should be aware that primary industries refers to industries that deal with the extraction of natural resources and conversion into commodities and products for the customer. The main forms of primary industry in Australia include farming, mining, forestry and commercial fishing.

High-scoring responses included a clear differentiation between the two relationships being described and specific links or examples to the outdoor environment.

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

Recreational relationships refer to when people view the environment as their playground/gymnasium, a place to have fun and escape the pressures of everyday life. This includes activities like skiing, bike riding, bushwalking, fishing, or scuba diving.

Conservation relationships refer to when people view the environment as a museum, a place worth protection and preservation. This could include taking preventative or restorative measures to maintain outdoor environments, like revegetation or pest eradication.

Question 5b.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Mark | 0 | 1 | 2 | 3 | Average |
| % | 22 | 16 | 31 | 32 | 1.7 |

Students were required to analyse how technology could impact one of the chosen societal relationships in part a.

Students needed to clearly demonstrate the cause (so naming a specific technology) and effect (how it has impacted the relationship). Many students analysed the impact on the environment with no further reference as to how it would affect the societal relationship in the future.

High-scoring responses included a specific technology with a clear link to an outdoor environment/experience and how this impacted the relationship. Examples of some of these impacts included increasing/decreasing access, increasing/decreasing environmental damage, and easier/more comfortable participation. Discussion of environmental impact was acceptable, provided it linked back to how this would then influence the societal relationship.

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

Technology would impact recreational relationships because it would make it easier for people to participate in an activity. It could also add a level of comfort for participants or increase safety. This could result in an increase in participation of recreational activities. For example, the technological advancement in the wetsuit material for scuba divers allows people to stay in the water for longer, and the advanced scuba tanks will make participants feel safer while participating.

Question 5c.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Mark | 0 | 1 | 2 | 3 | Average |
| % | 33 | 24 | 23 | 19 | 1.3 |

Students were required to suggest how the Victorian Environmental Assessment Council (VEAC) might investigate the environmental impacts of one of the chosen societal relationships from part a.

Students were required to demonstrate accurate knowledge of VEAC and make a plausible suggestion as to how VEAC might investigate the environmental impacts resulting from the relationship in part a. It should be noted that the focus was on the relationship in part a., not the technology analysed in part b. Students should ensure that they read the questions carefully and follow the directions provided.

High-scoring students demonstrated accurate knowledge of the VEAC and provided strong suggestions as to how VEAC might investigate the impacts of one of the relationships described in part a.

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

The VEAC could receive a proposal from the government about the use of an environment for recreational activities. They might then conduct research into the possible impacts of these activities by observing other locations where it occurs. They would likely also ask for community input about whether this recreation should be allowed, and they might look at any ecological or cultural values of the particular area. They would then collate their findings into a report with a recommendation about how best this land should be used.

Question 6a.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | 3 | 4 | 5 | 6 | Average |
| % | 12 | 7 | 21 | 20 | 22 | 8 | 9 | 2.9 |

Students were required to evaluate the health of an outdoor environment that they had visited and/or studied, using two State of the Environment (SoE) report themes.

Many students found it hard to achieve full marks for this question as, while they mentioned two themes, they only used the observable characteristics to evaluate the health of the outdoor environment rather than using evidence from the theme selected. As this question called for an evaluation, a strong and clear judgement on the health of a specific environment was required, with supporting evidence.

High-scoring students used a clearly defined environment and evaluated the health of that environment by using specific evidence from appropriate SoE report themes.

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

The State of the Environment (SoE) report’s theme for air quality positively states in the key findings that ‘Australia generally experiences healthy air quality, which is evident in the Alpine National Park as there are no gas-emitting industries nearby. However, despite this key finding, the report also states that ‘there may be no safe level of pollution’ meaning that even a small amount of pollution in the Alpine National Park near the ski resorts may be detrimental to fauna, such as the Mountain Pygmy possum’s health. Overall, the air quality in the Alpine National Park is at a high level and while there is small amounts of localised pollution it is hopefully not to a level that there will be significant impacts on the flora and fauna in the area.

Climate key findings on the SoE report state that Australia’s average temperatures have risen by 1.4°C since the early 20th century and that rainfall in the southern parts of Australia is decreasing. Unfortunately this means that flora and fauna, such as the Mountain Pygmy Possum and Snow Gum have to adapt to these warmer conditions in order to survive. Unfortunately, key findings of climate also indicate that ‘global greenhouse gas concentrations are continuing to increase’ meaning that the climate may be warming even faster than expected and not allowing flora and fauna the time it needs to evolve and adapt to survive these warmer and drier conditions. The rate of snow is also decreasing and with many of the Alpine flora and fauna reliant on snow for their survival, the health of Alpine National Park is at significant risk due to changes in the climate.

Question 6b.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | Average |
| % | 24 | 24 | 53 | 1.3 |

Students were required to outline two significant threats to the outdoor environment that they chose in part a.

The threats had to be either real or plausible and specific for the outdoor environment being used. As the command term was ‘outline’, students had to provide at least one complete sentence. Simply listing a threat did not attract marks.

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

Climate change is a significant threat to the Alpine National Park as it is the global, long-term warming of average temperatures which impacts snowfall. Urbanisation is another threat to the Alpine National Park as the increased land clearing and development cause deforestation and habitat loss.

Question 6c.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | 3 | 4 | 5 | 6 | Average |
| % | 7 | 5 | 12 | 17 | 22 | 16 | 21 | 3.8 |

Students were required to analyse the potential impact that the two threats identified in part b. might have on the chosen environment.

High-scoring students were able to demonstrate further understanding of the threat (simply repeating their outline from part b. was not mark-attracting) and then unpack the effect of the impact. Specific references to the chosen environment were also included in the response.

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

Climate change will cause the world’s average temperatures to increase. This will reduce areas that it will be cold enough for snow and reduce overall snowfall all together. This will harm animals such as the mountain pygmy possum that relies on snow coverage for insulation and it will affect recreational users as the snow season will be shorter, therefore people won’t appreciate the Alpine National Park. Urbanisation is another threat that will impact the Alpine National Park as more and more people will create development and construct buildings. This will cause increased land clearing which will eliminate many habitats and more development will contribute to carbon emissions through the use of fossil fuels which will pollute the air at the Alpine National Park and contribute to climate change.

Question 6d.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | 3 | 4 | 5 | Average |
| % | 11 | 9 | 19  | 23 | 18 | 18 | 2.9 |

Students were required to identify two actions that could be used to sustain the chosen environment and outline why it is important for individuals and future society that the specific outdoor environment remains healthy.

To allow greater scope in responses and use of specific examples from their selected outdoor environment, the actions students could identify were not limited to those in the study design. However, actions had to be direct and specific to the environment being used. Indirect actions, such as reduction of CO2 emissions, did not attract marks. Students then needed to outline why the ongoing health of that environment was important to both individuals and society.

Higher-scoring students chose very specific actions that directly related to the environments they were focusing on. This allowed them to provide stronger and clearer examples that demonstrated their understanding. They then went on to discuss the importance of the health of that environment for both individuals and society, again with specific examples for both groups.

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

Green building design and Landcare could be used to help sustain the Alpine National Park. The Alpine National Park is important to individuals as it provides a place for recreation and adventure, this allows people to escape their everyday lives and relax from stress through activities such as skiing, while helping build fitness. The Alpine National Park is important to society as it provides a place to help the economy. Through people visiting to ski for the day, local ski resorts benefit from providing ski lessons, food, rentals, apparel, and accommodation. A health economy helps to protect the alpine national park for future generations as money is available to help restoration and revegetation.

Question 7a.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Mark | 0 | 1 | 2 | Average |
| % | 13 | 28 | 60 | 1.5 |

Students were required to describe a management strategy that Parks Victoria could implement to reduce competing recreational impacts and maintain the health of the new national parks depicted in the stimulus material.

The management strategy had to be suitable for a dry forest / woodland forest as stated in the stimulus and had to be accurately described.

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

A public land management strategy they could use is zoning which involves dividing the land into different areas based on their specific purpose. This can reduce competitiveness as it allows Parks Victoria to minimise potential or existing conflicts between different recreational users and their activities, promoting better environmental health in the new national park.

Question 7b.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Mark | 0 | 1 | 2 | 3 | Average |
| % | 15 | 21 | 39 | 25 | 1.8 |

Students were required to analyse the effectiveness of the management strategy described in part a.

Students needed to be able to further their description of the management strategy and then show how this strategy could be effective.

Higher-scoring students demonstrated a strong understanding of their management strategy and provided specific detail on the level of effectiveness.

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

Zoning causes environments to be split up areas based on their use, such as being purely used for recreation or conservation. This effects environments as it allows Parks Victoria to have a geographic framework to better manage each zone. It also effects environments as Parks Victoria can identify areas of priority and focus on those, allowing for more effective management.

Question 7c.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Mark | 0 | 1 | 2 | 3 | Average |
| % | 24 | 16 | 31 | 29 | 1.7 |

Students were required to describe a management strategy that a private landholder could use to maintain the health of an environment that the student had visited or studied this year.

Students had to ensure that the environment they chose for their response was private land and that the management strategy was appropriate for that environment. Many students chose public land or stated that Parks Victoria implemented the management strategy.

Higher-scoring students were able to discuss in detail a specific area of private land, providing a name and location, and then describe an appropriate management strategy. It was clearly evident that they had either visited and/or studied the area in depth as they were able to apply this knowledge in their response.

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

Private land can be managed by Trust for Nature, a non-profit organisation. A strategy that private landowners could implement would be to work with Trust for Nature and place a conservation covenant on the land indefinitely protecting it and giving landowners access to conservation advice and support on maintaining the land. In the South-east Grampians, Trust for Nature partnered with Glenelg Trust to purchase properties in the Walker Swamp of high conservation value so the covenant could be placed, indefinitely protecting it, and then sold as part of the revolving fund.

Question 8a.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Mark | 0 | 1 | 2 | 3 | 4 | Average |
| % | 10 | 5 | 13 | 28 | 45 | 2.9 |

Students were required to name an environmental conflict that they had studied this year and provide a description of the conflict, including identifying the two main groups.

Most students performed strongly on this question and, while the majority used conflicts specified in the study design, it was also acceptable to use other conflicts they had studied. High-scoring students were able to provide a strong description of the conflict, which included a demonstrated understanding of the key issues, the major groups involved, and accurate knowledge of key dates, events and people.

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

*Conflict: Proposed Great Forest National Park*

The proposed Great Forest National Park proposes adding 355,000 hectares of protected forest to the existing 170,000 hectares in central highlands of Victoria. The conflict began when the Forestry Industry consisting of Friends of Forestry and local forestry employees opposed the proposal. They argued that there would be many social, economic, and environmental impacts that needed to be considered. The Great Forest National Park working group consisting of friends of Leadbeater’s possum and the Wilderness Society were for the conflict as they wished to save the critically endangered Leadbeater’s possum and forest environment from the timber industry.

Question 8b.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Mark | 0 | 1 | 2 | 3 | 4 | Average |
| % | 10 | 7 | 26 | 21 | 36 | 2.6 |

Students were required to describe two methods used by individuals or groups to influence decisions in the chosen conflict.

Most students were able to accurately describe two different methods and provide clear links back to their selected conflict. In order to attract marks, the method described had to be relevant to the conflict and linked to the appropriate group.

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

The Great Forest National Park working group used direct action to try to influence decision makers. The working group protested and blockaded Toolangi State Forest to cause disruption to the industry and make their position known on the conflict. The forestry industry used the method of petitions to influence decision makers. They created the petition and Facebook campaign ‘Say NO to proposed Great Forest National Park’ that got over 16,000 signatures and showed support.

Question 8c.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | 3 | 4 | 5 | 6 | Average |
| % | 13 | 6 | 13 | 15 | 25 | 15 | 14 | 3.3 |

Students were required to evaluate the effectiveness of each of the methods they described in part b.

Many students did not score as strongly on this question because their response lacked a clear judgement supported by evidence. For each method, students needed to provide any combination of positive and/or negative arguments on factors affecting the effectiveness of each method. They then needed to provide a clear judgement on the level of effectiveness, with an additional piece of support information.

High-scoring students were able to demonstrate their depth of knowledge, both of the method and the conflict in general, as they provided strong supporting evidence with direct links to the conflict

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

The Great Forest National Park working group’s decision to undertake direct action has the advantage of gaining free media attention which therefore raised awareness as people were able to learn about the issue and this can help the groups gain support. However, direct action can alienate groups in society depending on how they are depicted as they can be seen as being a nuisance. Direct action also requires a large number of people for it to be effective and requires significant organisation. Despite this, the direct action in this case was effective as it raised a large amount of awareness but unfortunately, they were not successful in helping the proposal go through.

The forestry industry’s use of petitions and social media campaigns allowed them to access a wide audience with little effort therefore making it very easy to conduct. However, people tend to sign petitions without fully understanding the issue and in order for a petition to have any weight there must be a high number of signatures. However, this method proved successful for the forestry industry as they were able to gain high profile support which potentially influenced the decision makers, and this resulted in the proposal not going ahead.

Question 9

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Marks | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | Average |
| % | 3 | 0 | 1 | 2 | 3 | 4 | 7 | 9 | 10 | 10 | 12 | 11 | 9 | 9 | 5 | 5 | 9.2 |

Students were required to provide an extended response to a case study revolving around a small town looking to shift from coal-fired power to renewable energy. The town was located on top of a geothermal basin, had access to a river, had higher than average rainfall, received above average sunshine in summer and had constant wind. Students were required to write a report covering the following points:

* A description of two types of renewable energy sources that could be used to supply the town, including correctly naming the types of renewable energy they were focusing on.
* A description of two different viewpoints Larksville residents might have about the proposed shift to 100% renewable energy. These viewpoints had to be distinct from one another. Students tended to perform better when they described opposing viewpoints.
* A discussion on how two different political parties might view the proposal. Students had to be able to name the parties and provide information that related specifically to the party. They did not necessarily have to name a policy, but some students were able to do this and, in most cases, it strengthened their response as it demonstrated a greater depth of understanding.
* An analysis of how switching to renewable energy might impact on the resident’s relationship with the local environment. Students had to be able to discuss how the switch to renewables (the cause) led to a shift in relationship (the effect).

Students who performed well on this task took the time to plan out their response, ensuring that they covered all of the above dot points. Students also took note of, and knew how to respond appropriately to, the different command terms used in the response.

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

Dear local community members of Larksville,

In order to make Larksville 100% renewable by 2025, there would need to be a variety of renewable energy sources used, such as wind power and solar energy. Wind energy requires lots of space for the wind farms. It would include big windmills, to convert wind to energy. Wind energy would be possible due to Larksville’s constant wind throughout the year. Solar energy would require lots of land as well to set up solar panels to capture Larksville’s above average sunshine, in order to produce enough energy to supply power to the town.

Community members that support the switch to renewables as an energy source may view renewables as critical to saving the environment from climate change. These members may take on an environmentalist perception in wanting to protect the land. They may argue that burning fossil fuels are the biggest contributor to climate change and currently we are burning fossil fuels 100,000 times faster than they are being produced, so the switch would positively impact the environment, as renewables would mean less carbon emissions released. The other community members may want to stick to conventional methods, believing that they are more reliable, and it is too costly to make the switch. Further renewables require lots more space to produce the same energy as conventional methods.

The Australian Greens political party may support the Larksville proposal as one of their policies aims for 100% renewable energy by 2030. This shows that they have a conservationist relationship and want to switch to help the environment. The Liberal National party may not be in support of the proposal as their policy is for 23.5% renewable energy by 2030 with no further goal, proving they believe in sticking with the conventional methods, as they are more reliable, and they don’t regard the environment as much.

If the proposal went ahead, it would lead to the residents perceiving the environment as in danger and in need of protection. This may lead them to interact by adopting more sustainable practices such as green building design or Landcare or integrated farming, that are more environmentally friendly. This would have a positive environmental impact of maintaining the Larksville area for future society and individuals, along with strengthening human and environmental relationships.