

# 2018 Research Project A and Research Project B Subject Assessment Advice

# Overview

Subject assessment advice, based on the previous year's assessment cycle, gives an overview of how students performed in their school and external assessments in relation to the learning requirements, assessment design criteria, and performance standards set out in the relevant subject outline. They provide information and advice regarding the assessment types, the application of the performance standards in school and external assessments, and the quality of student performance.

Teachers should refer to the subject outline for specifications on content and learning requirements, and to the subject operational information for operational matters and key dates.

Research Project continues to flourish, evident not only in the engagement of students with their individualised focus areas and questions, but also in the expertise in the teaching, learning and assessment within this subject. Teachers and students have gained even more confidence in utilising a breadth of research methodologies; In addition to the usual literature review method, students are engaging in meaningful qualitative research that moves beyond sending superficial emails, to instead attending focus groups and meetings or undertaking considered and purposeful personal interviews. If suitable as a research methodology, students are also engaging in carefully managed experimental research by conducting their own trials or creating surveys where focus groups and sample size are a part of the research process in order to ensure the gathering of valid and reliable data. Across all assessment types, the standard of student evidence continues to improve; predominantly, students are engaging with the essence of real research and as a consequence, Research Outcomes are more in-depth, complex and insightful.

Significant improvements in regards to the teaching of this subject have been made and in light of these, further suggestions regarding continuing to enhance student engagement with this subject are provided:

- The use of templates should be used carefully, especially in evidence for Assessment Type 1: Folio. There are many students who require some element of scaffolding in order to provide evidence of the assessment design criteria. It has been noted that teachers who provide templates which limit opportunities for students to show evidence of their learning often limit the capacity for authentic student engagement with the research conducted.
- The continued use of technology in order to conduct research and display key findings is very positive.
  The documentation and analysis of research is increasingly of a diverse nature and students are
  obviously comfortable not only using apps and smart devices to record their investigative journey, but
  also to produce refined, sophisticated and engaging outcomes.

## **Question choice**

An increased range of questions and ideas were explored, especially those that had a practical application or were specific to the student's area of personal interest. Students who demonstrate an element of 'passion' for their research are then more successful when they help develop a skill, provide a valid answer to contemporary issues or demonstrate true creative and/or critical thinking skills.

The more successful questions commonly:

- · were clear, concise, specific and accessible
- were manageable and could be achieved within the time-frame



- were consistently refined. Students should be reminded that their research question, should and will
  evolve and that is the nature of real research
- allowed for a range of research methodologies to be utilised
- provided scope for an answer that has a degree of complexity and insight.

# School Assessment

Teachers and students are reminded that Assessment Type 1: Folio and Assessment Type 2: Research Outcome for both Research Project A and Research Project B are assessed according to the same standard with identical assessment design criteria and performance standards. Therefore, the evidence of learning from students in a Research Project A or a Research Project B class should be assessed identically. The only difference between the two subjects is that the evidence for assessment for Assessment Type 2: Research Outcome for Research Project A is a maximum of 1500 words, if written, compared to 2000 words for Research Project B (10 minutes and 12 minutes, respectively, for an oral presentation, with equivalents for multimodal forms).

# Assessment Type 1: Folio

Moderators stressed the importance of the appropriate selection of evidence for the 10 pages (as described in the Research Project subject operational information). Better responses continued to be those which provided balanced evidence against all of the specific features. These responses tended to present a tight snapshot of the research undertaken and the research processes used.

## Specific features: Planning (Research Project A and Research Project B)

P1: Consideration and refinement of a research question

The more successful responses commonly:

- focused on research questions that were not only succinct and resolvable but also provided opportunities to explore the question from various perspectives.; These questions enabled students to achieve higher grade levels in other specific features, such as D2 and D3 due to the opportunity for stretch and rigour
- provided evidence of the refinement of the research question and an explanation of reasons for the refinement
- revealed a continued grappling with the inherent complexities of attempting to resolve their research question by undertaking meaningful research; the evidence was ongoing throughout the entire folio rather than just in the proposal
- provided detailed and explicit ongoing evidence of planning: lotus diagrams or brainstorms were obviously dynamic documents that were constantly added to, in-depth and provided a clear overview of the student's management of the research conducted
- included a diagram or explanation, identifying key turning points in the evolution of the research question and the reason behind refinements.

- featured questions to which the answers were already well documented. This also limited students' ability to develop D2
- were closed questions and provided a yes/no answer that prevented higher-order analysis or evaluation

- commenced with expressions such as: What do you need to become a ...
- were ethically inappropriate due to focusing on abuse, dangerous experimentation, etc
- revolved around collection and description of information due to the nature of a limiting or unfocused question. A well worded question should encourage depth and breadth of research
- limited the question refinement to an explanation of why topics were changed rather than focusing on the actual evolving research question. This often took the form of a recount of the first months of the project
- only provided limited development of planning other than a superficial and incomplete lotus diagram, brainstorm or planner that was generic and repetitive.

P2: Planning of research processes appropriate to the research question

The more successful responses commonly:

- provided targeted and question specific planning of research methods most appropriate to the research question
- reflected on the plan at a range of critical points throughout the project and made targeted adjustments to their planned methodology that were fully explained and well reasoned
- provided evidence of their planning throughout the 10 pages (e.g. evidence of experimentation, observation, field trips, or face-to-face interviews) often including a sound and considered explanation of why the research process was used, rather than simply listing their possible research processes
- planned particular process that they could identify as increasing the validity and reliability of the research as a whole.

The less successful responses commonly:

- used a research methodology that was provided for a whole class and was not appropriate for their specific research question. provided generic evidence of the development of the research which could have been for any question, rather than the specific and most appropriate research methodologies for the answering of the research question
- failed to do any research to fully understand the particular research method they were utilising and so invalidated the data they were generating. Would this point actually be better in D1?
- recounted processes rather than exploring, designing and justifying all aspects of the research
  processes used showing an awareness of what research methodologies were being engaged with and
  why.

## Specific Features: Development (Research Project A and Research Project B)

D1: Development of the research

- provided evidence of being very resourceful in utilising specific research methodologies (both primary and secondary) that would assist in resolving the research question (e.g. field trips, experimentation, accessing online forums, personal interviews, transcripts, surveys, etc)
- included effective evidence and succinct examples of thorough and resourceful development of the research incorporated and there was variety in the range of sources accessed (archival, qualitative, experimental)

- identified the way in which ethics was shaping their research process and subsequent findings. These
  responses were insightful, showing a nuanced understanding of the ethical issues specific to their
  research question and displayed more than a cursory application of simplistic, generic ethical
  considerations
- were able to present more than 3 or 4 sources of information; successful students often presented a diverse range of research methodologies giving good coverage of all aspects of their question
- provided explicit evidence of the development of the research, with students coming back to the development of their understanding and progress in finding an answer in light of their research question
- reflected on the planning of their research methodology explaining why it was proving to be appropriate or explaining why it needed to be altered
- outlined the growing depth in their understanding of their topic/question as it revealed itself to them. This was often found in many places across their 10 pages
- identified and understood, results that invalidated or supported other data and clearly explained why this was so.

- did not have a range of sources and predominantly relied on downloads from the internet (e.g. screen shots and URLs), without commentary or analysis; these students were really only 'collecting information' which is in the D grade band of the performance standards
- included limited bibliographies that were fairly brief and only really repeated what had already been provided as evidence on other pages
- provided surveys, graphs, images, etc that displayed little evidence of how they assisted in the development of the research
- failed to show how one aspect of the research methodology linked to another or explain why a certain process was undertaken
- provided many secondary source analyses (often taking up 8 of the 10 pages) which were commonly completed on a template that didn't allow the student to show how the research was unfolding and developing

D2: Analysis of information and exploration of ideas to develop the research

- demonstrated a real engagement with the information being analysed and revealed a development in a student's knowledge and or/skills pertaining to their research question
- showed an authentic engagement with the data produced. This took many forms some students
  formulated diagrams to represent their exploration of ideas while others explored the meaning of what
  they were finding while reflecting on the validity and reliability of their conclusions. revealed an
  authentic student voice, one in which the student was engaging personally with the data or
  information that was being collated in light of their research question
- engaged with the credibility, and currency of sources in an insightful manner, which went beyond qualifications of the author and date of release
- firstly, successfully identified key findings in research data and then utilised these to generate new thinking in the area of their research
- fully explored ideas in responses/sources/experiments and often cross referenced these to other key findings, in order to demonstrate new awareness, evidence or thinking relating to the research

- showed evidence of analysis of both the source and the information that it contained in relation to their research question
- showed insight in understanding how ethical issues shaped the findings and key ideas emerging from the research. This included possible flaws in the research and the implications of these
- were aware of their own possible biases as a researcher and the impact of these.

- provided large sections of photocopied material (i.e. large excerpts of images or quotes) that had not been engaged with (e.g. highlighting, annotating and no analysis, expecting the information to speak for itself)
- used the concepts of validity, reliability and bias interchangeably with no real evidence of understanding of the terminology
- used templates which only encouraged an analysis of the author of a source rather than an analysis of the information itself
- summarised information or provided simplistic annotations, omitting any analytical thinking
- included templates that were restrictive in the amount that could be written in regards to actually analysing a text (e.g. one or two sentences); these responses tended to be superficial and limited, therefore hindering a student's ability to meet the assessment design criteria at a high level.

# D3: Development of knowledge and skills specific to the research question

The more successful responses commonly:

- engaged in an insightful manner with the sources and focused more on the quality of the key points arising from each source rather than lengthy summaries
- identified and highlighted key knowledge and skills were went beyond generic research skills
- provided reflections that were able to pull together the threads and developments of key-findings by cross-referencing information and explored how the research was enabling a student to come to some form of a resolution to their research question
- demonstrated the development and growth of knowledge and skills in a number of ways, including
  exploring ideas through extended reflections, development of interview questions that had been
  annotated and revealed growth of subject knowledge or documentation of experimentation through
  graphs, tables, photographic evidence, or conceptual diagrams
- evaluated the success of a product by obtaining feedback, which they reflected on, thereby providing evidence that there had been growth in their knowledge and skill development
- clearly identified new and very specific skills which often related to the disciplines in which the research was undertaken.

- listed generic statements of learning and/or recount of the research that had been conducted; these statements did not reveal the development of any knowledge or skills, nor did they provide evidence of being able to find any resolution to the research question
- only provided evidence of knowledge that was simplistic and 'empty' in regards to the complexity of the research that should have been undertaken.

D4: Understanding and development of one of more capabilities

The more successful responses commonly:

- indicated both an 'understanding' and a 'development' of their chosen capability or capabilities; both should be addressed
- provided explicit evidence of the development of the capabilities; it was more than just a generic, repetitive summary of superficial engagement with the capability, either throughout the 10 pages or in a few more detailed reflections
- examined only one or two capabilities, which tended to lead to a stronger series of reflections and insights, as the students were able to provide a consistent application concerning the growth of knowledge and understanding
- used the capabilities as a lens through which the entire research was conducted and viewed; the capabilities were constantly referred to and became an intrinsic component of the research.

The less successful responses commonly:

- only focused on development, but not directly showing understanding of what the capability meant and what it included. Provided simple statements with little real evidence of growth in awareness of the nature of the capability and its contribution to the development of the research
- featured capabilities only being evident in the proposal, making it difficult to demonstrate development of either the capabilities or the student's understanding. Such responses often resorted to generic statements, for example, 'I will ask permission when I interview someone about ...' in reference to the ethical understanding capability, or, 'I will be reading magazine articles...' in reference to the literacy capability
- attempted to respond to all of the capabilities rather than providing awareness that one or two capabilities, when explored in-depth, has a place in the Research Project as it has the potential to refine, define, guide and/or provide parameters for the research.

## Assessment Type 2: Research Outcome

The Research Outcome formats continued to grow in diversity in 2018. Students are increasingly taking in to account their intended audience when deciding on their mode of presentation. Highly successful responses often contained an answer to the research question at the outset, which was continually referred to throughout, leading to an informed conclusion as well as clear and detailed synthesis supported by substantiation showing engagement with sources, comparisons between perspectives, and balanced weighing-up of the evidence.

Questions which were very focused and specific, generally allowed for more insightful synthesis and a better-quality outcome. In contrast, questions that were very broad tended to lead to outcomes which were a screed of generic information and/or facts.

Students who failed to produce a resolution to their question or who outlined information with little critique or insight were less successful

# Specific Features: Synthesis (Research Project A and Research Project B)

S1: Synthesis of knowledge, skills, and ideas to produce a resolution to the research question

The more successful responses commonly:

- clearly identified an appropriate audience to target in relation to the research question and used language appropriate for the audience
- prioritised and drew out meaning from the findings which were more prominent in the research rather than providing a superficial recount of all findings identified in the folio
- meaningfully engaged with their research and with their own voice came to a resolution to the question
- used appropriate and well-phrased subheadings to assist the reader in following their arguments
- clearly articulated each key finding and then weighed evidence from a range of sources and perspectives, which supported the assertion of the prominence of the finding to the research
- provided evidence to highlight why the most important ideas were more significant than others
- accessed a wide range of sources and then brought together the common threads from this diverse range of perspectives to provide strong evidence for the ideas and knowledge that they were presenting
- provided a well delineated conclusion that linked back clearly to the question.

The less successful responses commonly:

- provided a collection of information or a series of facts and recount (summary of information) rather than a synthesis of the material
- provided personal opinions regarding the research question rather than evidence based from sources
- did not conclude at all, which meant that there was limited or no evidence of a resolution to the research question
- included images and data that were not referred to (and in some cases not relevant) and therefore did not support or enhance the line of argument and/or validity of the research
- restricted the capacity to provide insightful key findings by selecting a poor choice for the mode of their presentation.

# S2: Substantiation of key findings relevant to the Research Outcome

Evidence of substantiation can be effectively provided in a number of ways and it is more than just the use of footnotes. Students are being asked to 'prove' how they came to the resolution to their question. Students who use a vast range of sources in order to consistently and thoroughly substantiate their findings, generally achieve at a higher level. If the Research Outcome is in a format that is a product, then substantiation needs to either be integrated into the product or in a separate document.

- provided multiple relevant references (correctly referenced), and perspectives to validate their key findings which further strengthened the substantiation
- used a consistent, clear, referencing system throughout (and this included multi-modal presentations where students utilised pop-ups or verbally articulated where they had gained the information within the content of their presentation)

- showed in-depth substantiation by explaining processes and the reasons for decisions which often relied on action research. Often this substantiation took the form of time-logs, or photographic evidence that validated the findings
- engaged with action research and valid ways of testing new 'theories' and then providing evidence of
  this in the form of graphs, photos, etc. Moderators also commented on the increasing use of fieldwork
  and experimentation and the success that this often brought to the project in terms of authentic and
  original substantiation
- often included multi-dimensional approaches that integrated to provide strong substantiation (eg literature reviews, observation and experiments).

- provided little to no substantiation (and this included multi-modal forms of outcomes). Some outcomes were purely videos from external sources without any student commentary or introduction or reports that only had evidence from three or four sources; these were limiting in regards to the depth of insight provided within the Research Outcome
- contained substantiation that was confined to a URL at the end of a paragraph or even a page. When
  this was done, sources were not contextualised and consequently the line of evidence to support the
  statements being made was lost
- did have some outstanding products had been created that were highly authentic, but the substantiation of the development of the product was not clearly articulated; more often than not it was implied rather than being overt
- included a bibliography at the end but never referred to any of the material in the bibliography within the actual outcome; the richness of the bibliography was implied in the findings of the outcome.

#### S3: Expression of ideas

Expression of ideas is more than just correct grammar and punctuation. Moderators noted that the most successful responses also made use of subheadings, graphs, or diagrams to support the clarity with which the resolution to the question was presented. Students who used sub-questions as headings seemed to address specific key findings in detail that assisted in the answering of the question.

# The more successful responses commonly:

- provided well-articulated evidence that succinctly addressed the research question (clear subheadings that addressed the question, assisted in this)
- provided a conclusion at the end of the outcome; demonstrating clear evidence of resolving the question
- considered their target audience which added to the clarity of the Research Outcome
- successfully integrated most appropriate images/video/diagrams to aid in the expression of their ideas.

- were poorly formatted or presented (no sub-headings or breakdown of content and just a running narrative) and simplistic in style (e.g. PowerPoint presentations with limited content that were fact driven)
- included graphs, tables or images that were never alluded to and therefore did not assist in being able to read the outcome with any real clarity.

# Assessment Type 3: Review (Research Project A only)

While there was a wide variety of ways that students presented their review in 2018 the most common form was as a written report. As has been identified in previous years, many students are presenting their Review for RPA, in a manner designed to meet the specific features of the Evaluation in RPB. This limits their success, as does a discussion of outdated specific features (such as the capabilities developed).

# Specific Features: Review (Research Project A only)

R1: Review of the knowledge and skills developed in response to the research question

The more successful responses commonly:

- clearly identified and then reviewed the new knowledge and skills that had been gained in the course
  of the project
- showed how far knowledge and skills had been developed by including words (such as 'before', 'after', 'having completed', 'prior to this') and descriptions ('as a consequence of', 'became clearer', 'suddenly made sense', 'was unclear until'), as well as qualifiers ('most', 'somewhat', 'to an extent')
- differentiated between knowledge and skills and discussed the information that they initially had and how this had developed over the period of research by providing examples
- discussed and demonstrated development of theoretical skills (skills of research or those associated with the discipline in which they were working) and/or practical skills in depth of detail, making an explicit connection to the research question
- used targeted examples which linked to the resolution of the research question. In addition, the responses showed insight about how the example had a significant impact on the resolution of the research question
- were able to prioritise key knowledge, rather than presenting a discussion of all knowledge gained in a chronological fashion. Students who recognised the meaning and value of their significant findings were able to better convey this development of new learning.

- directly addressed the development of the capabilities at length (as was required in Research Project A in 2013 but is no longer required in the subject outline)
- submitted Evaluations as Reviews which hindered students' success as the assessment criteria for the Evaluation is different to the Review. As a result, students used their word count discussing research processes rather than new knowledge and skills developed
- provided a recount of their research project as a whole rather than focusing on the new skills and knowledge they developed e.g. "First I completed a lotus diagram, then I started to look through the Internet"
- listed the knowledge gained in a chronological fashion, rather than prioritising critical new knowledge that allowed development of their project
- listed and evaluated sources used in the outcome, rather than reflecting on the knowledge and skills gained
- relied on teacher-generated templates which often contained sections that were not relevant to their particular research question
- described the development of practical skills which were only loosely connected to the research topic
- only briefly discussed new knowledge developed and then focused on generic skill development
- recounted the research undertaken.

• used the majority of the word-count in addressing specific feature R1 (review of knowledge and skills), often giving only cursory treatment to R2 and R3. In some cases, R3 was not addressed at all.

R2: Discussion of decisions made in response to challenges and/or opportunities

The more successful responses commonly:

- discussed their actions when faced with challenges and/or opportunities. The challenge and/or
  opportunity was briefly outlined, the decision made in response to that challenge and/or opportunity
  was clearly stated, and how their decisions influenced their research development was discussed
- explicitly discussed (in detail) the significance of decisions made when faced with challenges and/or
  opportunities during the research development. In addition, they often also showed how these
  decisions were directly linked to the key ideas of their research
- discussed both the positive and negative aspects of their decisions and how these affected the
  research, particularly in terms of validity and reliability. In addition, successful responses often
  furnished their discussion with examples regarding the appropriateness of the decision by reflecting
  on the consequences
- went beyond challenges that may have been experienced by all students (such as time management, availability of sources, workload, and so on) and focused on those specific to their project. This often meant that the corresponding decisions discussed were more sophisticated and nuanced, and therefore contained greater depth
- discussed opportunities to use local "experts" or other relevant primary sources and the impact that decision had on their Research Project as opposed to writing to an elite soccer player based in England and then not receiving a response.

The less successful responses commonly:

- devoted much of the discussion to an explanation of the challenges and/or opportunities themselves, rather than the decisions made. A significant number of reviews omitted any mention of decisions at all. described actions taken in response to opportunities or challenges without explaining reasons and the impact their actions had on their research project
- presented generic responses regarding challenges and opportunities as a result of scaffolding. In many cases, this led to terms and ideas being included in the review without discussion or clarification. At times these scaffolds did not align with the 2018 subject outline
- made reference to superficial issues of time management/being disorganised/Internet not working/sites being blocked/missing school. Generally, a generic and superficial response to these 'challenges' was produced. It would be preferable for students to attempt a more positive way of using these insights i.e. "I tend to be disorganised so I ......". In this way it may be more than simply outlining a largely irrelevant deficit.

R3: Reflection on the quality of the Research Outcome

- reflected on the quality of their Research Outcome and discussed the significance of their findings and the features that influenced the overall value and worth of their Research Outcome, including the extent to which the question has been answered
- were clear on what they were trying to achieve with their Research Outcome and then specifically reflected on how well their Research Outcome actually achieved this purpose, giving detailed examples. Assessed the suitability of the Research Outcome format in relation to the question and

- their target audience. Strong responses included those that considered (honestly) how well the question had been answered. These responses were also free of generalisations
- highlighted the successes and limitations of the Research Outcome and the pertinence of the findings, and thereby conveyed an understanding of the quality of the Research Outcome
- reviewed the clarity of the final piece
- successfully and appropriately used the vocabulary of qualitative judgments.

- made simplistic or exaggerated comments about the quality of the Research Outcome, including a sole focus on how it was personally meaningful
- focused on features of the Research Outcome such as its length and layout. These are only useful when qualified appropriately
- dealt with this specific feature very briefly often as a result of devoting the majority of the allocated word-count to specific feature R1
- reviewed their Research Project, particularly how they conducted their research rather than focusing on their Research Outcome and how they were able to provide a resolution to their research question.

# Specific Features: Synthesis (for Research Project A)

## S3: Expression of ideas

The more successful responses commonly:

- used expression which was fluid and logical and ensured that that their meaning was clear
- organised their information coherently to communicate ideas accurately and appropriately
- often featured headings that related directly to the 2018 Subject Outline and so served to organise the review, aiding clarity. used a range of vocabulary, including varied qualifiers
- were carefully drafted and edited to ensure effective communication.

### The less successful responses commonly:

- expressed ideas with little thought given to organisation or clarity
- presented mostly the teachers' scaffolding questions, rather than their own input.
- used very informal language that at times obscured meaning
- expressed ideas that were not being assessed.

# Assessment Type 3: Evaluation (Research Project B only)

It was pleasing to note that there were less reported instances of student evidence including reflections on the capability. It must be reiterated however that any evaluation of capability development is not an assessable component. Inclusion of this evidence hampers the capacity of students to provide evidence against the specific features on which they are actually assessed.

# Specific Features: Evaluation (Research Project B only)

E1: Evaluation of the research processes used, specific to the research question

The more successful responses commonly:

- evaluated a selection (2-3) of specific processes with in-depth, judgement centric statements
- used approximately a third of the word count for this specific feature to avoid impacting on the depth of the E2 and E3 specific features
- linked the success of the research process directly to the student's research question and its specific nuances, framing evaluation of the strengths and limitations of process(es)
- used research terminology (i.e. validity, credibility, reliability) to evaluate the accuracy and use of processes, linking ideas of qualifications, experience etc. to justify
- discussed research processes relatively, to make comparisons between the effectiveness and usefulness of each process by ranking the processes
- applied a range of qualifiers to delineate their application, such as 'most useful', 'most reliable', 'less effective', 'pertinent', 'critical', etc. with examples that related directly to their own question.

The less successful responses commonly:

- · recounted the research process in chronological order with few judgements or evaluative discussion
- · discussed irrelevant processes such as planning or basic actions i.e. highlighting sources
- · did not specifically discern processes, instead offering a general overview of learning
- used terms such as 'validity', 'reliability', 'bias', and 'credibility' interchangeably, or misused such words
- made judgments without supporting evidence
- featured broad statements about generalised processes such as 'using the Internet'.

E2: Evaluation of decisions made in response to challenges and/or opportunities specific to the research processes used

Significant improvements were noted in the evidence submitted for this criterion with the focus on decisions becoming much clearer. However, evidence was not always in reference to the specific criteria being assessed. Teachers are directed to the support materials on the SACE website which provide specific and detailed advice for this specific feature.

- · made the decisions the central focus of discussion
- only focused on key decisions with measurable impact
- provided a very brief summary of the challenge or opportunity, without making it the main focus of discussion
- provided a link between the decision made and the research processes
- provided specific evaluation of how the decision had impacted upon the breadth and/or depth of the research
- linked their decision to an effect on the validity or reliability of research undertaken
- discussed how the decision impacted upon the quality of the outcome

- provided explicit judgment of the decision and its effectiveness in overcoming a challenge or capitalising upon an opportunity
- used language such as 'pertinent', 'timely', 'important', 'useful', 'powerful', 'useless', 'ineffective/effective'
- referred to both positive and negative ramifications, with consequences weighed in a balanced manner
- where relevant, explained how the decision had helped or hindered further research or led to new thinkings or findings.

- focused on the challenge or opportunity, instead of the decision
- identified decisions made without linking them as a response to a problem or opportunity
- discussed general hardships (time management, loss of data, shyness) rather than challenges pertaining to the generation of data
- discussed the decision broadly without reference to the research
- focused overly on what they could have or should have done without any overt links to the challenges or opportunities.

# E3: Evaluation of the quality of the Research Outcome

- explicitly evaluated the success of the Research Outcome by explaining how well the question was resolved, providing evidence to support this judgment
- evaluated the outcome in sections, referring to specific sections, focus areas or paragraphs
- clearly outlined the features which impacted on the quality of the Research Outcome including aspects such as:
  - quality of the sources used
  - originality of the findings
  - forms of substantiation used
  - suitability of the findings for the intended audience
  - depth and breadth of the research
  - range of perspectives included
  - clarity of the findings
  - effect of the credibility, validity or reliability of source material
  - conciseness of the argument
- clearly articulated the intended purpose of the Research Outcome and used this as a criteria for evaluation
- recognised the limitations of their research with links to validity, reliability and bias
- weighed up strengths and limitations of their Research Outcome to provide balanced judgments
- focused specifically on the Research Outcome not the wider research process
- had a balanced understanding of the usefulness of their Research Outcome.

- overly focused on the value of the Research Outcome to themselves or made generalisations about its usefulness that were overstated
- recounted evidence from the Research Outcome without evaluating its pertinence, use, or effectiveness in resolving the research question
- discussed irrelevant features such as skill and capability development, changes to be made if the outcome were to be redone, the limitations of the word-limit, and time-management challenges
- focused on the format of the Research Outcome, rather than the quality of their resolution to the research question
- focused on the Research Project as a whole.

# S3: Expression of ideas

Markers noted that this section was typically well done. Templates and scaffolds can limit student voice and should be used carefully.

The more successful responses commonly:

- used clear paragraphs, subheadings and topic sentences to aid clarity
- ensured that sections were clearly demarcated
- · organised information clearly into sections
- used subject specific terminology with accuracy.

- used conversational or incomplete writing styles
- repeated content across paragraphs
- used research specific terminology incorrectly
- used an introduction or conclusion to recap key ideas.