

## **Extended Essay. Comment and Assessment Rubric - ITGS**

### **Criterion A: Focus and method**

This criterion focuses on the topic, the research question and the methodology. It assesses the explanation of the focus of the research (this includes the topic and the research question), how the research will be undertaken, and how the focus is maintained throughout the essay.

(Strands: Topic, Research question, Methodology)

The ITGS topic and research question should focus on how an IT system affects particular stakeholders in a specific situation. The question will contain aspects of the “ITGS triangle”: particular scenario, IT system, specific social and ethical considerations.

A research question that is focused on only an IT system or a new computer-based technology is unlikely to be successful. It also needs to be noted that not all “technologies” are computer-based technologies and may not be relevant to the ITGS EE.

The research question must be concisely stated as a question and must be able to be effectively addressed within the 4,000-word limit. The research question must be placed in an academic context stating the significance of the topic and why it is worthy of investigation.

Research questions that are focused on a particular situation and context (eg school, organization or business) must be thoroughly researched using both secondary and primary resources. For example, school-based topics limit the scope of the investigation to the particular school setting.

Students must first consult sufficient secondary research. This should include a range of relevant sources, including the internet, books, newspapers and magazines.

Students can use primary research methods and investigations to further develop the research question with a view to explaining the related IT systems and for comparisons with findings from secondary research.

Primary research may include: first-hand investigations, interviews, surveys, other data collection methods.

Students must clearly explain within the body of the essay the methodologies they use for primary research.

Students must also be aware of the correct processes to use for collecting, analysing, presenting and citing the type of data they have collected. They must make appropriate evidence from their primary research available in the appendices using accepted techniques.

The secondary research and primary research must provide sufficient evidence for students to develop an argument and support their conclusion to the research question.

The success of the ITGS EE is dependent upon: a concisely stated research question based on the ITGS triangle, thorough research using a comprehensive range of sources, detailed planning leading to a conclusion.

**Criterion A: Focus and method.** *The Assessment Criteria*

Level	Descriptor
0	The work does not reach a standard outlined by the descriptors below.
1–2	<p>The topic is communicated unclearly and incompletely</p> <ul style="list-style-type: none"><li>- Identification and explanation of the topic is limited; the purpose and focus of the research is unclear, or does not lend itself to a systematic investigation in the subject for which it is registered.</li></ul> <p>The research question is stated but not clearly expressed or too broad</p> <ul style="list-style-type: none"><li>- The research question is too broad in scope to be treated effectively within the word limit and requirements of the task, or does not lend itself to a systematic investigation in the subject for which it is registered.</li><li>- The intent of the research question is understood but has not been clearly expressed and/or the discussion of the essay is not focused on the research question.</li></ul> <p>Methodology of the research is limited</p> <ul style="list-style-type: none"><li>- The source(s) and/or method(s) to be used are limited in range given the topic and research question.</li><li>- There is limited evidence that their selection was informed.</li></ul>
3–4	<p>The topic is communicated</p> <ul style="list-style-type: none"><li>- Identification and explanation of the research topic is communicated; the purpose and focus of the research is adequately clear, but only partially appropriate.</li></ul> <p>The research question is clearly stated but only partially focused</p> <ul style="list-style-type: none"><li>- The research question is clear but the discussion in the essay is only partially focused and connected to the research question.</li></ul> <p>Methodology of the research is mostly complete</p> <ul style="list-style-type: none"><li>- Source(s) and/or method(s) to be used are generally relevant and appropriate given the topic and research question.</li><li>- There is some evidence that their selection(s) was informed.</li></ul> <p>If the topic or research question is deemed inappropriate for the subject in which the essay is registered no more than four marks can be awarded for this criterion.</p>
5–6	<p>The topic is communicated accurately and effectively</p> <ul style="list-style-type: none"><li>- Identification and explanation of the research topic is effectively communicated; the purpose and focus of the research is clear and appropriate.</li></ul> <p>The research question is clearly stated and focused</p> <ul style="list-style-type: none"><li>- The research question is clear and addresses an issue of research that is appropriately connected to the discussion in the essay.</li></ul> <p>Methodology of the research is complete</p> <ul style="list-style-type: none"><li>- An appropriate range of relevant source(s) and/or method(s) have been applied in relation to the topic and research question.</li><li>- There is evidence of effective and informed selection of sources and/or methods.</li></ul>

## **Criterion B: Knowledge and understanding**

This criterion assesses the extent to which the research relates to the subject area/discipline used to explore the research question, or in the case of the world studies extended essay, the issue addressed and the two disciplinary perspectives applied, and additionally the way in which this knowledge and understanding is demonstrated through the use of appropriate terminology and concepts.

(Strands: Context, Subject-specific terminology and concepts)

Students must effectively demonstrate their understanding of the concepts related to the research question. This requires a clear explanation of the specific IT system using the appropriate terminology, concepts, diagrams, images and screenshots.

Visual material along with the related text is an effective method for showing how the IT system has contributed to the specific topic in the research question. Wherever they use visual material, students must ensure that they:

- label it clearly
- cite its source
- refer to it in the accompanying text.

Students should show their knowledge and understanding through a logical, well-presented argument based on sound research and investigation leading to an appropriate conclusion(s) for the research question.

The level of knowledge and ITGS terminology should address an IT-aware audience, providing sufficient explanation and examples to support the topic. ITGS terminology refers both to IT terminology and to vocabulary referring to social and ethical considerations.

The level of knowledge and understanding should reflect the specialized knowledge that has been acquired through comprehensive research into the research question.

**Criterion B: Knowledge and understanding.** *The Assessment Criteria*

Level	Descriptor
0	The work does not reach a standard outlined by the descriptors below.
1–2	<p>Knowledge and understanding is limited.</p> <ul style="list-style-type: none"><li>- The selection of source material has limited relevance and is only partially appropriate to the research question.</li><li>- Knowledge of the topic/discipline(s)/issue is anecdotal, unstructured and mostly descriptive with sources not effectively being used.</li></ul> <p>Use of terminology and concepts is unclear and limited.</p> <ul style="list-style-type: none"><li>- Subject-specific terminology and/or concepts are either missing or inaccurate, demonstrating limited knowledge and understanding.</li></ul>
3–4	<p>Knowledge and understanding is good.</p> <ul style="list-style-type: none"><li>- The selection of source material is mostly relevant and appropriate to the research question.</li><li>- Knowledge of the topic/discipline(s)/issue is clear; there is an understanding of the sources used but their application is only partially effective.</li></ul> <p>Use of terminology and concepts is adequate.</p> <ul style="list-style-type: none"><li>- The use of subject-specific terminology and concepts is mostly accurate, demonstrating an appropriate level of knowledge and understanding.</li></ul> <p>If the topic or research question is deemed inappropriate for the subject in which the essay is registered no more than four marks can be awarded for this criterion.</p>
5–6	<p>Knowledge and understanding is excellent.</p> <ul style="list-style-type: none"><li>- The selection of source materials is clearly relevant and appropriate to the research question.</li><li>- Knowledge of the topic/discipline(s)/issue is clear and coherent and sources are used effectively and with understanding.</li></ul> <p>Use of terminology and concepts is good.</p> <ul style="list-style-type: none"><li>- The use of subject-specific terminology and concepts is accurate and consistent, demonstrating effective knowledge and understanding.</li></ul>

## Criterion C: Critical thinking

This criterion assesses the extent to which critical-thinking skills have been used to analyse and evaluate the research undertaken.

(Strands: Research, Analysis and Discussion and evaluation)

The essay should follow a logical development, progressing from the research question through a well-constructed argument to formulating a conclusion that answers the research question.

The argument must be closely related to the research question and to the evidence provided by the secondary and primary research.

Accurate analysis can only be based on quality research. The resources used must be relevant and reliable. Secondary research needs to be conducted before primary research so that the two can be related to one another. The sources used for secondary research must be appropriately cited and documented.

Valid data collection techniques must be used for primary research. These methods must be explained in the body of the essay along with any limitations, assumptions and biases that may be involved.

Students need to use the accepted methodologies for collecting, analysing and presenting data from primary research.

- Where interviews are used to collect data, transcripts from interviews must be accurately documented and made available in the appendix.
- Surveys must be included in the appendix along with a summary of the raw data question by question.
- Well-labelled graphs, charts or tables relevant to the argument should be included within the body of the EE to present data for analysis.

Analysis can occur in several ways, including:

- analysis of findings from secondary sources or experts
- analysis of the results of primary research or investigation (eg outcomes of surveys, results from two different interviews)
- comparison of the results of primary research or investigation with the claims found in secondary research.

Students must use sound deductive reasoning throughout their argument. Specific situations may be presented that demonstrate a particular point. However, it is erroneous reasoning, called “fallacy by induction”, to claim that a situation that occurs in one, two or a limited number of instances is true in general.

Students should base their conclusion on the sources and argument that they have presented. The conclusion must not introduce any new evidence. However, it should not merely repeat what has been stated before. It should be a synthesis of the arguments that have been presented and answer the research question. Questions that have emerged as a part of the research and are suitable for further study may be included in the conclusion.

**Criterion C: Critical thinking.** *The Assessment Criteria*

Level	Descriptor
0	The work does not reach a standard outlined by the descriptors below.
1–3	<p>The research is limited.</p> <ul style="list-style-type: none"><li>- The research presented is limited and its application is not clearly relevant to the RQ.</li></ul> <p>Analysis is limited.</p> <ul style="list-style-type: none"><li>- There is limited analysis.</li><li>- Where there are conclusions to individual points of analysis these are limited and not consistent with the evidence.</li></ul> <p>Discussion/evaluation is limited.</p> <ul style="list-style-type: none"><li>- An argument is outlined but this is limited, incomplete, descriptive or narrative in nature.</li><li>- The construction of an argument is unclear and/or incoherent in structure hindering understanding.</li><li>- Where there is a final conclusion, it is limited and not consistent with the arguments/evidence presented.</li><li>- There is an attempt to evaluate the research, but this is superficial.</li></ul> <p>If the topic or research question is deemed inappropriate for the subject in which the essay is registered no more than three marks can be awarded for this criterion.</p>
4–6	<p>The research is adequate.</p> <ul style="list-style-type: none"><li>- Some research presented is appropriate and its application is partially relevant to the Research question.</li></ul> <p>Analysis is adequate.</p> <ul style="list-style-type: none"><li>- There is analysis but this is only partially relevant to the research question; the inclusion of irrelevant research detracts from the quality of the argument.</li><li>- Any conclusions to individual points of analysis are only partially supported by the evidence.</li></ul> <p>Discussion/evaluation is adequate.</p> <ul style="list-style-type: none"><li>- An argument explains the research but the reasoning contains inconsistencies.</li><li>- The argument may lack clarity and coherence but this does not significantly hinder understanding.</li><li>- Where there is a final or summative conclusion, this is only partially consistent with the arguments/evidence presented.</li><li>- The research has been evaluated but not critically.</li></ul>

7-9	<p>The research is good.</p> <ul style="list-style-type: none"> <li>- The majority of the research is appropriate and its application is clearly relevant to the research question.</li> </ul> <p>Analysis is good.</p> <ul style="list-style-type: none"> <li>- The research is analysed in a way that is clearly relevant to the research question; the inclusion of less relevant research rarely detracts from the quality of the overall analysis.</li> <li>- Conclusions to individual points of analysis are supported by the evidence but there are some minor inconsistencies.</li> </ul> <p>Discussion/evaluation is good.</p> <ul style="list-style-type: none"> <li>- An effective reasoned argument is developed from the research, with a conclusion supported by the evidence presented.</li> <li>- This reasoned argument is clearly structured and coherent and supported by a final or summative conclusion; minor inconsistencies may hinder the strength of the overall argument.</li> <li>- The research has been evaluated, and this is partially critical.</li> </ul>
10-12	<p>The research is excellent.</p> <ul style="list-style-type: none"> <li>- The research is appropriate to the research question and its application is consistently relevant.</li> </ul> <p>Analysis is excellent.</p> <ul style="list-style-type: none"> <li>- The research is analysed effectively and clearly focused on the research question; the inclusion of less relevant research does not significantly detract from the quality of the overall analysis.</li> <li>- Conclusions to individual points of analysis are effectively supported by the evidence.</li> </ul> <p>Discussion/evaluation is excellent.</p> <ul style="list-style-type: none"> <li>- An effective and focused reasoned argument is developed from the research with a conclusion reflective of the evidence presented.</li> <li>- This reasoned argument is well structured and coherent; any minor inconsistencies do not hinder the strength of the overall argument or the final or summative conclusion.</li> <li>- The research has been critically evaluated.</li> </ul>

## Criterion D: Presentation

This criterion assesses the extent to which the presentation follows the standard format expected for academic writing and the extent to which this aids effective communication.

(Strands: Structure, Layout)

This criterion assesses the extent to which the presentation follows the standard format expected for academic writing and the extent to which this aids effective communication.

Students may provide a section and sub-section structure to their essays, with informative headings, if appropriate. sub-headings should not distract from the overall structure of the essay or argument presented.

Students may include in the body of the essay any charts, images or tables that are relevant to the development of their argument. They should appear as close as possible to their first mention. Students should only use them if they are directly relevant to the research question and are of a good graphic quality.

To ensure legibility of screenshots, images and other visual material, original versions of the essay must be submitted, not photocopies where the colour and quality of visual material has been compromised.

Students must accompany images, charts and tables with analysis and discussion to show how they further the essay's argument.

When graphs and charts are based on the results from a particular question in a survey, the citation should refer to the specific summary of raw data for that question by number.

All charts, images and tables must be properly referenced with respect to their origin or source. Too many graphs, charts and tables detract from the overall quality of the communication.

Tables of processed data should be designed to display clearly the information they contain. They should enhance a written explanation and should not themselves include significant bodies of text. If they do, then these words will be included in the word count.

Students must take care in their use of appendices as examiners are not required to read them. All information with direct relevance to the analysis, discussion and evaluation of the essay must be contained in the main body of the essay.

Any material that is not original must be carefully acknowledged, with specific attention paid to the acknowledgment and referencing of quotes and ideas. This acknowledgment and referencing is applicable to audio-visual material, text, graphs and data published in print and electronic sources. If the referencing does not meet the minimum standard as indicated in the guide (name of author, date of publication, title of source and page numbers as applicable), and is not consistently applied, work will be considered as a case of possible academic misconduct.

A bibliography is essential and has to be presented in a standard format. Title page, table of contents, page numbers, etc must contribute to the quality of presentation.

The essay must not exceed 4,000 words of narrative. Graphs, figures, calculations, diagrams, formulas, equations and information contained in visual material are not included in the word count. Examiners will not read beyond the 4,000-word limit, nor assess any material presented thereafter.



**Criterion D: Presentation.** *The Assessment Criteria*

Level	Descriptor
0	The work does not reach a standard outlined by the descriptors below.
1–2	<p>Presentation is acceptable.</p> <ul style="list-style-type: none"><li>- The structure of the essay is generally appropriate in terms of the expected conventions for the topic, argument and subject in which the essay is registered.</li><li>- Some layout considerations may be missing or applied incorrectly.</li><li>- Weaknesses in the structure and/or layout do not significantly impact the reading, understanding or evaluation of the extended essay.</li></ul>
3–4	<p>Presentation is good.</p> <ul style="list-style-type: none"><li>- The structure of the essay clearly is appropriate in terms of the expected conventions for the topic, the argument and subject in which the essay is registered.</li><li>- Layout considerations are present and applied correctly.</li><li>- The structure and layout support the reading, understanding and evaluation of the extended essay.</li></ul>

## Criterion E: Engagement

This criterion assesses the student's engagement with their research focus and the research process. It will be applied by the examiner at the end of the assessment of the essay, after considering the student's *Reflections on planning and progress form*.

(Strands: Process, Research focus)

This criterion assesses the student's engagement with their research focus and the research process. It will be applied by the examiner at the end of the assessment of the essay, after considering the student's Reflections on planning and progress Form (RPPF).

Students are expected to provide reflections on the decision-making and planning process undertaken in completing the essay. Students must demonstrate how they arrived at a topic as well as the methods and approach used. This criterion assesses the extent to which a student has evidenced the rationale for decisions made throughout the planning process and the skills and understandings developed.

For example, students may reflect on:

- the approach and strategies they chose, and their relative success
- the Approaches to learning skills they have developed and their effect on the student as a learner
- how their conceptual understandings have developed or changed as a result of their research
- setbacks they faced in their research and how they overcame these
- questions that emerged as a result of their research
- what they would do differently if they were to undertake the research again.
- 

Effective reflection highlights the journey the student has engaged in through the EE process. Students must show evidence of critical and reflective thinking that goes beyond simply describing the procedures that have been followed.

The reflections must provide the examiner with an insight into student thinking, creativity and originality within the research process. The student voice must be clearly present and demonstrate the learning that has taken place.

**Criterion E: Engagement.** *The Assessment Criteria*

Level	Descriptor
0	The work does not reach a standard outlined by the descriptors below.
1–2	Engagement is limited. <ul style="list-style-type: none"><li>- Reflections on decision-making and planning are mostly descriptive.</li><li>- These reflections communicate a limited degree of personal engagement with the research focus and/or research process.</li></ul>
3–4	Engagement is good. <ul style="list-style-type: none"><li>- Reflections on decision-making and planning are analytical and include reference to conceptual understanding and skill development.</li><li>- These reflections communicate a moderate degree of personal engagement with the research focus and process of research, demonstrating some intellectual initiative.</li></ul>
5–6	Engagement is excellent. <ul style="list-style-type: none"><li>- Reflections on decision-making and planning are evaluative and include reference to the student’s capacity to consider actions and ideas in response to setbacks experienced in the research process.</li><li>- These reflections communicate a high degree of intellectual and personal engagement with the research focus and process of research, demonstrating authenticity, intellectual initiative and/or creative approach in the student voice.</li></ul>