

ITGS

This is a supplementary report following the May 2010 session and should be read in conjunction with the May 2009 extended essay report.

Overall grade boundaries

Grade:	E	D	C	B	A
Mark range:	0 - 7	8 - 15	16 - 22	23 - 28	29 - 36

The range and suitability of the work submitted

Candidates addressed a range of research questions involving topics appropriate to ITGS. There seemed to be an increase in research questions relating to the impacts of various aspects of social networking, mobile devices such as cell phones and laptops, gaming, and the use of IT in particular situations (i.e. particular schools and businesses). At times candidates did not realize that secondary research as well as primary research must be conducted even if the scenario is unique to a particular business, organization or institution.

There were several commendable research questions this session:

- *What are the social and ethical issues raised by the use of the online follow-up program to attendance at a XXX weight-loss camp.*
- *How does Google affect consumer privacy with their advertising and storage of private information?*
- *What are the impacts of the Golden Shield Project and Censorship in China?*

There were only a few instances of topics that were inappropriate for an ITGS EE. These focused on an IT technology, or an IT historical development or were simply not ITGS-related.

Quick indicators of a formal approach to an ITGS extended essay include:

- The research question is a well-stated question in the introduction that allows for both secondary research and primary investigation. It should not be a 'yes/no' type question.
- It is apparent from the research question that the ITGS Triangle can be addressed within the scope of the extended essay.
- The table of contents provides an overview of the approach, organization of the paper and how the investigation has been planned.
- The bibliography and footnotes/citations together provide an excellent insight into the quality of the research. All of the sources in the footnotes/citations appear in the bibliography and all of the entries in the bibliography appear as footnotes/citations.
- All of the resources in the bibliography are reliable, current and cited according to a standard method (i.e. MLA, APA, Harvard or other). The bibliographies in better ITGS extended essays tend to contain 20-30 entries.

- The appendices show how the primary research has been conducted and contain the evidence from that research. Interviews require full transcripts with details such as the name of the interviewee, position, date, method of recording, the questions numbered and an accurate recording of the responses.
- The process used for data collection using surveys is systematic and described within the extended essay. A copy of the questionnaire and a summary of the raw data must appear in the appendix. Often charts are legible and properly labelled.
- Quotations and paraphrased works are correctly cited and in themselves receive no marks. It is the analysis by the candidate of similar or contrasting points of view that is awarded marks.

Candidate performance against each criterion

A: research question

The research question is major factor in determining the success of an ITGS extended essay. Too few research questions receive two marks. A “yes/no” question is not a suitable research. Through secondary research and/or primary research, the research question will be answered in the course of the paper.

B: introduction

The quality of the introduction was variable. Candidates need to state clearly the research question, the significance of the topic and the direction of the research. The significance of topic and why it is worthy of investigation should be supported by cited evidence.

C: investigation

Many extended essays rely on insufficient research. This was clearly evident from the limited number of entries in the bibliography. Candidates did not always use a standard approach in citing references in the body of the extended essay or in listing entries in the bibliography. Wikipedia is considered an unreliable source.

Candidates do not seem to know how to use formal processes for primary research (i.e. investigations, interviews and surveys). A major omission was that candidates rarely explained their primary research and how it was carried out in the body of the extended essay and abstract.

At times candidates made claims from the interviews, but there was no evidence in the interview. In general, more consideration must be given to the statement of the questions used in interviews and surveys and the nature of the response. The nature of the questions did not always allow analysis between findings from secondary research and the results from the primary research. Interview questions need to be numbered so that specific reference to an interviewee and question/response can be made.

D: knowledge and understanding of the topic studied

The background, not the history, of the research question must be explained. The use of IT terminology and knowledge of IT concepts rose only slightly above the level of general knowledge. Some candidates mistakenly presented the history of the topic. This approach is completely off course. Including diagrams would further support the explanation of the IT systems and processes. Instances referring to specific IT tools should be accompanied by screenshots.

In instances where students proposed solutions to problems that emerged, the solutions should be researched and their effectiveness evaluated. Students tend to present speculative solutions without any basis.

E: reasoned argument

Candidates need to spend more time planning their research and the logical development of their extended essays. Insufficient research, the lack of substantiation and reference to resources are common problems. In some cases dated or unreliable secondary resources were used. Arguments were often lacking in coherence, depth or relevance to the research question.

Primary research should be conducted after secondary research is completed. All extended essays must be based on secondary research. Some candidates failed to use the results from their primary research even though the results were recorded in the appendix.

F: application of analytical and evaluative skills appropriate to the subject

Quotations and paraphrasing only provide a basis for an argument and should be used sparingly. It is the analysis and evaluation that contributes to the argument.

Analysis and evaluation can emerge from the comparison of the information collected from:

- varied secondary sources
- primary research and investigations
- secondary research and primary research (i.e. investigations, interviews, and surveys)

However, it must be emphasized that in order for analysis and evaluation to take place, the proper methods must be used to collect secondary research and primary data.

G: use of language appropriate to the subject

ITGS terminology includes IT terminology and the terminology associated with social and ethical impacts. ITGS terminology and concepts were often only at the level of general knowledge, especially with respect to IT systems. Some candidates fail to address all parts of the ITGS triangle. Specific examples were required in order to provide meaningful explanations.

H: conclusion

Most candidates seem to fade by the time they reach the conclusion and abstract. They do not make a distinction between simply making concluding remarks to an essay and presenting the conclusion of a well-reasoned argument or investigation relating to a specific research question. The research question should be answered.

I: formal presentation

One would expect ITGS students to use good layout skills within an ITGS paper. However, very few candidates achieve full marks on this criteria:

- Bibliographies often lacked essential information, such as authors' names and publication or access dates.
- Candidates who had devised their own experiments or surveys generally included appropriate data and a summary of results in the appendix.
- Interviews were correctly cited in the bibliography, but the description of how the interview was conducted was missing in the body of the extended essay. Full transcripts were often missing in the appendix.
- References were variable, with a number of candidates failing to provide clear references in the text. In many instances, there was not a correspondence between the entries in the bibliography and the sources cited in the essay. The components of the extended essay (i.e. abstract, table of contents, bibliography and appendix) should appear in the correct order.
- The source of visual evidence (i.e. screenshots, graphs and charts) needs to be clearly indicated. Visual evidence needs to be explained in the paragraphs before or after the images. In some cases, the visual evidence was illegible. The explanation of IT systems requires diagrams.
- Photocopied extended essays are unacceptable. In some instances, the divisions in pie charts and details in images were indistinguishable due to the gray-tones in the photocopies.

J: abstract

The abstract is the compression of the 4000 words in the extended essay into 300 words. The abstract should contain only information that is contained in the extended essay, not new information that did not appear in the extended essay.

Candidates often did not include all four required parts: the research question, how the investigation was carried out, and the findings of the research and the conclusion.

K: holistic judgment

A limited number of candidates demonstrated high levels of initiative or insight. However too few candidates understand how to conduct secondary research and even less understand how to use primary research to further investigate their research question. Many candidates would benefit from the research process being broken down into a step-by-step learning process where they meet with their supervisor at planned intervals.

The supervisor's comments are taken into consideration in assessing criterion K. Some supervisors did not provide comments on the extended essay cover.

Recommendations for the supervision of future candidates

The criteria need to be clearly explained and made available to the candidates before they embark on the extended essay. Sample extended essays have been provided on the OCC and can be used to demonstrate the expectations of the ITGS extended essay.

Supervisors need to advise candidates on how to formulate a sharply focused research question appropriate to ITGS.

The process for producing the extended essay needs to be set out as a step-by-step process for the candidates. Supervisors need to meet with the candidates at various stages of research and development to provide guidance on secondary research processes, citing sources and the bibliography, and how to conduct and evaluate the results of primary research.

Secondary research needs to be completed before undertaking primary research.

Supervisors need to read a draft of the extended essay and provide feedback to the candidate on aspects of the ITGS essay that meet/do not meet the assessment criteria or do not follow accepted practices for secondary and primary research or violate academic honesty.

Only original copies, no photocopies, of extended essays are submitted.

Supervisors need to use the ITGS discussion forum on the OCC to access information and post questions regarding the ITGS extended essay.

Whenever possible, teachers should attend ITGS workshops where the processes required for the ITGS extended essay and example extended essays are discussed.