# Subject-specific guidance

## Overview

This section covers individual subjects' requirements for the extended essay (EE) in terms of:

- · Choice of topic
- Treatment of topic
- Assessment:
  - · Criterion A: focus and method
  - · Criterion B: knowledge and understanding
  - · Criterion C: critical thinking
  - Criterion D: presentation
  - Criterion E: engagement.

It assumes that teachers are already familiar with the EE generic guide and the EE teacher support material, in particular the process whereby students choose a subject area and topic, write their research question and select the research method(s) they will use to explore and answer it.

For a full summary, see the process diagram and the generic assessment criteria.

Or for a quick refresher, read Extended essay: general requirements .



# General requirements

The EE is an in-depth study of a focused topic. It gives students the opportunity to:

- · engage in independent research with intellectual initiative, creativity and rigour
- · develop research, thinking, self-management and communication skills
- reflect on what they have learned throughout the research and writing process.

#### All students must:

- provide a logical and coherent rationale for their choice of topic
- · review what has already been written about the topic
- formulate a clear research question
- offer a concrete description of the methods they use to investigate the question
- generate reasoned interpretations and conclusions based on their reading and independent research in order to answer the question.

### Choice of topic

See also Initial guidance on research and writing

Students first need to identify the broad area of inquiry they are interested in.

Sources of ideas may include:

- · work already undertaken as part of the course
- preliminary reading of academic journals and reputable scholarly e-resources, eg conference papers,
   essays, book chapters or journal articles. A school librarian can advise on this
- · conversations with teachers, fellow students and librarians.

#### Literature review

Students should try to read as much as they can of what has already been written about their topic. Time spent on a literature review early on in the research process will guide and improve their work. It will help them to:

- · contextualize their research question and subsequent findings
- meet criterion B: demonstrating knowledge and understanding.

While conducting their literature review, students may find it useful to compile an annotated bibliography and to record their responses to what they read in their researcher's reflection space (RRS).

If using the internet, students are encouraged to use specialized academic search engines that will find resources appropriate for citation in the EE.

Students must be aware of their responsibilities to cite properly the resources they use and to check their work for plagiarism. Their citations should adhere to the requirements of the IB and be consistently applied.



## Research question

Students should identify a **working** research question early on but be prepared to change, eg if too little information is available to permit the intended investigation.

Students should be guided by the idea that what they are writing is important because:

- it seeks to fill a gap in understanding their chosen topic, or
- it offers a resolution to some controversial argument.

The research question should therefore be non-trivial and follow from the existing body of literature on the topic. It must be:

- specific, sharply focused and capable of being answered within a 4,000-word essay
- stated clearly in the introduction of the essay and on the title page
- · related to the chosen topic.

Students need to avoid researching questions that are too narrow or too obvious as this will limit their ability to formulate reasoned arguments.

Their answer to the question must be analytical rather than descriptive.

#### Title

The title is a formal requirement on the title page of the essay. If the title is missing, it will be considered on balance with the other formal requirements against criterion D. While there is no explicit penalty in criterion A, the title will help address the requirements as it expands on the student's intended focus. Without a title, students lose an opportunity to clarify their focus.

## Treatment of the topic

Once students have identified their topic and written their research question, they can decide how to research their answer. They may find it helpful to write a statement outlining their broad approach.

The definition of "research" and terms such as "primary data" and "secondary data" varies from subject to subject.

In some subjects, students must use both primary and secondary data. In others, students may, or even must, rely exclusively on secondary data.

However, all students must carry out secondary research in terms of a literature review for their topic.

### Two important reminders

- 1. Undertaking an extended essay is a challenge. Planning is crucial. Students need to start writing their papers early and discuss any emerging difficulties with their supervisor. As well as their supervisors, librarians are a great source of information, advice and support for students.
- 2. Students risk their diploma if found guilty of academic misconduct:



## Individuals and societies

# Individuals and societies

An extended essay (EE) in individuals and societies is intended for students who are interested in undertaking research in an area of business management, economics, geography, global politics, history, ITGS, philosophy, psychology, social and cultural anthropology or world religions.

The individuals and societies EE is intended to encourage the systematic and critical study of:

- human experience and behaviour
- · physical, economic and social environments
- the history and development of social and cultural institutions.

Students' choice of topic should enable them to recognize that the content and methodologies of the subjects are contestable and that their study requires critical thinking.

Students must have sufficient grounding in the subject under which they submit their essay: reading a textbook or consulting an encyclopedia while writing the EE will not compensate for a lack of proper background knowledge.

For a longer general introduction to the subject areas of individual societies see Individuals and societies:

An introduction



## Geography: Subject-specific guidance

See also: EE generic guide and EE teacher support material

#### Overview

An EE in geography gives the student an opportunity to apply a range of geographic skills to complete an independent and in-depth research investigation using geographic concepts, methodologies, theories and sources with a clear spatial emphasis.

## Choice of topic

The essay topic may relate to an area of the Diploma Programme geography course, but this is not a requirement. Students can also explore other areas of the wider subject, such as how global issues can be examined through the lens of geography.

#### Examples of research topics

These examples are for guidance only. Students must ensure their choice of topic is focused (left-hand column) rather than broad (right-hand column).

Focused topics	Broad topics
The extent that soil characteristics affect land use on a farm in ABC, XYZ	Soil characteristics have an effect on farming
Challenges in ensuring a sustainable tourism industry on the island of ABC, XYZ	Managing tourism is a priority in sensitive environments
Factors that account for the changing pattern of refugee migration into country X	Different patterns of refugee migration
Positive impacts in XYZ as a result of the redevelopment of ABC shopping centre	Retail area redevelopment and its effect

## Treatment of the topic

It is the task of the supervisor to ensure that the research question:

- is relevant to the subject
- allows the student to make use of appropriate geographic sources
- encourages the application of relevant subject concepts, theories or ideas.

Students should establish the geographic and theoretical context for their research question early in the essay. Students should outline clearly the geographic context in which they are conducting their research using:

- one or more annotated maps
- · where relevant, photographs and/or satellite images.



#### Research methods

#### Methodology

Students are not required to undertake primary research, but it is rare for an essay that is based entirely on the reading of published texts to score highly.

Many successful research topics are based on published data such as census or weather records.

Investigations carried out at a local scale also usually achieve highly:

- · they demonstrate connections between the subject and local manifestations and instances
- their narrow focus discourages an over-reliance on published materials and encourages original research
- students become more involved when investigating in a familiar, accessible location.

Students should focus on individual research and avoid approaches involving group fieldwork data collection. They must not view the EE as simply an extended piece of fieldwork.

Information on the methodology of the investigation is essential. If students collect their own data, it must be of high quality. It is vital that the investigation is tailored closely to the research question and shows evidence of careful planning.

Students will be assessed for their skills of analysis rather than techniques of data collection and processing. For the EE, the emphasis should be on:

- · written analysis
- interpretation
- discussion
- critical evaluation
- the development of a coherent, reasoned argument.

#### Resources

Appropriate resources for an EE in geography could include:

- · primary and secondary data
- quantitative and qualitative information
- · books, newspapers and magazines
- interviews and/or questionnaires
- the internet
- maps
- · aerial photographs and satellite images
- · digital landscape simulations
- videos
- GIS
- · diagrams and models.



Students should analyse their data using appropriate quantitative, statistical, graphical or qualitative techniques and the findings should be critically evaluated.

# Examples of topics, research questions and suggested approaches

Once students have identified their topic and written their research question, they can decide how to research their answer. They may find it helpful to write a statement outlining their broad approach. These examples are for guidance only.

Topic	Factors that account for differing fertility rates in two states in India
Research question	How can differences in the total fertility rates of Uttar Pradesh and Kerala be accounted for?
Approach	The essay contrasts two states of India, one in the north (Uttar Pradesh) and one in the south (Kerala) in terms of their different total fertility rates (TFR). Historic changes in the TFR for each state were examined. Differences in the percentage of rural and urban population, sex ratios, infant mortality rates, female literacy, religion, income levels and local customs were examined in order to explain contrasting levels of the TFR and differences in its rate of change in each state.

Topic	The sustainability of Singapore's transport system: the Circle Line
Research question	How far can it be argued that Singapore's Circle Line is a sustainable transport system?
Approach	Using published models of sutainability, a transport sustainability model was devised similar to the Egan Wheel. Eight measures of transport sustainability (accessibility, efficiency, infrastructure quality, comfort and security, affordability, policy response, environmental and health impacts) were applied to eleven selected stations on the Circle Line. Information was collected via passenger questionnaires, an environmental quality survey, qualitative observation and a topological analysis of the transport system to evaluate the sustainability of the system.

Topic	Globalization in the Suseong district of South Korea
Research question	Can Suseong be considered to be a socially globalised community?
Approach	The approach uses the KOF Index definition of social globalization. A questionnaire was used to gather information regarding levels of social globalization in each of the 13 subdistricts of Suseong, including dress, music, food, language, technology, access to foreign TV stations, newspapers and services. A land use survey was carried out to examine the range of foreign restaurants, fast food, shops and services. Levels of personal contact, information flows and cultural proximity (KOF indicators), were then evaluated for the sample population in the study area.



## Illustrations and maps

It is essential that a geography EE be supported by appropriate illustrative graphical material, such as diagrams, maps, tables, images and graphs. Students must acknowledge the sources for each.

#### Maps

- Good essays usually have maps in the introduction to place the investigation in a clear spatial context.
- All maps should give an indication of orientation and scale, and include a legend or key.
- Students should clearly reference all maps used and give the source of any base maps they have not constructed themselves.
- The use of scanned maps or satellite images, or those that are downloaded in unaltered form, is rarely effective and provides little evidence of students' map skills. However, students are encouraged to modify or adapt such images.
- Students are encouraged to include:
- sketch maps
- · labelled or annotated diagrams
- · maps they have constructed.
- If students draw maps using computer software, they should state the proprietary program used. Handdrawn maps should be neat and clear, and employ standard map conventions.

#### Images or photographs

- Images or photographs should only be used if they are essential illustrative components of the essay, ie not just decoration.
- Students should explain the feature(s) an image or photograph is intended to illustrate. Each should be:
- · oriented
- sourced
- · labelled, annotated or captioned.
- Colour is frequently used in geographic illustrative materials, so it is important that an original colour version of the essay is submitted.

## An important note on "double-dipping"

Students must ensure that their EE does not duplicate any other work they are submitting for the Diploma Programme.

The geography EE and IA

In particular, an EE in geography is not an extension of the internal assessment (IA) task. Students must ensure that they understand the differences between the two.

Supervisors play an important role in guiding students on these distinctions. Students risk their diploma if academic misconduct is detected.



#### Interpreting the EE assessment criteria

#### Criterion A: Focus and method

(Strands: Topic, Research question, Methodology)

The topic of the geography extended essay must be clearly indicated at the beginning. This should include the area of the research, the purpose, and the focus of the essay in order to clearly establish the context of the research question. It is usually appropriate to include the general locational background as well as appropriate geographic theory or concept required to understand how the research question has been established. Above all there should be a clear spatial component. For example, a topic statement of an essay may be 'The distribution of textile retail shops in South Mumbai'. The explanation of this topic might revolve around location on major thoroughfares and access to a market.

The research question is best stated in the form of an actual question. An example of research question could be "To what extent does location have an impact of educational attainment of indigenous people in Queensland? The research question should be identified clearly and set out prominently at the start of the essay and on the title page.

The student needs to demonstrate within the essay that their research methodology has been well planned. It is expected that students show that they have researched the topic and selected an appropriate geographic approach to address the research question. This applies both to literature research and to practical data collection. Primary or secondary data collection is acceptable. The very best essays are likely to have a mixture of both. Students must ensure and demonstrate that their chosen methods and materials are appropriate for addressing the research question. Investigative methods should be clearly explained. The investigation should be sufficiently clear for, so that others could repeat the work. The reliability of the research should be discussed.

If students are investigating a well-documented or standard topic, they should attempt to look for a new approach or perspective to the issue. This is most likely undertaken by choosing a particular location within the student's own experience, for example their home location. For example, a topic covering climate change may look at changes in snow cover in a ski resort. This would also help in reducing the scope to a manageable local scale.

# Criterion B: Knowledge and understanding

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

The source materials accessed should be clearly relevant and appropriate to the research question. They should be effectively referenced and incorporated into the main body of the essay in a way that demonstrates the student's understanding. Literature cited should predominantly come from acknowledged sources.

