

## ITGS

### Overall grade boundaries

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

### The range and suitability of the work submitted

A wide range of appropriate research questions provided the basis for ITGS EE this session.

Topics reflected the current uses of information technologies in scenarios including:

- Impact of policies by particular companies (e.g. Facebook, Google)
- Implications of online banking for customers
- Smartphone addiction in South Korea
- Effectiveness of Internet filtering in a specific school
- Impact of a particular technology in a specific school (e.g. iPads, laptops or other mobile devices)

Candidates must be reminded that even research questions that are focused on a particular situation and context (e.g. school) must be thoroughly researched using both secondary and primary resources. Too often school-based topics limit the scope of the investigation to the particular school setting.

It is highly recommended that only students who are studying ITGS should submit an extended essay in the subject and that the supervisor is an ITGS teacher, or otherwise appropriately qualified, as highlighted in the EE guide.

The submissions demonstrated that the students had an understanding of how to conduct secondary research and cite sources.

The collection, presentation and analysis of primary research (e.g. interviews, surveys, and investigations) is for the most part not addressed well. Supervisors need to advise students on these processes.

In a few instances photocopies of the extended essay were submitted. Only original printed versions should be sent. Candidates can be disadvantaged when photocopies are sent because the print quality can be affected with regards to analysis of graphs and other visual material. The following identifies the new aspects of each criterion that has emerged. This report needs to be read along with the May 2012 ITGS Extended Essay report.

## Candidate performance against each criterion

### **Criterion A: research question**

A well-formulated research question reflects all of the ITGS requirements. . The research question is one of the major factors in producing a successful ITGS extended essay. Some of the candidates were able to formulate well-stated research questions that could be addressed in 4000 words. The research question must be the focus of the paper and “answered” in the conclusion. A ‘yes/no’-type research question cannot satisfy this condition well. Candidates may begin with a “working” research question, but they should refine it as they get more involved in the research.

### **Criterion B: introduction**

In general candidates make some attempt to provide the significance and worth of the investigation. However, they do not realize that this should be supported by evidence from research. The reason why the topic is worthy of investigation often lacks evidence and depth. Some extended essays also appropriately provide an overview of the process that will be used in the paper to research the research question. The specific research question must be stated in the introduction.

### **Criterion C: investigation**

Too few candidates understand that they must conduct extensive secondary research in order to support their arguments in the extended essay. In most extended essays too few sources have been consulted to support the research question.

Only reliable relevant sources should be consulted. Wikipedia may be useful for insight into a topic. However, Wikipedia and other similar sources should not be used for research nor appear in the bibliography.

Furthermore, the skills for conducting primary research must be taught. These include how to:

- formulate questions and conduct an interview
- use appropriate methodology for conducting a survey and analyzing the results
- use the investigation of original documents as evidence to support arguments
- conduct first hand experiments/investigation.

The methods used for primary research must be clearly explained in the extended essay. This is a major shortcoming. Candidates must explain within the body of the paper the details of what was done (i.e. how, who, what or when) as it relates to interviews, surveys and the primary investigations.

The quality of table of contents is usually a good indicator of the approach to the research question, development of the paper and how the research and investigation has been carried out.

**Criterion D: knowledge and understanding of the topic studied**

Many candidates do not explain the IT systems related to the research question well. They do not realize that the IT systems must specifically relate to the topic being investigated. Often irrelevant information is included in the background that is not specific to the topic. There are still a few candidates who think that the background of the IT issue is the history of the topic which takes the extended essay off-course from the research question.

Thorough research must be conducted in order for an extended essay to have the balance of ideas between sources. From observation of excellent ITGS extended essays, they rely on over twenty resources cited within the text.

**Criterion E: reasoned argument**

The argument must be well-organized and progress in a logical manner from secondary research through to primary research keeping the research question in mind throughout the process. Too often there is a lack of evidence and speculative comments have been made that have no basis.

Secondary research should be completed before engaging in primary research because it provides the foundation for further investigation.

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

Analysis and evaluation continue to be troublesome and is often not done well. There are many ways that analysis can be achieved in the extended essay. Some include:

- Analysis/evaluation of findings between secondary sources or experts
- Analysis/evaluation of the results of primary research/investigation (i.e. outcomes of surveys, results from two different interviews)
- Analysis/evaluation of the results of primary research/investigation with the claims found in secondary research.

Wherever diagrams or other visual evidence is used, they must be labeled and reference needs to be made to them from the preceding or following paragraph(s).

Candidates often try to reason because one, two or a limited number of instances of a particular situation have occurred that the situation applies to all cases. This is referred to as “the fallacy of induction”. It often appears in the analysis of data from interviews and surveys.

**Criterion G: use of language appropriate to the subject**

The use of IT terminology and terminology related to social and ethical considerations are often at the level of general knowledge. This is partially caused by the lack of research and depth in explaining the topic.

### **Criterion H: conclusion**

Most conclusions do not achieve full marks because the candidate attempts to repeat what has already been stated in the extended essay. The conclusion needs to be convincing based on the evidence presented and it must specifically “answer” the research question stated in the introduction. Often candidates go off-course by introducing new material in the conclusion that did not appear in the extended essay.

### **Criterion I: formal presentation**

The formal presentation of the ITGS extended essays was, for the most part, good. Common problems include:

- Table of contents should not contain the abstract or to the table of contents itself
- Bibliography should be placed before the appendices.
- Full-transcripts of interviews with name of the interviewee, position and date must be included in the appendix. The details of the interview must appear in the body of the paper.
- Survey questions must be included as well as sample survey(s) and most importantly a summary of all of the responses collected. The details of the methodology used must appear in the body of the paper.
- All sources in the bibliography must be cited in the paper. Often sources were missing from the bibliography or far too many included.
- All sources of images and diagrams must be cited in the paper and appear in the bibliography.

### **Criterion J: abstract**

Most candidates manage to achieve 1 mark. In general, candidates do not realize that the abstract is 4000 words “compressed” into 300 words. No new facts can appear that are not in the body of the extended essay. In some instances it seems that candidates are trying to write from memory rather than relying on the content of their extended essay.

### **Criterion K: holistic judgement**

A few examples of commendable effort were noted. However, for the most part the achievements fell within the middle range. Most candidates got a level 2 in this criterion. Unfortunately, there were candidates who did not demonstrate the attributes required by this criterion and fell in the 0 to 1 range.

## **Recommendations for the supervision of future candidates**

The following sources of information need to be consulted:

- Extended essay guide (first exams 2013)
- ITGS Extended essay subject reports from the OCC from May 2009 onwards

It is advised that teachers make use of the OCC ITGS discussion forum and EE discussion forum to follow the advice of experienced ITGS colleagues.

It is also recommended that ITGS teachers attend the new ITGS cat 3 workshop for assessment which addresses the extended essay and where the methodology and samples are discussed.