

Geography extended essay

Grade boundaries

For grade boundary information, please refer to the **Grade boundaries for Diploma programme coordinators** document available on the PRC.

Extended essay

The range and suitability of the work submitted

There was a complete range of work from the exceptionally researched essays that reflected sound sources, both primary and secondary and which were analysed using statistical and/or spatial means to those essays which were more like individual personal position papers.

Students used spatial data collection techniques, however a number of essays had small samples or took an IA-related approach which limited their attainment. There were some high achieving students who used census data to address broader research questions (RQ) well. Overall, there were a number of excellent essays that reflected a spatial approach that allowed them to achieve the highest marks. In this sense, it was pleasing to see the number of essays that included a variety of mapping techniques (including digital techniques such as GIS) for both displaying and analysing data. The presentation and organisation of essays overall was good with the basic requirements being observed although there were some essays that had a poor structure.

A number of the essays were focused on issues to do with sustainability and urban issues. The best of these were focused on spatial patterns at a local rather than regional or global levels. Successful essays analysed spatial patterns in cities (for example, mapping social deprivation, access to public services, CBDs and spheres of influence studies), along coastlines (patterns of coral growth) using maps produced with the data gathered; at the bottom end, as usual, were the essays solely based on written literary sources (as opposed to data), or based on non-representative sample sizes (including the ones that followed a more IA-type structure based on studies that were too narrow to produce the type of original in-depth research necessary for this component). A number of essays were highly descriptive not allowing the students to perform well against criterion C, the research questions of some of them were extremely broad in scope (national or even global scale) which then, penalized the work against criteria A and B. A good number of essays seemed to focus on broad geographical themes or were based in case studies rather than focusing on a spatially driven argument. Examples of unsuccessful topics are “Analysis of --- culture” and “The impact of the --- industry on the planet”.

Student performance against each criterion

Criterion A: focus and method

There were a number of excellent essays with focused spatial questions and well communicated topics grounded in strong literature reviews and academic background; nevertheless, some research questions were broad in scope which also impacted their performance against criteria B and C.

The most recurring issue faced with methodology was that students' samples tended to be small and/or not sufficiently representative to be able to draw conclusions. The weaker EEs did not manage to communicate the methodology – it is necessary to remind that the methodological framework for the essay should be clearly outlined so that “others can repeat” the research.

Criterion B: knowledge and understanding

There was generally good understanding of key concepts and issues and the resources used were generally appropriate and well applied. Knowledge and understanding were generally well reflected in range of sources, references and in the integration of geographical models and theory such as urban models, gravity models, socio-economic theory or vegetation successions. In some cases, the essays demonstrated good knowledge and understanding, but their performance against this criterion was limited due to the descriptive nature of the research. Again, some students produced very poor essays based only on literary sources and written text with descriptive outcomes

Criterion C: critical thinking

The standard of research was generally good and this was reflected through a good number of essays that incorporated statistical and spatial analysis thoroughly and used data to show this. The best essays demonstrated excellent mapping skills but the weaker ones tended to be too descriptive and relied mostly on written text.

Again, the most successful essays were local or regional studies based on representative sample sizes that managed to map their results using GIS; coherent essays that critically followed the arguments presented throughout and that included conclusions that came directly and accurately from the research findings.

Nevertheless, criterion C proved to be an area of difficulty for a number of students. A lack of geographical analysis and mapping techniques limited the analytical dimension of many essays, thereby impacting students' performance. In too many occasions, the tools used were simple bar graphs, line graphs or pie charts that were not geo located. The higher achieving students used techniques such as distance decay, change of variables with distance, comparative studies, a variety of choropleth, isolines, point and symbol maps and more. The weaker students struggled to follow basic mapping conventions with maps that were sometimes illegible or even had no scale or key.

As in the past, some students did not attempt to answer their actual research question but something slightly similar instead; this resulted in important lack of coherence in their arguments.

Criterion D: presentation

Most students produced well-presented and structured essays and they included good quality legible images and maps and followed the route to enquiry through clearly identifiable sections.

A small number of students included incomplete and inconsistent references and bibliographies and very few still produced poorly structured essays with random paragraphs and sometimes even no page numbers. In this sense, it is necessary to remind that incorrect or incomplete referencing is raised as possible academic misconduct.

A reduced number of students still presented layout problems with poor structure, images in separate sections rather than in the body of the text and tables with data in the body of the text rather than in an appendix, or even poorly planned blank spaces across the essays and titles at the bottom of the pages. Some of the images were of poor quality and some included text that was too blurry to be read.

Many of the issues related to criterion D have improved from previous sessions and those remaining could have been easily overcome with thorough planning and double-checking of the final essays.

Criterion E: engagement

Many reflections are showing signs of improvement with students showing progression and linking it to the Learner Profile, showing excellent personal engagement. Some students included good evaluations of the research process and what they had gained from it.

The best essays included critical reflections with specific evidence about the process and its setbacks and managed to score full marks in this criterion; however, many students seemed to have been heavily guided in this process by the supervisor.

Recommendations for the supervision of future students

- **Above all, students should ensure that they use a variety of geographical analytical techniques to process and present their data.**
- Students must think of research questions that focus on spatial patterns that can be mapped.
- Students should be encouraged to produce local studies.
- Discourage future-oriented / speculative essays.
- Ensure that a range of data has been used and encourage the students to use GIS and statistical analysis to present and analyse the data.
- Students must ensure that their introductions and the communication of the topic includes substantial geographical theory, when possible, based on current research, and that they refer back to that literature review through their analysis.
- Students need to be encouraged to use maps in the introduction of their essay and ensure that they are relevant and also legible. Digital maps need to be more than a download than google earth or maps, particularly when they use them to introduce the locational context of the essay.
- Ensure that students clearly communicate their methodology so others could repeat the study.
- There needs to be greater clarity about whether there is an appropriate sample size in relation to the question being asked. Students should be aware if there is sufficient data to answer the question.
- Students should avoid EE topics that are just an extension of an IA based on a small sample of primary data.
- Ensure that the students follow the route to enquiry to structure their essay.
- Students must make sure that they follow a clear referencing system and that all the references in the study are also included in the bibliography at the end.
- Make sure students reference every image in the essay, including hand drawn maps.
- Students must carefully plan the layout and structure of their essays in a manner that titles and images are carefully inserted in the text and the use of the page space is maximised.
- Ensure that the cover of the essay includes the necessary elements (question, topic, student code, word count).

Further comments

It is of extreme importance that students understand that criterion C includes:

- the analytical techniques used by the student i.e. the ones they actually produced, not the ones taken from other sources. In this sense, we should expect maps produced with the data gathered in the research, statistical tests, graphs and annotated photographs. Essays that do not include the use of such analytical techniques are likely to score poorly throughout as they will quite likely be over descriptive.

- the coherence of the essays that critically follow the arguments presented throughout and that include conclusions that come directly and accurately from the research findings.
- the mapping techniques and conventions as well as the labelling and the scales of the graphs and the accuracy of the statistical tests (whereas the quality of the images –scanning, legibility, etc. - are assessed in D).

Schools should discourage IA type EEs, as they will score poorly:

- in criterion A, if the sources are not enough to fully answer the question and the geographical context (academic, locational) is not well developed.
- in criterion B, if those sources are not appropriate to fully answer the question.
- in criterion C, if the sample size is not big enough to prove a valid argument (for example, at this level a few sample points along a river will not really prove much about the whole river characteristics, a couple of transects across a city with 10 sample points each might not be enough to prove that there is in fact an urban heat island or a sample of 50 people will not be deemed enough to prove the characteristics of a population of 500,000 people). In this sense, fieldwork is advisable when the area of study is of a size that will allow for a meaningful sample size; if not, primary data may be part of the analysis but will need to be supported with further data from secondary sources.

The development of appropriate methodology and use of sources has a knock-on effect on different criteria but from different perspectives:

- in criterion A, the methodology must be sufficiently clear for others to be able to repeat the work and the range and quality (selection) of sources must be enough to fully answer the question.
- in criterion B, we must look at the sources from the perspective of their appropriateness
- in criterion C, we must look at how the sources have been used (application) in order to be able to prove the argument; again, if the sample size is too small the argument might be incomplete.

A well-presented essay must:

- have meaningful paragraphs
- not exceed word limit of 4000 words.
- have references for all images and maps, even the hand drawn ones.
- use an appropriate font 12 and double spacing.
- have clear images in terms of definition and/or scanning and if they have text, it must be big and clear enough to be read.
- not have big blank spaces caused by a poor layout.
- not have tables in the body of the text as these belong in the appendix

Insufficient or incomplete references or bibliographies will be suspected of malpractice. This means that if there is one image or one map with no reference, missing references in the bibliography (but stated in text or foot notes) or lack of reference in the text when the ideas presented are obviously not the student's (geographical context and theory for example), it implies that the essay will have to be raised as a possible academic honesty exception.