

Albert Einstein High School
International Baccalaureate Programme



**EXTENDED ESSAY
STUDENT MANUAL**

2022 Graduates

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INTRODUCTORY MATERIAL

Schedule of Student Due Dates

for Junior Year

by this date:	the student will...	form(s)	submit to
2/19	submit EE preliminary proposal	A	Krauchi
3/9-12	meet with supervisor to discuss EE Proposal and potential sources	B & C	supervisor
3/15	submit documentation of meeting with supervisor to discuss EE Proposal and potential sources	B & C	Krauchi
3/17	enter extended essay subject, topic description, and research question in managebac	none	alberteinstein.managebac.com
3/23	read about reflections in manual, write first reflection, and enter it on managebac	none	alberteinstein.managebac.com
4/7-9	meet with supervisor to discuss EE research notes and annotated bibliography	D	Supervisor
4/12	submit documentation of meeting with supervisor to discuss EE research notes and annotated bibliography	D	Krauchi
4/21-26	meet with supervisor to discuss introductory paragraph and thesis statement	E	Supervisor
4/28	submit documentation of meeting with supervisor to discuss introductory paragraph and thesis statement	E	Krauchi
5/13-20	meet with supervisor to discuss EE progress and outline	F	Supervisor
5/21	submit documentation of meeting with supervisor to discuss EE progress and outline	F	Krauchi
6/8	submit 2 drafts of EE rough draft, 1 draft of self-evaluation form, and rubric	G & H	EE supervisor www.turnitin.com
6/10-14	meet with supervisor to discuss rough draft and scored rubric	H	
6/15	submit documentation of meeting with supervisor to discuss rough draft	G & H	Krauchi
6/15	write and upload interim reflection to managebac	none	alberteinstein.managebac.com
	work on revision and redrafting over the summer		

The Extended Essay at a Glance

The extended essay is an in-depth study of a focused topic chosen from the list of available Diploma Programme subjects for the session in question. This is normally one of the student's six chosen subjects for those taking the IB diploma, or a subject in which a student has a meaningful background and an interest. It is intended to promote academic research and writing skills, providing students with an opportunity to engage in personal research in a topic of their own choice, under the guidance of a supervisor (an appropriately qualified member of staff within the school). This research leads to a major piece of formally presented, structured writing, in which ideas and findings are communicated in a reasoned and coherent manner, appropriate to the subject chosen. It is mandatory that all students undertake three reflection sessions, which include a short, concluding interview, or *viva voce*, with their supervisor following the completion of the extended essay. An assessment of this reflection process is made under criterion E (Engagement) using the *Reflections on planning and progress form*. The extended essay is assessed against common criteria, interpreted in ways appropriate to each subject.

Key features of the extended essay

- The extended essay is compulsory for all students taking the Diploma Programme.
- A student must achieve a D grade or higher to be awarded the Diploma.
- The extended essay is externally assessed and, in combination with the grade for theory of knowledge, contributes up to three points to the total score for the IB Diploma.
- The extended essay process helps prepare students for success at university and in other pathways beyond the Diploma Programme.
- When choosing a subject for the extended essay, students must consult the list of available Diploma Programme subjects.
- The extended essay is a piece of independent research on a topic chosen by the student in consultation with a supervisor in the school.
- It is presented as a formal piece of sustained academic writing containing no more than 4,000 words accompanied by a reflection form of no more than 500 words.
- It is the result of approximately 40 hours of work by the student.
- Students are supported by a supervision process recommended to be 3–5 hours, which includes three mandatory reflection sessions.
- The third and final mandatory reflection session is the *viva voce*, which is a concluding interview with the supervising teacher.

Prior Learning

The extended essay is a unique task for all students, both those who are studying for the full IB diploma and course students who choose it as an option. While no particular background is formally required to undertake the extended essay, you are strongly recommended to carry out research in a subject area you are currently studying to ensure that you have sufficient subject knowledge to complete the task. If you have a background in the subject that is not from your school studies, you must ensure that you are familiar with the subject from a Diploma Programme perspective. Ms. Krauchi is able to provide you with some IB subject-specific information and guidance.

For those students completing a world studies extended essay, it is strongly recommended that they are undertaking a course of study in at least one of the subjects chosen for their essay. A familiarity with research methods would be an advantage; however, when students begin the extended essay, part of the process is to develop an understanding of the methodology most appropriate for the research area within the chosen subject. Developing this understanding will be undertaken with the support and guidance of their supervisor, Diploma Programme and/or extended essay coordinator and librarian.

The Nature of the Extended Essay

The extended essay is a unique opportunity for students to explore an academic area in which they have a personal interest. This takes the form of an independently written research paper that allows students to demonstrate their passion, enthusiasm, intellectual initiative and/or creative approach for their chosen topic. Such topics can range from focused, in-depth analyses of specific elements of a subject to critically evaluating responses to issues of global significance in the case of the world studies extended essay. Students develop important transferable skills such as research, critical thinking, and self-management, which are communicated in the form of an academic piece of writing. Emphasis is placed on engagement and reflection on the research process, highlighting the journey the student has made on an intellectual and personal level and how it has changed them as a learner and affected the final essay.

Students complete an extended essay in a specific discipline or in one of the interdisciplinary options available. In a disciplinary essay students must demonstrate their knowledge and understanding of the theories, tools and techniques of a specific discipline explored through a topic of their choice. Students who choose a world studies extended essay must demonstrate how their understanding of an issue of contemporary global significance is enhanced by taking an interdisciplinary approach.

An important aim of the extended essay, as part of the Diploma Programme core, is to support and be supported by the academic disciplines. Whichever subject is chosen, the extended essay is concerned with exploring a specific research question through interpreting and evaluating evidence, and constructing reasoned arguments. In undertaking the extended essay, students model many of the elements of academic research by locating their topic within a broader disciplinary context (or issue in the case of a world studies extended essay), justifying the relevance of their research and critically evaluating the overall strength of the arguments made and sources used. Guided through this process by a supervisor, students are encouraged to reflect on insights gained, evaluate decisions, and respond to challenges encountered during the research.

Embedded within the process of writing the extended essay are many elements of the *approaches to learning* (ATL). While research skills are fundamental to successful completion, other ATL skills are implicit in the task. As the extended essay is an independent task, it requires students to self-manage by developing organization and affective skills, including mindfulness, perseverance, resilience and self-motivation. The process of researching and writing the extended essay represents the learner profile in action. Being open-minded, principled and reflective are aspects of the student experience within the extended essay. The extended essay provides students with the opportunity to become more internationally minded by engaging with the local and global communities on topics of personal inquiry. The development of the learner profile attributes help to unify IB learners in a larger community in this shared experience.

The extended essay is a challenging and rewarding experience, which prepares students for different pathways beyond the Diploma Programme by developing skills valued by both tertiary education and employers. The extended essay embodies the essence of an IB education in developing inquiring, critical, lifelong learners.

Aims and Assessment Objectives

The aims of the extended essay are for students to:

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

In working on the extended essay, students are expected to achieve the following assessment objectives.

Assessment objectives	
Knowledge and understanding	<ul style="list-style-type: none"> ● To demonstrate knowledge and understanding of the topic chosen and the research question posed. ● To demonstrate knowledge and understanding of subject specific terminology and/or concepts. ● To demonstrate knowledge and understanding of relevant and/or appropriate research sources and/or methods used to gather information.
Application and analysis	<ul style="list-style-type: none"> ● To select and apply research that is relevant and appropriate to the research question. ● To analyse the research effectively and focus on the research question.
Synthesis and evaluation	<ul style="list-style-type: none"> ● To be able to discuss the research in terms of a clear and coherent reasoned argument in relation to the research question. ● To be able to critically evaluate the arguments presented in the essay. ● To be able to reflect on and evaluate the research process.
A variety of (research) skills	<ul style="list-style-type: none"> ● To be able to present information in an appropriate academic format. ● To understand and demonstrate academic integrity.

Getting Started

- Choose a subject from the available extended essay list. See Diploma Programme coordinator or extended essay coordinator for details.
- Ensure that the starting point for your essay is a subject that is available, or in the case of the world studies extended essay, an issue of global, contemporary significance within one of the six world studies themes.
- Observe the regulations with regard to the extended essay, including the IB's *ethical guidelines*.
- Read and understand the subject-specific requirements for the subject in which you intend to complete your extended essay, including the interpretation of the assessment criteria.
- Meet all internal deadlines set by your school in relation to the extended essay.
- Understand concepts related to academic honesty, including plagiarism and collusion, for example, and ensure that you have acknowledged all sources of information and ideas in a consistent manner. This also includes understanding the implications of the *General regulations: Diploma Programme* should there be a breach of these.
- Attend three mandatory reflection sessions with your supervisor, the last of which is the *viva voce*.
- Record your reflections on the *Reflections on planning and progress form* for submission as part of the assessment of criterion E (engagement).

Reflection in the Extended Essay

Student reflection in the extended essay is a critical evaluation of the decision-making process. It demonstrates the evolution and discovery of conceptual understandings as they relate to the research question and sources. Reflection demonstrates the rationale for decisions made and the skills and understandings developed, as well as the authenticity and intellectual initiative of the student voice. Effective reflection highlights the journey the student has taken to engage in an intellectual and personal process as well as how it has changed him or her as a learner and affected the final essay.

As a part of the extended essay, students will be expected to show evidence of intellectual growth, critical and personal development, intellectual initiative and creativity. This should be facilitated by the use of the Researcher's reflection space. The most successful students will be able to show an appreciation that learning is complex and that they are able to consider their actions and ideas in response to challenges that they may experience during the research process.

The depth of reflection will demonstrate that the student has constructively engaged with the learning process. Such engagement provides evidence that the student has grown as a learner as a result of his or her experience. More importantly, it demonstrates the skills that have been learned.

These skills may include:

- critical thinking
- decision-making
- general research
- planning
- referencing and citations
- specific research methodology
- time management.

Reflection must be documented on the *Reflections on planning and progress form* and is explicitly assessed under assessment criterion E (engagement).

More detailed information about the Reflection process and expectations can be found on pages 18-22 of this manual.

The Supervision Process

In order for students to be successful in the completion of the extended essay, the process needs to be structured and must incorporate a supervision process of 3–5 recommended hours to include three formal reflection sessions between the student and the supervisor as well as supervision sessions called check-in sessions.

The recording of reflections on the *Reflections on planning and progress form* is mandatory and must be submitted with the completed extended essay for assessment under criterion E (engagement). To prepare for these sessions and ensure that they are meaningful and purposeful, the student needs to undertake a number of preparatory steps which are outlined in the following section.

Your supervisor must be a faculty member here at Albert Einstein High School. The faculty member does not need to be *your* teacher or even necessarily a teacher of the subject in which you'll be writing your extended essay. There are many faculty here at Einstein who have specialized in, have education in, or simply possess specialized knowledge in many subjects, areas, and topics which they do not currently teach. Open your mind to the possibility of working with someone whom you do not currently know.

Check-in sessions

Students are encouraged to meet with their supervisor in between (and in addition to) the formal reflection sessions. Supervision time should meet the needs of the individual student; therefore, the frequency and duration of these meetings will depend on the needs of the student and the supervisor's requirements. Supervision time may consist of an occasional 10-minute check-in to discuss a timeline or clarification of a comment made by the supervisor. It may also include a more lengthy discussion about particular issues, for example, regarding access to resources. These supervision sessions do not form part of the formal reflection process and do not, therefore, need to be reported on the *Reflections on planning and progress form*. However, they nevertheless form an important part of the supervision process.

Formal reflection sessions

These are the mandatory sessions that must be recorded on the *Reflections on planning and progress form*. It is recommended that these sessions last 20–30 minutes. During these sessions students should share excerpts from their Researcher's reflection space with their supervisor. These sessions should focus on progress made so far and set clear objectives for moving forward in the research process. Students should be prepared for these sessions and the meetings should be a dialogue guided by questions posed by the supervisor. Examples of these are given in the document *Guiding student reflection*.

INTO THE PROCESS

Choice and Treatment of the Topic

Choice of topic

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, *e.g.*, conference papers, essays, book chapters or journal articles. A school librarian can advise on this
- conversations with teachers, fellow students and librarians.

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 will find it useful to keep notes for their future 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 and databases 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.

Treatment of the topic

Once students have identified their topic and written their research question, they can decide how to research their answer. They will write a proposal, a statement outlining their broad approach. Remember that the definitions of *research* and terms such as *primary data* and *secondary data* vary 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 supervisors. Librarians are also a great source of information, advice and support for students.
2. Students risk their diploma if found guilty of academic misconduct:
 - a. **Academic honesty:** students' work will be checked in terms of the IB's academic honesty policy and so all students must ensure that they are familiar with this.
 - b. **"Double-dipping":** students must ensure that they are not using material submitted for any other assessment component as part of their EE submission. Although it is technically allowed, it is best to avoid sharing resources between IB components. Resources used for IA, for example, *could* be used as part of the EE, but no content can be duplicated at all, so to prevent any cross-over the candidate would need to have a substantially different angle that s/he will investigate and there must be a complete shift in focus.

Available Subjects

Subject Area	Prerequisites/Considerations
Studies in Language and Literature (English) (Group 1)	Look at one or several pieces of literature; analyze how the writer achieves theme or purpose. Work of study or one of two must have originally been written in English. Students may also choose to analyze texts which include oral, written and visual materials present in society (Category 3). Student research should also consult secondary sources which include scholarly work (journal articles, reviews, etc.) about the primary sources.
Group 2 (Foreign Language)	Should be strong in the language because <u>the paper must be written in that language</u> (e.g. Spanish, French, Japanese); paper may focus on language or culture
Biology	Enrollment in IB Biology recommended. Students are encouraged to pursue questions that can be analyzed through data collected by the student. Essays that focus on human disease should focus on biological aspects rather than on medical diagnosis and treatment.
Chemistry	Completion of Chemistry or enrollment in IB Chemistry recommended. Students are encouraged to pursue questions that can be analyzed through data collected by the student.
Dance	Dance as expressive movement with intent, purpose and form that communicates through the body and gesture of the dancer should be at the heart of an extended essay in dance. A particular dance or a particular style of dance may be chosen as the core focus of the extended essay.
Environmental Systems and Societies	Enrollment in IB Environmental recommended. Papers focus on the interaction of humans with the environment and the effects of that interaction.
Film	It helps to have had film study but it's not mandatory; papers look at film techniques as one would look at writer's techniques in an English paper. Student should undertake the study of at least two films.
Global Politics (formerly Human Rights, Politics, and Peace and Conflict)	Paper focuses on the nature of problems in political terms, policy-making and the role of government institutions. Students should consult the syllabus for this course to be sure they are addressing political theory. The topic students choose must be contemporary which is defined as events during a students' lifetime.
History	Papers are not descriptive, but rather look at different historical perspectives of events, people or movements. To be defined as "history," events must be more than 10 years in the past.
Literature and Performance	Papers in this category provide students with the opportunity to consider the relationship between literature and different kinds of performance, focusing on the relationship between the text and the performance. Students should look at this relationship from a number of different viewpoints that could include research into the original text, its genre, the themes it treats, its structure, the cultural and socio/historical context of which it is part.

Math	Papers could address the applicability of mathematics to solve both real and abstract problems, the beauty of mathematics as in, for instance, geometry or fractal theory, the elegance of mathematics in the proving of theorems as in, for example, number theory, the origin and subsequent development of a branch of mathematics over a period of time, measured in tens, hundreds or thousands of years.
Music	Should have some music experience such as chorus, orchestra, band or guitar; can focus on a composition or an artist.
Philosophy	Topics may be stimulated by work done in class, by current events, by issues of contemporary debate, by discussion, by private reading and/or reflection, or by conceptual features of belief systems not previously encountered by the student.
Physics	Completion of Physics or enrollment in IB Physics recommended. A physics extended essay should have a basis in physical theory and emphasize the essential nature of the subject. Students are encouraged to pursue questions that can be analyzed through data collected by the student.
Psychology	Must be enrolled in psychology. Psychology extended essays must be supported with careful and appropriate citation of relevant theories and/or studies within psychology.
Sports, Exercise and Health Science	The topic chosen must allow for an approach that distinctly relates to an analysis of the development of human performance in sports or exercise or an understanding of the role of exercise or nutrition in improving or maintaining health and managing disease. Must conduct a study or be able to look at studies that have been done.
Theatre	Should have some background in theatre – courses or work on a show.
Visual Arts	Should have some experience with an art class.
World Religions	In a world religions paper, a rigorous attempt is made to maintain objectivity in the analysis and evaluation of religions. This requires, at the very least, an authentic attempt to understand the beliefs, values and practices of the religion being studied by using language and concepts drawn from that religious tradition.
World Studies	An extended essay in world studies provides students with an opportunity to undertake an in-depth, <u>interdisciplinary</u> study of an issue of contemporary global significance . Students are required to: <ul style="list-style-type: none"> ● Identify an issue of global importance ● Identify a local manifestation of the issue of global importance ● Develop a clear rationale for taking an interdisciplinary approach and use the conceptual framework/vocabulary of two Diploma Program subjects. Students should choose to explore a topic from one of the following global themes: <ul style="list-style-type: none"> ● Language, culture and identity ● Science, Technology and Society ● Equality and Inequality ● Conflict, peace and security ● Economic and/or environmental sustainability ● Health and development

Finding a Supervisor

Many students worry about finding a supervisor and some even select a topic based more upon their comfort level with a particular teacher and the subject that teacher teaches than upon their own interests and plans for future study. This approach to the extended essay is neither wise nor effective. Students should pursue their own interests and passions and talents. Finding a supervisor is never impossible, and there is no need for you to know your supervisor before commencing the extended essay process. You will get to know him/her well enough in that process!

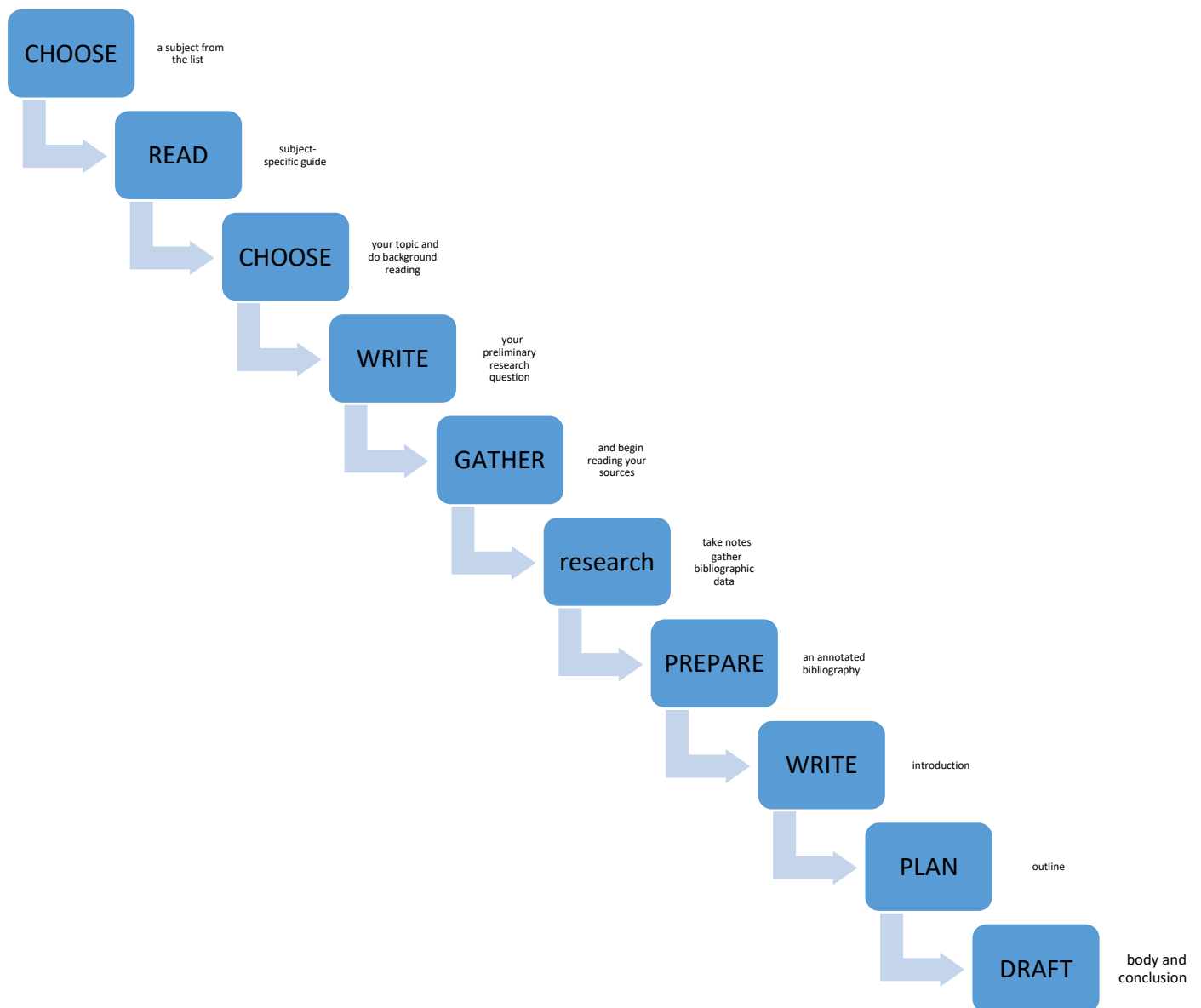
Some teachers who regularly have extended essay supervisees have a process in place by which they select the students they will supervise. For that reason, if you have your heart set on a particular teacher to be your supervisor, you should see that teacher immediately to find out if s/he has any requirements. If you are at a loss, talk to Ms. Krauchi about possible supervisors and how to find them.

RESEARCHING AND WRITING THE EXTENDED ESSAY

Initial Guidance

Supervisors are recommended to advise their students on how to conduct research and write the extended essay, paying particular attention to the following key areas.

When researching the extended essay, students should follow the steps below:



The Research Question

Developing a research question

All students, regardless of the subject chosen, must frame their research question as a question. A hypothesis or statement of intent is not acceptable. The reason for this is that a question helps students to retain focus throughout the essay.

A research question is a **clear and focused** question centered on a research topic. Research questions usually emerge when questions are asked about a particular issue that a student is interested in or curious about.

A research question helps to focus the research, providing a path through which students will undertake the research and writing process. A clear and well-focused research question, which has a specific aim, will allow a student to work towards developing a reasoned argument within the scope of the task, rather than the kind of “all about” essay that an unfocused research question can lead to. Sometimes students may need to revise their research question; therefore, a research question should always be considered provisional until they have enough research data to make a reasoned argument.

Five steps to developing a research question

1



CHOOSE A SUBJECT AND TOPIC THAT IS OF INTEREST TO YOU.

Deciding on a subject and topic that is of interest and in which you are personally invested is important if your motivation is to be sustained throughout the process. You should be able to identify, in a broad sense, what it is that you are interested in and why.

2



CARRY OUT PRELIMINARY READING.

After deciding on a topic of interest you should undertake some general reading around the issue. Questions you must consider at this stage are

- What has been written about this topic?
- Is it easy to find sources of information?
- Is there a range of different sources available?
- Is there a range of views or perspectives on the topic?
- What interesting questions have started to emerge from your reading?

3



CONSIDER THE EMERGING QUESTIONS.

You should now begin posing open-ended questions about your topic. These questions will usually be framed using the words *how*, *why* or *to what extent*.

4



EVALUATE THE QUESTION.

Once possible research questions have been posed, they should be evaluated. This evaluation should be based on whether the question is clear, focused, and arguable.

Clear: Will the reader understand the nature of my research? Will it direct the research being undertaken?

Focused: Will the research question be specific enough to allow for exploration within the scope of the task (that is, the number of words and amount of time available)?

Arguable: Does the research question allow for analysis, evaluation, and the development of a reasoned argument?

5



CONSIDER RESEARCH OUTCOMES.

Once you decide upon a provisional research question, you should start thinking about the direction your research might take. This decision could be in terms of

- Suggesting possible outcomes of the research
- Outlining the kind of argument you might make and identifying how the research might support it
- Considering options if the research available is not sufficient to support a sustained argument.

Required Elements

The structure of the essay is very important. It helps students to organize the argument, making the best use of the evidence collected.

There are six required elements of the final work to be submitted. Please note that the order in which these elements are presented here is not necessarily the order in which they should be written.

Six required elements of the extended essay:

1. Title page
2. Contents page
3. Introduction
4. Body of the essay
5. Conclusion
6. References and bibliography

Further information and instruction about the above elements will be provided later in the course as they are needed.

Presentation

The extended essay should be written in a clear, correct and formal academic style, appropriate to the subject from which the topic is drawn. Given that the extended essay is a formally written research paper, it should strive to maintain a professional, academic look. To help achieve this, the following formatting is required:

- the use of 12-point, readable font
- double spacing
- page numbering
- no candidate or school name on the title page or page headers.

Submitting the extended essay in the required format will help set the tone of the essay and will aid readability for on-screen assessment by examiners.

Academic Honesty

Research practices when working on an extended essay must reflect the principles of academic honesty. The essay must provide the reader with the **precise** sources of quotations, ideas and points of view through accurate citations, which may be in-text or footnotes, and full references listed in the bibliography, which, regardless of the system used, must ensure the minimum requirements.

Producing accurate references and a bibliography is a skill that students should be seeking to refine as part of the extended essay writing process. Documenting the research in this way is vital: it allows readers to evaluate the evidence for themselves, and it shows the student's understanding of the importance of the sources used.

Failure to comply with this requirement will be viewed as academic misconduct and will, therefore, be treated as a potential breach of IB regulations. For further information, see *Academic honesty in the IB educational context* and *Effective citing and referencing*.

Proofreading

The whole essay needs to be proofread carefully by the student (computer spelling and grammar checkers are useful but will not do everything). You must **not** ask someone else to proofread your work as this is an important part of the learning experience.

REFLECTING ON YOUR EXTENDED ESSAY AND ITS PROCESS

Researcher's Reflection Space

Student reflection in the extended essay is critical. Effective reflection highlights your engagement in an intellectual and personal process and the ways that this process has changed you as a learner and affected the completion of your essay. The IB considers reflection to be a central component of a successful research process as it:

- supports student learning, thinking and critical analysis throughout the research process
- helps to stimulate discussions between the student and supervisor
- aids the reflection process.

The nature of the RRS

Use of the RRS is strongly recommended (but not required) as it will allow you to more clearly articulate and understand your decision-making process. It supports learning, thinking, critical analysis and evaluation, and contributes not only to the development of a successful extended essay but also to skills and competencies for pathways beyond the Diploma Programme.

The RRS is a space in which you are able to record reflections on what you are reading, writing and thinking. The use of the RRS will help you to prepare for reflection sessions with your supervisor and inform the discussions that take place. In preparing for reflection sessions, you could use your RRS to:

- record your reflections
- respond to artefacts, such as photos, newspaper clippings, twitter feeds, blogs, and so on
- respond to prompts and questions that may arise in your subject areas, TOK classes or other aspects of the Diploma Programme
- create MindMaps[®]
- record emerging questions.

Created by students to support their engagement in the planning and decision-making process, the RRS helps to develop critical and evaluative thinking skills. Additionally, the RRS tracks the evolution of thought as it relates to the development of an argument. It helps you to personally connect to the topic and may motivate you in meaningful ways to successfully complete the extended essay. Finally, supervisors will be able to more effectively authenticate your student voice in that the RRS links directly to elements that will eventually be found in the essay itself. The RRS is intended to make the entire supervision process more meaningful.

Insights and information recorded in the RRS are expected to form the basis for and find direct expression in the essay, reflection sessions and Reflections on planning and progress form. You are expected to share excerpts from the RRS in discussions with your supervisor. Using these reflections as a point of reference in their supervision sessions, you will be able to:

- demonstrate your planning
- discuss what you are learning
- evaluate your progress.

Using the RRS is optional; it is not required for the extended essay process. However, the Reflections on Planning and Progress Form (RPPF) is not optional. In it, you record the three required reflections, explained on the following pages. We do require that you record your reflections in Managebac's "Planning and Progress Form."

The student–supervisor relationship and mandatory reflection sessions

Students can use the RRS to prepare for their reflection sessions with their supervisors. There are three mandatory reflection sessions that are a formal part of the extended essay and will be uploaded on the [Reflections on Planning and Progress Form](#) from Managebac. Following each session, students are required to complete the relevant comment section on the form and submit it to their supervisor. The supervisor must then sign and date the form and after the final reflection session, the viva voce, add their own comment. **The total maximum length for all three reflections combined is 500 words, so each reflection is relatively short—about 165 words.**

Reflection session	Description
<p>The first reflection session</p> <p>(reflection written after the proposal has been accepted and you have discussed it and preliminary sources)</p>	<p>Students are encouraged to include in their reflections examples of initial topic exploration, possible sources and methods, preliminary research questions and their personal reactions to the issues.</p> <p>In attending their first reflection session with their supervisor, students can use notes made in the RRS as the basis for discussion as well as to demonstrate the progress students have made in the research process.</p>
<p>The interim reflection session</p> <p>(reflection written after you have written the rough draft and met with your supervisor to discuss it)</p>	<p>As their RRS develops, students can demonstrate the progress of their thinking, the development of their argument and raise any questions they may have with their supervisor. At this stage the RRS may include reactions to readings, progress in the timeline for completion of the extended essay, a possible outline of arguments, challenges encountered and the strategies used to overcome them.</p>
<p>The final reflection session—<i>viva voce</i></p> <p>(reflection written after the <i>viva voce</i>)</p>	<p>During the <i>viva voce</i>, which takes place at the completion of the extended essay process, the RRS can form the basis for discussion about the process of completing the essay. Students can show what they have learned about the topic, the research process followed, their own learning, as well as outlining new questions they have uncovered. Most importantly, during the <i>viva voce</i> the RRS may help to highlight the personal significance of the work to the student and ultimately contribute to the supervisor's report.</p>

Following the completion of all three sessions, the Reflections on Planning and Progress Form will be submitted to the International Baccalaureate along with the completed extended essay. An incomplete form will impact the examiner's ability to apply assessment criterion E (engagement) and will result in the student receiving a lower mark for this criterion.

Preparation for the first reflection session

As preparation for their first reflection session, you should do the following:

1. Think about subjects and areas of particular personal interest and do some initial background reading into a subject and topic of their choice.
2. Using this as a starting point, explore a variety of possible research topics.
3. Read the subject-specific section of the Extended essay guide for the subject you are interested in, paying particular attention to the nature of the subject and the treatment of the topic.
4. Undertake further background reading and begin to gather information around your area of interest. This exploration should give rise to a variety of topics and questions that you can consider for further research. At this stage it is important that you consider the availability of reliable and valid sources for the topic under consideration. All of this should be recorded in your researcher's reflection space.
5. Begin developing a research proposal which might include a MindMap® of ideas, an annotated article or preliminary bibliography. Additionally, you must already be thinking in terms of the following questions:
 - Is my topic appropriate for the subject I am considering?
 - Why am I interested in this area and why is it important?
 - What possible questions have emerged from my initial reading?
 - Are there any ethical issues that I need to consider?
 - What possible methods or approaches might be used for research in this area and why?

It is recommended at this point that the student–supervisor relationship be formalized and you can consider yourself prepared for the first formal reflection session.

Preparation for the interim reflection session

This session is a continuation of the dialogue between supervisor and student in which you must demonstrate the progress you have made in your research. You must also be able to discuss any challenges you have encountered, offer your own potential solutions and seek advice as necessary.

During this session the supervisor might discuss:

- a completed piece of your sustained writing in order to ensure that you understand the academic writing requirements, including referencing formats
- whether an appropriate range of sources has been accessed and how you are critically evaluating the origin of those sources
- what you now have to do in order to produce the full draft of your essay, and ways and means of breaking down the task into manageable steps.

By the end of the interim reflection session both you and your supervisor should feel satisfied that there is:

- a clear and refined research question
- a viable argument on which to base the essay
- a sufficient range of appropriate sources
- a clear vision for the final steps in the writing process.

Between the interim session and the completion of the extended essay, you should continue to see your supervisor as appropriate to your needs, although the third and final reflection session should not take place until after the extended essay has been completed and uploaded for submission during your senior year.

Following this interim session, you are required to complete the second student comment section of the reflections on planning and progress form and submit it to your supervisor who must then sign and date the form. Please refer to the section “Protocols for completing and submitting the Reflections on planning and progress form” for more information.

Preparation for the final reflection session (*viva voce*)

Supervisors must have already read the final version of the essay, sent to them by the IB Coordinator, before this session takes place.

You should bring the following to this session:

- extracts from your RRS that illustrate how you have grown as a learner through the process of reflection
- a willingness to share your personal experience and to discuss the skills and development of conceptual understandings that you have acquired through the completion of the extended essay.

It is important to note that you are not allowed to make any changes to your extended essay after this meeting. Once you have submitted the essay as final to Ms. Becraft, your essay may not be revised.

The *viva voce* is a short interview between the student and the supervisor, and is the mandatory conclusion to the extended essay process. Students who do not attend the *viva voce* will be disadvantaged under criterion E (engagement) as the Reflections on planning and progress form will be incomplete.

The *viva voce* is

- an opportunity for the supervisor to ask you a variety of open-ended questions to elicit holistic evidence of your learning experience.
- an opportunity for the supervisor to confirm the authenticity of your ideas and sources
- an opportunity for you to reflect on successes and difficulties encountered in the research process
- an aid to the supervisor’s comments on the reflections on planning and progress form.

The *viva voce* should last 20–30 minutes. This is included in the recommended amount of time a supervisor should spend with the student.

Following this final session, you are required to complete the last student comment section of the reflections on planning and progress form, sign and date it and submit it to your supervisor, who must then add their own comments, sign and date the form. The supervisor must then upload the form into the e-coursework system, confirm the authenticity of both the form and essay, and submit them to the IB for assessment as one portfolio.

A blank or unsubmitted RPPF will score a 0 for criterion E.

The assessment criterion E (engagement) will be applied in the assessment of students’ reflections. Representing 18% of the total grade, this is an extremely important part of the overall EE assessment.

It is important to stress that examiners want to gain an insight into students' thinking processes throughout their experiences with the EE. **Criterion E 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 RPPF.** To see the descriptors of strands and indicators in the rubric, see Criterion E (pp. 27-28 in this manual).

An essay that achieves highly against criteria A–D will not automatically achieve highly against criterion E. Students who have struggled with the EE can nonetheless achieve quite highly against criterion E. The crucial point is to show what they have learned in terms of their understanding of the research process, its challenges and their own personal development.

The examiners will read the RPPF together with the EE and will want to be able to recognize the student's voice in their reflections.

Once students have entered a reflection on the RPPF, they must not amend it with hindsight. Amendments will undermine the authenticity of the reflection and may hide the development the examiners are looking for.

In critically reviewing your engagement in the research process, it might help to think in terms of three levels of reflection: **descriptive**, **analytical** and **evaluative** reflection. Note the use of these terms in the rubric above. The table below gives examples of guiding questions to help with this. They are not exhaustive.

Level of reflection	Example of the kinds of questions students may have asked and answered of themselves
Descriptive	<ul style="list-style-type: none"> ● What did I do? ● How did I undertake my research? ● What were the problems I faced? ● Did my approach or strategies change throughout the process? ● What have been the high and the low points of the research and writing process?
Analytical	<ul style="list-style-type: none"> ● Was my research successful? ● If I changed my approach or strategies during the process, why did I do this? ● What did I learn from the experience in terms of my understanding of the subject area and/or the skills needed to undertake research? ● How has my understanding of the topic and research process developed throughout the task?
Evaluative	<ul style="list-style-type: none"> ● If I were to undertake this research again, would I do it differently—if so, why or why not? ● What has affected this? ● If I did do the research again, would I change the theories applied or the methodological approach? Would this have led to a different outcome? ● What can I conclude from this? ● Were the strategies I used for undertaking my research the most appropriate for achieving my outcomes? ● What, if any, questions emerged as a result of my research that I was not expecting? Would these questions influence my approach if I were to undertake the research again?

ASSESSMENT

Overview

Criterion A: focus and method	Criterion B: knowledge and understanding	Criterion C: critical thinking	Criterion D: presentation	Criterion E: engagement
<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
Marks	Marks	Marks	Marks	Marks
6	6	12	4	6

Total marks available: 34

Criterion A: Focus and method

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.

Level	Descriptor of strands and indicators
0	The work does not reach a standard outlined by the descriptors below.
1–2	<p>The topic is communicated unclearly and incompletely.</p> <ul style="list-style-type: none"> • Identification and explanation of the topic is limited; the purpose and focus of the research is unclear, or does not lend itself to a systematic investigation in the subject for which it is registered. <p>The research question is stated but not clearly expressed or too broad.</p> <ul style="list-style-type: none"> • The research question is too broad in scope to be treated effectively within the word limit and requirements of the task, or does not lend itself to a systematic investigation in the subject for which it is registered. • The intent of the research question is understood but has not been clearly expressed and/or the discussion of the essay is not focused on the research question. <p>Methodology of the research is limited.</p> <ul style="list-style-type: none"> • The source(s) and/or method(s) to be used are limited in range given the topic and research question. • There is limited evidence that their selection was informed.

3–4	<p>The topic is communicated.</p> <ul style="list-style-type: none"> • Identification and explanation of the research topic is communicated; the purpose and focus of the research is adequately clear, but only partially appropriate. <p>The research question is clearly stated but only partially focused.</p> <ul style="list-style-type: none"> • The research question is clear but the discussion in the essay is only partially focused and connected to the research question. <p>Methodology of the research is mostly complete.</p> <ul style="list-style-type: none"> • Source(s) and/or method(s) to be used are generally relevant and appropriate given the topic and research question. • There is some evidence that their selection(s) was informed. <p>If the topic or research question is deemed inappropriate for the subject in which the essay is registered no more than four marks can be awarded for this criterion.</p>
5–6	<p>The topic is communicated accurately and effectively.</p> <ul style="list-style-type: none"> • Identification and explanation of the research topic is effectively communicated; the purpose and focus of the research is clear and appropriate. <p>The research question is clearly stated and focused.</p> <ul style="list-style-type: none"> • The research question is clear and addresses an issue of research that is appropriately connected to the discussion in the essay. <p>Methodology of the research is complete.</p> <ul style="list-style-type: none"> • An appropriate range of relevant source(s) and/or method(s) have been applied in relation to the topic and research question. • There is evidence of effective and informed selection of sources and/or methods.

Criterion B: Knowledge and understanding

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.

Level	Descriptor of strands and indicators
0	The work does not reach a standard outlined by the descriptors below.
1–2	<p>Knowledge and understanding is limited.</p> <ul style="list-style-type: none"> • The selection of source material has limited relevance and is only partially appropriate to the research question. • Knowledge of the topic/discipline(s)/issue is anecdotal, unstructured and mostly descriptive with sources not effectively being used. <p>Use of terminology and concepts is unclear and limited.</p> <ul style="list-style-type: none"> • Subject-specific terminology and/or concepts are either missing or inaccurate, demonstrating limited knowledge and understanding.

3–4	<p>Knowledge and understanding is good.</p> <ul style="list-style-type: none"> • The selection of source material is mostly relevant and appropriate to the research question. • Knowledge of the topic/discipline(s)/issue is clear; there is an understanding of the sources used but their application is only partially effective. <p>Use of terminology and concepts is adequate.</p> <ul style="list-style-type: none"> • The use of subject-specific terminology and concepts is mostly accurate, demonstrating an appropriate level of knowledge and understanding. <p>If the topic or research question is deemed inappropriate for the subject in which the essay is registered no more than four marks can be awarded for this criterion.</p>
5–6	<p>Knowledge and understanding is excellent.</p> <ul style="list-style-type: none"> • The selection of source materials is clearly relevant and appropriate to the research question. • Knowledge of the topic/discipline(s)/issue is clear and coherent and sources are used effectively and with understanding. <p>Use of terminology and concepts is good.</p> <ul style="list-style-type: none"> • The use of subject-specific terminology and concepts is accurate and consistent, demonstrating effective knowledge and understanding.

Criterion C: Critical thinking

This criterion assesses the extent to which critical-thinking skills have been used to analyse and evaluate the research undertaken.

Level	Descriptor of strands and indicators
0	<p>The work does not reach a standard outlined by the descriptors below.</p>
1–3	<p>The research is limited.</p> <ul style="list-style-type: none"> • The research presented is limited and its application is not clearly relevant to the RQ. <p>Analysis is limited.</p> <ul style="list-style-type: none"> • There is limited analysis. • Where there are conclusions to individual points of analysis these are limited and not consistent with the evidence. <p>Discussion/evaluation is limited.</p> <ul style="list-style-type: none"> • An argument is outlined but this is limited, incomplete, descriptive or narrative in nature. • The construction of an argument is unclear and/or incoherent in structure hindering understanding. • Where there is a final conclusion, it is limited and not consistent with the arguments/evidence presented. • There is an attempt to evaluate the research, but this is superficial. <p>If the topic or research question is deemed inappropriate for the subject in which the essay is registered no more than three marks can be awarded for this criterion.</p>
4–6	<p>The research is adequate.</p> <ul style="list-style-type: none"> • Some research presented is appropriate and its application is partially relevant to the Research question. <p>Analysis is adequate.</p>

	<ul style="list-style-type: none"> • There is analysis but this is only partially relevant to the research question; the inclusion of irrelevant research detracts from the quality of the argument. • Any conclusions to individual points of analysis are only partially supported by the evidence. <p>Discussion/evaluation is adequate.</p> <ul style="list-style-type: none"> • An argument explains the research but the reasoning contains inconsistencies. • The argument may lack clarity and coherence but this does not significantly hinder understanding. • Where there is a final or summative conclusion, this is only partially consistent with the arguments/evidence presented. • The research has been evaluated but not critically.
7–9	<p>The research is good.</p> <ul style="list-style-type: none"> • The majority of the research is appropriate and its application is clearly relevant to the research question. <p>Analysis is good.</p> <ul style="list-style-type: none"> • The research is analysed in a way that is clearly relevant to the research question; the inclusion of less relevant research rarely detracts from the quality of the overall analysis. • Conclusions to individual points of analysis are supported by the evidence but there are some minor inconsistencies. <p>Discussion/evaluation is good.</p> <ul style="list-style-type: none"> • An effective reasoned argument is developed from the research, with a conclusion supported by the evidence presented. • This reasoned argument is clearly structured and coherent and supported by a final or summative conclusion; minor inconsistencies may hinder the strength of the overall argument. • The research has been evaluated, and this is partially critical.
10–12	<p>The research is excellent.</p> <ul style="list-style-type: none"> • The research is appropriate to the research question and its application is consistently relevant. <p>Analysis is excellent.</p> <ul style="list-style-type: none"> • The research is analysed effectively and clearly focused on the research question; the inclusion of less relevant research does not significantly detract from the quality of the overall analysis. • Conclusions to individual points of analysis are effectively supported by the evidence. <p>Discussion/evaluation is excellent.</p> <ul style="list-style-type: none"> • An effective and focused reasoned argument is developed from the research with a conclusion reflective of the evidence presented. • This reasoned argument is well structured and coherent; any minor inconsistencies do not hinder the strength of the overall argument or the final or summative conclusion. • The research has been critically evaluated.

Criterion D: Presentation

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.

Level	Descriptor of strands and indicators
0	The work does not reach a standard outlined by the descriptors below.
1–2	<p>Presentation is acceptable.</p> <ul style="list-style-type: none"> • The structure of the essay is generally appropriate in terms of the expected conventions for the topic, argument and subject in which the essay is registered. • Some layout considerations may be missing or applied incorrectly. • Weaknesses in the structure and/or layout do not significantly impact the reading, understanding or evaluation of the extended essay.
3–4	<p>Presentation is good.</p> <ul style="list-style-type: none"> • The structure of the essay clearly is appropriate in terms of the expected conventions for the topic, the argument and subject in which the essay is registered. • Layout considerations are present and applied correctly. • The structure and layout support the reading, understanding and evaluation of the extended essay.

Criterion E: Engagement

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, and is based solely on the candidate’s reflections as detailed on the RPPE, with the supervisory comments and extended essay itself as context.

Level	Descriptor of strands and indicators
0	The work does not reach a standard outlined by the descriptors or a RPPF has not been submitted.
1–2	<p>Engagement is limited.</p> <ul style="list-style-type: none"> • Reflections on decision-making and planning are mostly descriptive. • These reflections communicate a limited degree of personal engagement with the research focus and/or research process.
3–4	<p>Engagement is good.</p> <ul style="list-style-type: none"> • Reflections on decision-making and planning are analytical and include reference to conceptual understanding and skill development. • These reflections communicate a moderate degree of personal engagement with the research focus and process of research, demonstrating some intellectual initiative.

5-6	<p>Engagement is excellent.</p> <ul style="list-style-type: none">● Reflections on decision-making and planning are evaluative and include reference to the student's capacity to consider actions and ideas in response to challenges experienced in the research process.● These reflections communicate a high degree of intellectual and personal engagement with the research focus and process of research, demonstrating authenticity, intellectual initiative and/or creative approach in the student voice.
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