

2016 VCE Extended Investigation: Critical Thinking Test examination report

General comments

The questions on the 2016 Extended Investigation: Critical Thinking Test challenged students to analyse and understand debateable issues, recognise the relationship between different propositions, evaluate arguments, and generate arguments for and against propositions. The questions on the test assessed different aspects of critical thinking.

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.

Questions 1 and 2

Questions 1 and 2 were drag-and-drop items. In each question, students were directed to consider a proposition and read four statements related to that proposition. They then needed to drag each statement and drop it into the appropriate empty cell in the table.

Question 1

Marks	0	1	2	3	4	Average
%	4	8	23	7	58	3

Students were asked to consider the following proposition: Fame has more costs and disadvantages than benefits and advantages.

For	Against
Most fame is a result of continuous hard work that is very stressful and never ends.	<i>Fame comes to those with energy and commitment who love what they do.</i>
<i>Fame is often insubstantial and undeserved.</i>	Fame comes as recognition of achievement and success.
	People must choose or allow themselves to become famous. Fame can be avoided if that is the preference of a person.
<i>The famous are subject to jealousy and resentment.</i>	To be famous is to be admired and accepted.

The famous are often egomaniacs who are a misery to others and to themselves.	<i>Fame gives individuals recognition, and makes them feel worthwhile and important.</i>
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Question 2

Marks	0	1	2	3	4	Average
%	4	15	25	38	17	3

Students were asked to consider the following proposition: More freeways should be built in the city.

(The statements in the table below have been labeled 1–9 for the purposes of this report, but they were not labeled in this way on the test.)

For	Against
Freeways make motoring safer and save lives. (statement 1)	<i>Building freeways takes money away from other more beneficial community services.</i> (statement 6)
<i>Our road system is inefficient and limits economic development.</i> (statement 2)	Freeways are very costly and unnecessary. (statement 7)
Freeways ease traffic congestion. (statement 3)	<i>Freeways are only a temporary fix that delays sustainable approaches to our transport problems.</i> (statement 8)
The car is necessary for living a modern lifestyle. (statement 4)	
<i>Freeways are only one part of a comprehensive transport system.</i> (statement 5)	Freeways discourage the development and use of public transport. (statement 9)

One way to begin responding to a question such as this would be to categorise the statements to be allocated as being either 'for' or 'against' the proposition. For example, statements 2 and 5 were potentially arguments for freeways, and statements 6 and 8 were potentially arguments against freeways. There were three cells for two statements on the 'Against' side of the table. Statement 3 was concerned with the purpose of freeways to assist traffic flow, and statement 8 could be seen as a retort by claiming that the improvement from freeways is only temporary. Statement 1 was about the safety value of freeways, and statement 6 seemed to concede the value of freeways but implied that there are more worthwhile and beneficial uses of the money spent on freeways.

There were two empty cells on the 'For' side of the table, so students needed to decide which of the 'Against' side statements were related to them. Statement 7 was concerned with cost, and there is a match with statement 2, which expresses concern about the economic inefficiency of the road system. The other 'For' statement, statement 5, is a less obvious relationship to the 'Against' case, and can be construed as a response to statement 9. The word 'only' in statement 5 implied that freeways should not be seen as being at odds with other parts of the transport system, and in that sense is a response to statement 9.

Questions 3 and 4**Question 3**

Marks	0	1	2	3	4	5	6	Average
%	4	16	26	28	16	9	1	3

Question 3 invited analysis of a set of opposing arguments about compulsory language learning in upper secondary school. Students were required to choose the argument that they found the most convincing and explain why. They were also directed to analyse the arguments presented rather than offering their own opinion about the proposition.

This question was an analytical task focused on a specific argument, inviting students to identify and justify which argument they saw as decisive in the set. Many students commented on a number of arguments, or the whole case 'For' or 'Against'. There was no penalty for commenting on more than one argument, although there was no advantage to commenting on more than one. Students who examined an argument in detail were rewarded.

The following high-scoring response is a strong elaboration and explanation of argument B, which was about the social value of language learning.

Argument B is the most convincing argument as it targets social in society. It is widely accepted that whilst learning a language, the person also builds a greater appreciation for not only the language, but the people and the culture as well. We live in a multicultural society where there are people from many different places from this world, and by building an appreciation and understanding for those different cultures, our society would be able to function in a more coherent way. Some may say that if one does not want to learn a language, then they shouldn't be forced as they will not enjoy it, but students will benefit greatly from this as it not only allows them to broaden their perspectives and appreciation of alien cultures but also allow them to learn something new.

Question 4

Marks	0	1	2	3	4	5	6	Average
%	3	8	21	27	24	14	3	3

In Question 4 students were directed to consider two sets of arguments about requiring Australian programs to be shown on television, and to offer their own position for or against the proposition. Students were able to introduce arguments of their own, although most used the arguments presented or a version of them.

The following response is a strong elaboration and explanation in favour of compulsory Australian content.

Television stations should be required to show a substantial amount of Australian programming as this would supply a platform for Australian culture and identity to be shown. It is generally accepted that modern Australia is becoming Americanised, be it language or customs, and this is partly due to the large amount of American programs that are broadcasted on television stations. We should be showing more support for local content as this not only reaffirms Australian culture and national identity, but allows for them to be shown worldwide allowing for economic growth through the tourism industry. Take Ramsay Street as an example, tourists from the other side of the world come to Australia just to see the neighbourhood where 'Neighbours' is filmed. Others may argue that we should be looking overseas for sources of entertainment due to a robust Australian culture and that we can cope with overseas influences. However, due to Americanisation, the younger generation has forgotten slang unique to Australia.

The following response against compulsory Australian content reviews a range of specific arguments.

I am against the proposition, because I believe that television is a medium that allows Australia to become more globalised. Globalization has significantly and inevitably impacted the world, and TV should be a reflection of our world. The government trying to regulate TV would lessen the freedom of speech and expression in Australia.

Further, Australia is a multicultural county, and so it is hard to determine what is 'Australian programming'. Would it include Chinese, British, and Greek etc. TV programs? National culture and identity is ever changing- how do we convey that through TV? These are just some challenges to the nature of 'Australian programming'. Although TV can strengthen culture, TV is a fictional and artificial representation of our world, and people can fall victim to living their lives vicariously through TV, which undermines the legitimacy of its 'influence'.

Questions 5 and 6

Questions 5 and 6, about analysing and assessing research questions, were answered well by most students. There was a general sense that students had thought about the framing of research questions during the year, and the comments offered were often original and focused on the nature of particular questions.

Question 5

Marks	0	1	2	3	Average
%	6	25	39	30	2

Question **A.** ('Live export of Australian animals – a matter of ethics or economics?') was the most difficult to answer in that it seemed to set up false alternatives by confusing ethical and economic considerations.

Question **E.** (Computer coding in schools – are the skills taught through coding programs in schools preparing students for the workplace?) would also be very difficult to answer because it is too all encompassing, and it offers no hint about how it would be answered and/or what would give an answer to such a question. At best, question **E.** could be approached as a survey of perceptions or opinions, but that would yield no more than speculative opinions.

On the other hand, question **C.** (How successful has the 'No Jab, No Play' legislation been in increasing vaccination rates in Summerville?) and question **D.** (Remote learning – empowering or alienating? An investigation into the experiences of students at Northside High School as they undertake one day a week of online learning) would be easier to answer and most likely to produce a definite result than the other questions. Question **C.** was quite specific and concrete, and could be addressed by comparing vaccination rates in a specific location over time. Even if the records of vaccination rates in childcare centres and kindergartens were dubious, such establishments could be sampled and surveyed or interviewed. While question **D.** seemed to pre-empt the issue of remote learning by proposing that it is either empowering or alienating, this need not prevent an exploration of the issue through survey and interview. The focus of the second part of the question is quite specific.

The following are strong arguments about the difficulty of answers to questions **D.** and **A.**

Example 1

D. The terms specified in the question, empowering or alienating, can be seen as subjective and the meanings may differ for each person. Additionally, by only mentioning those two terms, the researcher has come to assume that the answer can only be one of the two, and therefore does not allow any room for those who do not fit in the two groups. The research question does

not provide a scope or range be it with participants or with time and does not specify which subjects the participants will be learning. It also has some ethical issues.

Example 2

Question A would be the most difficult to answer as there is no clear scope or clear methodology into how to gain a clear answer through an investigation. There is no mention of how you would answer this question as asking if its “a matter of ethics or economics” does not give any clues of whether you’ll be asking people for their opinions or doing research into the industry itself and then forming your own opinion. There are also too many variables for it to be a realistically undertaken in the time frame of the course.

Question 6

Marks	0	1	2	3	Average
%	7	25	40	28	2

The following are strong arguments about the ease with which question **C**. could be answered.

Example 1

Question C would be the easiest to answer. In order to answer this question, vaccination rates in Summerville over a number of years before and after the ‘No Jab, No Play’ legislation implementation would be identified, and then this data would be analysed and it would be observed whether or not there was an upwards trend following the implementation of the legislation. It is a very simple and straightforward study, and does not require the use of qualitative data.

Example 2

Question C would be the easiest to answer, because the research would simply look at the vaccination rates before and after the ‘No Jab, No Play legislation’, analyse the numbers and arrive at a conclusion. This is a very straightforward question to answer, as it is looking directly at a cause and effect relationship. The specificity of the ‘No Jab, No Play’ legislation as opposed to just health legislation in general also narrows down the focus of the research which would make it more feasible to answer as well.

Questions 7–10

The tasks of presenting arguments for and against a proposition in Questions 7 to 10 were challenging for some students.

Students dealt with the issues of penalty rates for Sunday work and charges for admission to art galleries quite well, but seemed to call more on knowledge of the world than more philosophic questions.

Question 7

Marks	0	1	2	3	Average
%	1	27	47	24	2

The following is a strong argument in favour of increased pay on Sundays.

Double pay on Sunday is an incentive for people to work when no one really wants to. Many people like to enjoy a Sunday relaxing while going out however to make Sunday an enjoyable day for everyone, some people will need to work. If the pay was the same as every other day it would be difficult to find people who were willing to work when they could be spending their time doing something else that they would rather do. The financial incentive benefits families who are in need of extra money as well as providing an enjoyable day out for many people who want it,

double pay on Sunday is a win-win situation. Some people may say if they are doing the same job they should not be paid more simply because it is a Sunday, however Sunday is usually a much busier day and as I previously mentioned people work on Sunday for the enjoyment of others which should be rewarded with extra pay.

The argument is strong as it focusses on the point that it is difficult to find employees who will give up their leisure time to work for the same money. The argument is logical in its approach and rebuts the idea that there is no difference in working on a Sunday.

Question 8

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

Question 9

Marks	0	1	2	3	Average
%	5	28	44	24	2

The following are strong arguments for charging for general admission to art galleries.

Art galleries require significant costs to maintain and visitors should pay their part in this maintenance.

This is a strong argument because it supports the proposition in a variety of ways. Firstly, that art galleries require significant costs to maintain is clearly evident from the expensive pieces of art as well as the cost of the workers, such as cleaners and exhibit workers, and building maintenance, as many art galleries are housed in architecturally significant buildings.

Secondly, the argument has the implication that maintenance costs are covered by tax payers, some of whom may never be interested in visiting and should therefore not have to pay as opposed to visitors who would pay for something which they want to see. Those who visit are those who benefit from the gallery and should therefore be the ones paying for themselves.

Question 10

Marks	0	1	2	3	Average
%	8	26	41	25	2

The following are strong arguments against charging for general admission to art galleries.

Example 1

Art galleries should not charge for general admission due to the fact that it would close off the access of educational and inspiring art to a proportion of the community that cannot afford to visit galleries. The significance of art is important in society as it fosters cross cultural understanding and it is often an integral platform for creative approaches to social and political issues. If art galleries were to charge for general admission it would make art increasingly difficult to access and limit the benefits art has on society. A general admission fee for visiting art galleries would send society backwards in terms of social advances as it would associate art with money and make it only accessible to people who can afford it, much like the times of aristocrats and the bourgeois. Some may argue that with a lack of general admission fees, artists that are on exhibition will not receive appropriate payment for their work. However, although reasonable, it is invalid as galleries pay artists in order to commission their work and in return they also advertise and widely publicise their work to the community, increasing popularity and boosting the image of the artist.

This argument against general admission charges is strong because it qualifies the claims and has substantial reasons to support the claim that also address social and economic factors.

Example 2

Galleries should not charge admission as art is a medium of cultural expression that should be available to all. Modern, liberal democratic society aims to give everyone a fair chance and provide them with the same opportunities and experiences. Limiting the viewing of art to those who can afford it does not provide fair access. Art is culturally and historically significant to many, and as such limits the access of some denies them access to our culture, this being a core value of modern society. Modern democracies strive to enhance cultural institutions and as such should supplement the costs of running a gallery. It is in the nature of most contemporary welfare state to ensure a happy life for its citizens and one way through which people find pleasure and indeed employment is in the art industry.

This argument is clear, rational and links cultural and societal values to the tenets of modern democracy and the state. Its rationality derives from its avoidance of assumptions and continuous qualifications. The argument also draws on the economic advantage of galleries and art institutions and draws a link between that and the prevalent cultural values. Its chain of reasoning trickles down from the central contention to further arguments which continually consolidate the preceding reasons.