# 2015 VCE Extended Investigation: oral presentation examination report

## General comments

The Extended Investigation oral presentation provides an opportunity for students to showcase and defend their research as well as celebrate and critically reflect on their research experience.

The oral presentation comprises two sections: the presentation of the research investigation and a questions/challenges section. Both sections contribute equally to the student's score. The oral presentation runs for 15–20 minutes. Students present for 7–10 minutes, after which they are asked questions for a further 8–10 minutes. Assessors will indicate when students have reached the 10-minute mark, at which point students are asked to conclude their presentation and respond to questions.

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

In 2015, there was a slight increase in the number of students using visuals to support their presentations. In general, visuals best supported the explanation of complex concepts, methodologies or subject-specific terminology. Visuals that were less effective included slides with large amounts of text or those that did not have a clear purpose in supporting the presentation. It is important for students to rehearse their presentation with and without visuals, so that in the event of technical difficulties the student can proceed with their presentation.

While no marks are awarded for presentation style, clarity of expression and pace do have an impact on the way that assessors receive information. Students need to be aware of this throughout their presentation and adjust their language use to suit the non-specialist audience. Many students used speaker's notes to support their presentation. There were also a number of students who spoke with little, or no, use of notes. In preparation for the oral presentation 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.

## Specific information

### Authentication

The oral presentation further supports authentication processes undertaken regarding the written reports submitted by students. Issues of authenticity are identifiable particularly in students' discussion of existing literature, where the voice of the student's presentation and their familiarity with the field are markers of independent study. A student's ability to explore and defend their methodology and method is also a means of understanding the role of mentors in the design of research projects and the extent to which students have been responsible for their own research process and choices.

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 a student's work that may contribute to achievement.

### Very high

High-scoring presentations were insightful, critical and comprehensive. These presentations were characterised by a detailed and well-structured synthesis of the student's investigation that was presented with confidence and professionalism. In discussing the literature within their field of study, students critically explored a wide range of authoritative academic literature. They explored areas of tension, conflict and agreement and situated their own work within this. In many cases students used this literature to identify the significance and relevance of their own study, building a case for the usefulness of their research. Their presentations also comprehensively explored the methodological choices and design of the investigation, extensively justifying the design and conduct of the research in light of the central research question and existing studies. Students presented a detailed and critical exploration of their data. They presented a synthesis of their key findings and explored the possible implications of this in light of existing research. Very high-scoring students evaluated and reflected on their investigation, exploring a number of potential meanings for their findings and the further questions these raised for future research.

The structure of these presentations was supported by extensive signposting and summary to support the audience's engagement with the investigation. While clearly adjusted to suit a non-specialist audience, the presentations were also sophisticated and engaged with the complexity of ideas and concepts within the research. For example, some students identified competing definitions of key terms and synthesised these to suit their own research. When successfully used, visuals supported the understanding of complex subject matter and data, adding further depth to the information presented.

### High

Students demonstrated a sound understanding of the research process and their research field. They presented clearly and outlined each aspect of their work effectively. Such presentations effectively summarised and began to critically engage with the literature in their field as well as justified the methodological choices within their study. There was some discussion of the tensions or areas of agreement within the literature, and a range of reputable sources were used. These students began to make connections between the literature and their own investigation but needed to do so in greater detail. They may have, for example, identified a connection but did not fully explain what this was or its relevance to their investigation. In discussing their method, presentations outlined each aspect of their data collection effectively. They identified some limitations and supported their overall finding with relevant data. To develop this section of their work, students would have benefited from a greater critical exploration of their methodological choices and justification of their method. When discussing their findings they could have more consistently identified and explained connections to existing literature.

These oral presentations were structured effectively and paid equal attention to each aspect of students' work. Students made use of some communicative features such as signposting; however, could have made more consistent links back to their central research question. Language and key concepts were adjusted effectively for a non-specialist audience; however, some aspects required greater clarification. Some key terms were not explained clearly or competing definitions were not synthesised to a central position. Some students did not embed their definitions and explanation effectively into the body of their speech, but were able to make links to their overall research question.

In responding to questions and challenges students were able to further elaborate on their research and present some justification of their choices. They supported their discussion with

relevant literature; however, there were points where this could have been developed further or where connections could have been further explained.

**Medium**

Students demonstrated a solid understanding of their research area; however, gaps were evident in some sections of their work. These students engaged generally with research in their field; however, their use of existing literature was limited, not authoritative or explained in broad detail. For example, a student may have relied heavily on one study or report at the expense of developing a more comprehensive discussion of the research area. In discussing their method and findings students presented an informative, but descriptive, summary of key elements of their work. These presentations would have benefited from additional justification of the methodology and method selected, and greater connection of these choices to the overall research question or problem. A further area of development was in the use of literature to justify the methodology/method and the findings of the study. Students who scored in this range began to explore connections to existing literature but did not do so in detail or consistently. In discussing their findings, some students presented large amounts of data with some synthesis of results but needed to further clarify their findings in relation to their research question. Some students engaged with the limitations of their work; however, in general, there was a need for students to do so with greater detail and clarity, rather than listing general limitations without explaining the impact on their work.

In general, presentations were clearly structured but would have benefited from greater links to the central research question and signposting of key information. Students were able to respond effectively to questions but could have elaborated on their research choices and knowledge in greater detail. Some referencing and links to existing literature were evident, usually from a limited number of sources or in brief detail. For example, a student may have identified connections to an existing study but did not explain what the connection was or its relevance to their own findings.

**Low**

Students demonstrated an inconsistent engagement with the research process and a lack of clarity regarding their investigation. They engaged with some key ideas regarding their research and presented a brief outline of their data collection process; however, this was purely descriptive and lacked both justification and references to existing literature. Where findings were discussed this was either brief – for example, identifying one finding or theme – or confused – for example, presenting a range of statistics without providing an accompanying explanation of their meaning in the investigation. A particular issue was the engagement with existing literature throughout the presentation. Students either outlined one or two sources that were not authoritative, or were simply descriptive, outlining the information from other studies without critical analysis regarding the implications for their own research. In discussing their method students presented a brief descriptive summary identifying, for example, their participants and data collection tools but not describing their purpose or use. Again, a lack of critical reflection and justification was evident in this aspect of students' work, with little or no reference to existing literature and study in their field. As a result there were many gaps in the students' knowledge and in their ability to explain their research process.

The structure of presentations within this range was often problematic, with links to the central research question not apparent or a lack of information in several sections. Where specialist terminology was used there was a lack of adjustment for a non-specialist audience. Some terms may have been defined briefly; however, this was sometimes out of context or relied on assumed knowledge in the research field. Responses to questions at this level were often brief and descriptive. Students were able to provide short responses that elaborated on some aspects of their work but did not engage critically with their investigation or make consistent links to existing

literature. This demonstrated a limited ability to justify their choices or engage with the implications of their work.

### Very low

Overall, students provided a brief, general and descriptive summary of their work and lacked references, demonstrating a very limited understanding of the research area and research process undertaken. Such presentations were typically missing key information or lacked a clear structure, resulting in brief presentations significantly short of the time frame suggested. A lack of language adjustment for a non-specialist audience was also a significant issue for these students. There may have been a heavy reliance on technical terms, processes or concepts without explanation of these to support an understanding of the investigation. In some cases, students did not articulate either a research question or a method, or outline any data, and their work generally lacked synthesis. Where data was presented, extensive statistics were listed without connection to findings or the central research question.

In responding to questions and challenges in the second half of the assessment, students were unable to elaborate on ideas within their work or did not respond to the question asked. They presented a very limited ability to explain or justify their choices and to connect their study to existing knowledge. In some cases responses were characterised by short, one-word answers or answers that contradicted information given in the student's oral presentation.

### Advice to students and teachers

- The research question is the core of the students' research. Teachers and students should ensure that sufficient time is invested in the early stages of the research process to refine and reflect on the central research question alongside developing an appropriate methodology and method. It is vital that the question is developed using the VCAA criteria (page 13 and 14 of the *VCE Extended Investigation Study Design*) and that the methodology/method is matched to this. Both aspects have an ongoing impact on the success of students' investigation.
- There is no one method or methodology that is preferred. Regardless of the investigation type and design all students can score highly in the oral presentation.
- It is essential that students consider the structure of their presentation. The logical development of ideas throughout the oral presentation is an important aspect of both communicating with a non-specialist audience and setting out the student's knowledge and thinking regarding their investigation.
- Teachers are encouraged to spend time throughout the year preparing students to answer questions and respond to challenges regarding their research. It may also be useful for students to practise their presentation with a range of audiences to highlight areas where terminology and content may be unclear. The more familiar students are with responding to a range of questions and exploring different aspects of their research, the more confident they may feel in this section of the assessment. It is also important that students are provided with strategies to deal with questions that they find difficult to answer or that they do not understand. If a question is unclear or falls outside the scope of a student's work, they should be advised to clarify the question with the assessors before responding. If a student feels that they have already responded to a question through their oral presentation they should also have strategies to summarise and reinforce information.
- To maintain the anonymity of assessment students are asked not to identify themselves, their school, participants or teachers connected with their research. This includes identifying this information on the title slide of visuals.
- Students should not refer to specific pages of their written report in response to questions or in order to outline specific aspects of their work. For example, where students wish to discuss data or graphs in detail these should be included either as visuals or as an explanation in the oral presentation.

## Assessment criteria

To further assist students and teachers, comments regarding each criterion are provided below.

### 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 but is not limited to: existing literature in their field, their chosen methodology and method, the process of data collection and analysis, their findings and their response to the research question. They should also explore the significance and applicability of their research.

Overall, students presented a balanced overview of their investigations, with reference to many of the areas listed above. High-scoring students critically engaged with literature, methods and findings throughout their presentation, both outlining their work and exploring the complexities of research in their field. In doing so they consistently justified their research choices, explored areas of tension and agreement in the literature, and examined issues of bias and assumption. Low-scoring students overemphasised one aspect of their work at the expense of others; for example, spending the majority of their presentation outlining the literature and only briefly discussing their method and findings.

Students are expected to reference consistently throughout their presentation. The approach that students take in order to do so may vary; however, referencing is essential for students to achieve high scores. Students are expected to engage with the existing knowledge in their research area. This is particularly important when students engage in research areas with an extensive body of existing knowledge. High-scoring students referred to a wide range of empirical research, while low-scoring students either relied heavily on one or two sources or referred solely to websites, blogs, newspapers or other media sources, without connection to academic knowledge. In engaging with the literature, high-scoring students explored areas of congruence and divergence, in some cases identifying gaps in knowledge and situating their own research within this. Low-scoring students summarised existing research without critical engagement or described one or two studies in extensive detail. It is important in this criterion for students to link their literature review back to their own research question.

Students were able to effectively explain the design and conduct of their investigation. They were expected to outline and justify in some detail the process of data collection they have undertaken and the tools used to facilitate this, regardless of the style of their investigation. Some students did not articulate a clear connection between their method and its applicability in investigating their research question. It is expected that students are able to explain how and why their chosen approach best meets the needs of their investigation. For example, if a survey is selected as the primary data collection method, this must have a clear purpose in terms of the research question as well as their research aims and hypothesis. If two or more data collection methods are used – for example, a survey and interview – students should be able to explore how the two approaches contributed to each other and worked together to answer the research question. Students also need to understand the difference between methodology and method. High-scoring students were able to explain the methodological design of their work and then the methods used to support this approach. Low-scoring students either conflated the two areas or identified a methodological approach without connection to their method.

When exploring the design of their investigation, high-scoring students dealt critically with their investigation, consistently justifying the design of their study. Where students conducted research with human participants, high-scoring responses dealt with the ethical considerations attached to this and, where necessary, the adjustment of their investigation to deal with these. Where students conducted literature reviews, text analysis or experiments, high-scoring responses dealt with the analysis frameworks employed and experimental design, justifying these choices in detail.

Low-scoring students either briefly mentioned that data was collected, without explaining the process behind this or presented a descriptive summary of their method without justification or links to the research question.

### Criteria 2 – Defence of research findings and understanding of audience

The structure and adjustment of each student's investigation to suit an educated, non-specialist audience is a key component of the oral presentation. Students presented their work with enthusiasm, clarity and confidence. In general, they were able to clearly articulate and defend their research choices, synthesising key aspects of their investigation and written report into oral form. The majority of students adjusted their work to suit the purposes of an oral presentation, although there were some instances where students simply read sections of their written report or presented without a clear structure.

An important element of the oral presentation is students' ability to explain terminology and concepts within their research. This is particularly important when students engage with complex concepts or topics. Students who were able to adjust their language effectively for the non-specialist audience often engaged with metaphors, analogies and examples to support their discussion of abstract concepts or complex processes. Simply referring to the glossary of the final written report or listing key terms on visual slides was not an effective adjustment of content for a non-specialist audience.

In 2015 there was evidence of students engaging with the definition of key terms and ideas within their study, particularly with regard to complex and scientific topics. In general this supported assessor understanding and illuminated different aspects of the student's work. Students defined key terms effectively by incorporating these into the discussion of their research, so that definitions were presented in context. There was, however, a tendency for some students to embed too many definitions, either by listing them or by defining every term used in their study. Definitions form an important aspect of adjusting language for a non-specialist audience, but should be used in conjunction with other techniques such as metaphor and analogy. Where definitions are used these should come from reputable sources and should not overtake the content of the speech itself.

In order to defend their findings students were expected to clearly articulate an outcome of their investigation and the findings that had led to this conclusion. Students should be able to explore the relevance and applicability of their work and to justify their findings in light of their central research question or premise. In the discussion of their findings, high-scoring students signposted key findings and used statistics or data to support this. They engaged with existing literature, making connections between their own work and the existing body of knowledge. It is not, however, a requirement that students fully support the findings of existing research. Critical engagement with their findings may lead some students to explore incongruities between their own and existing data, and to articulate the potential causes of this. Low-scoring students in this criterion did not present clear findings or data, demonstrated difficulty in synthesising data and listed a large number of statistics without discussion, or did not engage with existing research in their field. In some cases these students simply identified that their research linked to existing literature, without identifying either the research they were referencing or the link that they had established.

### Criterion 3 – Responses to questions and challenges

It is important for students to understand that there is no set list of questions that assessors are required to ask. All questions and challenges are developed during the oral presentation in response to the student's research. While the questions/challenges section is designed to illuminate different aspects of the students work, including those that may not have been fully

explored in their presentation, students should not rely on specific questions being asked and omit important information from their presentation.

Students demonstrated a clear understanding of their research and the ability to respond effectively to questions from the panel. Throughout the oral presentation and in their response to questions students are expected to use evidence and references to support their discussion. This may take the form of existing literature or studies in their field, or through discussion of their own findings.

The most effective responses in this section were detailed and considered, and incorporated the use of evidence or literature in responding to questions. These responses were not highly scripted and consistently linked back to the central premise and research question the student had investigated. High-scoring responses not only provided detailed information that elaborated on the oral presentation but drew on a range of evidence to justify the design, conduct and outcomes of the investigation. Such responses drew on a range of evidence, including data from the student's own research, existing literature in their field and previous studies. Low-scoring students either did not directly address the question posed or briefly recounted aspects of their oral presentation without further elaboration. In some cases they responded clearly to questions but without justification or reasoning to support their discussion.

### Criteria 4 – Reflection and evaluation

This aspect of the oral presentation requires students to critically reflect on and evaluate the design, conduct and outcomes of their investigation.

High-scoring students in this criterion were able to explore the limitations of their work and discuss issues such as bias, ethical considerations, further areas of investigation, triangulation of data, problems encountered during the research process and how these were dealt with, and contradictory findings. In order to achieve in the high range for this criterion students needed to address these areas with specific reference to their own investigation, exploring the impact on the design and result of their study. This necessitated reflection throughout the presentation, including, but not limited to, the method, data analysis and key ideas drawn from literature. Low-scoring responses listed limitations without explanation of their impact, or cited issues such as time constraints, word count and lack of organisation as their key limitations.