2019 VCE Extended Investigation oral presentation examination report

General comments

The Extended Investigation oral presentation affords students the experience of presenting and defending the research they have completed over the course of a year. The conduct of the assessment allows students to celebrate and reflect on their research journey.

The oral presentation comprises two sections: the presentation of the investigation and response to questions/challenges. The duration of the oral presentation is 15–20 minutes. Students present for 7–10 minutes, after which they will be asked questions for a further 8–10 minutes.

Assessment of the oral presentation is based on knowledge and understanding of the research area, defence of research findings and understanding of audience, response to questions and challenges, and reflection and evaluation. Students are strongly encouraged to use these four assessment criteria when developing the content and structure of their presentations.

Advice for teachers and students

- The time frame for the first part of the presentation is 7–10 minutes, and students are reminded to stay within this limit. Presentations that were significantly longer than 10 minutes needed further synthesis and clarity.
- Critical thinking skills underpin the entire Extended Investigation process. When preparing for their oral presentation students should consider how they are demonstrating critical thinking skills.
- It is important that students understand the difference in purpose between the two components of the Externally Assessed Task. It is not possible to cover all aspects of the written report in the oral presentation. Students should select the highlights of the investigation and use these to structure the oral.
- Students should practise their presentations, use cue cards selectively (i.e. dot points) and anticipate (but not pre-empt) questions.
- Students generally used visual aids effectively, though they are reminded to take time to explain the visuals (such as charts and graphs) they have chosen to present.
- It is important that students are made aware of speech structure, signposting, language choices and presentation techniques that will assist in explaining their research effectively, as this will build their confidence in giving a presentation.
- Students should approach their research with a degree of humility, specifically when positioning their own topics with respect to the work of other researchers. Looking at the reference lists for scholarly articles and reports should give them some idea of the scope of the research fields they are engaging with.
- It is important that students take the ethical issues seriously in their investigation. In 2019 many students offered only a prepared statement, without engaging meaningfully with the ethics of their research.

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- Extended Investigation questions and methods must comply with responsible and ethical research guidelines, as outlined on page 6 of the study design.

Specific information

Each oral presentation is assessed individually against the criteria. Comments regarding performance levels as outlined below are for illustrative purposes only and do not constitute all aspects of student work that may contribute to achievement.

Criterion 1 – Knowledge and understanding of the research area

In order to demonstrate knowledge and understanding of their research area, students are expected to engage with the full detail of their investigation. This includes the focus and significance of their research area and question, background research in the field, as well as their chosen data collection method(s). Students were able to clearly justify the significance of their research topic and approach and displayed a keen interest and sense of passion in their investigations. Students should, however, approach their research with a degree of humility, especially in relation to the work of more experienced, even eminent, researchers. Both the presentation and questions/challenges sections are used to assess against this criterion.

Most students presented a clear overview of their investigation, with reference to many of the above points. Investigations for which students had adopted a serious, systematic and academic approach were successful. Students who scored in the high range engaged with specific researchers or research fields, identified ideas or theories relevant to their research topic and question and then deployed appropriate methodologies. These students demonstrated a critical understanding of research literature and its link with their investigations. They engaged with literature and methods throughout their presentations and demonstrated a firm understanding of the complexities of the research field. Students who scored highly identified discordance or debate within the existing literature and therefore were better able to justify the entry point and purpose of their study (the ‘gap’ in the field). They displayed a passion for their investigation through the nuanced knowledge they had of the existing research within their field.

Some students who scored in the middle and lower range had selected a research question that made it difficult for them to deliver a significant or substantial piece of research, and neglected the current literature in both the background to the research and in connection to their own findings. Students who scored within these ranges needed to read more widely, select an appropriate approach (for example, a theory, a model, a school of thought) and work with it throughout the whole research process. Some presentations included only brief summaries of key ideas without critical engagement with the literature or an understanding of how the research is linked to other research in the field. It is important for students to be able to show a conceptual understanding of how their investigation fits within the context of existing research.

Students were mostly able to explain the design and conduct of their investigation effectively. It was necessary for students to explain and justify their chosen method(s) in some detail, clearly demonstrating how the method(s) helped them collect data that responded to their research question. The methodology and subsequent justification was a challenge for students and often distinguished the higher-scoring presentations. High-scoring presentations often included multiple stages of data collection. Many of these students had developed their own testing equipment or techniques for coding/analysing literature and data, and had even created their own frameworks and models as part of their methodological approach. These students were able to demonstrate how their selected data collection method, whether interviews, experiments, review of documents or surveys, enabled them to collect data that would respond to the specific demands of their research question.

Students who scored in the lower and middle ranges often found it difficult to explain the relevance of their selected method within the context of the research area. Some students argued that they adopted a 'mixed method' approach when only one method – such as a survey – had been used to collect different types of data (quantitative and qualitative). There were some instances of poor understanding of methodological terminology (for example, the difference between 'methodology', 'method' and 'data'). The use of literature reviews as a method was often poorly explained. Several students appeared to misinterpret 'literature review' to mean a methodology and/or method. The literature review – while a requisite part of the written report – should be used in the oral presentation to connect to the student's own work and not be a discrete part of a presentation with no specific purpose. Surveys were frequently used, but sometimes lacked complexity. The purpose of a survey in answering the question was also not always articulated or clear. More attention needs to be given to whether the discipline/methodological approach is suited to the research question posed.

Criterion 2 – Defence of research findings and understanding of audience

Students are expected to discuss the relevance of their work and to justify their findings in light of their primary research question. In explaining their work to the assessors, presentations are expected to be well structured, coherent and free from jargon. Subject-specific terminology should be clearly explained. Both the presentation and questions/challenges sections are used to assess against this criterion.

Most students displayed a very real sense of enjoyment and passion for their topics. They presented with confidence and it was apparent that they had prepared well. Students who scored highly spoke confidently, fluently and clearly. These presentations were often characterised by a few well-chosen visual aids and notes and the student's ability to restructure their investigation into a form appropriate for an oral presentation. Although there is no prescribed structure, higher-scoring presentations used techniques including signposting to show when they were moving from one section of the investigation to another. This enabled students to demonstrate a firm grasp of the material and a sound understanding of the research process. Students who scored highly clearly and purposefully highlighted the most significant findings of their investigation and demonstrated how their findings helped them respond to their research question. They explored the connections as well as areas of disagreement with previous knowledge in the research area.

Lower-scoring presentations often lacked a coherent structure, moving from one section to another without clear links and at such speed that the presentations were difficult to follow. Many students read their written report verbatim, rushing through the allotted time and failing to engage with the audience. In these cases their findings were lost in the race to finish. Many students merely listed their findings, on a question by question basis. Some students were unable to overcome the inherent bias that had affected their research from the start, and had collected data that simply confirmed what they already thought about a given topic. Some students who used friends to complete their research (as a source of data) found it difficult to defend the reliability and validity of their research findings. Middle- and lower-range presentations often made bold assertions about the generalisability of their findings without acknowledging the inherent bias in sample size and population.

The adaptation of language for a non-specialist audience was done well. Students who actively defined complex terminology for the assessors tended to deliver clearer presentations that were easier to follow. It is important that students have a range of techniques for explaining highly complex and technical terms. Techniques include using metaphor, analogy and visual aids. Although the use of visual technology is not assessed, students who used this medium to illuminate findings within the data were often better able to tailor their presentation for a non-specialist audience. It is important that students do not overuse visuals and they should make sure their meaning is clear to the assessors. Many students used charts and graphs which may have

looked impressive, but should have taken time to explain them. Visuals should be highlighted and commented on, not flicked through.

In defending their findings, students were expected to discuss the relevance of their work, justify their findings and clearly articulate an outcome of their investigation in light of their research question. It is vital, therefore, that students are able to explain how they analysed their data. For example, if students identify patterns and themes in their data, it is important that they clearly explain **how** they determined these patterns and what they did with them. Without a clear process for analysis, it often becomes difficult for students to convincingly and comprehensively defend their findings. Many students who undertook 'document analysis' or a 'systematic literature review' had difficulty in explaining their method of analysis. When describing statistics as findings, students need to ensure that these descriptions are informative and relevant. For example, comparing survey responses in percentage terms is not necessarily informative, unless the student makes the comparison meaningful. 'More' and 'less' are not necessarily informative unless it is clear to the assessors whether differences are statistically significant or are potentially affected by variables in the responding population. This was a challenge for many students and was a key element that distinguished higher-scoring presentations from others.

Criterion 3 – Responses to questions and challenges

The response section is designed to illuminate aspects of a student's work that may not have been fully explored in their presentation. Although there is only one criterion that explicitly addresses this section, the questions and challenges can have significant implications for success across the whole set of criteria. Students should not leave out key information in the expectation that they will be asked a question about it. Through the questions, students are given the opportunity to clarify and elaborate on their investigation. This includes key issues in the research, background research, methods, findings and limitations. It is important that students learn how to get the balance right between rehearsing an answer and being prepared for a question. If unsure of the meaning of a question, it is recommended that students ask for clarification rather than answering based on uncertain interpretation.

As there is no set list of questions that assessors will ask, it is important that students do not attempt to pre-empt what the assessors will ask: this often leads to prepared answers that do not necessarily fit the context of the question. Prior practise in responding to unpredictable questions is the best preparation. As a maximum of 10 minutes applies to the questions and challenges section of the presentation, students should provide responses that not only enable them to clarify and elaborate their ideas but that are also concise and succinct. Well-structured responses were consistently more effective in enabling assessors to understand the student's research.

In responding to questions and challenges, students who scored highly elaborated on and clarified their research design, supported their discussion with reference to previous research and further reflected on the findings of their investigation. These students responded to questions with reference to both the research literature in the field and their own topic and findings. It was clear that they knew their material thoroughly, as they were able to field questions and challenges with ease. They answered what was asked, rather than deflecting, and were able to discuss issues beyond the strict parameters of their investigation. They also tied all their ideas back to their own investigation. For example, if asked about their choice of a particular method (such as document review or experiment), these students explored the benefits of the methods in the context of their study, rather than discussing the benefits of the methods as a research approach in general.

Many students missed the opportunity during the questions/challenges section to evaluate their methodological approach and the implications the method may have had for their findings. Students should remember that questions in the oral presentation are specifically framed so as to draw out further information and evidence towards satisfying the criteria. Some students received repeated questions, framed in a different way, about an aspect of their investigation (for example,

'What else have you read which led you to form this belief?') but provided no additional information or only brief answers. These problems were common in lower-scoring presentations.

When responding to questions and challenges, it became apparent that some students who scored in the lower and middle ranges were not able to provide evidence of the work undertaken. During questioning, extensive gaps in their knowledge and methods were exposed. These students found it difficult to elaborate on and clarify their ideas, and their responses often included information repeated from the first part of the presentation, rather than making greater links to existing literature or data gathered through their investigations. Students who consider that memorising their written report is all that is required may not score well during this part of the assessment.

Criterion 4 – Reflection and evaluation

This aspect of the oral presentation requires students to critically reflect on and evaluate their extended investigation. Both the presentation and questions/challenges sections are used to assess against this criterion.

Students were generally able to provide a detailed and thoughtful reflection and evaluation of the research process and their findings. It is important that students do not seek to obscure the flaws and weaknesses of their work, but rather acknowledge them in a positive way. Statements of the type 'Now I realise that I could have or ought to have … ' can be very powerful if delivered as genuine insight. Too often students either represented their extended investigations as if they were perfect pieces of research or made superficial evaluative comments as an apology for the limitations in research design or in their findings.

Higher-scoring students reflected on the decisions they made throughout their investigation and were able to critically examine and evaluate these choices. They were able to comment on potential limitations, while still valuing what they had achieved. These students demonstrated critical thought, reflection, and analysis of their investigation and its outcomes and often embedded this in their discussion of the individual components of the research process (for example, limitations and implications of methodological choices). Students who scored highly had a developed idea of why their area of research is important and where it might lead in the future, providing a range of ideas for the direction future research might take.

Where relevant, higher-scoring students addressed ethical issues throughout their investigation and presentation, rather than merely listing potential ethical issues. It is important that students take ethical issues seriously in their investigations and understand the ethical dimensions of their research. However, they are not required to spend a lot of time on this if it is not a significant feature.

According to the research criteria, it is important that students develop a research question and design that can be addressed by systematic and sound research methods. They should attempt to keep a critical distance and take an impersonal or objective stance where possible. A number of students pursued research that was not realistic or manageable within the limits that time and resources impose. Pursuing such research topics limits the ability of students to conduct an effective and efficient investigation.

In middle- and lower-scoring presentations confirmation bias was an issue. Students who pursued simple projects about a personal enthusiasm, often using a small circle of friends and family as a source of data, and without a clear understanding of research processes, did not score highly. These students found it difficult to evaluate and reflect on the process and were unable to draw substantiated conclusions.

A key area for possible improvement was in the trialling of a particular method in order to ascertain the effectiveness or usefulness of the data to be collected. This was particularly the case in middle- and lower-range presentations. For example, when a student does an experiment, it could be repeated multiple times with different samples and consideration of variables. When reflecting on

their experimental design, students often discussed their failed experiments (not an issue in itself) in relation to ‘cost and time’. However, in many cases the limited results were due to poor planning and execution. It is acceptable if methodological approaches and data collection techniques do not work, so long as students demonstrate that they understand why this occurred. The trialing of a particular method is not limited to experimental research design and could be used when conducting surveys, interviews, document reviews and focus groups.