

International Baccalaureate

Extended Essay Guide



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Foreword

It is to be noted that while some of the material in this book, particularly the FAQs, the actual writing process portions, and the associated progress check forms are Edgewood High School original content, much of the information contained here within is taken from the *Oxford IB Diploma Programme Extended Essay Course Companion* by Kosta Lekanides. This includes many of the charts, graphs, and other visuals. This is done in order to maintain consistency between the IB Diploma Programme and Edgewood High Schools courses.

Academic Dishonesty and Misconduct

Academic Dishonesty

From the *Edgewood High School Academic Dishonesty Policy*: Academic dishonesty is taking credit or responsibility for quality or content that is not one's own work. Copying, cheating, and plagiarism are all forms of academic dishonesty; this includes any form of attaining information unfairly and without authorization, such as a test, quiz, or other graded assignment. Copying is the use of work belonging to another student with the understanding that the work is one's own. Cheating, whether verbal, written, or computer generated, can involve:

- Copying on tests
- Copying on homework
- Plagiarism of published works (including online sources)
- Giving answers to a test or homework
- Discussion of a test with others

Plagiarism is the act of using another's ideas or expressions in your writing without acknowledgement of the source. To plagiarize is to give the impression (intentional or not) that you have written and thought of something on your own that you did not, but have borrowed from somewhere else.

In any academic writing, sources must be acknowledged. Depending on the writing style you will be using for your extended essay, there are different types of acknowledgement, either parenthetical citations, footnotes, or endnotes. Moreover, all writing styles will require a bibliography (works cited & works consulted).

- Parenthetical citations - depending on style, this will include author and page number minimum
- Footnotes - placed at the bottom of the page cites the source of quoted or paraphrased information
- Endnotes - placed at the end of the document cites the source of quoted or paraphrased information

Misconduct

“Misconduct is behavior that results in, or may result in, you or any students gaining an unfair advantage in one or more assessment component” (Lekanides V). In other words, any behavior that allows you to be assessed unfairly in your favor.

Misconduct can include plagiarism (see above), collusion (allowing another student to cheat or reusing work from another assessment), bringing unauthorized materials into an examination room.



Frequently Asked Questions



1. What is the Extended Essay?

- The Extended Essay (EE) is a mandatory Core Component of the International Baccalaureate Programme. It gives you the opportunity to conduct independent research and investigation on a topic of your choice. If you do not complete your EE, you will not receive an IB Diploma.

2. How long is the Extended Essay?

- 3,750 - 4,000 words
- As well as three RPPFs totaling 500 words
- Your RRS as an appendix

3. What writing format do I use?

- Of the three writing formats used in writing essays, the one you must use depends on the subject about which you are writing.

CMS	APA	MLA
<ul style="list-style-type: none"> ● Geography ● History 	<ul style="list-style-type: none"> ● Psychology ● Chemistry ● Biology ● Mathematics ● Physics ● Sports/Exercise/Health ● World Religions ● Socio-Anthropology 	<ul style="list-style-type: none"> ● English ● French ● Spanish ● Film ● Music ● Visual Arts

- For citation instructions consult the *Purdue Online Writing Lab*
https://owl.purdue.edu/owl/purdue_owl.html

4. Will I get help?

- Yes, from your supervisor and TOK class, but the onus for this essay is on you.

5. Can I choose my supervisor?

- No. One will be selected for you that best suits your topic; however, you may make a request.

6. Can I change my topic?

- Not after your question has been approved by your supervisor, however, you can revise your question to be more inclusive or exclusive.

7. Where can I find resources?

- A resource guide is provided for you in this packet.
- Acquiring material resources, such as experimental materials, is the responsibility of the student - you may use the labs and lab materials in school, but the school will not be supplying you with materials specific to your EE

8. When is this due?

- Your final draft must be turned into your supervisor, your TOK teacher, the EE Coordinator and Mrs. Childs by September 30, 2022.
- You must submit your final RPPF, RRS and upload the Draft by October 15, 2021.

9. How will this be graded?

- You will be graded externally by an IB examiner according to the IB Extended Essay Rubric and Grade Descriptors (*See “Grading Criteria at the end of this guide”*) You will also receive class grades in Theory of Knowledge as you complete components of the Extended Essay.
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Extended Essay Timeline

Date*	Lesson	Notes
	Introduce EE <ul style="list-style-type: none"> ● Go over what it is, how it is broken down, and how it affects your IB work ● Contract assigned ● Introduction to Managebac 	
	How to Research <ul style="list-style-type: none"> ● Media Center lesson ● Research Guide ● Review Citations ● Introduce Annotated Bibliography 	
	Select Subject & Topic <ul style="list-style-type: none"> ● Subject & Topic ● Contract Due by 11/24 	
	RQ Proposal <ul style="list-style-type: none"> ● Composing and refining RQ ● Submit proposal with at least 4 sources annotated bibliography 	
	Review of Supervisor Procedure <ul style="list-style-type: none"> ● Supervisors to be assigned 	
	<ul style="list-style-type: none"> ● Introduction to EE Research Cafe 	
	Complete first meeting with Supervisor <ul style="list-style-type: none"> ● Review proposal and plan with supervisor ● RPPF 1 ● Research Readiness Form Due 	
	Research Cafe work	
	Research Cafe Presentation	
	Primary Research Completed by March 18th Secondary Research can continue	
	TOK Exhibition Outlining	
	Meeting # 2 with Supervisor <ul style="list-style-type: none"> ● Review Outline ● Review Relevant Research 	

	<ul style="list-style-type: none"> ● Writing Readiness Form <ul style="list-style-type: none"> ○ Writing CANNOT begin unless primary research is complete 	
	Drafting <ul style="list-style-type: none"> ● Submit draft for Progress Check <ul style="list-style-type: none"> ○ You do NOT have to meet with supervisor, but you may request one 	
	<ul style="list-style-type: none"> ● Peer Review 5/18 	
	Completed Rough Draft due to Supervisor and EE Coordinator	
	Feedback on Rough Draft due Complete mandatory meeting # <ul style="list-style-type: none"> ● Complete RPPF 2 	
	Final Draft Due	
	Viva Voce RPPF 3 RRS Appendix	

*Please note that dates are subject to change

Extended Essay Overview

The Extended Essay (EE) is an opportunity for in-depth study of a topic that appeals to an individual student's interests within the available Diploma Program subjects. The student must either be taking or have taken an IB course appropriate to the topic. The idea is to encourage strong academic research and writing skills in an area of student's choosing. This is done under the guidance of a supervisor, who will be assigned to the student during the process. Students will complete reflections after various components of the essay have been accomplished. These reflections (RPPFs) are a graded part of the EE which are assessed under Criterion E (Engagement) in the Assessment Scoring Guide. This is formal, structured writing presenting ideas and conclusions in a well constructed and coherent academic style. It is a mandatory part of the IB Diploma Program.

Key Points to Remember

- ❖ The EE is compulsory for all students taking the Diploma Program.
- ❖ A student must receive a D grade or higher to be awarded the Diploma.
- ❖ The EE is externally assessed and, in combination with the grade for TOK, contributes up to three points to the total score for the IB Diploma.
- ❖ The EE is a piece of independent research on a topic chosen by the student in consultation with a supervisor from the school.
- ❖ The student is responsible for acquiring and maintaining any necessary materials for their research
- ❖ The EE is presented as a formal piece of sustained academic writing containing no more than 4,000 words, with a minimum of 3,750. This is accompanied by a reflection of no more than 500 words.
- ❖ The EE is the result of approximately 40 hours of work by the student over the course of a year.
- ❖ Students are supported by a supervisor in a supervisory process of 3-5 hours, which includes three mandatory reflection sessions.
- ❖ The third and final session is the *Viva Voce*, which is the concluding interview with the supervising teacher.

Aims of the EE are for students to:

- Engage in independent research with intellectual initiative and rigor.
- Develop research, thinking, self-management, and communication skills.
- Reflect on what has been learned throughout the research and writing processes.



The Extended Essay Process



The following steps *must* be followed in order to complete your essay

1. Choose a subject
2. Choose a topic
3. Formulate a research questions
4. Identify and evaluate sources
5. Plan your research
6. Begin your research
7. Present your research in a research cafe
8. Outline your essay
9. Draft your essay
 - a. Progress Check with Supervisor
10. Peer review
11. Final revisions
12. *Viva Voce* and final reflections

Subjects

Edgewood High School IB Approved Subjects

Remember to choose a subject in which you have sufficient background knowledge, skills, and personal interest!

Biology	French	Mathematics	Visual Arts
Chemistry	Geography	Music	World Religions
English	Global Politics	Psychology	World Studies
Film	History	Sports & Exercise Science	Theatre

Topics

You must choose a specific topic within your subject. Below are examples.

Biology	Origins of the Ebola Virus
Chemistry	The Effects of Laundry Detergent on the Environment
English	Symbolism in Jane Austen's <i>Pride and Prejudice</i> and <i>Emma</i>
Film	Influence of Hong Kong Action Cinema
French	French Alterations in Algerian Culture
Geography	A Critical Analysis of Jared Diamond's <i>Guns, Germs, and Steel</i>
Global Politics	United Intervention in Darfur
History	An Analysis of the Opium Wars
Mathematics	The Golden Ratio in Architecture
Music	The Beatles and Multi-Track Recording Technology
Psychology	Synesthesia: A Study of a Sixth Sense
Sports and Exercise Science	Concussions and Dementia
Visual Arts	Photography and the Iraqi War
World Religions	The Influence of Anne Boleyn on the English Reformation
World Studies	Epidemiology and Africa
Theatre	Stanislavski and Strasberg: A Comparison

NOTE: The topic is NOT the research question.

Subject Prerequisites and Considerations

Subject Area	Prerequisites/Considerations	Sample Questions
English (Group 1)	Look at one or several pieces of literature; analyze for how the writer achieves theme or purpose. Work of study must be written in English. One piece must have originally been written in English.	How do the authors of <i>The Hunger Games</i> and <i>The Lord of the Flies</i> provide contrasting ideas about survival and human nature?
Group 2 (Foreign Language)	Should be strong in the language because the paper must be written in that language (e.g. French); paper must focus on language or culture.	To what extent have differences between formal and informal usage disappeared from the language used in the Rio de la Plata region?
Biology	Should be in HL Bio I as a junior	How are the distribution and growth of lichens affected by sulfur dioxide and ozone levels in the atmosphere?
Chemistry	Should be HL Chem I as a junior	Does the time it takes to brew a cup of tea using a specific commercial brand of tea leaves significantly alter the amount of caffeine that is dissolved in the drink?
Film	Helps to have had film study but not mandatory; paper looks at film techniques as you would look at a writer's techniques in an English paper	To what extent do the films <i>Chinatown</i> (1974), <i>Blood Simple</i> (1984), and <i>Pulp Fiction</i> (1994) qualify as film noir?
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.	<ul style="list-style-type: none"> • Which theory best explains the Salem Witch Trials? • To what extent were Hitler's educational aims fulfilled in the Uhland Gymnasium, 1937-1939?
Global Politics	Topic encourages analysis and I evaluation, rather than description and unsupported value judgments, and must allow critical evaluation of human rights issues and practices in light of relevant theories and arguments. Students must	<ul style="list-style-type: none"> • To what extent can the limited political rights of women in Saudi Arabia be justified? • To what extent was the US use of force in Kosovo a

	consult the Human Rights course syllabus	humanitarian intervention?
Mathematics	Papers could address the applicability of mathematics to solve both real and abstract problems; the beauty of mathematics as in, geometry or fractal theory; the elegance of mathematics in proving theorems, as in number theory; the origin and subsequent development of a branch of mathematics over a period of time.	In what ways can modular arithmetic be implemented into cryptography?
Music	Should have some music experience such as chorus, orchestra, band, or guitar; can focus on composition or artist	What is the influence of Edgar Varese on the musical output of Frank Zappa?
Psychology	Must be in Psych SL as a junior; Psychology EE must be supported with careful and appropriate citation of relevant theories and/or studies within psychology	To what extent has research on stress with airplane pilots improved airline safety standards?
Sports & Exercise 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 in nutrition in improving or maintaining health and managing disease. Must conduct a study or be able to look at studies that have been done	<ul style="list-style-type: none"> • What is the effect of energy drinks on recover times for middle-distance runners? • What is the most effective angle for javelin throwing?
Theatre	Should have some background in theatre - courses or work on a show:	What are the main uses and types of masks in Noh drama, and how does the mask contribute to the creation of a character in Noh?
Visual Arts	Should have some experience with art class	How did Wassily Kandinsky use color?
World Religions	In a world religions paper, a rigorous attempt is made to maintain objectivity in the analysis and evaluation of religions. This requires an authentic attempt to understand the beliefs, values, and practices of the religion being studied by using language and concepts drawn from that religion.	<ul style="list-style-type: none"> • What is the difference between a Catholic church and a mosque? • Why is the doctrine of creation so central to contemporary evangelical Protestantism?

World Studies	<p>An EE in World Studies provides students with an opportunity to undertake an in-depth, interdisciplinary study of an issue of contemporary global significance. Students should choose to explore a topic from one of the following global themes</p> <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 	<ul style="list-style-type: none"> ● How might religious beliefs inform people’s understanding of the causes, transmission, and treatments of HIV/AIDs? (Religion & Bio) ● What is the impact of non-native aquatic plants on marine and inland environments (Ecology & Economics)
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NOTE: The sciences can be split into experimental EE research and non-experimental. If a student elects to do an Experimental EE, it is up to them to acquire the materials needed for their experiments. **All primary research, which includes experiments, must be completed by March 18th, 2022.**

Supervisory Meetings & Reflection Process

Supervisor Selection Process

The supervisor selection process is relatively straight forward:

- Student chooses a topic
- Students request one or two teachers as possible supervisors
- Supervisors are selected among staff, though not all teachers requested will be supervisors
- Supervisors will review proposals within their content area along with annotated bibliographies thus far, and then choose those EEs to which they are best suited

NOTE: if we can match a student with the supervisor they want, we try to as often as possible, but there is no guarantee.

Supervisory Meetings

You will have five (5) required meetings with your supervisor that should be about 45 minutes each. Please plan your time accordingly. You will meet with your supervisor before you may move on to the next portion of the EE process.

- Meeting 1 - review your research question and initial sources. Get Research Readiness form signed - RPPF 1
- Meeting 2 - review research and outline with supervisor. Get Writing Readiness form signed
- Meeting 3 - Progress Check
- Meeting 4 - review rough draft with supervisor before revising for final draft. RPPF 2
- Meeting 5 - Viva Voce, RPPF 3.

After meetings 1, 4, & 5, you are required to complete a submission on your Reflection Planning and Progress Form (RPPF) on Managebac. These will count as a summative (Product) grade and will be based on the quality of what you write. They should be about 150-175 words each, for a total of no more than 500 words. **This is a scored component of the EE and DOES make a difference!**

Once an RPPF reflection is complete, you are not allowed to go back and make changes. They will be locked on the set deadline, so make sure you submit them on time!

You may meet with your supervisor informally beyond the three required meetings. The role of the supervisor is to:

- Discuss your choice of topic and help you to formulate a research question
- Guide you through the process and help you troubleshoot
- Provide feedback on ONE complete draft
- Read the final draft, conduct the *Viva Voce*, complete RPPF for submission, and provide predicted grade

What your supervisor is NOT responsible for

- Finding you resources
- Fixing spelling and grammar
- Making corrections to errors (they can point errors out, but will not tell you how to correct them.)



Reflections: RRS & RPPF



There are two types of reflections used during the EE process: Researcher Reflection Space (RRS) and Reflection on Planning and Progress Form (RPPF). RRS are daily reflections completed as you do your research. RPPF are reflections completed after specific components of the EE are completed (See Extended Essay Timeline for dates).

Researcher's Reflection Space RRS

The purpose of the Researchers Reflection Space is to act as a journal to record your progress, your learning, thinking, critical analysis and evaluation. It will contribute not only to the development of a successful EE, but also to skills and competencies for the future.

The RRS is a personal document for you to record reflections on what you are reading, writing and thinking as well as to prepare you for your reflection sessions with your supervisor. You will be required to complete a minimum of 20 RRS entries.

RRS's can be used to:

- Record reflections on progress
- Respond to research
- Respond to discussions that have taken place (with teacher, classmates, etc.)
- Record emerging questions
- Demonstrate your planning
- Evaluate your progress

This journal will become an appendix in your EE. At any time, your supervisor, TOK teacher, and IB Coordinator will be able to review your RRS.

This will be done on *Managebac* and will count towards your quarter grades (formative). Some guidance to help you with your reflections:

The following are part of each RRS. You should add additional thoughts as appropriate – make sure each entry is dated:

- (1) What did you accomplish during class today? (2-3 sentences)
- (2) Did you meet your goals set from last class (if you didn't, why)? (2-3 sentences)
- (3) What are your goals for the next class? (can be a bulleted list)

Keys to Making this Space Work

- Reading - a log of your reading as you complete it
 - This could be an annotated bibliography with short notes on what you thought you gained from each source. Even if the information is contradicted, it is important. Remember, good reflection acknowledges mistakes made and corrections thereafter.
- Notes - Brief notes on your developing thoughts on your research questions as a result of your reading and research
- Challenges - Register any challenges you encountered and what you did to resolve them, especially if they revolve around the research itself. Avoid simply complaining about things such as missed opportunities or wasted time, but reflect on steps to overcome these issues in the future.
- Visuals - Include annotated diagrams, charts, tables, illustrations, or images that help to build your argument.
- Skills - Document any newly developed skills or refining of pre-existing skills that you gain as a result of the research process.

Getting the Most Out of Your Reflection

Below is a list of key questions that you should consider when writing your core reflections in your RRS, which could then inform what you include in the assessed RPPF. Each key question below is subdivided into additional stimuli questions to help guide your reflections along a more focused research. Bear in mind that you do not need to answer all of the additional stimuli questions as they may not all apply to you. What you must do, however, is respond to the key questions as a minimum. Your supervisor should encourage questioning along these lines so you can make the most out of those meetings.

Key Questions

1. How effective were your choices?

- a. In what way(s) did your chosen methodology produce a definite or satisfying answer to your Research Question?
- b. In what way(s) did your personal reading shed any new light on the text or challenge, or confirm pre-existing schools of thought?
- c. In what way(s) did your choice of source material lead to a comprehensive assessment of (most) all factors?
- d. Was your choice of sources consistently relevant to your Research Question? What implication did that have on your conclusion?
- e. To what extent did your primary research consider (most) all key variables or factors in external agents (e.g. socio-cultural influences, gender or research biases)?
- f. To what extent did your research material (or approach) utilize the latest research in the field, making it up to date?
- g. In what way(s) did your research highlight any undocumented or new thoughts on the topic question?
- h. To what extent could your approach be seen as yielding reliable (and/or valid) results?

2. What changes were necessary during the research process?

- a. Did your research bring to light any material or data that forced you to rethink your approach or adjust your Research Question accordingly?
- b. Did your methodological approach or choice of sources consistently yield the required results or were changes/additions required?
- c. In what way(s) did your Extended Essay compel you to seek out new modes of note taking or overall organization (e.g. time management)?
- d. To what extent did you include a wide variety of source material (not just internet sources)?
- e. Did your argument require a greater balance of opinion that forced you to do wider reading or additional primary resources?
- f. Why did you switch from a primary to secondary research approach (or vice versa)?

3. What were the greatest achievements and challenges during your research process?

- a. Did your research require you to acquire more technical skills or adapt your technical proficiencies so as to conduct your research properly (e.g. learning how to use a specific lab or technological equipment or software to devise subject appropriate surveys)?
- b. Was there a lack of sufficient source material to begin with when it came to your topic? Was there too much material? How did you overcome this?
- c. In what way(s) has your research findings added to the existing body of knowledge around your chosen topic?
- d. Did you make any significant breakthroughs with regards to the topic in question?
- e. Were you able to devise any original approaches to respond to your Research Question?
- f. In what way(s) was your conclusion a comprehensive response?
- g. In what way(s) could your chosen topic or approach be deemed a challenge to research or pursue (e.g. deals with complex mathematics, concerns itself with an obscure aspect of history, or attempts a new reading of a well-known text)?
- h. Did you acquire any new skills that you have found useful in other areas of your studies?

Research Planning and Progress Forms

The three RPPFs come after meetings with your supervisor. Together, these will total 500 words, in addition to the 4000 of the essay itself. They will be considered product grades for the sake of ToK grading. The first comes after your initial supervisor meeting in which you will lay out your plans. The second will come after the rough draft has been read by your advisor (September of your senior year), and the third, the Viva Voce will be done when you have finished your final draft.

The RPPFs should include **all three** aspects of the following:

Level of Reflection	Examples of questions
<i>Descriptive</i>	What did I do? How did I undertake my research? What were the problems that I faced? Did my approach or strategies change throughout the process What have been the high and low points of the research and writing process?

<i>Analytical</i>	<p>Was my research successful? If I changed my approach or strategies during the process... why did I do that? 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?</p>
<i>Evaluative</i>	<p>If I were to undertake the research again, would I do it differently? Why? What has affected this? If I did the research again would I change my methodological approach? Were my strategies for undertaking this research the most appropriate? What new questions emerged as a result of my research that I was not expecting?</p>

Exemplar Reflections on Planning and Progress Form

Below is an example of the kinds of things you could write in the three reflection spaces on the RPPF. The key at all times is to maintain a focus on the process of researching and writing the essay itself.

The example is intended for a history EE, but similar types of reflection could be raised with any subject.

RQ - To what extent could Anna Comnena's "Alexiad" be read as a criticism of the reign of Emperor Manuel I?

<p>First Reflection</p>	<ul style="list-style-type: none"> I was attracted to Anna Comnena's <i>The Alexiad</i> as a result of some extra readings that formed part of my IB history course (The Crusades). As the first female historian, Comnena stands in a unique place in terms of historiography, something which appealed to me as both a woman and budding historian. I was initially considering writing about her accounts of the First Crusade, but quickly found the topic to be far too wide in scope. A reading of Paul Magdalino's article "The Pen of the Aunt", helped refocus me on the issue of historical purpose, that is, why she wrote the history she did. I have no allocated time to reading historical accounts of Manuel I's reign to decide how closely the events Comnena mentions in her history of her father's reign (Alexius) so as to validate my current hypothesis that she intended the work to be a celebratory account of her father so as to cast a negative light on the
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	<p>rule of her nephew Manuel I. My current list includes: Runciman, France, Macrides, Christomides, and Hill.</p>
<h2>Interim Reflection</h2>	<ul style="list-style-type: none"> I was finding it hard to come up with a satisfactory counter to the questions of accuracy and authenticity that feature prominently in modern readings of her work. Historians ranging from Edward Gibbon and John France to the more direct Howard-Johnson paper that completely challenges her authorship effectively negated my hypothesis entirely. Using Magdalino and Hill as a focus point, I reread key sections of <i>The Alexiad</i> and mapped out her account against the political events of Manuel I's reign and quickly discovered some interesting overlaps (buildingworks, military campaigns, relations with the West, and so forth). Although occasionally obscure and subtle, the criticisms emerge by means of an unspoken comparison which Byzantine readers of account would have well understood. This approach is providing me with a suitable counter to the aforementioned criticisms. I have also begun structuring my work accordingly with sections devoted to historical context followed by a section on <i>The Alexiad</i> that compares and contrasts events from Alexius' time with those of Manuel's. I am considering a chapter on the historiographical tradition of Byzantium but may integrate it into the main body in the end.
<h2>Final Reflection</h2>	<ul style="list-style-type: none"> I am very pleased with how the essay has turned out. Skills-wise, I had no problems with referencing, which I picked up quickly. However, integrating source analysis did prove a challenge at times, due to my narrative tendencies. I believe I've been able to challenge the orthodox interpretations of Comnena's work as a piece of fantasy fiction at the hands of a disgruntled woman by showing that she was effectively using one of the few weapons she still possessed in her diminished political state - the power of words - to criticize the existing leadership. Hill's works proved of particular use to me as they examined female power in the broader context and thus gave me a framework for interpreting that Comnena was able to do within the context of her time.

Note: The RPPF is NOT intended to be a place where you mention any medical or personal problems that you encountered. Any adverse circumstances will be communicated to the IB via your IB Diploma Coordinator through a different channel. So, seek guidance form the coordinator if this applies to you.

Getting Started

All Extended Essays require you to formulate your own research question that will invite an investigation and can be meaningfully answered within the prescribed limit of 4,000 words. It is important that this *be a question* in part as it is required to state your question in the essay, but also as it will help you maintain focus in your research and writing.

Subject and Topic

As a starting point **always** opt for topics that are of meaningful interest to you. Consider the following questions:

1. Which subjects have you really enjoyed?		
English Literature	History	Biology
2. Which topic areas or themes or periods have you been most intrigued by in these subject areas		
<ul style="list-style-type: none">• Magical Realism• Latin American Literature• Relationships	<ul style="list-style-type: none">• Ancient Greece• The Nuremberg Trials• Pre-colonial Cameroonian economics	<ul style="list-style-type: none">• Micro-organisms• Bacteria• Genetic manipulation

Designing a Research Question

Once you've considered the above table you will have a starting point for the development of your research question.

For example, your first column may indicate that you are interested in writing an Extended Essay on the following:

Magical Realism

This, however, is quite a broad topic and so will need to be pared down in order to produce a **workable research question**. To do this, start applying "limiting factors" to your topic - for instance:

What writers are best known for using magical realism?

The answer (predominantly used in Latin American writing) will limit the scope of the investigation to a specific author(s) thus limiting the range from an initial and very broad topic (magical realism) to specific novelists who use the technique.

The above could now be refined to:

The use of magical realism in Latin American literature

However, this is still too broad a basis for a research question, as there are simply too many novels and novelists to be able to successfully answer this within the word limit. Further questions would therefore, need to be asked to limit the scope of the investigation further.

As you will see in the table below, we can narrow down the scope of the investigation by taking each aspect of the question in turn and asking what possible limiting factors could be

Subject	English (Language A)
Original Title	The use of Magical Realism in Latin American Fiction
Limiting Factor	Latin American Fiction
Question	Which novels or novelists of Latin American Literature am I interested in?
Answer	Laura Esquivel



Refined Question	How does Laura Esquivel use Magical Realism in her novels?
Limiting Factor	Laura Esquivel
Question	Which work(s) by Esquivel?
Answer	<i>Like Water for Chocolate</i>



Refined Question	How does Laura Esquivel use Magical Realism in <i>Like Water for Chocolate</i> ?
Limiting Factor	Use of Magical Realism
Question	How is it used?
Answer	To develop themes of love, revolution, and redemption



Refined Title	Esquivel uses Magical Realism in <i>Like Water for Chocolate</i> to develop the themes of love, revolution, and redemption.
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Final Question	How does Esquivel use Magical Realism in <i>Like Water for Chocolate</i> to develop the themes of love, revolution, and redemption?
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The above refined title is a very good starting point to begin your Extended Essay research, as it has a clear focus and is narrow enough to be covered within the word limit.

Below are additional examples for other subject areas:

Subject	History
Original Title	The use of atomic bombs on Hiroshima and Nagasaki was justified
Limiting Factor	Justified
Question	How do I determine it was justified
Answer	It saved more lives than it ended



Refined Question	The use of atomic bombs on Hiroshima and Nagasaki saved more lives than they ended
Limiting Factor	Comparison of lives lost with and without the use of the bombs
Question	How do I determine that the bombs saved more lives
Answer	By forcing Japan to end the war years early



Refined Question	To what extent was the use of atomic bombs on Hiroshima and Nagasaki justified because it ended the war?
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Subject	Psychology
Original Title	Violent media leads to violent actions
Limiting Factor	Cause, violent media
Question	What type of media?
Answer	Violent video games



Refined Question	Do violent video games cause violent behavior
Limiting Factor	cause
Question	What is the relationship between violent video games and violent acts?
Answer	Correlative or causative



Refined Question	What type of relationship is there between playing violent video games and committing acts of violence?
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Limiting Factors

Below is a list of general terms that allow for the narrowing down of potential research questions. They are all accompanied by examples showing how a question can be more sharply focused when the general terms are narrowed down by asking limiting questions.

Accuracy	
<i>Accurate in determining what exactly?</i>	
Original Question	How accurate are state mandated subject tests such as PARCC?
Refined Question	To what extent can standardized tests such as PARCC or MCAP be an accurate measure of student proficiency?

Aspect	
<i>Is there a specific aspect that could be investigated (e.g. a particular military confrontation, a specific programme, a type of therapy, or a specific law)</i>	
Original Question	What social aspects can affect student learning?
Refined Question	In what ways do poverty and family educational history affect student educational success?

Author	
<i>Which specific author/artist/scientist/musician did you have in mind?</i>	
Original Question	How did 90's music change the music industry?
Refined Question	To what extent did Nirvana change the face of music in the 1990s?

Case Study	
<i>Which case study did you wish to explore?</i>	
Original Question	To what extent does trickle down economics work?
Refined Question	How effective were Ronald Reagan's economic policies in growing the U.S. economy?

Cause	
<i>Is there a specific cause you're trying to ascertain or measure (e.g. an event, a person, a group, a chemical)?</i>	
Original Question	The rise of mass shooters
Refined Question	To what extent does media coverage of mass shootings lead to more mass shooters?

Effect	
<i>Is there a specific effect you are trying to ascertain or measure (e.g. on behavior, or in terms of migration patterns, or development of laws, etc)?</i>	
Original Question	What accounts for the decreased levels of concentration among the young?
Refined Question	To what extent does constant stimulation contribute to lack of concentration in children between 4-10 years old?

Effectiveness

<i>What exactly are you referring to when you say “effective”? Effective in what way?</i>	
Original Question	The effectiveness of merit pay for teachers
Refined Question	To what extent is merit pay for teachers effective in improving school performance?

Experiment	
<i>Which experiment do you wish to explore or question the validity of?</i>	
Original Question	Can an experiment in psychology ever be objective?
Refined Question	To what extent can the Milgram Experiment be considered ethical?

Factors	
<i>Which specific factors do you want to focus on? (e.g. economic, religious, socio-political, etc.)</i>	
Original Question	What factors led to Obama’s 2008 election win
Refined Question	How did youth appeal factor into Obama’s 2008 election win?

Features	
<i>Which specific features do you wish to explore (e.g. compositional, database, connectivity)?</i>	
Original Question	In-flight services provided by a major airline
Refined Question	To what extent does the introduction of the Tempu system on X airline improve in-flight healthcare?

Location	
<i>Which country, city, or location do you want to investigate</i>	
Original Question	Japan’s declining birthrate.
Refined Question	To what extent has the increase in education and employment of women contributed to the decline in Japan’s birthrate?

Material	
<i>Is there a specific material that lends itself well to your investigation?</i>	
Original Question	Can caffeine be reduced in tea and coffee?
Refined Question	What is the effect on flavor in reducing caffeine in tea and coffee?

Methodology	
<i>Is there a specific method you wish to investigate in terms of your approach?</i>	
Original Question	Which method works best for determining cash-flow optimization in the banking sector?
Refined Question	How effective is the Taguchi method in determining optimal cash-flow levels in the banking sector?

Process	
<i>Is there a specific process or model that you could refer to? (i.e. a research model or interpretational model)</i>	
Original Question	Apple's business model from 1985-1997
Refined Question	What was the effect on earnings of Apple's business model during the Jobs-free years of 1985-1997

Reliability	
<i>Reliable in determining what? Or Compared to what?</i>	
Original Question	The reliability of cable news
Refined Question	To what extent can cable news outlets be considered a reliable source of information?

School	
<i>Is there a particular school of thought you have in mind upon which to base your interpretation or reading?</i>	
Original Question	A closer reading of William Faulkner's <i>As I Lay Dying</i>
Refined Question	In what ways can William Faulkner's novel <i>As I Lay Dying</i> be seen as a representative of the Cubist movement?

Skills	
<i>Which specific skills did you wish to explore (e.g. numeracy literacy or computation)?</i>	
Original Question	Use of online learning platforms during the Covid pandemic
Refined Question	In what ways does the use of online learning improve literacy skills among elementary students?

Society	
<i>Is there a specific type of social structure you would like to explore (Patriarchy, Matriarchy, Industrial)?</i>	
Original Question	BLM Movement
Refined Question	In what ways does the Black Lives Matter movement in 2020 differ from the Civil Rights movement of the 1960s?

Technique	
<i>Is there a specific technique you wish to investigate in terms of your approach?</i>	
Original Question	The theme of sexuality as seen in Syd Brak's "Kiss" series of work
Refined Question	To what extent does the use of airbrush techniques enhance the theme of sexuality in Syd Brak's "Kiss" series?

Texts	
<i>Which specific texts do you have in mind to focus on for your investigation</i>	
Original Question	Representations of African-Americans in literature
Refined Question	In what ways does <i>The Other Wes Moore</i> depart from contemporary literary depictions of African Americans?

Time Period	
<i>Which specific time period do you want to investigate (i.e. a specific decade, early years of home computing, etc.)</i>	
Original Question	Was Prohibition ineffective?
Refined Question	What were the negative outcomes as a result of Prohibition in the United States from 1920-1933?

Type	
<i>Is there a specific product, version, or design you have in mind</i>	
Original Question	The ergonomic design of modern console controllers
Refined Question	How have ergonomic factors been considered in the design of the PlayStation 4 controller to maximize first-person shooter gameplay efficiency?

Comparison

In some instances, research in your selected topic will lead to a comparison that more fully investigates your focus. There's nothing wrong with this, however, you must keep in mind that if you include a comparison it must contribute meaningfully within the allotted word count.

For example, in the English (Language A) question used above, the comparative element could alter the title to the following:

How do Laura Esquivel and Isabel Allende demonstrate the idea of revolution through Magical Realism in their works: Like Water for Chocolate and House of Spirits?

Another option would have been to compare two novels by Esquivel, provided they showed some difference in terms of how she approached the theme of revolution.

Below are examples of comparative elements added to a question for biology and history

	Non-comparative	Comparative
Biology	To what extent do natural products reduce growth of normal microflora (<i>Candida Albicans</i> and <i>Streptococcus Mutans</i>) in the oral cavity?	To what extent do natural products reduce growth of normal microflora (<i>Candida Albicans</i> and <i>Streptococcus Mutans</i>) in the oral cavity and differ from commercial mouthwashes?
History	How did the founding of PFR in Italy lead to the spread of fascism across Europe?	What factors in 1915 Italy and 1914 Germany led to Moussolini and Hitler’s respective rises to power?

Question vs. Title

In previous iterations of the EE, research questions could be worded as a proposition or statement, called a Title. Since 2016, this is no longer the case. According to the new rules, **all** Extended Essays must contain a research question written up as a question rather than a title.

This does not mean that when it comes to designing your research question you cannot begin with a title or hypothesis, so long as the finished version is in the form of a question (just like in Jeopardy). Below is an example of how a working title in an English (Language A) EE could be converted to a question.

Title Format	The subversion of archetypal depictions and classifications of the “hero” in George R. R. Martin’s <i>Song of Ice and Fire</i> series
Question Format	How does George R. R. Martin subvert the archetypal depictions and classifications of the “hero” in his series <i>Song of Ice and Fire</i>

Note: It is still possible to include a title as part of a cover page in addition to the research question. It is also perfectly fine to include hypotheses or titles for the purposes of section or chapter headings within the body of the essay itself. This often helps planning how to break your research question into smaller, more manageable parts.

Question Starters

Below is a list of question starters and their descriptions taken from the *IB Extended Essay Course Companion*, which may help you design your own research question or convert a working title into a question format.

Question Starter	Description
To what extent...	Allows for an evaluation of the degree to which something is true or a contributing factor. To effectively answer this type of question, the main body of the essay should include considerations of other influencing factors.
Assess the role of...	Allows an analysis of a specific factor or the contribution of something/someone
How accurate/reliable...	Allows for exploration relating to accuracy and usefulness
How far could one argue...	Allows for the analysis to focus on the accuracy/truthfulness of a specific argument or line of enquiry
How successful...	Allows for an evaluation of the success of an approach, method, policy, style, and so on of an associated area
How crucial/significant...	Allows an analysis for the significance of one or more factors on other associated areas
Which factors played...	Allows for an investigation around key factors
Has the introduction/cancellation of ... resulted in...	Allows for cause and effect style investigation
Does (X) process/approach provide...	Allows for a focused investigation on the result of a specific method followed or technique used
What is the contribution/influence of...	Allows for a focused investigation on the impact (positive or negative) of a certain individual, group, material, or concept on a broader area
What evidence is there to support...	Allows for an investigation into the nature of evidence and the extent to which it can support a thesis or approach
What is the impact of...	A straightforward causal investigation
Is it possible to determine...	An investigation into hypothetical frameworks based on existing and available evidence
Under what circumstances	Allows investigation into the conditions required before X is

may...	deemed possible
Is there a correlation between...	Allows for an investigation into the relationship between two or more factors

Feasibility

In order for a research question to be explored, it must be feasible. Feasibility means a question must meet certain requirements, including access to materials, equipment, and ethical guidelines (which will be explained later in this guide). Essentially, in order for a question to be a viable EE question, it must be able to be properly researched.

Locating Sources

Once you've established an appropriate research question, you then need to make sure you can find and access enough source material for the question to be considered feasible. This generally is done through primary and/or secondary sources which will make up the core of your research to start. This will allow you to determine the feasibility of your question and to begin an analysis toward answering your question.

Mrs. Z from the media center will help you access databases in order to find source material for your research.

Based on your initial proposal, you will be asked to find a minimum of four initial sources of information that you can use to help refine your question and then determine if it is feasible.

These initial sources will help:

- Revise and refine your initial proposal into a proper research question
- Proving to yourself and your potential supervisor the feasibility of your question
- Providing a starting basis for your investigation
- Situating your work in a wider body of research

Research Cafe

One of the steps in the process for writing the EE, which will help with organizing ideas and focusing research, is the Research Cafe. This will be an in-class opportunity for students to share their EE research with their peers.

Students will prepare a presentation with the following:

- Introduction slide
- Research Question
- Background - Why are you researching it?
- Scope of research - How are you researching it?
- Worthiness of investigation - Why does it matter?
- Chapter/Section headings

- Detail - Select one chapter/section to discuss in detail
- Significant findings so far
- Difficulties encountered and solutions found
- Next steps

Students will be broken up into small groups by subject and/or topic and present to their groups. Group members will evaluate student presentations and research, asking questions to facilitate reflection.

Ethical Guidelines for Extended Essay Research and Fieldwork Taken from Page 18 of the EE Course Companion.

- Extended Essay students must exercise the greatest sensitivity to local and international cultures
- Any research/fieldwork that creates anxiety, stress, pain, or discomfort of participants is not permitted
- Any research/fieldwork that involves unjustified deception, involuntary participation, or invasion of privacy, including inappropriate use of information technology, email, and the internet is prohibited
- Before commencing the research, all participants must be informed that they have the right to withdraw at anytime. Pressure must not be placed on any individual participant to continue with the investigation beyond this point
- Each participant must be informed of the aims and objectives of the research and in addition be shown the results of the research
- Informed consent should be obtained from the people who are the subject of the fieldwork. Research involving children needs the written consent of parents or guardians. Students must ensure that the parents are fully informed about the implications for children who take part in the research. Where research is conducted with children in a school, the written consent of the teachers concerned must also be obtained
- Extended Essay students must avoid conducting research with any adult who is not in a fit state of mind and cannot respond freely or independently
- If any participant shows stress and/or pain at any stage of the research, the research must finish immediately and the participant must be allowed to withdraw
- Participants must be debriefed and given the right to withdraw their own personal data and responses. Anonymity for each participant must be guaranteed.
- All data collected must be kept in a confidential and responsible manner, and not divulged to any other person
- Research that is conducted online, using IT methods, is subject to the same guidelines. Any data collected online must be deleted once the research has been completed. Such data must not be used for any purpose other than the conduct of research.

Disproving a Research Question

It is completely conceivable that in researching your question you may find that the research disproves your thesis. This is called objective research.

For example, if I want to write a History EE on America's involvement in WWII, I may opt for a question such as: *To what extent did America's reticence to become involved in WWII lengthen the duration of the war?*

Even if your research should find that had America become involved at an earlier date, the war would have proceeded for the same duration, you can still conclude that America's involvement in World War II made little to no difference in the duration of the war.

Alternatively, you may find other factors that may seem to disprove your thesis but are simply a matter of perspective. For example if I were writing on the question of *To what extent was the economy the driving factor in the advent of space travel?*

Research could show that the Cold War was the driving factor in the advent of space travel. This appears to negate our initial question, however it can be discussed in the paper so long as the paper focuses on answering the proposed question. *The economy was a significant factor in the advent of space travel, however the Cold War was the primary factor.* You could even have a section which discusses the various other factors from Jules Verne's writings to Kennedy's speech.

Keep in mind that one of the central ideas of the IB Extended Essay is for students to understand how independent research works, including all aspects such as disproving one's own thesis. Academia often seeks to disprove as much as prove hypotheses in order to push the boundaries of knowledge. The key idea is to provide proof that either confirms or refutes your thesis, and not to worry if you end up disagreeing with your original idea.

Changing Your Research Question

- 1. Change of subject or topic:** You may find yourself changing your research question quite a bit as your interests shift or as you encounter obstacles - usually in the shape of lack of resources. As a result, you may find yourself wishing to change topics and/or subjects completely. This is perfectly normal, however, you should set yourself a cut off point after which no more changes are permissible. This will ensure that the work needed to be done for the Extended Essay can be completed without affecting other assignments that will inevitably be due as part of the IB programme you are studying.

Each school will inevitably have different logistical considerations to wrestle with, such as supervisor availability and assessment calendars) so cut-off points may already be set by the school. It is always important to stick with these as your school has

its own process through which it engages the Extended Essay once you factor in all their other Diploma and Course obligations. This does not mean, however, that tweaking and adjusting your question are not possible throughout the process of writing your Extended Essay.

2. **Adjustments to the research question:** It is quite common, and even advisable, to constantly re-evaluate your research question in light of the reading and research you conduct on your topic. The reading and research phase will inevitably open up new pathways that you may not have considered previously, or it may shed new light on a different approach that can be followed.

The key thing to remember is that your research question should

- a. Reflect what your essay is actually about
- b. Be the question your conclusion responds to

Essays often lose marks because the question on the cover is not exactly what the student has ended up writing about in the body of the essay, or most commonly, what the student has responded to in their conclusion. The best way to avoid this mismatch from occurring is to adjust your research question to match what you actually wrote about in the end. Re-read your essay and if you feel the analysis has shifted focus, then go back and reverse engineer your question to match.

Case Study

John's initial research question was:

Which factor best explains Pharaoh Hatshepsut's rise to power in 1478 BCE?

However, as he began researching and reading on the female Pharaoh, he discovered that there was a lot more to be said for her consolidation of power as opposed to her rise to power.

The question was thus adapted midway through the research process to read:

Which factor best explains Pharaoh Hatshepsut's consolidation of power from 1478 to 1458 BCE?

Once the essay was near completion, John noted that his essay leaned heavily on Hatshepsut's use of religious and diplomatic propaganda to gain control over Egypt, and that this was in fact the underlying thread throughout the essay. The question was then adapted again, to read:

To what extent can Hatshepsut's use of religious and diplomatic propaganda be considered the key factor behind her consolidation of power from 1478 to 1458 BCE?

The key here is that the reading, research, and eventual writing of the essay shaped the final research question so that the entire process was organic in nature, changing and adapting to suit where the work John did was taking him.

Use the tables below to refine your original titles into a workable research question. Refer to pages for examples as to how this can be done. **Remember, per the new IB rules for the EE, you must end up with a question, not a title.**

Subject	
Original Question/Title	
Limiting Factor (highlight or list)	
Refined Question/Title	
Limiting Factor	
Refined Question/Title	
Limiting Factor	
Refined Question	

Feasibility Check

Feasibility Check	Yes?
Are there sufficient primary sources available?	
Are there sufficient secondary sources available?	
Can you access the sources from your location?	

Do you have all the materials at hand necessary to carry out your investigation?	
Do you have all the equipment at hand necessary to carry out your investigation?	
Can you access the materials and equipment in your location?	
Can you begin your research immediately?	
Your research question can be assessed against the Extended Essay's criteria?	
The chosen research methods or concepts underpinning your research question are relevant and appropriate to your subject?	
Does your research meet all of the IB's ethical guidelines on research and fieldwork?	

Locating, Organizing, and Evaluating Sources

The following section is designed to help students with locating, organizing, and ultimately evaluating their research sources.

The IB promotes four steps for the research process:

- Defining a research question (RQ)
- Locating relevant sources to support research of the selected topic
- Organizing information into useable formats
- Evaluating resources based on criteria such as reliability, limitations, and issues raised

At this stage, you should already have completed step 1 - defining your research question. Steps 2 through 4 will be discussed below. To start with, you will need to know what type of sources are relevant to your topic. Certain EE topics will require certain types of sources - e.g. a literary analysis of Haruki Murakami's *Kafka on the Shore* is going to require the primary source - the novel itself. Depending on the specific RQ being researched, secondary sources may also be required.

Below is a Subject-specific Source List taken for the IB EE *Course Companion*. As you browse the list, note that a [✓] indicates that this is a required source type, while a [✗] indicates that this type of source should not be used, and a [⊙] indicates that this source's use is dependent on the nature of the question.

Subjects	Primary	Secondary	Notes
Language A	✓	⊙	Analysis should largely be based on the primary sources (texts being written about). Secondary sources can be used provided they are treated critically and not simply accepted as definitive
Language B a. Language b. Culture and Society c. Literature	✓ ✓ ✓	✓ ✓ ⊙	With essays based on language or culture and society there is an expectation that reference to both primary and secondary sources should be made With literature, the same rules apply as Language A

<p>Biology</p> <p>a. Experiment based essay</p> <p>b. Non-experiment based</p>	<p>✓</p> <p>⊙</p>	<p>✓</p> <p>✓</p>	<p>a. The focus with experiment-based essays is the primary data produced as a result of the experiment(s) conducted by the student. Secondary sources in the form of scientific publications should be used to support a line of argument or indicate where the student has adapted their approach to produce different results. A consideration of the quality of the secondary material should also be offered to identify any limitations or weaknesses in approach, method, and so on.</p> <p>B. Non-experiment based essays should effectively question the reliability of the secondary source material used, and offer some critical insight into the strengths and limitations of the methodological approaches taken by the secondary sources</p>
<p>Business Management</p>	<p>⊙</p>	<p>✓</p>	<p>Essays in business management can rest on secondary source material entirely. Where primary research is used, it must provide quantitative and qualitative analysis directly relevant to the question</p>
<p>Chemistry</p> <p>a. Experiment based essay</p> <p>b. Non-experiment based</p>	<p>✓</p> <p>⊙</p>	<p>✓</p> <p>✓</p>	<p>See bio notes</p>
<p>Classical Greek & Latin</p>	<p>✓</p>	<p>✓</p>	<p>Students should aim to reference both types of source material. The text(s) studied will act as primary source, while articles, reviews or other publications will constitute secondary sources</p>
<p>Computer Science</p>	<p>⊙</p>	<p>✓</p>	<p>Essays in computer science can be based on secondary source material entirely. A large number of such sources should be used where possible with the proviso that the most up to</p>

			<p>date material is found in every instance.</p> <p>Primary source material, in the form of program runs or statistical charts, can also be used if reliably constructed and relevant to the question</p>
Dance	✓	✓	<p>Dance essays lean heavily on primary source material (e.g. interviews of dance practitioners or student's own experience) Secondary source material should be used only as evidential support of your own perspective or argument. Challenging the position of secondary sources is encouraged</p>
Design Technology	✓	⊙	<p>Due to the practical nature of the subject, most essays will focus on design, implementation, benefits, and effectiveness of your chosen product(s). A common approach would be to include data in the form of statistical charts, diagrams or tables gathered from user surveys and interviews of the product in action. More commonly the sources used will often include your own data gathered from trial of the material, product or specific design, its experimentation for effectiveness, resilience, or user friendliness. Primary experimentation is not a mandatory requirement, however, it does lead to significantly better essays</p>
<p>Economics</p> <p>a. Research-based</p> <p>b. Source-based</p>	<p>✓</p> <p>⊙</p>	<p>⊙</p> <p>✓</p>	<p>Source requirements for economics essays are highly dependent on the nature of the question. Questions that invite and are dependent upon you conducting primary research are highly advisable though not mandatory. Essays based purely on secondary source material are perfectly feasible provided the question has a sufficiently narrow scope. Essays that combine the two are also fine, provided both sets of</p>

			sources are shown as directly relevant to the question
Environmental Systems and Societies a. Experiment/Fieldwork based essay b. Non-experiment/Fieldwork based	✓ ⊙	⊙ ✓	Data gathered from experiments or fieldwork can constitute the entire basis for a successful ESS essay, provided that detailed descriptions of the procedures used are given so that the work can be repeated independently. Essays based solely on secondary source material are also feasible, provided that a wide range of sources are used and that consideration for reliability of said sources is made in the body of the essay
Film	✓	⊙	As with language A essay, primary focus is a film. Secondary sources can be used to support your line of argument, but should not replace it. Secondary sources may also be challenged rather than accepted as definitive interpretations
Geography	⊙	✓	Successful geography essays can be based solely on published secondary material, however, a wide range of such sources would be required in this instance. Primary source work, although not mandatory, is highly advisable as it tends to produce stronger essays in this subject. A critical evaluation of sources and approaches followed is required
Global Politics	⊙	✓	Essays in global politics require you to situate your question within existing theories or arguments related to the subject. As such, references to secondary materials are mandatory. The use of primary material, although not mandatory, is highly advised as it tends to result in a stronger essay and higher marks.
History	⊙	✓	Essays in history should aim to use both primary and secondary sources,

			<p>although the IB recognizes that this may not always be possible with certain topics, and thus primary sources are not mandatory. If primary source material is readily available, Extended Essays in history are expected to make reference to them. A primary source in history is deemed to be any artefact from the time in question, while a secondary source is anything written about that time produced later. A critical analysis of the value and limitations of the sources used by means of investigating their origin and purpose is also required. Factual data and historians' views should be used to support your argument without replacing it.</p>
Information Technology in a Global Society	✓	✓	<p>ITGS essays require the use of a wide range of both primary and secondary sources. An attempt should be made to support or contest findings in secondary source material with primary source work. The selection of material should also be briefly and critically assessed in the body of the essay.</p>
Literature and Performance	✓	✓	<p>Due to the interdisciplinary nature of the subject, any Extended Essay in literature and performance will require a thorough understanding of primary texts studied and the context in which they have been “transformed” from one medium to another. This means that although the primary focus is the text, the key difference here is that a comprehensive understanding of the pre-existing historical and cultural context is required to better evaluate the “transformation” aspect. As such, secondary source material are required as part of any literature and performance essay.</p>

Mathematics	✓	⊙	Essays in mathematics can rely solely on the data and analysis produced by your own calculations and applications of mathematical formulae associated with the differing mathematical disciplines. Secondary source material can be utilized if the focus of the question demands considerations of external proofs or approaches.
Music	✓	✓	Music essays must analyze the primary source first and foremost, however, secondary sources should also be used to provide support to the points raised by the student in the body of their essay. When secondary sources are used, they must be used to support your own argument and not replace it. Awareness of the value and limitations of the primary source(s) used is also required
Peace and Conflict Studies	⊙	✓	It is mandatory that essays in this subject refer to at least one text that describes theories underpinning peace and conflict. There is a list of texts contained in the subject guide for Peace and Conflict Studies. Primary source material can also be used where appropriate. This will become mandatory when there is not much secondary source material in existence for a chosen topic.
Philosophy	✓	✓	Primary sources in philosophy include the works by the philosophers themselves, whereas secondary sources would include all other texts written about these works. Essays in philosophy should always begin with the primary sources while making use of secondary sources to augment and support a line of argument or analysis. Reliance on textbooks alone will produce poor philosophy essays, so this should be avoided.

Physics a. Experiment based essay b. Non-experiment based	✓ ⊙	✓ ✓	See bio notes
Politics	⊙	✓	Secondary sources are mandatory requirements for essays in politics. The student is expected to situate their question within relevant existing theories of politics. Primary sources can be of use when the chosen topic is local in nature, but will still need to be grounded in existing political theory
Psychology	✗	✓	Psychology Extended Essays are expected to be seen as analytical investigations into an area of interest rather than primary research to test a hypothesis. Under NO circumstances are students to engage in their own experiments or case studied as this is deemed inappropriate for essays in psychology. Instead, students should reference secondary source material as a minimum expectation while making reference to pre-existing research material as appropriate
Social and Cultural Anthropology	⊙	✓	There is an expectation that all essays in this subject are rooted in a good understanding of anthropological theories. As such, reference to work by accepted anthropologists is highly advised. Primary source material can be included but must not be the focus of the essay. A consideration of the value and limitations of the methodological approach followed to generate the data is also expected if primary source material is used
Sports and Health Science a. Experiment based essay b. Non-experiment based	✓ ⊙	✓ ✓	See bio notes
Theatre	✓	✓	Theatre EEs require the use of both primary and secondary sources. You

			may also make use of your own primary data generated from interviews with theatre practitioners or visits to theatres and galleries, or even your own experiences of performances
Visual Arts	✓	✓	VA EEs must analyze the primary sources first and foremost, however, secondary sources should also be used to provide support to the points raised in the body of the essay. Where secondary sources are used, they must be used to support your argument not replace it.
World Religions	✓	✓	Essays in world religions work best when they evaluate the established approaches to religion as they appear in secondary sources against the data from primary sources. In both cases sources should not automatically be treated as representative or authoritative.
World Studies	✓	✓	World studies is unique in that it requires students to combine two subject methodologies (e.g. History and Visual Arts) As such, the type of sources referenced will depend on the two subjects chosen. Refer to specific subject information listed above.

Types of sources

The following are examples of primary and secondary sources for each subject area. **Reminder: Students are responsible for acquiring materials if they intend to pursue an Experiment based EE**

Subjects	Primary	Secondary
Language A	Novels, letters, anthologies, poems, interviews, plays	Journals, articles, critiques, documentaries, websites, literary reviews, newspaper or literary magazines Autobiographies and biographies may also prove useful in terms of context and occasional insight into meaning
Language B a. Language b. Culture and Society c. Literature	Novels, letters, poems, non-fiction, interviews, newspapers, websites, idiolects and dialects, advertisements	Journals, articles, critiques, documentaries, websites, literary reviews, newspaper or literary magazines that are language specific
Biology a. Experiment based essay b. Non-experiment based	Observations, fieldwork, experiments and data generated from all of them	Journals, articles, reviews, documentaries, websites, textbooks, science magazines about experiments, methodology, models, case studies or approaches Data charts or graphs from science institutes or government centres
Business Management	Data, graphs, charts, position maps, matrices produced by the student from conducting surveys, questionnaires, strengths, weaknesses, opportunities and threats	Books, textbooks, articles, journal publications and websites on business theory, management or practices

	analyses and any other acceptable quantitative or qualitative method as outlined by a business management syllabus	Company reports, statistical bulletins, or corporate analyses
Chemistry a. Experiment based essay b. Non-experiment based	See bio	
Classical Greek & Latin	Classical Greek or Latin texts such as epic poems, histories, speeches, political treatises, law codes, and inscriptions	Journals, articles, critiques, documentaries, websites, literary reviews, newspaper or literary magazines about the Classical Greek or Latin text(s) chosen
Computer Science	Analysis of student-made source code, compiler, or other computer program can form the basis of CSEE Interviews with computer science experts	Any specialist books, textbooks, newspapers, magazines, journal articles, or websites that reference the chosen computing system, program, code, technology, hardware, etc.
Dance	Dance productions (live or recorded) photos of dance performances, articles by dance practitioners, or interviews with them, dance notations, student participation in performances or workshops related to them	Any textbooks, journals, articles, critiques, documentaries, websites, dance reviews, dance magazines, promotional material or DVDs concerned with the chosen essay topic or its background
Design Technology	Surveys, questionnaires, user observations and structured interviews with users and experts Any data in the form of graphs, tables, charts, and so on that emerge out of	Books, textbooks, journals, articles, critiques, websites, newspaper, or magazines on design theory, principles, trends, applications, and approaches

	practical experiments conducted by you	The usage of websites and textbooks alone is not sufficient for the purposes of the Extended Essay
Economics a. Research-based b. Source-based	Any graphs, tables, charts, or other data that are produced by the student from conducting surveys, questionnaires, or interviews with experts in the field of economics	Books, textbooks, newspapers, magazine articles, journals, and governmental publications and websites on economic theory, research, trends, and policy Research conducted by think tanks, such as the Institute for Economic Affairs, Centre for Economic Policy Research, RAND corporation, etc.
Environmental Systems and Societies a. Experiment/Fieldwork based essay b. Non-experiment/Fieldwork based	Observations, fieldwork, experiments, surveys or interviews with experts in environmental studies	Journals, articles, reviews, documentaries, websites, textbooks, magazines on theories, experiments, models, case studies, approaches, research or methodologies related to environment, biology, geography Data, charts, tables, graphs, etc. from scientific institutes, government centers, or international agencies
Film	The film(s) or TV show(s) would act as the main primary source material, which would also include any scripts, screenplays, storyboards, or scores.	Any textbooks, journals, articles, critiques, documentaries, websites, film reviews, film magazines, promotional materials or DVD special features

	Interviews with the people involved in the film/show's production	
Geography	All data gathered from fieldwork investigations or studies	Any books, textbooks, newspapers, magazines, journal articles or websites that reference geographical issues Aerial satellite images Digital landscape simulations or models Diagrams, charts, reports and other statistical data obtained by reputable sources
Global Politics	Questionnaires, surveys, and interviews with experts in the topic or stakeholders related to political issues being investigated	Any books, textbooks, newspapers, magazines, journal articles or websites that reference the chosen political issues, conceptual frameworks, research, or approaches followed Written or oral record of major stakeholders or participants
History	Texts or artifacts created at the time in question: such as histories, letters, images, objects, speeches, laws, buildings, photographs, etc.	Texts concerning the time in question but created after it: histories, documentaries, websites, journals, history magazines, films, etc.
Information Technology in a Global Society	Any data gathered by the student through the application of ITGS theory, tools, or techniques.	Any specialist books, textbooks, newspapers, magazines, journal articles or websites that reference the chosen IT system or overall IT related concepts and applications

		IT think tanks such as the Information Technology and Innovation Foundation
Literature and Performance	The focus here is on how a literary work was adapted into a performance. As such the primary sources will be the literary work and the adaptation.	See Language A
Mathematics	Axioms, proofs, equations, theorems, data, problems, conundrums, statistics and so on	Books, journal articles, mathematics magazines, essays, specialist websites, and any publications that incorporates mathematical techniques
Music	Music recordings, scores, performances, concerts, observations, workshops, interviews with performers, questionnaires, and/or surveys	Any books, textbooks, newspapers, magazines, journal articles or websites, music reviews, or evaluations concerned with the chosen essay topic or its background
Philosophy	The original works of philosophers that outline their philosophical concepts or themes	Any philosophy-related compendiums, dictionaries, textbooks, encyclopaedias Where non-philosophy sources are used, they must be examined from a philosophical perspective
Physics a. Experiment based essay b. Non-experiment based	Observations, experiments, and all data generated by them	Any books, textbooks, newspapers, magazines, journal articles or websites on theories, experiments, models, case studies, approaches or methodologies

		Data charts, graphs, or tables from science institutes or government centres
Psychology	Experiments, case studies, observations and similar would classify as primary sources in psychology, however, these are NOT permitted in the EE	Any books, textbooks, newspapers, magazines, journal articles, websites on psychological theories, experiments, case studies, models, approaches, or methodology
Social and Cultural Anthropology	Observation, ethnographies, questionnaires, and interviews	Ethnographical and anthropological publications, studies form the core secondary source material. Considerations of the ethical issues that underpin these studies is also necessary. Texts referencing social, cultural, political, historical contexts can be used. Anthropology research libraries and institutes
Sports and Health Science a. Experiment based essay b. Non-experiment based	Observation, fieldwork, experiments, surveys, questionnaires and all data generated from such	Sports, exercise and health related books, textbooks, newspapers, magazines, journal articles or websites concerned with theories, experiments, models, methodology Data and graphs from sports science institutes and government centers
Theatre	The play itself (script or recorded performance) Stage sketches, drawings, pictures, plans, photographs Reviews of major productions	Any books, textbooks, newspapers, magazines, journal articles, evaluations or websites concerned with the

	Interviews with playwrights, directors, actors, producers, set designers, et Drama workshops	chosen topic or its background
Visual Arts	The artwork and/or artist will constitute the main primary source material for a VAEE - Exhibitions - Interviews with artists	Any books, textbooks, newspapers, magazines, journal articles, evaluations or websites concerned with the topic or its background
World Religions	Observation of religious practices and spaces Surveys, questionnaires, interviews with religious leaders, practitioners, or community members	Religious/Sacred texts, images, artifacts Any books, textbooks, newspapers, magazines, journal articles or websites concerned with the chosen religious topic or theme Written or oral records of major stakeholders or participants
World Studies	A World Studies essay requires that you select two subject areas upon which to base your investigation. As such, the list of acceptable primary sources would depend on your chosen subjects Refer to those subjects above	A World Studies essay requires that you select two subject areas upon which to base your investigation. As such, the list of acceptable secondary sources would depend on your chosen subjects Refer to those subjects above

So How Do I Determine Relevant Sources You Ask?

Most students will tend to default to Google and Wikipedia as their go-to starting point. However, since the algorithm for a general Google search is not academically oriented, and the information on Wikipedia is less than reliable, we advise steering clear of these generic search sources. Instead, consider the following:

Libraries	The school library or Harford County Public Library would both serve as good starting points. The librarians there will be able to point you to sources, both hardcopy and online. Mrs. Z has set up a portal on the library page for you to access a variety of online resources
Electronic Databases	Instead of just a Google search, scholarly and governmental databases will help you narrow down your search <ul style="list-style-type: none"> - Jstor - ERIC Institute - CQ Research - National Archives - Google Scholar - an academic search engine for Google
Online Encyclopedias	An online encyclopedia such as Wikipedia, may be your first instinct, but these do not often work out well, due to lack of peer review. They may be used for providing links to other more relevant primary and secondary sources, however.
Books	Regardless of whether you use a hard copy or digital copy of a book, it is the quality of the text that is important. For instance, a political science book written by a professor of political science at University of Maryland is likely to be more reliable than a history book published by a media pundit. Likewise, if a history book is written by an anthropologist rather than an historian, it will likely take a different approach to its scholarly research than what you may be looking for.
Textbooks	Similar to online encyclopedias, no Extended Essay should rely heavily on school textbooks. They are great for initial ideas or overviews of content, but you should seek more scholarly materials.
Journals	You should always seek out information from acknowledged journals in your chosen subject. Online databases (e.g. Jstor) are excellent for this, however, you may be able to find hardcopies at a school, local, or college library. Major universities usually have publishing houses affiliated with them, from which their publications can be purchased directly.
Magazines	There are numerous specialized magazines that cover a wide variety of topics across all subject areas. A school or local library is always a great source for these publications. Some examples are <ul style="list-style-type: none"> ● <i>New Scientist</i> ● <i>Billboard</i> ● <i>Psychology Review</i>

	<ul style="list-style-type: none">● <i>Popular Mechanics</i>● <i>National Geographic</i>● <i>The Economist</i>
Audio-visual	Videos or sound recordings such as documentaries, interviews, sound clips, demonstrations, 3D models and the like are also great sources to feature in an Extended Essay Bear in mind they must be audited for reliability as you would a website or book. Make sure to use material from credible sources, rather than anything from Youtube.

Organizing Source Material

Now that you have gathered your source material, you will want to organize it in such a way that it is easy to go back and reference the material.

While it may seem like sitting at a desk buried under a pile of books and journals is “research”, this is not actually the case. Students have a tendency to go straight from finding information in one source to writing, then go to another and write some more, and so on. This is bad research writing. Writing this way could lead to missed details, and will likely lead to a stuttered approach to writing, without any synthesis.

Since the Extended Essay process is done over a period of months, a wise course of action is to do solid note-taking of your sources. There are a variety of note-taking strategies which you could employ, such as: note-cards, grids, or charts. Below are some examples

Source Cards: It may be helpful to color code them by critical concept

Source (organize by author, or type [book, journal, website])	Heading/Chapter/Section of EE
Key information Bullet points Themes Experiments Quotes w/ page numbers	

Grid or Table - if you prefer to store your notes electronically. It may even benefit you to do this in a spreadsheet to make it easy to organize and quickly searchable.

Sources	Key Information	Heading
For this it may be wise to sort sources by type	<ul style="list-style-type: none"> ● Quotes ● Relevant details ● synopsis/summary 	Chapter or section of EE

	<ul style="list-style-type: none">• Quick facts• Data	
--	--	--

Tips:

- Define if this is primary or secondary, as well as type of source (book, website, journal, etc.)
- MS Word has an automatic bibliography maker that you can set for the appropriate writing style
- Your research data, quotes, statistics and other evidence serve to support your ideas, they should not be the focal piece of your writing, but rather a supporting detail.

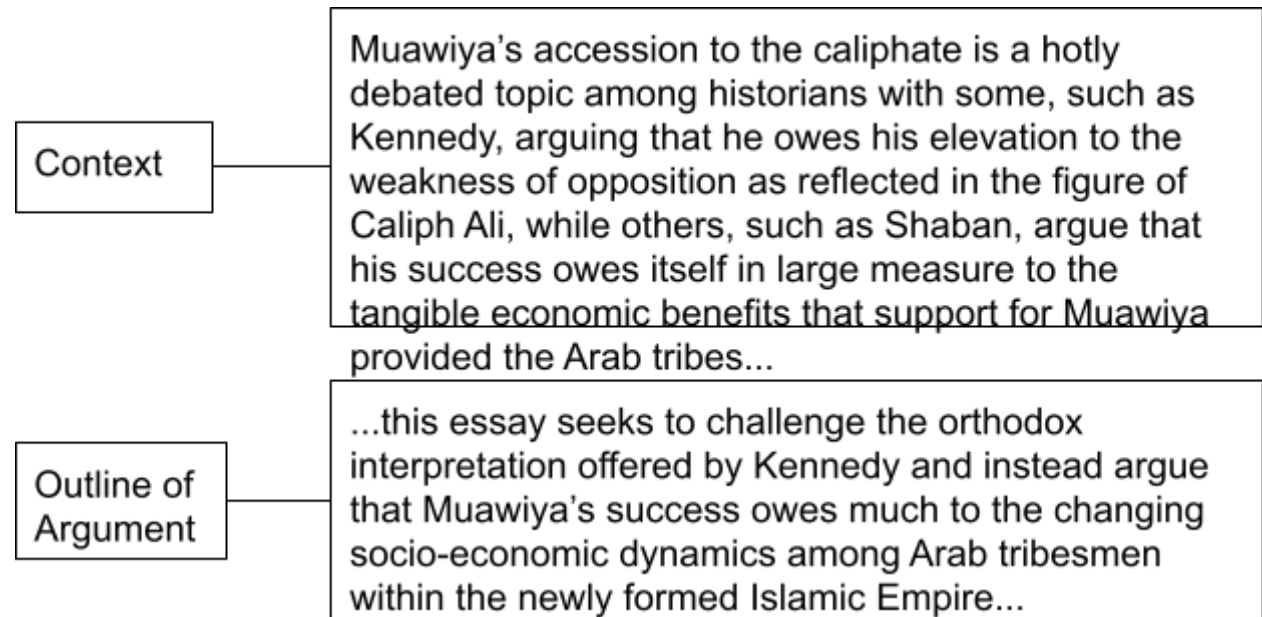
Structuring your EE

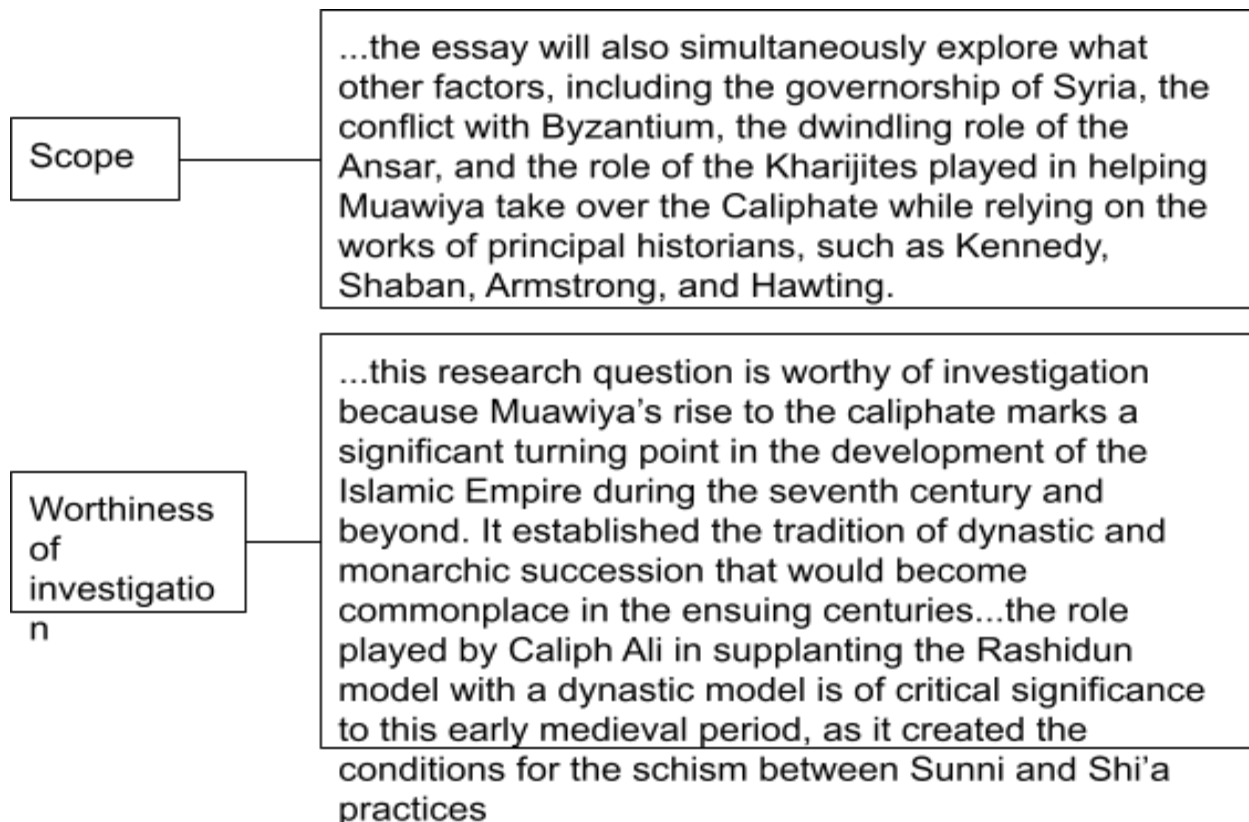
The Extended Essay consists of three major parts - Introduction, Body, and Conclusion. In your introduction you will need to have 4 things: Context, Outline of your argument, Scope of your research, and Worthiness of investigation. **Note: The introduction is often written last, as it is easier to revise the introduction to align with your essay than to align the whole essay to an introduction.**

Exemplar Introduction: Below are sections of an introduction that showcases how to go about including the four core aspects outlined above. These can also be found on page 64 of the *Course Companion* book.

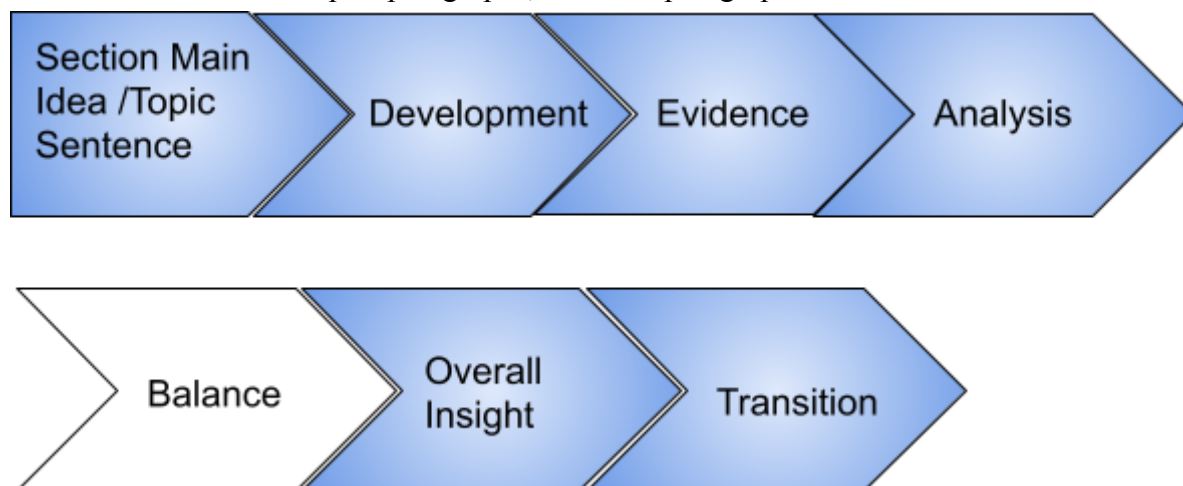
Recommended word count for Introduction: 300-450 words

Research Question: *To what extent does Muawiya owe his accession to the Caliphate in 661 CE to the weakness of his principal rival, Caliph Ali?*





The body section of your essay is made up of the various chapters, headings, or sections that will cover the different features and aspects of your research and findings. If you are writing a literary analysis this is more likely to break down into the specific literary aspects which you will be discussing. Most other subjects will use subheadings or chapters in the body. Each section should be made up of paragraphs, and each paragraph should follow the correct structure:



- *Main Idea /Topic Sentence* - A sentence or two establishing what the central idea of the paragraph will be.
- *Development* - elaborate on your initial topic sentence. It should flow and broaden the idea you're presenting.
- *Evidence* - Quotes, Data, News reports, examples, facts, diagrams, etc.
- *Analysis* - Explain what the evidence means.
 - What does this evidence show us?
- *Balance* - note that Balance is colored differently, that is because this could conceivably be a separate paragraph in its own right.
 - Balance is where you offer alternative perspectives on the idea about which you are talking.
 - Always include a counter balance so that the alternative perspectives aren't overwhelming your analysis.
- *Overall insight* - How does it relate to your RQ?
 - What does this idea tell us about your research question?
 - What are the implications of this idea to your research question?

Note: When writing the outline and the essay, the body is made up of many paragraphs, and should be organized around critical concepts.

Exemplar body paragraph from pages 66 & 67 of the *Course Companion*

RQ - How significant a role did the Prophet Muhammad's military victories play in the rise of Islam in the Arabian Peninsula

The Paragraph

- I. Muhammad's string of early military victories, primarily against the Quresh, were a significant factor in the early development of Islam.
- II. During Muhammad's prolonged exile in Yathrib (Medina) from 622-630, his position as the pre-eminent religious leader of the nascent Islamic community (umma) was consolidated and secured by his abilities to defeat the enemies of Islam in accordance with practices the local Arabs (badw) would recognize as noteworthy. Muhammad, in true tribal chieftain form, was able to attract supporters to his fold through the pursuit of raids and campaigns which bolstered his reputation and standing among his fellow men.
- III. According to Armstrong, the Prophet Muhammad's victory at Badr "impressed the Bedouin tribes, some of whom enjoyed seeing...the mighty Quraysh brought low" (Armstrong, 2001, p. 17). In time, Muhammad's victory at the Battle of the Trench where his force of 3,000 defeated a force three times larger "convinced the nomadic tribes that Muhammad was the coming man and made the Quraysh look decidedly passe" (Armstrong, 2001, p.17).

- IV. However, despite the prestige gained from Muhammad’s victories, these alone would have been worth nothing had he not followed it up with a more localized campaign in Medina and its surrounds to root out his most dangerous ideological rivals, principal among those being the Jewish clans who had aligned themselves with the Meccans (Qaynuqah, Nadir, and Qurayzah). By crushing them , and in the case of Qurayzah, massacring all 700 of their men and selling their women and children into slavery, he ensured that his military victories brought about more long-term benefits.
- V. It becomes increasingly clear, therefore, that Muhammad’s military victories, significantly aided his reputation and prestige among the Arab tribes by playing on local sensitivities and traditions of “good” leadership. However, these would not have translated into long-term benefits had it not been for his parallel campaign against ideological and political rival bases.

Or in actual paragraph format:

Muhammad’s string of early military victories, primarily against the Quresh, were a significant factor in the early development of Islam. During Muhammad’s prolonged exile in Yathrib (Medina) from 622-630, his position as the pre-eminent religious leader of the nascent Islamic community (umma) was consolidated and secured by his abilities to defeat the enemies of Islam in accordance with practices the local Arabs (badw) would recognize as noteworthy. Muhammad, in true tribal chieftain form, was able to attract supporters to his fold through the pursuit of raids and campaigns which bolstered his reputation and standing among his fellow men. According to Armstrong, the Prophet Muhammad’s victory at Badr “impressed the Bedouin tribes, some of whom enjoyed seeing...the mighty Quraysh brought low” (Armstrong, 2001, p. 17). In time, Muhammad’s victory at the Battle of the Trench where his force of 3,000 defeated a force three times larger “convinced the nomadic tribes that Muhammad was the coming man and made the Quraysh look decidedly passe” (Armstrong, 2001, p.17). However, despite the prestige gained from Muhammad’s victories, these alone would have been worth nothing had he not followed it up with a more localized campaign in Medina and its surrounds to root out his most dangerous ideological rivals, principal among those being the Jewish clans who had aligned themselves with the Meccans (Qaynuqah, Nadir, and Qurayzah). By crushing them , and in the case of Qurayzah, massacring all 700 of their men and selling their women and children into slavery, he ensured that his military victories brought about more long-term benefits. It becomes increasingly clear, therefore, that Muhammad’s military victories, significantly aided his reputation and prestige among the Arab tribes by playing on local sensitivities and traditions of “good” leadership. However, these would not have translated into long-term benefits had it not been for his parallel campaign against ideological and political rival bases.

The conclusion is how you draw your essay to a fine point and bring it to a formal closure. In your conclusion you should reiterate (not restate) your significant findings and the main ideas developed in the body of your essay. Offer evaluation of your methodology, process, and sources. Note any unresolved areas or questions bred by your research. Finally, it needs to answer your research question.

Note: It may behoove you to restate your question from the title page and then state your answer to it (I set out to answer the question yada yada yada; I have found that...)

Writing Tips

- The introduction in an EE is NOT the place to include detailed background information on an author, theory, or topic. If you must include this information, do so in the main body, or a separate “Background” section.
- Do not answer your question in your introduction. The introduction should serve to foster the question in the reader’s mind, and your answer should come in the conclusion.
- Avoid soft or indefinite language, such as “can” or “could”.
- Avoid personal pronouns - “I think”, “I believe”, etc. It sounds more academic and will save you on your word count.
 - With Personal Pronoun - “I think one of the major influences on Ray Bradbury was the increase in household televisions in the 1950s.”
 - Rephrase as - “A major influence on Bradbury’s writing was the increase in household televisions in the 1950s.”
- CUPS - Inconsistent capitalization, usage, punctuation, and spelling creates a bad impression for the examiner.
 - Capitalization
 - Be sure you are capitalizing proper nouns - Names of specific people, places, things, or ideas.
 - For instance = tissue vs. Kleenex (since the latter is a brand name)
 - Usage
 - This is your There, Their, They’re or To, Too, & Two.
 - Affect vs. Effect is a very common one.
 - Punctuation
 - Make appropriate use of commas, semicolons, colons, and apostrophes.
 - Won’t = Will not
 - Wont = a tendency to
 - Spelling
 - Use spell check as you can, but make sure to proofread yourself, as spell check will not always pick up certain words, or will not recognize uncommon words.
- Excessive Narrative or Summary
 - Examiners are looking for your analysis, so they do not need a play by play of given events in your essay. Provide context as necessary, but the bulk of your work should be your analysis.
- Inaccuracies -
 - Be sure you are correct in your facts and attributions.
 - “I fear all we have done is to awaken a sleeping giant and fill him with a terrible resolve.” Admiral Yamamoto in response to the plan to attack Pearl Harbor.
 - This is actually a misattribution. There is no record of Yamamoto stating this, but for a line of dialogue in the film *Tora! Tora! Tora!*

- Skip a line between paragraphs
- Be scholarly in your language choices
 - Use verbs beyond “said”
 - Verbs to present a point of view
 - Argues, concedes, disagrees, contradicts, etc.
 - Verbs to state neutrally
 - States, defines, describes, etc.
 - Verbs to show insight
 - Demonstrates, evaluates, recognizes, etc.
 - Use transitions and transitional phrases
 - Reinforcing an argument
 - Also, moreover, furthermore
 - Drawing comparisons
 - Similarly, likewise, just as
 - Showing contrasts
 - Although, however, even so, otherwise
 - Providing rationale
 - For this reason, because of this, since, in order to
 - Stating results
 - Consequently, thus, as a result, therefore
 - Citing evidence
 - (Remember, for example is not a good sentence starter)
 - For instance, in other words, as illustrated by, as seen with
 - Drawing conclusions
 - Finally, ultimately, in short, it can be established that
- Use your sources to reinforce your points, not the other way around.



Word Count

As you know the extended essay has a maximum word count of 4000 words. When it is uploaded, instructors are told to disregard anything after the 4000. For Edgewood, the requirement is between 3700-4000 words.

“But what if I only have 3692 words?” This is within the realm of acceptable. The 3700 minimum is a target. The 4000 maximum is an absolute.

Supervisors and students should be aware that the e-upload of extended essays will facilitate the automatic recognition of a cut-off point for assessment. Students should ensure that they remain within the word limit and should edit accordingly. Anything beyond this word count will be penalized.

Below is a list of what is and is not included in the word count.

 Included in the word count	 Not included in the word count
The introduction	The contents page
The main body	Maps, charts, diagrams, annotated illustrations
The conclusion	Tables
Quotations	Equations, formulas and calculations
Footnotes and/or endnotes that are not references	Citations/references (whether parenthetical, numbered, footnotes or endnotes)
	The bibliography
	The <i>Reflections on planning and progress form</i>
	Headers

Model Extended Essay Outline

I. Introduction

A. Context

1. explicit statement of your research question
2. Where your questions falls in the current existing knowledge

B. Outline of argument

1. Aspects of your topic
2. Key features you will be investigating

C. Scope

1. An explicit statement of your sources
2. Research methods used
3. Or experiments done
4. **Do NOT say “I used a variety of websites and journals”; include specifics sources that you drew the bulk of your information from**

D. Worthiness of investigation

1. Explain why this is an important question to research
 - a) How is it applicable to the world today
 - b) Its relation to the core field of study
 - c) Its challenge or confirmation of current thought
 - d) **Just because you like it does NOT make it worthy of investigation**

II. Main Body (Repeat the process below for each section of written paragraphs)

A. Section/Chapter/Heading 1

1. Paragraph 1

- a) Main Idea /Topic Sentence
- b) Development
- c) Evidence
- d) Balance/Counter-balance
- e) Analysis
- f) Insight
- g) Transition

2. Paragraph 2

- a) Main Idea /Topic Sentence

- b) Development
- c) Evidence
- d) Balance/Counter-balance
- e) Analysis
- f) Insight
- g) Transition

B. Heading 2

1. Paragraph 1

- a) Main Idea /Topic Sentence
- b) Development
- c) Evidence
- d) Balance/Counter-balance
- e) Analysis
- f) Insight
- g) Transition

Repeat as needed

III. Conclusion

- A. Summary of Main thesis and points
- B. Summative synthesis of key points (linked to Research Question)
- C. Acknowledgement of limitations, suggestions for further study

Consider

The outline of your paper is the skeleton, you want strong healthy bones, so details

The rough draft is the muscle tissue and organs, it fills out and gives shape

The final draft is the flesh. This is where the paper is smoothed out

Note: You will need a title AND research question on your cover page.

Grading

Criterion A: Focus and Method

This criterion focuses on the topic, research question and methodology. It assesses the explanation of the focus of the research (topic and the research question), how the research will be undertaken, and how the focus is maintained.

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 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) are generally relevant and appropriate given the topic and research question. ● There is some evidence that their selection(s) was informed. <p><i>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.</i></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

<p>1-2</p>	<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
<p>3-4</p>	<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 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><i>If the topic of 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</i></p>
<p>5-6</p>	<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 analyze 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 and 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 it is superficial <p><i>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</i></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 RQ <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 and 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

	<p>significantly hinder understanding</p> <ul style="list-style-type: none"> ● 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 clearly relevant to the research question <p>Analysis is good</p> <ul style="list-style-type: none"> ● The research is analyzed 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 may be some minor inconsistencies <p>Discussion and 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 it is 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 analyzed 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 and 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

	<ul style="list-style-type: none"> • The research has been critically evaluated
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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 (MLA, APA, CMS) • 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 of the topic, the argument, and the 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 in the RPPF, with the supervisory comments and the extended essay itself as context. Be aware, your supervisor's comments will include things about your progress, your preparedness, and your reflections. If you let things slide, it will reflect poorly in the Engagement piece.

Level	Descriptor of Strands and Indicators
0	The work does not reach a standard outlined by the descriptors below
1-2	Engagement is limited <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/process
3-4	Engagement is good <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	Engagement is excellent <ul style="list-style-type: none">● Reflection on decision-making and planning are evaluative and include reference to the student's capacity to consider action 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

Grade Descriptors

Grade A
<p>Demonstrates effective research skills resulting in a well-focused and appropriate research question that can be explored within the scope of the chosen topic; effective engagement with relevant research areas, methods, and sources; excellent knowledge and understanding of the topic in the wider context of the relevant discipline; the effective application of source material and correct use of subject-specific terminology/concepts further supporting this; consistent and relevant conclusions that are proficiently analyzed; sustained reasoned argumentation supported effectively by evidence, critically evaluated research; excellent presentation of the essay, whereby coherence and consistency further supports the reading of the essay; and present and correctly applied structural and layout elements.</p> <p>Engagement with the process is conceptual and personal, key decision-making during the research process is documented, and personal reflections are evidenced, including those that are forward-thinking.</p>
Grade B
<p>Demonstrates appropriate research skills resulting in a research question that can be explored within the scope of the chosen topic; reasonably effective engagement with relevant research areas, methods, and sources; good knowledge and understanding of the topic in wider context of relevant discipline; a reasonably effective application of source material and use of subject-specific terminology/concepts; consistent conclusions that are accurately analyzed; reasoned argumentation often supported by evidence; research that at times evidences critical evaluation; and a clear presentation of all structural and layout elements, which further supports the reading of the essay.</p> <p>Engagement with the process is generally evidenced by the reflections and key decision-making during the research process is documented.</p>
Grade C
<p>Demonstrates evidence of research undertaken, which has led to a research question that is not necessarily expressed in a way that can be explored within the scope of the chosen topic; partially effective engagement with mostly appropriate research areas, methods, and sources - however, there are some discrepancies in those processes, although these do not interfere with the planning and approach; some knowledge and understanding of the topic in the wider context of the discipline, which is mostly relevant; the attempted application of source material and appropriate terminology/concepts; an attempted synthesis of research results with partially relevant analysis; conclusions partly supported by the evidence; discussion that is descriptive rather than analytical; attempted evaluation; satisfactory presentation of the essay, with weaknesses that do not hinder the reading of the essay; and some structural and layout elements that are missing or are incorrectly applied.</p> <p>Engagement with the process is evidenced but shows mostly factual information, with personal reflection mostly limited to procedural issues.</p>
Grade D
<p>Demonstrates a lack of research, resulting in unsatisfactory focus and a research question that is not answerable within the scope of the chosen topic; at times engagement with appropriate research, methods, and sources, but discrepancies in those processes that occasionally interfere with the planning and approach; some relevant knowledge and understanding of the topic in the wider context of the discipline, which are at times irrelevant; the attempted application of source material, but with inaccuracies in the use of, or underuse of, terminology/concepts; irrelevant analysis and inconsistent conclusions are a result of a descriptive discussion; a lack of evaluation, presentation of the essay that at times is illogical and hinder the reading; and structural and layout elements that are missing.</p> <p>Engagement with the process is evidenced but is superficial, with personal reflections that are solely narrative and concerned with procedural elements.</p>
Grade E
<p>Demonstrates an unclear nature of the essay; a generally unsystematic approach and resulting unfocused research question; limited engagement with limited research and sources; generally limited and only partially accurate knowledge and understanding of the topic in the wider context of the relevant discipline; ineffective connection in the application of source material and inaccuracies in the terminology/concepts used; a summarizing of results of research with inconsistent analysis; an attempted outline of an argument, but one that is generally descriptive in nature; and a layout that generally lacks or incorrectly applies several layout and structural elements.</p> <p>Engagement with the process is limited, with limited factual or decision-making information and no personal reflection on the process.</p>

Extended Essay Formatting and Submission Guidelines

1. The candidate name **SHOULD NOT** appear on any of the pages of the extended essay, including the title page.
2. The Cover page should be formatted as follows:
 - Subject
 - Research Questions
 - Candidate number
 - Word Count
3. The essay should be formatted as follows:
 - Arial font
 - 12 point
 - 1 inch margins
 - Double spaced
 - Numbered pages
4. The extended essay should be saved in a file size of ***no more than 10MB*** and as an acceptable file type:
 - .doc
 - .docx
 - .pdf
5. All diagrams, maps, tables, and pictures must be digitally produced where possible to prevent excessive file sizes when included as part of the essay.
6. In preparation for the electronic upload, supervisors must remind candidates that the model for the EE is a paper in an academic journal. No provision is therefore planned for the upload of media other than the essay itself and accompanying images.
7. Appendices must be used sparingly. Examiners are not required to read appendices, so material essential to the essay must also be included in the body of the essay (including large images) and any material in the appendix should be minimal and selected with care.
All candidates are required to put their Researcher's Reflection Space (RRS) journals into an appendix.

Irrespective of the subject, the extended essay should be modeled on an academic journal/research paper which can exist and be understood on its own, without the need to access external links or accompanying material, such as DVDs. There is no requirement for the examiner to refer to any material that is not included in the extended essay itself when assessing the work.

Receiving an electronic version of an extended essay will make it easier for examiners to gauge at which point an essay has reached 4,000 words. Candidates must be reminded of the penalty for exceeding the word count or circumventing it using footnotes incorrectly (for anything other than referencing).

**Please save your file name as:
Last name, First name EE**

Make sure to save it before you click “send”!

Some Notes from an IB EE Grader

- IB Examiners were cautioned about too many sources, and too many secondary sources. Only put sources in your Bibliography that you actually cite in your paper.
- There is a whole other category in Group 1 EEs called Language Studies - study of any type of media and culture. The text in this category is anything - books, speeches, advertisements, articles, pictures, films, songs, TV shows, video games, etc.
- It might be smart to **Bold** the research question in the introduction

Bibliography

Lekanides, Kosta. *Extended Essay Course Companion. Oxford IB Diploma Programme*, Oxford University Press, 2016.