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Extended Essay Guide

For the 2016 syllabus

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Introduction

The Extended Essay is designed to give you a first taste of academic work, encouraging you to move beyond the structure of exam-based study into a world of possibility. Here, you are entirely in control of all aspects of the investigation from beginning to end. If all this freedom seems daunting, do not fear! The IB has corseted the task by providing you with a set of guidelines, to help keep things manageable.

The assessment criteria can be a little confusing at times, so we're here to lend a helping hand and be your translator. This guide is full of practical advice on how to make your Extended Essay writing process less stressful and more enjoyable, and how to achieve your desired grade. Consult it throughout: as a place for initial inspiration, a helpline for specific problems and as a checklist before your final deadline. A few tweaks to your research question or writing style can affect your overall mark a lot, so listen carefully!

“Remember that it’s never too early to start, but also never too late, to set your Extended Essay right either.”

Why write an Extended Essay?

Writing an Extended Essay is no simple task. It's important to understand the point of an Extended Essay, to give yourself the motivation to write it to the best of your ability. In this section we ask not what you can do for your Extended Essay, but what your Extended Essay can do for you.

Academic benefits

First and foremost, it is important to view your Extended Essay as an opportunity. Few students get a taste of true academic freedom before they reach university. The IB Extended Essay is an exception – what you decide to write about and how you do it is *up to you*. This will help you learn about academic independence, and give you a head start with skills used daily by researchers in the wider world (e.g. planning and conducting research, referencing, writing analytically), and university students. It is also a chance to get credit for writing about something that *you* care about. Those who choose a good topic will find the process exhilarating, interesting and enjoyable, so choose wisely!

Practical benefits

Aside from the intellectual rewards mentioned above, writing the Extended Essay has some practical advantages:

University applications: Many universities will require a writing sample from you and as your Extended Essay will probably be a fairer reflection of you and your interests than any other piece of schoolwork, it would be an excellent choice. Furthermore, having written an essay relating to your chosen university course will aid in writing a personal statement with more personal edge, or help you show some originality during any potential interviews.

Work experience: If you already have a potential career in mind or if you have any particular extracurricular interests which you would like to pursue further, then writing a related Extended Essay can provide you with valuable initial expertise. Some students considering a legal profession have written about the origins of the Magna Carta, some with an interest in debating have written about human rights issues discussed in the UN and budding doctors have benefited from the chemical experiments they conducted for the essay.

Core Points: Writing a good Extended Essay can significantly help in improving your overall mark, which is especially useful if you feel unsure about your ToK abilities. Remember that up to 3 points are available from your combined EE and ToK grades – this could be the difference between securing a university place, and missing out. You also need to score at least a D to receive your Diploma, so beware of underestimating the importance of the EE!

ToK/EE	A	B	C	D	E
A	3	3	2	2	Failing condition
B	3	2	2	1	
C	2	2	1	0	
D	2	1	0	0	
E	Failing condition				

Personal development: Finally, writing an EE is not just some pragmatic opportunity-opener; it can also be highly entertaining and personally rewarding. Do take advantage of the flexibility of the project to really tailor it to your own needs and wishes. Your research can thus include interesting travels or meetings: past students have done everything from revisiting their family village to interviewing one of Mao's nurses. In this way, even if you're not particularly academically inclined, writing the essay can prove to be an unforgettable experience.

Initial Steps

What you will need to do?

- ✓ Structure your own work, with the aid of a supervisor.
- ✓ Spend around 40 hours on the project.
- ✓ Work with the assessment criteria to ensure that your essay meets the formal requirements.
- ✓ Adhere to deadlines, both to ones set by your school (idea proposal, drafts) and IBO ones (final draft).
- ✓ Meet with your supervisor three times to reflect on the process of planning, researching and writing your essay.
- ✓ Record these reflections in the 'Reflections on Planning and Progress Form', to be submitted and marked with the final essay.

Apart from this, you will need to learn how to manage any resulting complications of stress, time management problems or self-confidence issues. But do not feel overwhelmed at this stage, all time management issues will be discussed at length below, helping you to cover everything successfully on time. If you are stressing at any given point, we have included troubleshooting sections to help you get unstuck as well as checklists, which will allow you to constantly evaluate your own work.

Planning and Time Management

Each school has its own time frame for the EE, which has been developed *in your interest*. Beware of going rogue and ignoring the deadlines set by your school – they will have been set to avoid clashes with Internal Assessment deadlines and to minimise stress. Follow them to the letter - once you get out of sync with the rest of your class it can be really difficult to get back on track. And finally: remember that planning is one of the easiest tasks of your Extended Essay, but it is ultimately the one that yields the most results!

Personalised Deadlines

There are ample opportunities within your Extended Essay-writing to manage and structure your own schedule. This can be challenging and you might feel a bit unsure whether you've given everything enough time and attention. Thus, it is crucial that you establish some form of plan before you start writing. Work with your supervisor to give

yourself a set of personalised deadlines, in order to avoid overworking certain areas and under working others. This will help you to use your time efficiently and to beat any budding procrastination, by breaking up the task into manageable chunks (for inspiration as to how, check out this [handy guide](#)).

Examples for creating deadlines

- **A time limit for a certain type of source:** Give yourself a number of hours to complete your secondary reading, for example. This will allow you to not spend excessive time pondering over one book or article - remember that it's important to get different points of view.
- **A deadline for your overall research:** It's easy to think that an intensely profound idea or the answer to all your questions will be contained in the next book or in the next experiment. Unfortunately, this is not always the case - instead you might not be giving yourself enough time to process the material.
- **A deadline for the data analysis:** Some will be doing this continuously throughout the project, but the majority will profit from devoting a set amount of time on it. Remember that your analysis needs to be explicit.
- **A deadline for when you should have an outline ready:** This is important, as many students don't give themselves enough time to think this step through properly. Thus, they panic at the last minute before the draft deadline and start writing immediately. If you have a clear structure, with your main arguments and pieces of evidence already stated, actually putting pen to paper (or hands to keys) shouldn't be too much of a problem.
- **A time limit for writing certain parts of the draft:** E.g. the introduction, the first paragraph or the conclusion. This will save you from getting stuck and rereading the same old paragraph, wondering if it's any good. Make sure that each part gets the time it deserves.

Identifying your strengths and weaknesses

Before you can set deadlines successfully you will need to find your own weaknesses and strengths: are you a slow reader or writer? Do you work best intensely or regularly over longer periods of time? Factor these considerations into your plan. Things you could consider might be:

Problem areas: Think about the obstacles you've come across in previous assignments (e.g. lab reports, essays or projects). Which part posed the greatest difficulty? Usually looking at your teachers' comments proves to be incredibly helpful: if they mostly

commented on inaccuracies or the information you included, it might be useful to make sure to spend more time reading and researching, If, on the other hand, your structure faltered, spending more time on planning should be essential.

Things you're good at: These could be fast reading, speedy typing or intuitive planning. Again, only determine these based on your previous experiences and remember never to omit a step completely (e.g. structuring, reading) due to a strength in that area.

Your procrastination habits: Do you tend to procrastinate and postpone tasks? If so, you must deal with these tendencies at a planning stage – providing a framework usually helps more than sheer will power. Divide tasks into manageable chunks over a longer period of time, to save you from feeling too overwhelmed and schedule in rewards for good work (more of this in the 'Getting Stuck' section, below).

Time Management

Bearing in mind how variable the needs of different schools and different students can be, there are still some general guidelines for how much time each segment of the project should take. Usually it is recommended that you spend about 50% of your time researching (including data analysis), 20% planning and outlining, 20% writing and the rest re-drafting and editing. Remember that 4000 words are not as much as they seem - most students risk writing too much rather than too little. Thus it is important to devote as much time to planning as to the actual writing process. Bear in mind that some scripts will require more writing time than others, so ensure that you leave yourself enough extra time to address any unforeseen problems.

“It is recommended that you spend about 20% of your time planning, 50% of your time researching and analysing and 20% writing and the final 10% re-drafting and editing.”

Key Components

When planning, you should always have the big picture in mind. A good plan will include:

- ✓ Your school's idea proposal deadline (usually at the end of the spring term of IB1).
- ✓ Time to locate and look for sources before the beginning of the summer vacation, so you can consult your supervisor.

- ✓ Research – 20 hours over the Summer, but feel free to expand if necessary. Break this down into components.
- ✓ Processing notes and creating an essay outline – 5-10 hours.
- ✓ Writing the first draft – 10 hours. Usually during the Summer (preferable) or at the beginning of the Autumn Term (August-September).
- ✓ Redrafting, usually after a meeting with your supervisor.
- ✓ Handing in the final draft. Plan to be done at least 3 days before the deadline.

“The Extended Essay is not as overwhelming as it seems, and by breaking it into different components, you will find it easier to avoid performance anxiety.”

Summary of common planning errors

- **Giving yourself too much time:** ‘I’m going to work on it over the Summer’, or ‘I’ll write my draft over the next week’ are common traps; not only are they overly general, they will also give you feelings of guilt when you are not working on the essay, which might result in more procrastination and avoidance. Instead, state in your plan; ‘In weeks 3 and 4 of Summer (after my family holiday) I will spend 5 hours each week reading secondary sources’ or ‘I will write my draft over four days, with 4 hours of work every day.’ Set yourself specific goals, and write them on a calendar.
- **A too tight schedule:** This point involves assuming that the separate parts of the plan will somehow flow seamlessly into each other – instead, plan your ‘buffer zones’ well. Give yourself a couple of days off between each step of the assignment, which you could use to finish things that are taking too much time. Plan for the unforeseen.
- **Over-planning:** Do not include every 5-minute break, every meal or activity – you might risk abandoning your plan altogether when you start failing to perform all of your scheduled tasks. Allow some room for creativity within your project.
- **Over-ambition:** Determine how important the Extended Essay is to you and bear that in mind when planning. Only give it the time you think it deserves. Don’t have grandiose plans and instead aim at getting everything done.

Active and passive time

Another thing to keep in mind is the difference between active and passive time. Active time is the time you actually spend working on a task, whilst passive time is the time you spend “working” (i.e. messaging friends, browsing Instagram...). If you think writing your introduction will take four hours of active time allot more than four hours when planning writing your introduction. It is worth remembering that writing an Extended Essay is not a full time job: don't be overly optimistic about how much time you will spend on it. Give yourself plenty of time off and remember your other commitments as well.

The final schedule

The above should allow you to create a plan which places you and your own needs at the centre, as well as fitting the schedule your school has set for you. Put somewhere visible: a [wall planner](#), your phone calendar, or both. The more reminders you have, the more likely you are to stick to your plan. Don't stress out if things don't go exactly as expected – it's ok to adapt as you learn more about how long things take you. Just beware of letting that adaptation turn into procrastination: be flexible, but disciplined. Use people around you to help you stick to your goals: once you have a plan, give it to your supervisor so they can check in on you and provide some extra motivation. You could even design it with a friend, so that you can help each other make the most of the Summer break.

Working with a supervisor

The importance of finding a good supervisor and establishing a good relationship with him/her is not to be underestimated. While it is perfectly possible to do without the benefits that flow from a candid and productive supervisor-supervisee relationship having one will make a lot of your Extended Essay work easier.

Choosing a supervisor

Certain schools allocate supervisors according to certain internal guidelines and others allow you to choose freely. If you have the latter opportunity, use it wisely. Bear in mind that a good working relationship is crucial in determining how comfortable you will be with your own project. If, on the other hand, you feel like your supervisor is not being helpful enough, you might need to consult alternative expertise. Remember that working with a supervisor is essentially enjoyable – it's one of the few opportunities where you can engage in an in-depth dialogue with one of your teachers. Thus, even if

you do not bond with them on a personal level, remain intellectually engaged throughout your co-operation and make sure to profit from their knowledge and expertise.

What you can demand

Regardless of your personal dynamic with the teacher in question, you should be aware of what you can expect and to some extent demand from your supervisor. Make sure that you can contact your supervisor whenever you need to: having their email address is absolutely essential. Remember that your supervisor is **required** to:

- ✓ Discuss your extended essay with you in three reflection sessions:
 1. To discuss your initial ideas and research plan
 2. When you have done most of your research
 3. When you have handed in your final essay

The outcomes of these 3 sessions will need to be recorded on the Reflections on Planning and Progress Form, which your supervisor will sign.

- ✓ Offer advice and guidance on planning your research, and support you through the research and writing process
- ✓ Advise you on choosing an appropriate and well focused Research Question
- ✓ Give you a copy of the Assessment Criteria and help you to understand it
- ✓ Read and comment on **one draft** of your essay (but not edit it)
- ✓ Read your final version and confirm its authenticity

The IBO recommends that you spend 3-5 hours with your supervisor, including the three reflection sessions. It's up to you to ensure that you get as much out of this time as you can. Take it upon yourself to ask your supervisor how to choose appropriate resources (e.g. people, libraries, laboratories) and research methods, and ask how to cite and reference properly. It's also a really good idea to work with your supervisor to set your own mini-deadlines for the completion of each part of the essay. Whilst you may hate the idea of taking on MORE deadlines, this will really help you in the long run. Having someone else to check your progress throughout will encourage you to get things done gradually, and not leave things until the last minute.

Keeping a Researcher's Reflection Space

To ensure that you make the most out of the time you spend with your supervisor, and to help your essay progress, it is strongly recommended that you keep a **Researcher's Reflection Space**. This is basically a log (either virtual or hand written) that you use to

document your thinking process, all the way from choosing a question to writing up your final draft. It could be that you've come across a new piece of information in your research that makes you re-think an aspect of your plan. Perhaps you find a new database or website that takes you in a new direction. Maybe a conversation with a teacher puts you on to a new lead. Think of your essay process as a meandering river. Each time it meets a new obstacle or takes a new path, reflect on what you've learned and how it's changed your approach. You can then use this as the basis of discussion for each reflection session with your supervisor, to help them understand your thought process and guide you in the right direction.

Supervisor's advice

Always be ready to listen carefully to your supervisor's suggestions and ideas: some students feel strongly about their scripts and will not accept any criticisms. It is, however, better to discuss your worries openly rather than dismissing any advice with half hearted nods. Remember that your supervisor has previous experience of reading this type of essay. Your supervisor is not responsible for your final output: you are. You don't have to follow their advice (especially if it interferes with your own fundamental plans and ideas), but it will probably be to your benefit!



The start of the essay

Picking a subject and a topic

Choosing a subject that you want to work with and a topic within that subject that interests you is of obvious importance. Below you will find some advice and some examples of idea processes that might be of some inspiration for you.

Choosing a subject

An Extended Essay needs to be written in an IB subject. It does not necessarily have to be in a subject that you have studied yourself (although some schools may restrict you to your 6 subjects or your Higher Levels). What is important is your own interest and knowledge: you have to feel comfortable employing relevant terminology and investigative methods. This means that you have to be comfortable with the language that the normal practitioners in your subject are prone to using and to be able to appreciate or emulate methods used by these. Bear in mind that the IB is very strict about topics fitting wholly within a specific subject area – beware of trying to make a topic ‘fit’ one of your subjects if the link is tenuous. Each subject has its own set of guidelines and assessment criteria, so work with your supervisor to make sure that you understand them. Be aware that certain subjects require certain methods e.g. for Group 4 subjects it is strongly preferred that you conduct your own experiments.

Choosing a topic

There are several ways in which to get ideas for a potential Extended Essay: some students will begin the process with a clear and crystallized notion whereas others will require more time and research before settling on something specific. Do give this part the time and attention it requires - a well-chosen idea will help you in all subsequent steps.

Steps to bear in mind as you look for ideas:

- Choose according to interest, not according to what’s considered ‘important’ within the subject. For a literary subject you don’t have to write about a classic novel or celebrated poet, in history don’t feel like you need to address wars and dictatorships. You will be working on your extended essay for a long time, so make sure that you’re not likely to get bored.

- Don't choose a topic just because you think you can answer it already - that's never a good sign! Originality is awarded – simply because something has been covered thoroughly in class does not make it a good choice. Of course, you will need to know the basics before researching further, but be prepared that you will also need to go beyond any core syllabus in order to write your essay.
- Make sure that your idea can be treated successfully with the amount of time that you have at your disposal. Choose a question that you can answer in detail in 4000 words, not one where you will only have space for a broad overview.
- Don't make your topic too narrow or specialized either. Remember that you will still need to be able to find easily accessible sources and receive some relatively competent advice from your supervisor.
- Even though originality is important, you're not expected to come up with seriously ground breaking conclusions. Do not feel that you need to choose a topic that will change the face of science or uncover a new Watergate.
- Cast your net wide. There are all kinds of resources at your fingertips - not just the ones immediately obvious to you – that could provide inspiration. Talk to your librarian about the journals your school has access to. Many libraries and museums also have [digital collections](#) that you can access for free online – not just of books but also works of art, letters, newspapers, objects... the possibilities are endless.

If you get stuck

Keep a record of your journey towards choosing a final topic in your **Researcher's Reflection Space**. Where was your starting point? Did you initially settle on a subject area? How did you narrow down to a particular person/time period/theory? Did any particular discussions strongly influence your choice? Were you guided by the availability of certain resources? Did something you read inspire you? Each time your thought process moves in a slightly different direction, reflect on why. Often the most exciting projects arise from simple curiosity - it really helps if you actually want to know the answer to your own research question. Also, look to your strengths and experiences: language skills, travels or any form of special training may help you find an unusual angle on an old problem. Talk about your ideas and problems with your friends and family, or, indeed, anyone you come across who might be inclined to listen. Inspiration and help can come from the most unlikely of sources. Don't worry if you don't get a great idea straight away. It's better to take your time than to rush into something you're not sure about. You will, however, be surprised at how many ideas actually will come to you once you start looking for them!

Examples of idea processes

STUDENT A: HISTORY

Wanted to write about the effects of World War II on the Cold War, but didn't feel comfortable discussing it from the perspective of the US or USSR.

The student spoke fluent Swedish and thus decided to focus on the effects of the war on Swedish national self-perception.

Sent an email to a university lecturer and was recommended some history text books from the 1950s and 1960s, which were readily available to the student.

Project became about how textbook portrayals of World War II changed during the 1960s and to what extent these changes were caused by Sweden's past neutrality or by the changing international situation.

A good example of how new material can help to refine general ideas into a precise research interest. Note how the initial idea is not necessarily fully reflected in the final proposal - it's important to be able to be flexible within your given area of interest.

STUDENT B: ENGLISH LITERATURE A2

Wanted to write something about gender issues, but wasn't sure of which works to focus on.

After having consulted an English literature text book, the student found that a work he had already read - *The Great Gatsby* - was full of appropriate material, which he had previously not thought of.

Having also read much other literature from the 1920s, he then chose to compare *Gatsby* to Hemingway's *The Sun also Rises*, to see how they differed in their portrayal of female influence.

This is an example of a relatively straightforward idea process, yet it shows how consulting even the simplest of sources can help to trigger a stream of thought. Sometimes inspiration will come from familiar places.

STUDENT C: BIOLOGY

Wanted to write something about enzymes, but wasn't sure of what type of experiment to conduct.

After consulting scientific journals and doing some general research about enzymes, they decided to focus on factors that affect rates of reaction.

Discussed with supervisor the availability of materials, what enzymes he would have access to, and what types of reactions he would be able to perform.
Narrowed it down to three options: pH, temperature and enzyme concentration.

Read scientific journals to see which factors had been well documented for the different possible enzymes and reactions. Decided to test the effects of different enzyme concentrations on the rate of one of his chosen reactions.

A good example of the initial steps in developing an idea from a Group 4 essay. Rather than starting out looking for an experiment, seek out a topic of interest, determine the availability of experimental materials, then use scientific journals to determine an appropriate scope.

Summary – Subject and Topic

- ✓ Make sure you know the subject and its specific language and methods
- ✓ Choose a topic you are interested in
- ✓ Remember that originality is awarded
- ✓ Don't make your topic too broad or too narrow
- ✓ Don't expect to revolutionise your field
- ✓ Use your Researcher's Reflection Space to clarify your thought process

Working with your Research Question

Having defined a more precise general topic to work with, it is time to transform it into a proper research question. Your research question is the mind and drive of your essay. It guides your research, analysis and writing. At the risk of sounding obvious – your research question must be formulated as a question, and not a statement!

Finding your question

This is not as straightforward as it seems and might require a few attempts to get right. It's crucial that you know what question you are setting out to answer, so that you can design your research in the most appropriate way. Your essay should be a focused and analytical answer to a question, not a broad narrative overview of a topic area. It's ok to make minor edits to your question as your research progresses, but the clearer you can be from the outset, the better.

Dangers & Troubleshooting

Not all questions are appropriate for exploring in an Extended Essay. Here's a few things to avoid:

- **Generality:** Don't try and cover too much at once - if your area of interest is quite broad (e.g. reasons for World War II) then treat your Extended Essay more like a chapter within that topic than an exhaustive explanation of it.
- **"Un-answerability":** Make sure that you can back up all of your arguments. Ambition is good, but don't try and take on a question that a PhD student with lab access and years of experience would struggle to answer! Be sensible about the limitations of the resources available to you, and your own knowledge and understanding.
- **Obviousness:** Don't let the answer to your question seem self-evident or banal - your question needs to be something that justifies 4000 words of discussion.

Narrowing the question

The best Extended Essays will have a clear focus driving their research and analysis. If you've decided on a topic area, you could choose to focus on:



A specific time period: Why did the U.S.S.R fail to accept the Marshall Plan? ⇒ Did the events of 1947 determine the USSR's rejection of the Marshall Plan?



A geographic area: What were the social effects of the shifted borders after World War I? ⇒ How was the Hungarian minority in Ruthenia treated by Czechoslovak authorities after the Treaty of Trianon?



A work or author: How does Religion affect Elizabethan poetry ⇒ How does John Donne's religious belief in re-incarnation affect his *Elegies*?



A comparison: How does Ibsen portray the dynamic of the bourgeois household in *Hedda Gabler*? ⇒ How do Ibsen's *Hedda Gabler* and Flaubert's *Madame Bovary* respectively portray the dynamic of a bourgeois household?



One type of source: How were popular perceptions of the Great Depression in America shaped by the media? ⇒ How did the photographs of Dorothea Lange shape popular perceptions of the Great Depression in America?



A particular organism: How can natural products be extracted from plants? ⇒ How can the natural oxidant rutin be extracted and purified from the seed of the Chinese Scholartree?



A particular phenomenon: What is the efficiency of electromagnetic damping? ⇒ Is the efficiency of electromagnetic damping of a moving glider a function of the initial kinetic energy of the glider?

Finalizing the question

Often, you will need to work with several of these narrowing techniques simultaneously to optimize the potential of your question:

Example 1: “What has been the effect of the minimum wage on unemployment in Austria?” ⇒ “What has been the effect of the recent imposition of the minimum wage on unemployment in the fast food industry in Graz?”

Example 2: ‘To what affect are images of the supernatural used in Victorian Gothic literature? ⇒ ‘I thought the swift-darting beam was a herald of some coming vision from another world’ (1.2.32): How do images of the supernatural contribute to the character development of Jane in *Jane Eyre*?

Example 3: “What is the effect of acidity on plant growth?” ⇒ “What is the effect of differing pH levels on the growth of *Phaselous vulgaris*?”

Approach

For a scientific essay, your research question must also be coupled with an explanation of the experimental approach that will be taken to answer it. This can be highly useful for subjects within other groups as well, as it helps you to critically address the needs of your own work process before embarking upon it. The approach should not be a detailed procedure, but an outline of the type of experimentation you will undertake.

Example from Biology:

- ☞ **Topic:** The distribution and growth of lichens on urban pavements.
- ◇ **Research Question:** How are the distribution and growth of lichens affected by sulphur dioxide and ozone levels in the atmosphere?
- ⇒ **Approach:** Thalus diameter and population density data is collected from selected sites in different parts of the city. This data is then correlated with published data on the levels of SO₂ and O₃.

Example from Maths:

- ☞ **Topic:** Archimedes’ calculations of areas.
- ◇ **Research Question:** What is the legacy of Archimedes’ calculations of circular and parabolic areas in today’s methods of integration?
- ⇒ **Approach:** Describe how Archimedes determined the area of a circle, by using inscribed polygons, leading also to his measurement of π . Continue with a description of his method of discovery for calculating the area of the parabola.

Example from French B:

- ☞ **Topic:** The use of ‘verlan’ in spoken French.

- ◇ **Research Question:** To what extent has 'verlan' been rejected by Parisian lycée students in favour of other forms of slang?
- ⇒ **Approach:** Three lycée classes chosen from different parts of Paris, but from the same age group will be a) observed during recreation periods and b) interviewed about their language use and about their relationship to 'verlan'.

Summary – Working with your Research Question

Key things to remember:

- ✓ Avoid generality
- ✓ Avoid un-answerability
- ✓ Avoid questions with obvious answers
- ✓ State your research question as a question

To narrow your question focus on:

- ✓ A specific time period
- ✓ A geographic area
- ✓ A work or author
- ✓ Comparisons
- ✓ One type of source
- ✓ A particular organism
- ✓ A particular phenomenon
- ✓ A combination of focus areas

Research Process

This should be the weightiest part of your Extended Essay process: get this right and you will set yourself up for success. If you've already narrowed down your research question, determining a proper study plan should not be too much of a challenge. It does, however, require a set of skills that are not necessarily immediately obvious. The following section is divided into two sections: one general and one group specific. Make sure that you go through both – do not jump straight to the points relevant to your subject.

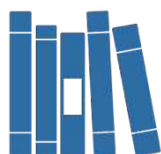
General Advice

Getting started, step by step

- 1) **Background reading:** Do some initial background reading to place your research question in its context and increase your awareness of your chosen field of study. Your supervisor should be able to guide you towards the key texts and resources for this. Textbooks, syntheses and online research can be a good place to start. Seek a range of authors and opinions to ensure that you get the full picture.
- 2) **Develop a hypothesis:** This is an especially crucial step for Group 4 & 5 essays, but it can be useful for other subjects too. Your hypothesis is a predicted outcome of your research based upon what you already know from existing theory identified in your background reading. This will shape the course of your research.
- 3) **Choose your sources:** Determine which kind of sources you would like to examine. Make sure that these relate directly to your research question and that you're using several different types of sources alongside each other. Even if you plan to focus on one type of material (e.g. interviews, data collections) you will need to consult secondary sources as well, to make sure that you understand and process different points of view. Don't limit yourself to an obvious and uninspiring set of sources - you could use film, news coverage, research papers or diaries, all depending on your own approach. Usually, it's advised to find at least one primary source that you can subject to your own, individual analysis.
- 4) **Locate your sources:** This could mean finding somewhere to conduct an experiment (e.g. your school laboratory) or ordering books. Again, planning is essential, so that you don't stock up on piles of material which you won't be able to process, or that you only get hold of literature covering one aspect of the investigation.

Where to find sources

Your school: Speak to your school librarian to find out what you have readily available to you: not just books but also online journals and magazines. Also speak to your supervisor – it may be that they have books of their own that they'd be happy to lend you (of course, take great care of any borrowed items!).



Your local library: Never underestimate it! Some libraries are able to order books for you; arrange inter-library loans and others might help you locate other places to look. Remember to check the library's cataloguing system.

Online: Here you can find official documents, newspaper archives, documentaries, research projects, e-journals and, of course, Wikipedia. Be careful with online sources however, and only cite a text that have been officially published and will not be subject to change by the time your essay reaches an examiner (thus referencing Wikipedia is still a major Extended Essay faux-pas).



Experts in the field: This can be an incredible way to get information, ideas, and scientific resources, if you are lucky enough to get a response. Try writing to a handful of academics, as most are likely to be very busy with their own research!

Locations of interest: Visiting somewhere significant to your research, attending a museum or gallery, or taking a tour of a lab or research centre can be both informative and inspirational. Try hard to make your Extended Essay experience as three dimensional as possible by engaging with what you are writing about.



Key research skills

Once you have your plan in place and your sources to hand, you're good to go! Make sure you are familiar with basic research know-how:

Expanding

Each source you read can be a gateway to a whole new realm of information. Regard your research as a web – sometimes you need to branch out into new territories and be adventurous, building on what you have already learnt. Look at the bibliographies and footnotes of the works you are studying to see if you can identify more material to work with. Make a note of any 'classic' debates or trendsetting authors mentioned to follow up on later. Also prepare for the unexpected: look out for relevant stories in the news. Sometimes the best ideas come from unforeseen sources!

Reading

Adapt your reading style to each source. It's not necessary to read every book on your reading list in its entirety, unless of course it is central to your research. Sometimes it is possible to hone in on the most important information by looking at the index and focusing on certain chapters. Skim reading can allow you to get an overall impression of a book's main argument, without getting lost in the detail. Remember that the IBO only expects you to spend 40 hours in total on your EE – don't allow yourself to become too bogged down. Closer reading of a text (re-reading, marking the text with notes and/or post-its, noting down each piece of major evidence) is crucial for any classic texts, anything directly addressing your own question, or for shorter texts, such as journal articles.

Note-taking

Taking clear notes and keeping them organised will save a great deal of time and effort, and will help you to crystallise your essay argument. If your notes are a mess, your ideas will be muddled. Good rules to follow are:

- **Have a system:** Start the notes for each source you read on a new page if you're writing by hand, or in a new document/note when typing. Keep things organised by creating a filing system (virtual or physical), or using a searchable note-keeping system like EverNote or OneNote.
- **Be selective:** Only include information which has a direct bearing your research question: filter out the noise. A single page of focused notes is far preferable to a 20-page narrative. Once you've finished reading a source, try and summarise the author's key arguments in a sentence or two of your own words to clarify what you will take away from reading it.

- **Reference as you go along:** Write down the page numbers each time you work from a new page (you will need these later for citing/referencing), and be clear when you are directly quoting from a text to avoid accidental plagiarism. You might like to use a reference manager like [Mendeley](#) or [EndNote Basic](#) to keep a track of where you are getting your information from. Both have add-ons for Microsoft Word which allow you to insert references as you type, and automatically generate a bibliography at the end.

Research Process Summary

- ✓ Start off with a good qualitative review of your research area
- ✓ Develop a hypothesis to get good direction in your research
- ✓ Determine what sources to look for and where
- ✓ Use each source to expand your research
- ✓ Take careful notes and use appropriate reading techniques



Subject Group Specific Research Advice

Group 1 – Studies in Language and Literature

Group 1 EEs will involve detailed analysis of one or several texts - poems, novels, novellas, short stories, anthologies, etc. There are three types of Group 1 EE:

- **Category 1:** A study of one or more literary works originally written in the language you're writing in.
- **Category 2:** A comparison between a work (or works) originally written in the language you're writing in, compared with a work (or works) of another language (this can be studied in translation).
- **Category 3:** A study of language based on one or more texts originally produced in the language you're writing in.

Once you have chosen what to focus on, you need to develop a strategy. One of the best things about choosing a Group 1 EE is that it provides a great deal of freedom to make your own interpretations and formulate your own ideas. However, works need to be contextualised, and thorough research will place you in a good position to fully understand what an author is trying to convey. Your research question will determine your exact approach, but you can expect to have to do the following:

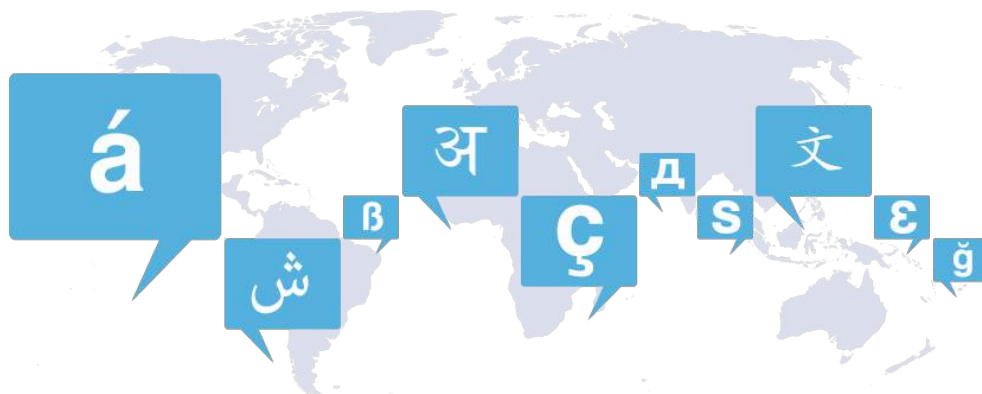
1. **Get hold of your texts:** An extremely simple point, but you would be surprised how many students procrastinate with doing this simply because they have 'read them already' or couldn't find them in the library. The sooner you get hold of them the better – remember that they are the essential core to all your subsequent research. Finally, it might be a good idea to own the texts yourself: somehow, this makes many feel more in control of their reading process, as they feel free to make small notes in the margin and don't have to worry about library fines. But this is of course entirely optional.
2. **Determine your approach:** Use your research question to guide your reading - it is easy to read aimlessly, noticing the beauty of the language or the occasional plot twist. What you really need to do instead is to establish a form of filter: how will you look at the texts? Depending on your question, you might consider looking out for:
 - **Stylistic devices:** Looking at narrative techniques, use of imagery and symbolism, use of colloquial language.
 - **Character development:** Looking at character development and relationships between characters.

- **Movements:** Looking for elements of certain movements or schools within the texts, e.g. beat styles, Romantic imagery.
 - **Themes:** Looking at literary themes or plot elements. These could range from obvious, general ones, such as love, death or crime to more niche and specialized ones.
 - **Theories or concepts:** Applying a theory or concept to your texts. This could be philosophical, political or something generally part of the public debate: looking at Marxist class conditioning, Freudian theories or feminist ideas could help you in developing a more critically engaging answer. Do not, however, embark upon a project using a theory you know little or nothing about – a simplistic level of knowledge will hinder your analysis greatly. Only adopt this approach if you are confident that you can perform the requisite analysis well.
3. **Read the texts:** The first thing to do is to read them at the beginning of the Summer: go through them as you would any other literary work. Enjoy the process and do not speed read or forcibly make notes. Keep a notebook with you as you read, but only take down things of exceptional interest – you will have time for the obvious points later. This will hopefully allow you to familiarize yourself with the content.
 4. **Re-read the texts:** Re-read and take careful notes, armed with a clever selection of materials: post-its, page markers, note books, colour-coordinated pens. As you have to mostly note down your own ideas and analysis, make sure that you keep yourself from getting bored by making the process interactive. Make sure to know your texts as the back of your hand: re-read and re-read again, if necessary. However, keeping careful notes and annotations will save you a lot of time and frustration.
 5. **Read secondary material:** It is surprisingly easy to rely on your own ideas sometimes. The IB guidelines, however, specify that you should always consult secondary material, even in a literature essay. Do not forget this! Also, do not consider this step as boring or somehow less stimulating: you have a wide range of different texts at your disposal. You can choose to look at biographies, author diaries or literary criticism, and even film or theatre adaptations (a great way to see certain themes or symbols more illustratively), so make sure to choose well to suit your needs.

Group 2 – Acquired Languages

This is an Extended Essay written in (and relating to) the subject language and is probably the group with the greatest amount of personal freedom, both in choice of possible topics as well as sources. Below are the three main categories for Group 2 essays, each with a separate research technique.

- **Language:** The essay should be a specific analysis of the language (its use, structure, and so on), normally related to its cultural context or a specific text. For example, it could deal with slang, language bans or regional dialects. Try as far as you can to gather some primary evidence. This could be in the form of questionnaires, language tests or oral interviews. Remember that it could be useful to have a comparative result (from e.g. another region) to aid your analysis, even if you are only specifically looking at one case.
- **Culture and Society:** This type of essay requires you to conduct sociocultural analysis. You can either look at how a particular issue has shaped the form or use of a language by analysing the language itself (e.g. the language used by different media outlets to report on the migrant crisis), or analyse cultural artefacts from a particular language community (e.g. protest songs in Pinochet's Chile 1973-1990). 'Cultural artefacts' is a very broad term: this could mean newspapers, magazines, cartoons, laws or policies, historical records, brochures, art, architecture, film, fashion, food items, brands... the list goes on. Many of these are readily available on the Internet and will thus be a useful for those who do not have access to an area where the language is spoken.
- **Literature:** This is highly similar to the research process for Group 1 (see above). Here the main difference is that all works investigated must have been originally written in the target language. You can choose to focus on a single text, or make a comparison between multiple.



Group 3 – Individuals & Societies

The main element these subjects have in common is the study of human societies, past and present. The methodology for each can vary greatly, ranging from economic modelling to psychology studies to historical text analysis. Because of this variability, some advice that is true for one group 3 subject will not be true of another. This said, there are some things which are common to all great Group 3 EEs. Firstly, make the most of the resources you have available to you. Spend some time exploring all of the different online libraries, archives and collections you can access free of charge. Don't be afraid to use your own local, cultural and social experiences as a basis for your research: you will likely be credited for your originality. You might consider conducting some oral research, by interviewing friends or family, or reaching out to people relevant to your study. Wherever possible, include some primary research: doing so will encourage you to make your own interpretations, rather than relying upon the thoughts of others. There are exceptions to this: psychology essays, for instance, must be based on entirely secondary sources.

Qualitative research is characterised by collecting data that is not directly amenable to numerical manipulation. Examples could include: interviews or other oral testimonials, images, manuscripts, objects, film, video.

Quantitative research is based on numbers. Questionnaires, censuses, polls and measurements of all kinds can all form part of this form of process. Where possible, find a way to process the numbers you collect into meaningful statistics.

Useful free online resources:

- The [British Museum](#) has digitised over 4,000,000 objects in its collection.
- [Project Gutenberg](#) offers over 53,000 free ebooks.
- Over 70,000 works of art can be viewed online at thanks to the [Tate](#).
- [Worldcat](#) is the biggest library catalogue in the world. Need a particular book? Find out which library near you contains it.
- [Social Science Open Access Repository](#), SSOAR contains thousands of open access articles relating to the social sciences and their various sub-disciplines.
- [Archive.org](#) is a vast collection of images, videos and texts.
- The [Wellcome Collection](#) is a unique collection of images and objects documenting medical history through the ages
- Investigate the history of science at [The Science Museum](#)

Group 4 – Natural Sciences

All the subjects forming the natural sciences share a similar research methodology: the collection and processing of measurable data. This involves a number of common steps:

1. **Establish where to collect your data:** Although you are not *required* to conduct your own experiment, it is likely that this will make writing and structuring your essay much easier. If you do choose to do a literature review instead, you will need to present a re-analysis or fresh take on a set of already published results without simply re-stating the work of others. Conducting a new experiment not only prevents IB from questioning your originality in this way, but gives you greater control over your research, making analysing the data and sources of error much easier to discuss. If you do choose to write a literature review, you need to have a clear and original plan in mind before you start.
2. **Develop an experimental procedure:** When designing your experiment, include a detailed explanation of each step you intend to conduct, specific descriptions of the materials you intend to use, and a plan for monitoring and controlling all of your variables (this will be discussed further in the next section). This procedure may be formatted any way that will make it easy for you to follow, and can be structured similarly to those you are used to using for labs in class. Remember, someone following your procedure should be able to easily and accurately reproduce your experiment. Because your experiment is the core of your essay, it is recommended that you work through the procedure multiple times.
3. **Conducting your experiment:** When you are conducting your experiment, follow your procedure exactly as written. Although it is not recommended, if you decide that it is necessary to deviate from your plan, be sure you make these changes to your procedure, as the procedure that you publish in your extended essay should be that which you actually conducted, even if it was not what you initially intended. For most experiments, you will want to complete multiple trials, and it is important that your procedure is consistent between these. If you spend enough time creating a detailed procedure, actually conducting the experiment should be relatively straightforward.
4. **Controlling your variables:** When you are writing your procedure, you should also develop a comprehensive list of variables that you will need to take into account. You will need to classify these as dependent, controlled, or uncontrolled:
 - **Dependent:** This is the variable being measured in your experiment. If you classify a variable as dependent, you need to explain how it will be measured.
 - **Controlled (Independent, Fixed):** A controlled variable is one that the experimenter has control over. An independent variable is one that is manipulated, while a fixed variable is one that is held constant. If you classify a

variable as controlled, you will need to specify whether it is independent or fixed, and explain the steps you will take to control these variables. These steps often become incorporated into the procedure as well.

- **Uncontrolled:** Sometimes you won't find this category among classifications of variables. For most simple experiments all the relevant variables can be classified as either dependent or independent. In more complex experimental designs this won't always be possible. If you need to classify a variable as uncontrolled, you will need to explain why the variable cannot be controlled, how it could potentially influence your experiment, and what steps (if any) will be taken to minimize these effects.
5. **Ethics and procedure:** Finally, remember to make sure that your investigation follows all ethical and health restrictions required by the IBO: your research must not cause harm stress to any living creatures or health problems for humans, be interfering with private and confidential issues (e.g. medical records) or use materials which are directly dangerous to handle (radioactive, carcinogenic etc.).

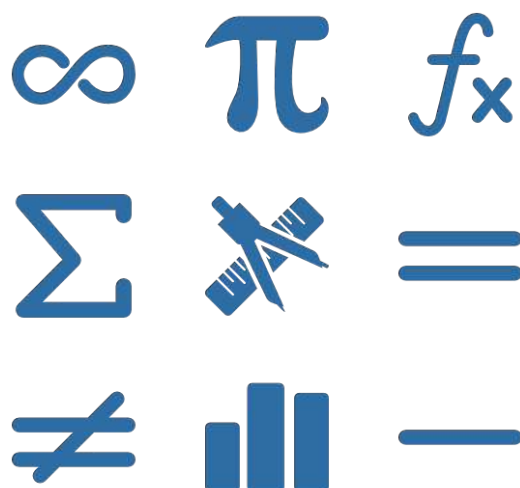
Questions to ask yourself: improving your experimental procedure

- ✓ Is there any way to simplify the procedure? Remember, simpler is better.
- ✓ Is there a way to eliminate or better control existing variables? The fewer uncontrolled variables you have to deal with, the more reliable your data will be and the easier it will be to analyse.
- ✓ Do I have access to all the materials necessary to complete the experiment effectively? If not, you will want to either find substitute materials or develop a new procedure.
- ✓ Do I have a clear method for precise and accurate data collection, and do I have somewhere to record this data? Before you begin, create a sheet use can use to record your data and observations.
- ✓ Do I know with certainty what the outcome will be? If so, you probably need to develop a new procedure. While it is good to be confident in your predication, if your background research has left no room for doubt or discovery, you should revise your experiment.
- ✓ Most importantly, is the design of the experiment mine alone? It is important that you are honest with yourself here. If your procedure is largely a copy of an experiment that has already been done, you are not fulfilling your requirement for independent research. If you have doubts about your procedure, consult your supervisor before going any further.

Group 5 – Mathematics

The first thing to realize is that a Group 5 Extended Essay does not need be based on pure theoretical maths. Instead, it can include any topic that has a mathematical focus. This could include applying maths to real or abstract problems, exploring the history of maths, considering the links between maths and technology, or even thinking about the beauty and elegance of maths itself!

Remember that your essay must be readable to someone with a similar level of mathematical sophistication to an IB student. Consult written sources with such an approach to get a better feel for the technique. Get yourself the right kit: whether some graphing software, a calculator or a spreadsheet programme. If you can, include theoretical debates, especially when working with statistical information: look at mathematical journals, and try and locate key areas of uncertainty etc. Do not over-read: it is not desirable to have consulted too many sources: you should be able to demonstrate how every piece of material which you end up using in your essay is contributing something essential to the investigation. If possible, gather your own data. If you are writing about possibility in games and gambles conduct a couple of tests in different situations and do not simply rely on your own calculations.



Research troubleshooting – Avoid unnecessary complications

Extended Essay research should not be overly complex: any ideas which would require you to consult a type of source which you have no previous experience of handling will not necessarily be a good idea. Remember that you don't get points for the complexity of your research. Similarly, Group 4 examiners will be more impressed by a simpler experiment that is effectively conducted and insightfully analysed than an overly complicated experiment that is less successful. The experiment for one of IB's highest scoring Group 4 Extended Essays simply measured the pH of rainwater in two different cities. The author's in-depth analysis of the data and research to explain the pH differences earned him more points than a more complicated experiment would have. Finally, your research process is meant to be fun and varied: there are not many requirements set in stone here, so make sure to enjoy it properly!

Checklist: The Research Process

Have you...

- ✓ Established an approach to meet your research question?
- ✓ Done appropriate background reading?
- ✓ Used both primary/experimental and secondary sources?
- ✓ Consulted several different types of sources?
- ✓ Consulted sources demonstrating different points of view?
- ✓ Made clear and thorough notes?
- ✓ Noted the title, author, publisher, and publication date for each of your secondary sources?
- ✓ Always acknowledged quotations in your notes?
- ✓ Always noted source criticisms and/or your own reflections?

The Writing Process

Now you have a research question and some research to help you in answering it. Where to go next? Simply sitting down and starting writing will not get you very far – most students attempting to do this end up getting stuck and confused halfway through. Half of the battle is in the planning: the writing process consists of several steps all of which are not necessarily about actually typing.

Reading the assessment criteria

Hopefully, of course, you will have done so before beginning to research. It is, however, necessary to have a look at specific criteria for how to write introductions, conclusions and how to analyse. Also, it's important that you familiarize yourself with the formal criteria before you write and that you feel comfortable employing the necessary techniques: avoid the situation of a past student, who did not know how to footnote and thus ignored it throughout his first draft. The time it took to find the details for his quotes and paraphrases was definitely not worthwhile.

Outline and structure

Do not skip this step! Use a good outline and structure to focus your writing and end up with a better essay than you otherwise would. In your outline you will get an overview of your main arguments and what supporting evidence you have gathered. You will see how your data fits your analysis and ultimately how everything you have done connects back to your research question. You will also need to choose how to present the material in the most convincing way. Make your final plan detailed and around 2 pages in length.

Beginning your outline

Begin by processing your notes and summarising each source you have consulted. Think of answers to the questions such as 'what does this source tell me?' and 'where in my essay does this source fit in?'. Remember that a versatile source might be useful in several places in your essay; do not discard one just because you have found a place for it already. When looking for answers to the questions above, constantly keep in mind that you are trying to answer another question – your research question! Each note and each step you take should be geared towards helping you to respond to your research question. If you find yourself losing yourself in the details of your essay, that it, so to speak, starts generating its own questions and side-tracks then you probably are answering something that is too broad to fit into the Extended Essay format. Take a

step back and refocus! A useful way to get an overview of what you are doing, regardless if you are planning a physics experiment or writing a literary essay is to use mind maps. Use it to connect your ideas and thought processes and at later stages in your writing

Creating a plan/structure

Groups 1 & 2: Here you will have a great deal of creative freedom in how you choose to plan your essay. Usually, some teachers will not recommend that you overly plan a literature extended – headings, for example, could risk ruining the natural flow of your essay. Others, on the other hand, will want you to hand them your plan with all your supporting quotes/information before you start writing. What you choose to do should be based on personal considerations and those of your topic: for example, a question relating to one work only could require a clearer break-up, as it could otherwise risk becoming narrative. You will probably find it easier to get an overview of your essay if you work with headers during your planning process even if you aren't going to write them out in the actual essay!

Group 3: Here it might be good idea to make informed use of headings and subheadings. Again, these will have to heavily depend on your topic. You could try outlining by:

- **Idea:** From the traditional views on the topic to the more recent.
- **Investigation steps:** Useful if your research covered several separate steps simultaneously (different sample groups, looking at different regions).
- **Source:** Useful for those of you who have consulted many primary sources and would like to discuss them critically in order to answer the question.
- **Timeline:** E.g. event-by-event. Remember to always write down the advantages and disadvantages of any outlining you might settle upon. Ask yourself: which elements of the topic are not well presented in your outline? Have you given yourself enough room for extensive analysis?

Group 4: Regardless of whether you decide to write an experiment-based or a literature-based essay, your final essay should look like an extended lab report. Using the headings in the skeleton structure presented in the text box below will not only give coherent structure to your argument, but will help ensure that you address each of the necessary extended essay criteria. Additional headings and subheadings can be added to meet topic-specific needs, but this general structure provides a viable model for a Group 4 essay.

Examples of structures

History

“When was life in post-war Soviet Union normalized?”

Subheadings:

1. Defining Soviet normality
2. The end of the war: what had been lost and what was hoped for?
3. 1948 as a turning point

Comments: This approach has enabled the student to discuss any debates in the first subheading, as well as any methodological issues. The two subsequent headings allow for some in-depth source analysis. The third part allows for a clearer argument in answer to the question. However, the number of subheadings is a bit scant to allow for detailed analysis.

Politics

“Which social and political values should a modern British Conservative party seek to conserve?”

Subheadings:

1. The ghost of the gent: problems of Tory self-perception in ideological context
2. The Iron Lady complex: how to be friends with the party
3. What is to be done? - a grassroots perspective Gradualism for the 21st century: environment and culture

Comments: The first two points of the outline deal with the common views of the Conservative party, both from an internal and external point of view. The focus on problems highlights the need for the party to reform itself to meet current demands. These points also allow the student to demonstrate knowledge of key debates etc. The third point draws from primary research (e.g. interviews with party activists) and shows popular perceptions of the party's direction. This also firmly roots the investigation in the present. Finally, the last heading allows for a more direct take on the question and directly indicates the complexities of 'conservation'.

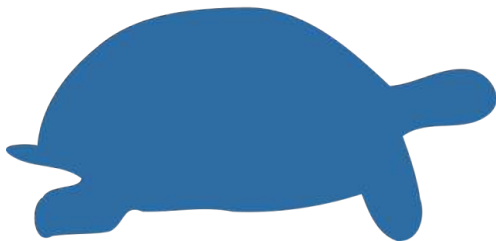
Group 4 Subjects (The Sciences)

1. Introduction: Research Question Hypothesis and Explanation of Hypothesis
2. Necessary Background Information: This information may be included in its own subheading but could also be incorporated into other sections.
3. Materials and Methods: Discuss the materials and the specific procedure performed to collect your data.
4. Variables: Discuss the variables and how you will control them
5. Data Collection: Use graphs, tables, and diagrams to present the data you collected
6. Analysis of Data: Use statistical tests, calculations, and other methods to analyse your data
7. Evaluation and Error Analysis: Evaluate the effectiveness of the experiment, its shortcomings, and whether or not the research question was answered
8. Conclusion: Discuss what the experiment showed, and whether or not your hypothesis was correct



Start typing

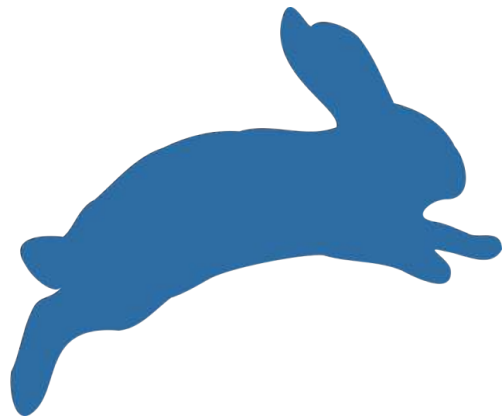
Finally, after much hard work you are allowed to start writing up your ideas. Do not wait too long before embarking on this step - once you have a working structure, you should begin typing as soon as you can. Otherwise, you might forget some of your more insightful ideas or lose part of your focus. Write whilst you are still fully emerged in your project.



Writing Slowly

This means taking the time to make sure that each sentence flows naturally from the other, making sure that you are incorporating quotes seamlessly into your text, noticing how your language is developing.

- ✓ **Advantages:** The result will be more elegant, with fewer mistakes. Scruffy first drafts take a lot longer to edit.
- ✗ **Disadvantages:** Takes a long time. Remember that you have other pieces of work to be focusing on as well. Also beware of getting bogged down in the detail and losing focus.



Writing Quickly

This might be useful even when you are not racing the clock. If you're struggling, it's often a good idea to just get something down on paper to work with, rather than agonising over creating a perfect first draft.

- ✓ **Advantages:** You will be able to feel where your argument is going. It will also help you in developing a more forceful and convincing style.
- ✗ **Disadvantages:** You might lose out on important details or omit a certain step. You run the risk of rambling, and your draft will probably need more editing.

The best idea is, of course, to develop a mixture of these two strategies. It is often useful to write your introduction and conclusion slowly and with great care and then type up a sub-heading as quickly as possible. Pause and reread before moving onto the next heading. This way your writing will become more dynamic and you can reap the benefits from both the approaches listed above. Remember that writing is not as straightforward as it seems: the balance between slow and fast might seem obvious to some of you, but as you have probably never written an essay this length before you will not have felt this balance in practice. Finally, make sure that you have time to proofread before you hand in your first draft. Equally, do not become too perfectionist: you will probably have ample opportunity to check for weaknesses in your writing style later on. When you get your draft back, look through your teacher's comments thoroughly and, again have a new look at the assessment criteria before preparing a final draft.

Summary – Writing Process

- ✓ Familiarize yourself with the criteria
- ✓ Work hard on your outline and structure
- ✓ Make sure you are always responding to your research question
- ✓ Use a mixture of writing strategies

Assessment Criteria

Assessment Criteria

Treat the Assessment Criteria as your Extended Essay Bible and make sure that you don't miss out on any easy points simply because you haven't read them thoroughly enough. Consult this checklist before, during and after your completed assignment. Never ever disregard the criteria! Even if you feel that something is interfering with your own vision of the project. Most of the time, the criteria will be more helpful than they are limiting.

The Best-fit approach to marking

Remember that your examiner will be considering several aspects when deciding which mark to award you for each criterion. This means you need to be aware of all of the different things you are being assessed on for each: if you let one aspect slip, this may bring your mark for the whole criterion down. The things taken into consideration for each criterion are summarised below:

Criterion A: Focus and Method (6 marks)	Criterion B: Knowledge and Understanding (6 marks)	Criterion C: Critical Thinking (12 marks)	Criterion D: Presentation (4 marks)	Criterion E: Engagement (6 marks)
<ul style="list-style-type: none"> • Topic • Research question • Methodology 	<ul style="list-style-type: none"> • Context • Subject-specific terminology and concepts 	<ul style="list-style-type: none"> • Research • Analysis • Discussion and evaluation 	<ul style="list-style-type: none"> • Structure • Layout 	<ul style="list-style-type: none"> • Process • Research focus

Whilst most marks are on offer for the critical thinking you show in the main body of your essay (research, analysis, discussion and evaluation), these are probably the hardest to receive. You will get a great deal of marks for just nailing the basics: doing your Reflections on Planning and Progress form well to show engagement, laying out your essay properly, using good terminology, having a good RQ and method... Don't miss out on these easy marks! Whilst content is obviously very important, a well planned and laid out essay will receive a great deal of marks.

So what do these criteria actually mean? Let's break it down:

Criterion A: Focus and Method (6 marks)

“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” (IBO, 2016:101).

This criterion focuses on three main aspects:

- 1. How well you have communicated your topic**
Have you clearly explained what it is that you are investigating, and why it is a valid topic? Does your chosen topic lend itself well to investigation as part of your chosen IB subject?
- 2. The clarity and scope of your research question**
Does your essay discussion actually answer your research question? Is your research question clearly phrased? Is the question you've chosen too broad/narrow to be treated effectively in 4000 words?
- 3. The completeness of your research methodology**
Are the sources and methods you've chosen relevant and appropriate? Have you shown that you've chosen them in an informed and effective way?

Criterion B: Knowledge and Understanding (6 marks)

“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.” (IBO 2016:102)

This criterion focuses on two main aspects:

1. **How good your knowledge and understanding of the topic is**
Have you chosen the best and most relevant sources available to you? Have you demonstrated clear and coherent knowledge of the topic, discipline and issues involved? Have you fully understood your sources and used them effectively?
2. **Your use of terminology and concepts**
Do you use subject-specific terminology and concepts accurately the whole way through your essay? Where you use jargon, have you showed that you really understand what it means?

Criterion C: Critical Thinking (12 marks)

“This criterion assesses the extent to which critical-thinking skills have been used to analyse and evaluate the research undertaken”. (IBO 2016:103)

This criterion focuses on three main aspects:

1. **The quality of your research**
Are your research techniques appropriate to your research question? Have you applied them in a consistently relevant way?
2. **The quality of your analysis**
Have you analysed your research in an effective way that is clearly focused on the research question? Have you avoided including less relevant research?
3. **The quality of your discussion and evaluation**
Is your argument well structured and coherent? Does it follow an effective and focused path grounded in your research? Does your conclusion clearly reflect the evidence you’ve presented or does it come out of nowhere? Have you critically evaluated your research and suggested problems/limitations/improvements?

Criterion D: Presentation (4 marks)

“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”. (IBO 2016:105).

This criterion focuses on one aspect:

1. Your presentation

Does your essay structure follow expected conventions for the topic/argument/subject you're doing? Is it well laid out? Does your structure and layout make your essay easy to read, understand and evaluate?

Criterion E: Engagement (6 marks)

"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." (IBO 2016:105).

This criterion focuses on one aspect:

1. Your engagement

Have you shown that you have learned from and responded to setbacks when researching? Have you shown that you personally and intellectually engaged with your research? Have you shown authenticity, intellectual initiative and/or creative approach?

Subject-specific interpretations



IMPORTANT: Remember that examiners have different sets of guidelines for each IB subject which tell them how to interpret the assessment criteria and award marks. This means that the emphasis, and how marks are awarded, will vary from subject to subject. To understand what is expected of students writing in your chosen subject, you must speak to your supervisor who will have the full Assessment Criteria.

Presentation

In order to make your Extended Essay look like a piece of academic writing would in the real world, you must follow certain rules:

- Choose a readable, 12-point font
- Double space between words
- Number your pages
- Do not put your name or school on the title page or headers
- Label any illustrations/maps/charts/diagrams. It is useful to number them (Figure 1.1, 1.2, 1.3, 2.1, 2.2, 2.3 etc) so that you can easily refer to them in your discussion.
- Don't use footnotes or endnotes for anything other than referencing, unless it is appropriate. You can't use them to evade the word limit!
- Examiners will not read any appendices, so make sure that any essential information contained in them is included in the main body of the essay.

Citations, References and the Bibliography

Citations must be used to acknowledge the work of others. Anything which is not entirely your own work (whether it be an idea, a quote, an image, a video, or a statistic) should be credited to its creator, even if you are paraphrasing. Failing to do this is plagiarism, and will be viewed by the IBO as academic misconduct, so always err on the side of caution. Citations can either be embedded in the text, or included as footnotes.

References give full details of all sources cited in your essay, so that a reader can easily locate them and read them for themselves. They should be included in an alphabetical list at the end of your essay called the Bibliography. Be careful to only include sources you have actually cited in the text: if you read a book but didn't cite it, don't include it.

There are various different styles you can use to cite and reference. You can learn about them in the IBO Guide to [Effective Citing and Referencing](#), and your supervisor will be able to advise you on the most appropriate one to use for your essay. The key thing whichever style you use is consistency: pick a style and apply it in the same way every time. Remember that you can use a reference manager to speed things up and minimise the chance of mistakes. [Mendeley](#) and [EndNote Basic](#) have add-ons for Microsoft Word which allow you to insert references as you type in your chosen style, and automatically generate a bibliography at the end.

Finishing

If you've made it to this point: congratulations! The Extended Essay is a lot of work and all those who have produced a final draft should feel proud of themselves. If you doubt the quality of what you've written, do not worry. Usually you are simply too caught up in your essay to be able to have any real perspective on the matter. There are, however, a few steps that you could use to perfect your finished text.

Proof-read

You will inevitably make errors - the author's blindness towards his own text is a curious yet common phenomenon. It is also important not to rely too heavily on spell checks and word processors, as they can lull you into a false sense of security (one student ended up writing 'fro' instead of 'for' throughout his essay!).

Allow others to proof-read

This deserves its own point. Family members, friends, teachers - you can choose different people for different reasons: their language style, their knowledge, their brutal honesty or their willingness to help. Listen carefully, even if some advice is threatening your most beloved paragraphs.

File it away

It is advisable to leave your finished essay be for a while, even if it's only overnight. Any subsequent re-reading allows you to take a more objective view of the strengths and weaknesses of your text. Imagine that you are looking at someone else's work.

Keep up appearances

Make sure that your layout is neat and consistent - your text should seem inviting to read. Add a decorative frame to the title page if you want to, make sure that your images are placed exactly right and that you are using the right form of spacing throughout. Do not add too much at this stage - you should rather aim to streamline the whole essay and not turn it into the Extended Essay version of an arts and crafts project.

Double-check the assessment criteria

Again, go through each of the formal assessment criteria, carefully checking that you have included everything. Don't expect to know the criteria by heart. Look at general

advice as well as checklists and try and place yourself in the situation of the examiner. How would you mark your own script?

Check for plagiarism

Your examiner will be able to tell whether or not you have taken ideas from somewhere else or if you've bought a whole essay. Remember: mistakes like these can result in the loss of your whole diploma. Be mindful of accidental plagiarism: it is very easy to copy out useful sentences from a source into your notes, and paste them in your essay later without citing them properly. For extra peace of mind, you could submit your essay to a plagiarism checker like [WriteCheck](#), but this definitely isn't a requirement.

Hand it in

This speaks for itself. Just do it (on time)! Aim to hand it in a few days before the deadline if you can to avoid leaving things until the last minute.

Preparing for the final reflection session

It's not all over as soon as your essay is handed in. You will have a final reflection session with your supervisor called a viva voce. Your supervisor will be aiming to assess two main things: whether the work you have submitted is entirely your own, and how engaged you have been with the process. Remember that there are 6 marks available for engagement, so now is the time to demonstrate it! To prepare, re-read your essay and have a think about what you have learned. Think about how the research process went and whether there is anything that you would do differently next time. Think about the key takeaways of your research – have you uncovered any new questions to be answered in the future? Most importantly: what have you learned about yourself? Even if you've only taught yourself how to read larger amounts of text or how to work with a supervisor, note it and acknowledge it properly. Everyone learns something from the Extended Essay, even if it's personal and not academic.

Final words

That's all there is to it! Once you're finished, take the time to acknowledge all that you have achieved, and think about what you have learnt from the process. No matter what the outcome, you will always have the skills and self-awareness that you have gained through this process. Remember that this is your first attempt at this kind of work and you are not expected to get everything right. Also bear in mind that that the EE only contributes to a potential 3 core points (really it's only worth 1.5 points maximum!), so it's not worth worrying over during the second term of IB2. Instead, get your head back in the game so that you can ace your other Internal Assessments and exams. But don't forget to have a good celebrate and a well-earned rest first! Until then, work hard, and the best of luck!

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