

The strands

The IB has set out a series of *strands* that act as the core focus of each criterion. In order to attain the highest grades a student needs to meet these for each of the criteria. These strands are as follows:

Criterion	Strands
A. Focus and method	<ul style="list-style-type: none"> • Topic • Research question • Methodology
B. Knowledge and understanding	<ul style="list-style-type: none"> • Context • Communication
C. Critical thinking	<ul style="list-style-type: none"> • Research • Analysis • Discussion and evaluation
D. Presentation	<ul style="list-style-type: none"> • Structure • Layout
E. Engagement	<ul style="list-style-type: none"> • Research focus • Planning and process

Each criterion will be elaborated upon in the following section with suggested approaches, useful tips and explanations relating to the strands offered across a wide range of IB subjects.

Criterion A: Focus and method (6 marks)

This criterion has a number of aspects that are closely aligned with it:

- Choice of topic
- Research question
- Methodology and/or sources utilized

The introduction

The introduction to the essay is your best friend when it comes to Criterion A as it is the perfect place to outline how almost all of the strands for Criterion A are to be covered in the body of the essay that follows. Due to this, it is advisable to write the introduction as *a separate and clearly labelled section* so that examiners can identify how you've gone about meeting the strands for Criterion A.

Although you can certainly create an outline of what your essay may include and look like contents-wise at the outset of the EE process, it is recommended that you finalize the writing of the introduction last once the essay has taken shape.



Question and Answer



Question: What do I include in my introduction?

Answer: There are four core things to explicitly mention in your introduction: the research question, some context with regards your topic, why it is worthy of investigation and the methodological approach and/or source material you've used to arrive at your conclusion.

INTRODUCTION	
INCLUDE	DETAILS
Research question (RQ)	<p>Aside from on the title page, it is advisable to explicitly refer to your research question in the introduction. Do not simply list it but rather blend it into the prose of your introduction (for example, "This paper seeks to explore the extent to which ...").</p> <p>Also, bear in mind that the conclusion to your RQ must not be obvious but should rather involve a degree of research and analysis on your part. Questions that are largely of the yes/no variant, or that lead to a simple conclusion, are not appropriate.</p> <p>Usually questions that begin with "who" or "what" lead to poor investigations as seen in the examples below:</p> <p>History EE on the Munich Agreement (1938)</p> <ul style="list-style-type: none"> • RQ: What did Chamberlain hope to achieve from the Munich Agreement in 1938? • Conclusion: He sought to avoid war with Nazi Germany. <p>Visual Arts EE on H.R. Giger's Work</p> <ul style="list-style-type: none"> • RQ: Which techniques did HR Giger find more emblematic for his work? • Conclusion: Airbrush <p>Economics EE on the public listing of a company</p> <ul style="list-style-type: none"> • RQ: Who stands to benefit the most from the public listing of Company X? • Conclusion: The shareholders <p>(See Chapter 2, pages 10–17 for more on how to devise good research questions.)</p>
Context	<p>You should always situate your RQ within any existing theories, approaches or evaluations that underpin your topic as a whole.</p> <p>For example:</p> <ul style="list-style-type: none"> ➤ Are there pre-existing interpretations of the "text" you're writing about? ➤ What pre-existing theories are there as to the cause of an event you're investigating? ➤ What conclusions do the major analytical tools or techniques related to your topic point to? ➤ What alternative schools of thought have been applied to the analysis of the topic you have in mind (for example, psychoanalytical and deconstructivism)? ➤ Are there alternative methodological approaches to your question?

Worthiness

It is imperative that you mention why your question is worthy of investigation or why we the readers should care about the potential conclusion(s).

Types of things that would be suitable here include:

- ✓ Offers a different interpretation to existing ones
- ✓ Is a contemporaneous and/or controversial topic that demands investigation (you must state the nature of the controversy)
- ✓ Has relevance or application in real-world dynamics
- ✓ Has often been erroneously represented (for example, through film adaptations or media sound bites)
- ✓ Is an often poorly explored field, area or topic of investigation
- ✓ Is of critical importance to the reading of a "text"
- ✓ Challenges existing assumptions or interpretations relating to the topic (or texts)
- ✓ Is assessing the validity of existing assumptions or interpretations
- ✓ Utilizes a different methodological approach in the hope of gleaning new insight into a given topic
- ✓ Evaluates different methodological approaches in the hope of deducing a "best" one (that is, for example, being more accurate or more reliable)
- ✓ Testing existing theories within a specific sample set

Types of things that are **not** suitable here include:

- ✗ Liking the subject/topic
- ✗ It is interesting (stating this is not sufficient as you must frame what makes it so, ideally in relation to one of the tick points above)
- ✗ Your parents are fond of the subject matter/topic
- ✗ Your teacher/supervisor instructed you to research it (this is not allowed under the IB rules governing the EE to begin with)
- ✗ Your elder sibling or friend is studying this at university

Methodological approach (or source-based approach)

Your introduction should offer an outline into your chosen methodological (or source-based) approach so that the examiner is clear on *how* you went about answering the RQ.

[Methodology] Consider the following also:

- a. Why was this method chosen?
- b. What is it about this method that helps answer the question (for example, greater reliability, repeatability, sample size, margin of error or industry standard)?

[Source-based] Consider the following:

- a. Why were the sources chosen (for example, they establish the traditional interpretative approaches that you will evaluate or challenge, offer diverse evaluative approaches or provide a new interpretative framework)?
- b. How are you going to use or respond to their claims (for example, challenge, affirm, prove or test)?



AVOID	DETAILS
Descriptive backgrounds	<p>Avoid narrating the extensive background of your chosen topic as this often is either irrelevant or ends up being purely descriptive filler. Keep it to the point and relevant to the focus of your RQ.</p> <p>Example of poor introductions:</p> <p>History EE on Hitler's rise to power</p> <ul style="list-style-type: none"> • Candidate mentions details relating to Hitler's childhood and upbringing. <p>English EE on representations of justice in Harper Lee's <i>To Kill a Mockingbird</i></p> <ul style="list-style-type: none"> • Candidate offers biographical information on Harper Lee. <p>Biology EE on optical isomers</p> <ul style="list-style-type: none"> • Candidate offers an account of the historical development of research on said topic beginning with Louis Pasteur's early pioneering work.
Biography	Biographical data, although useful under certain circumstances, is usually a poor substitute for proper research and analysis into a given topic. If anything, it often leads to a reductionist approach whereby the work of a given individual is summarized as an extension of their actual life. It has next to no place in the EE as a whole, and, therefore, should be avoided in the introduction as well.
Political or religious stance	The introduction (or EE as a whole) is no place to outline your personal political or religious agenda.
Personal pronouns	As the EE is intended to be an academic-style research paper the use of the personal pronouns ("I", "my" and so on) is best avoided on the whole.

For an exemplar introduction, refer to Chapter 5: Writing Essays Essay (page 64).

Criterion B: Knowledge and understanding (6 marks)

This criterion effectively evaluates how well you demonstrate content knowledge and understanding of the key issues, debates, theories, and arguments that surround your chosen topic. It also measures how fluently and accurately you use the command terms (or terminology) and concepts of your chosen subject. This also includes demonstrating knowledge of any subject-specific modes of analysis, preferred methodological approaches or styles and any evaluative or interpretative frameworks. Lastly, high marks in this criterion are awarded if the choice of resources is consistently relevant and befitting of an academic research paper in the chosen subject.

The table below highlights some other subject-specific requirements for a range of subjects:

Subjects	Requirements	Avoid
Literature (Group 1)	<ul style="list-style-type: none"> ✓ Knowledge and understanding of primary text(s) used is the key here. This is demonstrated through how well key passages, quotes or lines from the original text(s) are used to back up the claims made. ✓ Some context should be offered. This could take the form of an acknowledgment of alternate textual readings or interpretations from established scholars. It is always advisable to argue how your approach agrees, differs or challenges these pre-established viewpoints. 	<ul style="list-style-type: none"> ✗ Excessive historical and/or biographical background information ✗ Do not include definitions in footnotes ✗ Do not include images that are not referenced in the body of the essay
Language (Group 1)	<ul style="list-style-type: none"> ✓ Some context should be offered that showcases any existing theories or approaches to your chosen text(s) or language aspects. ✓ Demonstrate in what way your topic is of relevance or of particular interest/significance to the target language. 	<ul style="list-style-type: none"> ✗ Personal experiences or opinions (unless you fall into the target audience of the language) ✗ Do not include definitions in footnotes ✗ Do not include images that are not referenced in the body of the essay
Language and culture (Group 2)	<ul style="list-style-type: none"> ✓ Some consideration of the context into which the topic is situated (for example, cultural context) ✓ An understanding of the implications of your topic to the wider culture or language chosen ✓ Some of your research material should include (or be based on) primary sources 	<ul style="list-style-type: none"> ✗ Excessive historical and/or biographical background information ✗ Do not include definitions in footnotes ✗ Do not include images that are not referenced in the body of the essay
Literature (Group 2)	See Literature Group 1.	See Literature Group 1.
Business management (Group 3)	<ul style="list-style-type: none"> ✓ Source material chosen should all be relevant to your topic/RQ. ✓ Situate your topic/RQ within the wider business context. ✓ Accurate and consistent use of business terminology and concepts should be present throughout the essay. ✓ Offer explanations and definitions for complex terms or concepts used (specifically in relation to how you use them in your essay). 	<ul style="list-style-type: none"> ✗ Do not include definitions in footnotes. ✗ Do not include images that are not referenced in the body of the essay.



<p>Economics Group 3)</p>	<ul style="list-style-type: none"> ✓ Use of relevant economic theory and models is the key here. ✓ Any references to background theory should be integrated within the body of the essay itself. Ideally this should appear at the exact point where it is referred to as opposed to in a different section. ✓ Clearly indicating how the economic theory and data gathered is used to answer the RQ is also essential. ✓ Real-world data should underpin all arguments and be the basis of any application of economic models. ✓ Diagrams should be correctly labelled and supported with evidence through in-text analysis and commentary so as to demonstrate their relevance. 	<ul style="list-style-type: none"> ✗ Do not include a separate section on background theory or terminology. ✗ Do not include definitions in footnotes. ✗ Do not use generic diagrams or graphs. ✗ Do not include images that are not referenced in the body of the essay
<p>Geography Group 3)</p>	<ul style="list-style-type: none"> ✓ Explain the terms and concepts used within the body of your essay. ✓ Use acknowledged geographical sources as much as possible. ✓ Include only relevant source material. ✓ Support your points/arguments with relevant source material at all times. ✓ Diagrams, graphs, maps and so forth should all be correctly labelled and supported by solid geographical evidence (either primary or secondary in nature). 	<ul style="list-style-type: none"> ✗ Do not explain terms and concepts in footnotes or as separate sections. ✗ Do not include definitions in footnotes. ✗ Do not include images that are not referenced in the body of the essay.
<p>Global politics Group 3)</p>	<ul style="list-style-type: none"> ✓ Establish clear links between your chosen topic and the political theories, figures or institutions that underpin it. ✓ Place your topic within the wider political context by showing how they relate. ✓ Demonstrate an awareness of how socio-cultural biases can affect the political issue being investigated. ✓ It is vital that you demonstrate a solid grasp of the subject's terminology as taught in the IBDP course. ✓ Ensure you provide ongoing analyses of the data and source material you've utilized. 	<ul style="list-style-type: none"> ✗ Do not include definitions in footnotes. ✗ Do not include images that are not referenced in the body of the essay.

History (Group 3)	<ul style="list-style-type: none"> ✓ All source material used in the body of the essay must help develop an argument and be relevant to the research question. ✓ Place your research question within the wider historical context (e.g. link it to causation, implications, impact, etc). ✓ Accurately employ historical command terms and concepts. ✓ Ensure all your information is factual and accurate. 	<ul style="list-style-type: none"> ✗ Do not simply use source material to recount events or tell a narrative. ✗ Do not base your EE on events within the last ten years (or the maximum you can get for Criterion B is 4 marks). ✗ Do not include definitions in footnotes. ✗ Do not include images that are not referenced in the body of the essay.
Information technology in a global society (ITGS) (Group 3)	<ul style="list-style-type: none"> ✓ Offer a clear explanation of the IT system your essay is exploring along with accurately cited and labelled diagrams and images. ✓ All visual material should be labelled, cited accurately and referred to in the body of the essay. ✓ Use correct IT terminology fluently in the body of the essay. 	<ul style="list-style-type: none"> ✗ Do not include images that are not referenced in the body of the essay. ✗ Do not include definitions in footnotes.
Psychology (Group 3)	<ul style="list-style-type: none"> ✓ Offer an evaluation and/or commentary of the studies chosen based on any cultural, ethical, gender and methodological factors that may have contributed or influenced them. ✓ Accurately and consistently utilize the terms and concepts associated with the IBDP psychology course. ✓ Base your essay on relevant source material (ideally of an academic nature). 	<ul style="list-style-type: none"> ✗ Generally avoid using sources that do not fit the academic model for psychological studies. ✗ Do not include definitions in footnotes. ✗ Do not include images that are not referenced in the body of the essay.
Natural sciences (Group 4)	<ul style="list-style-type: none"> ✓ Seeing as secondary source materials are a bare minimum requirement, all essays should ensure that all materials are from reputable scientific sources and clearly relevant to the investigation. ✓ Correctly utilize any scientific terms and apply them correctly in the body of the essay. ✓ Make appropriate and consistent use of science-specific units of measurement, symbols and so forth. ✓ Explain any technical terms in relation to how you use them in your essay. 	<ul style="list-style-type: none"> ✗ Do not make excessive use of science jargon (clarity is preferred above all). ✗ Do not provide step-by-step, recipe-style lists of resources used in experimental work and overly detailed procedurals (remember the Extended Essay is not an IA). ✗ Do not include definitions in footnotes. ✗ Do not include images that are not referenced in the body of the essay.



Mathematics (Group 5)

- ✓ Only mathematics that is relevant to the specific research question should be used in the body of the essay.
- ✓ It is generally advised to pitch an EE in mathematics to an audience of people who have anything ranging from a strong interest to advanced knowledge of mathematics. This often means writing in such a way that the argument, as demonstrated by the mathematics used, is clear. This involves doing the mathematics and showing all the steps behind the reasoning.
- ✓ If complex theorems are used, always accompany them with an example to illustrate what you mean.
- ✗ Do not include wider mathematical knowledge if not directly relevant to the chosen research question.
- ✗ Do not draw conclusions from mathematics without having first shown the working out in the body of the essay.
- ✗ Do not include definitions in footnotes.
- ✗ Do not include images that are not referenced in the body of the essay.

Visual Arts (Group 6)

- ✓ Always situate your research question within a wider social, historical or cultural context (this is not the same as providing lengthy background information).
- ✓ Demonstrate an awareness of any existing theories, approaches, dialogue or criticism relevant to the specific arts subject and topic.
- ✓ Evaluate your source material for reliability and validity, commenting on any limitations.
- ✓ Ensure you are consistent in your usage of subject-specific terminology and any specific language (for example, musical notation, stage terminology and visual arts techniques).
- ✗ Avoid relying on subjective, opinion-based accounts.
- ✗ Avoid including lengthy biographical or historical background information.
- ✗ Do not include definitions in footnotes.
- ✗ Do not include images that are not referenced in the body of the essay.

Knowledge and understanding checklist

The worksheet below includes essential questions that all students should aim to respond to in order to maximize the grades awarded for Criterion B: Knowledge and understanding.

1. Have you supported key claims in your work with appropriate (ideally academic) source material?

YES ☐NO ☐

CHECK: List your sources and then evaluate each one for reliability and validity. It should pass the following questioning if it's to be deemed of academic value:

- 1. Does your data come from approved or acknowledged sources? (Remember: blogs, general websites, Wikipedia and the like do not usually qualify.)
- 2. If your data comes from primary research, have you followed an approved or acknowledged methodology in terms of data collection? (Check with your supervisor if the method adheres to the subject's research guidelines.)



If the majority of your source material does not pass the above checks, consider finding alternate sources that do. Some of your sources can be non-academic in nature though care should be taken when using them in your work. As a minimum, acknowledge their limitations in your writing.

- | | | |
|--|------------------------------|-----------------------------|
| 2. Have you assessed the value and limitations of your source material in your writing? (See Chapter 3.4.1 on pages 45–8 for help with this.) | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 3. Have you situated your research question within a wider context?
<i>For example (psychology):</i>
If your question explores the relationship between video games and violent behaviour in young males, have you shown an awareness of wider theories governing violence in males? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 4. Have you accurately labelled all images, graphs, diagrams, maps and so on that you may have used? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 5. Have you used subject-specific terminology (or conceptual language) accurately throughout your essay? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |

Tip

If you've used a technical term in a particular way, it helps to define your particular usage of it in the body of your work.

Also, complex terms benefit from a brief definition for the sake of clarity or an illustrative example to help the reader follow your train of thought.

- | | | |
|---|------------------------------|-----------------------------|
| 6. Is your content accurate and factual at all times? (For example, measurements, dates, events, characters and so on are all correct.) | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 7. Does your method of analysis adhere to the subject's acknowledged conventions? (Check with your supervisor to ensure that your approach meets the subject's general guidelines.) | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 8. Where appropriate, does your essay meet the IB's ethical guidelines? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |

Criterion C: Critical thinking (12 marks)

This criterion has the most marks allocated to it for the very simple reason that the critical evaluation of the evidence in order to produce a reasoned argument and sound conclusion is the key focus of any research paper.

There are three key strands that need to be met in order to score high marks under this criterion:

a. Relevance of research

- All research materials gathered and used are clearly relevant to the research question posed.

b. Analysis of research findings

- The research findings are effectively analysed so as to produce a reasoned argument. Any developing analyses are well-supported by relevant evidence.

c. Discussion and evaluation of evidence

- A coherent and well-reasoned argument is developed that is supported by the evidence presented. What's more, a critical evaluation of the source material is present.



Knowledge and understanding

- Is your content knowledge accurate and is the source material used to support your claims relevant to the RQ at all times (see Criterion B for more)?
- This is a basic expectation since any inaccuracies in content knowledge or irrelevant source material will diminish the potential for good analysis to emerge.
- This includes responding to the "who", "what", "where", "how" and "why" questions as well as being able to describe events, processes and methods used accurately.

Application and analysis

- What does your research (primary and/or secondary) indicate with regards to your RQ?
- Why did you choose that particular method or approach to answer the RQ? You should consider the suitability of your approach in the main body.
- Are you able to point out any inherent contradictions or alternative viewpoints that need to be considered?
- What limitations or weaknesses have you identified in your source material or methodological approach to the RQ?
- Have you developed mini-analyses or arrived at micro-conclusions to each point you raised in the essay?

Synthesis and evaluation

- As a result of your research, what have you determined is the core answer (or multiple answers as the case may be) to your RQ?
- Are there any aspects or factors you have not taken into account that need mentioning in your conclusion?
- How definitive a conclusion can you arrive at? What would help make it more definitive?
- How far does your conclusion differ from or challenge conventional wisdom or approaches?
- Are your conclusions consistent with your argument as it develops in the main body?

Avoid

- Evaluations that are based on narrative or descriptive accounts.
- Embedding new information in your final, concluding evaluation.
- Basing your final evaluation on personal opinion or unsupported claims.
- Drawing a conclusion at odds with your argument as it develops in the main body.
- Failing to omit any mention of limitations in terms of your approach. It is good academic practice to recognize any shortcomings in your method or approach.

Critical thinking skills

In order to demonstrate that critical thinking has taken place in your essay, you should aim to have answered the following questions in the body of your work.

Criterion D: Presentation (4 marks)

It is important to bear in mind that the Extended Essay is a formal piece of academic writing and as such must be presented using the agreed-upon conventions of independently written research papers.

The IB prescribes a set of aspects that must be included as part of the Extended Essay. These are as follows:

- Title Page
- Table of contents
- Page numbers
- Font use
- Spacing
- Referencing (citations and bibliography)
- Word count

The following sections will guide you through each presentation requirement. A checklist is also provided for your use on page 132.

Title page (or cover page)

Consider your title page like the front of a book. It should bear some key information pertaining to your Extended Essay in line with the IB's expectations.

Title pages should include the following:

a. Title (optional)

A brief heading giving a summative description of what the essay is about is an optional extra you may wish to include. The best way to do this is to convert your RQ into a title that captures the key focus of the essay.

For example:

RQ: In what ways does Jane Austen express her attitudes to the themes of love and marriage inherent in her work *Pride and Prejudice*?

Title: Austen's Attitudes to Marriage in *Pride and Prejudice*

NOTE: The RQ often acts as the title also so this step is purely optional.

b. Research question (RQ)

When writing your RQ there are a few things to consider:

1. Ensure it is the RQ that appears in other sections of your essay (for example, the introduction).
2. Ensure it is the question being answered in the conclusion (as opposed to a variant of it).
3. Ensure the spelling is correct and grammar accurate (and it ends with a question mark).

c. Subject

Ensure you've specified which subject the essay belongs to.

GROUP 1

For Group 1 (language and literature A) based essays you will also need to specify which category it belongs in:

Category 1: Studies of Literary Works (all works originally written in target language of the Essay).

Category 2: Studies of a Literary Works (at least one work written in the target language of the essay compared with works written in another language).

Category 3: Studies in Language (all works originally produced in the target language of the Essay).

Example:

SUBJECT: English A, Category 3

GROUP 2

For Group 2 (language B) essays you will need to specify the Category (and sub-category if a Category 2 essay):

Category 1: Language (when the focus of the essay is on language aspects of a given "text" or cultural context).

Category 2: Culture and Society

- a. *Culture and Society* (when the focus of the essay is on the impact of a specific issue or event on the language chosen).

- b. *General Culture* (when the focus of the essay is on a specified cultural artifact (or artifacts) specific to a country or community. See Chapter 1.2.1 on page 6 for more information on what constitutes an "artifact").

Category 3: Literature (when the focus of the essay is on language types in a work or works produced in the target language).

Example:

SUBJECT: French B, Cat 2 (b)

WORLD STUDIES

For world studies essays, you will need to indicate the:

- a. chosen theme

World studies themes

- conflict, peace and security
- culture, language and identity
- environmental and/or economic sustainability
- equality and inequality
- health and development
- science, technology and society

- b. two subjects used in terms of the essay's methodological approach (for example, history and social and cultural anthropology).

Example:

SUBJECT: World Studies, Equality and Inequality,
History and Economics

As of 2016, all Extended Essays will be digitally uploaded for assessment. This means the word count can more easily be ascertained by examiners so you must ensure that you accurately specify the **exact number of words** contained in your Extended Essay on the title page before uploading it for assessment. See page 131 for more detail on what counts as part of the total word count and what does not.

INCLUDE: Your name, school's name, candidate number or any identifying pieces of information on the title page (or any other section of the essay such as headers or footers).

As the work is uploaded, the IB tags the work to your digital profile so these details are not required on the essay itself. What's more, in order to maintain the integrity of this externally assessed work, the IB does not disclose your name to examiners so it is essential you do not include any identifying marks within the essay itself.

Table of contents

Extended Essays must contain a table of contents placed **after** the title page and before the introductory section of your essay.

The table of contents should contain a **sequential list** of all your essay's sections and chapters. Next to each section or chapter heading should be the page number where that section or chapter begins. These page numbers should be placed on the far right of the page as indicated in the example below:

Chapter or sections should use numbers or letters (that is, Section A).

Sub-chapters (or sections) are indented and numbered.

If you use letters instead of numbers for your headings the sub-chapters can be numbered thus: i) ii) iii) iv) and so on or A.1, A.2 and so forth.

Table of Contents

Introduction	1
Chapter 1: Pre-Islamic Medicine	2
Chapter 2: The Quran and Islamic Traditions of Learning	3
2.1 Christian and Jewish Influence	6
2.2 The Occult	8
Chapter 3: Socio-Political Influences	9
3.1 Inherited Greek Medical Traditions and Heritage	9
3.2 The Role of the Caliphs	11
3.3 Islamic Advances	15
Chapter 4: Medical Instruments	19
Conclusion	21
Bibliography	22

Page numbers are aligned on the right-hand side of the page.

Question and Answer

Question: Do all Extended Essays need to have a table of contents?

Answer: Yes. Even in the case of language A Extended Essays, where the normal expectation is for continuous prose as opposed to sections (and sub-sections), a basic table of contents should be provided even if it simply has introduction, main body and conclusion as its key sections.

Page numbers

Page numbers should be included on all pages of the Extended Essay though convention dictates that a page number is not required on the title page and table of contents. You will not be penalized, however, if they do contain page numbers.

It does not matter which format you choose (for example, 1, 2, 3 ... Page 1, Page 2 and so on) or where the page numbers are located (for example, at the bottom right or in the centre). Ideally, aim to have the page numbers at the bottom of the page rather than the top.

Ensure the page numbers referred to in the table of contents match those in the body of the essay. You will lose marks if your table of contents states that Chapter X begins on page 5 when in fact it begins on page 6.

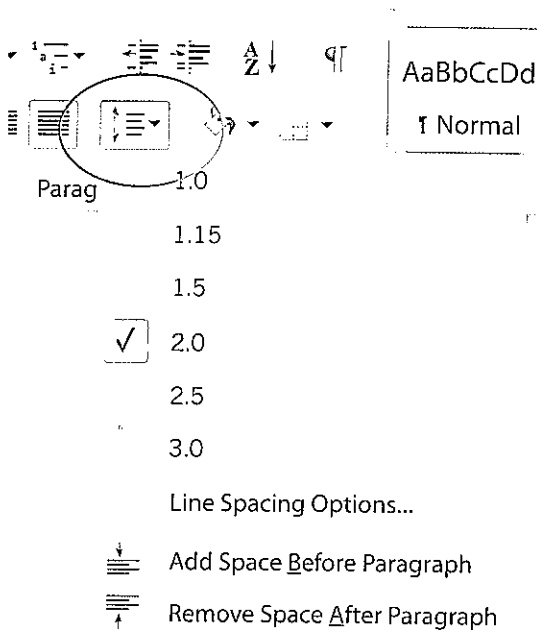
E: The IB now mandates that the font size should be **12pt**.
to emphasize a word or heading, do not use a larger font,
bold (or capitalization for headings).

E: The IB now requires that the font type must be Arial.

ne Presentation criteria, it is mandatory to **double space**
This allows examiners to insert annotations when marking it
making for a smoother reading experience.

sing MS Word (PC), the spacing option appears here:

View



ing (citations and bibliography)

s a key skill that all IB (and university) students must master
rder to produce work that meets accepted academic norms
neously avoiding issues relating to academic malpractice.
e Chapter 8: Academic honesty, pages 139–43.)

he work of others is mandatory for all IB assessments.

the provenance (origin) of any work you use that is not of
king or thought processes must be accurately referenced
nowledge its source. It is a means by which you show
to the work others have done in your chosen area or topic
neously acting as a platform from which you can base your
d develop your own lines of argument.

Failure to do this could lead to the non-award of a grade for the Extended Essay (or any IB assessment), and thus could jeopardize your chances of securing an IB qualification. This means that learning how to correctly reference is perhaps one of the most vital skills you will need to learn.

In some instances, your own work will also need to be cited if it is used as authoritative material (for example, a table of data based on an experiment you've conducted or fieldwork you completed for any other assessments or assignments).

Referencing basics

- a. **Reference:** Is the acknowledgment of the provenance of the work(s) that you've used in any written work that is not of your own making.
- b. **Citation:** An in-text citation means to reference a work directly where it appears in your text by referring to the most basic source information (usually the surname, year of publication and page number where applicable though this will vary based on the style chosen (for example, MLA does not require the year for in-text citations)).

Example:

...was not an accurate representation as "Basil's golden legacy was relatively short lived" (Holmes, 2006, p.4).

← In-text citation
(APA style)

- c. **Footnote:** A space at the bottom of the page where you can place a more complete reference. The reference is indicated in-text by an elevated number. Bear in mind, you do not need to include an in-text citation and footnote. Choose one approach that works for you and stick with it throughout your Extended Essay.

Example:

... that according to Holmes was not an accurate representation as "Basil's golden legacy was relatively short lived".¹

← Footnote
numbering

Tip

You can use Microsoft Word to automatically insert footnotes into a document (see pages 123–8).

The insert Bibliography feature will allow you to embed the full reference as a footnote also.

Don't forget to include the page number(s) in the footnote (where available).

¹Holmes, C. (2006). *Basil II and the Governance of Empire (976–1025)*, Oxford Studies in Byzantium, 1st Edition. Oxford: Oxford University Press, p.4.

← Footnote including all
reference details and page
number(s) using APA style.



itation style: This is the arrangement of provenance (origin) details in relation to an accepted citation system. There are many accepted citation styles (Oxford, Harvard, MLA, APA and so on). And large, they have minor stylistic differences between them (mostly the order of details or use of abbreviations as can be seen in the examples below).

Examples:

American Psychological Association (APA)

Jones, C. (2006). *Basil II and the Governance of Empire (976–1025)*, *Byzantine Studies in Byzantium*, 1st Edition. Oxford, England: Oxford University Press, p.4.

Modern Languages Association (MLA)

Jones, Catherine. *Basil II and the Governance of Empire (976–1025)*. *Byzantine Studies in Byzantium*. 1st Edition. Oxford, England: Oxford University Press, 2006, p.4.

Most subjects have a preference for a specific style over another (for example, literature and language essays prefer MLA whereas psychology-based essays prefer APA).

However, **does not** prescribe a particular citation style so you are free to choose one that works for you (or that is followed by your school as a guideline). What is important, however, is that you use one and adhere to that particular style throughout your work (don't mix and match styles!).

Citation and Answer



Question: What do I need to cite?

Answer: Nearly everything that was written or produced by someone else that acts as an authoritative basis for points raised in your essay (see the examples below).

When writing	Cite?	Details
Direct quotes (word for word copy) from books or internet sites.	Yes	Place the citation after the quote.
Paraphrasing or summarizing someone's work.	Yes	Place the citation after the sentence or paragraph where the paraphrasing ends or immediately after the author's name if used in-text.
Images	Yes	Place the citation in a caption at the bottom of the image. This applies to adapted images also or specific details of images. In these instances adding the words "adapted from" or "detail of X" followed by the full citation details is necessary.
Specialized definitions	Yes	As with direct quotes.
Idioms or expressions	No	If using idioms or proverbial sayings there is no need to cite. However, if the word or phrase is coined by a particular individual as a means to communicate a key point in their work, then you must cite the source (for example, if I encounter the word "Tsunamail" in an article on the internet about the overuse of workplace emails and I choose to use it in my essay, I should acknowledge its original source).

Common knowledge	No	Commonly known pieces of information such as the fact that water is made of two molecules of hydrogen and a molecule of oxygen or the Pythagorean equation do not require a citation. However, how many goals X football player scored or the distance between Earth and Sun will require a citation as these specific pieces of information would not classify as common knowledge and thus require authoritative backing by way of a citation.
Copyright-free material	Yes	"Copyright free only" refers to the fact that you can use the material without having to pay a royalty or licence fee. It does not mean you avoid citing the source, however.
Music and films	Yes	Just like texts, all work not of your own making must be cited (including screen shots or sections of score).
Letters	Yes	Even personal letters a member of your family wrote would require a citation if they have been used in your essay.
Maps, diagrams, illustrations, tables, graphs and so forth	Yes	Even when you adapt them and add your own layers or work to them you should acknowledge the base source. In all cases you should label these as Figure 1 or Table 1 and so forth in the caption followed by the title and year of production. If you refer to these in the body of your essay (in-text) simply write "see Figure 1" (or whichever label you used in the caption).
My own maps, diagrams, , illustrations, tables, graphs and so on	Yes	If you use data that you generated yourself for some other assignment or assessment and intend to use it as an authoritative source upon which to base your analyses in the essay then you should cite your own work (for example, Lekanides, K., "Oxygen Levels as a Percentage of Total Mass in Picnic Point Topsoil" [Table], 2015, Own Data). The raw data can be added in an appendix.
My own images	Yes	As with images in general, you can cite your own if they are used as part of the essay.

A useful rule of thumb to operate by when it comes to citations is that if you are in doubt as to whether or not some information you've included requires a citation, cite it anyway. You cannot be penalized for "over-citing", but you can be penalized for not citing.

Golden rule: If in doubt, cite.

e. Exemplar references

Below are examples of what a citation should look like for a variety of different source types. For convenience, all examples utilize the APA style unless otherwise specified.

i. Books

Citation

...that according to Holmes was not an accurate representation as "Basil golden legacy was relatively short lived" (Holmes, 2006).



Bibliography

Holmes, C. (2006). *Basil II and the Governance of Empire (976–1025)*, Oxford Studies in Byzantium, 1st Edition. Oxford, England: Oxford University Press.

ii. Websites

Citation

... it was not uncommon to see "overall infection rates of 15%" (D. Robson, 2008) among prisoners of war in the Far East ...

Bibliography

D. Robson, E. Welch, N.J. Beeching, G.V. Gill (2008, October 14). *Consequences of Captivity: Health Effects of Far East Imprisonment in World War II*. Retrieved September 24, 2015, from QJM: An International Journal of Medicine, Oxford University Press: <http://qjmed.oxfordjournals.org/content/102/2/87>

iii. Interviews

Citation

... children express difficulties in relation to "the rules of interaction such as initiating, maintaining and terminating the topic of conversations" (Pags, 2014) to the point where they ...

Bibliography

Pags, M. (2014, June 21). Social Pragmatic Interaction. (K. Lekanides, Interviewer)

iv. Images

All images used in an Extended Essay should appear as near as possible to where you first reference them in the text. The images should contain a fully referenced caption as seen below:

APA Style

Fig. 1: *Mona Lisa*



Vinci, L. D. *Mona Lisa*
La Gioconda. Musée du Louvre, Paris

MLA Style

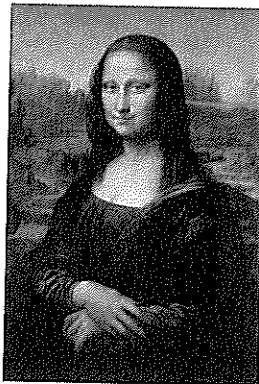


Fig. 1: Vinci, Leonardo Da. *Mona Lisa*
Musée du Louvre. *La Gioconda*
Paris, 1503–1506. Oil Painting

Note

The key difference between APA and MLA is the latter includes the year the work was produced and its medium [type]. APA generally requires the heading to go above the image.

Performers*:**Medium*:**

** If using MLA style you will also need the list of main performers (actors) and medium (for example, DVD or CD) on which the film was viewed.*

Word count

The absolute maximum amount of words that an Extended Essay can be is 4,000.

It is vital that you do not exceed this upper word limit as it will not only lose you marks in Criterion D (Presentation) but across all criteria as examiners will stop marking anything after the 4,000 word limit mark. This includes any analyses, arguments or concluding comments you've added.

Question and Answer



Question: What is included in the word count?

Table 1: Adapted from the IB Extended Essay Guide, 2016

Included	Not Included
The introduction, all sections of the main body and the conclusion	Table of Contents
All quoted material	Maps, charts, diagrams, tables or illustrations including their accompanying caption or heading Note, however, that if any of the above contain commentary or analysis that will be counted.
Any footnotes (or endnotes) that are not citations or references. That is to say, any explanatory text or definitions or similar material that is added in a footnote will count as part of the word count.	Equations, formulas and calculations
Inclusion of multiple units of measurement. For example, if you write the temperature as 25°C and also place the measurement in Fahrenheit next to it—that is, 25°C (77°F)—then this will count as two words.	In-text parenthetical citations, for example (Rees, 2015)
Anything in parentheses that is not a citation such as dates, alternate spellings of names, definitions, descriptions and the like will count.	The Bibliography or "Works Cited" section of the Extended Essay
Chapter headings (and sub-headings)	The Reflections on Planning and Progress Form All material placed in Appendices Note: Examiners are not obliged to read any material in appendices so if you include material that is vital to the development of your essay it should be in the main body of the essay and not in an appendix.

Presentation checklist

Tick

Title page

1. Does your title page contain a title generated from your research question?
2. Does the research question on the title page match the one in other parts of your essay?
3. Does the conclusion answer the research question on the title page?
4. Is the spelling and grammar of the research question correct?
5. Does the research question end with a question mark?
6. Is the subject (or subjects if world studies) mentioned on the title page?
7. Have you included the Category (and sub-category if applicable) on the title page for Group 1 or 2 Extended Essays?
8. Have you included an accurate word count on the title page?
9. Have you ensured that no personal information is on the title page?

Table of contents

Does the Essay contain a table of contents?

10. Is the list of sections or chapters sequential (that is, as they appear in the essay)?
11. Do the page numbers in the table of contents correspond to the right pages?

Page numbers

12. Does every page have a page number on it?

Fonts

13. Does the essay use a readable font (Arial, Times New Roman or Calibri)?
14. Is the font size set to 12pt?

Spacing

15. Is the essay double spaced?

Referencing (citations and bibliography)

16. Does the essay include citations (either in-text or in a footnote/endnote format) using an approved style (such as APA or MLA)?
17. Does the essay include a bibliography of only the works cited in the body of the essay?
18. Does the bibliography adhere to one style (such as APA or MLA)?
19. Is the bibliography in alphabetical order?
20. Is the spelling of all words in the bibliography correct?
21. Do images, tables, graphs and so forth have captions that include all reference details?

Criterion E: Engagement (6 marks)

This criterion has two key strands associated with it:

Process

Research focus

What is being assessed under this criterion is your engagement with both the research process and focus of your investigations (or topic).

How is this assessed?

The way the IB assesses this criterion is by means of the Reflections on Planning and Progress Form (RPPF) which has been newly introduced alongside the current criteria. In this form you will be expected to write three reflections after having met with your supervisor at each of three key junctures in the Extended Essay Process. The supervisor's report that is added to the RPPF will also shed light on how well you've engaged with the two strands for this criterion.

There will inevitably be more than three sessions with your allocated supervisor where you cover a wide variety of things in support of your Extended Essay. These sessions will range from quick 10–20 minute meetings to longer sessions to go over your research plan or provide feedback on your draft.

The three mandatory reflection-specific sessions, however, will ideally be as follows:

1. First reflection session

- This will be one of the early sessions with your supervisor (not necessarily the first) where you will outline your ideas regarding the topic in general, the research question you have in mind, initial background reading or research you may have conducted, possible approaches and your initial thoughts about the answer to your research question.

2. Interim reflection session

- This session will usually fall somewhere in the middle to latter half of your EE calendar, usually before the first full draft is completed. The general expectation is that you are able to present to your supervisor a more refined RQ, discuss your essay on the basis of some sustained writing and comment on any challenges encountered and what solutions you've attempted.

3. Final reflection session (viva voce)

- This session is indeed the last time you will meet your supervisor as it is intended to be the closing interview. This session takes place after the EE is uploaded for assessment so your supervisor will have read your work. It is an opportunity to offer your final reflections on the process, discuss any achievements and challenges overcome, while also sharing any aspects that contributed to the completion of the essay but are not immediately apparent within it.

How many words can I write in the RPPF?

The form is a fillable PDF and is restricted to **500 words** in total, so an economy of relevant and sharply focused summative words is in order. An example RPPF can be found on page 138.

What do I need to bring to the Reflection Sessions?

The IB advises all students to maintain a Researcher's Reflection Space (RRS) for the purposes of supporting them with both their research and as evidence to show how well they've engaged with both the research focus and process overall. The RRS can be kept in any form (for example, journal, scrapbook or online blog). It is intended to be a place where the process is chronicled as a whole and can therefore be a showcase to your supervisor of your level of engagement with the Extended Essay as a whole.

Towards meaningful reflection

Reflecting before, upon and after action has proven time and time again to be a key ingredient to successfully creating any "product", be it a piece of homework, a creativity, activity, service (CAS) activity or an Extended Essay.

But why do we reflect?

The reason we reflect could be broadly separated into five categories:

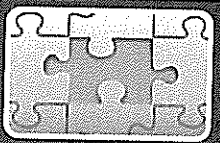


Celebrating success
EE link: What have I learned from my mistakes or choices made as part of my research? How successful was I in overcoming them?



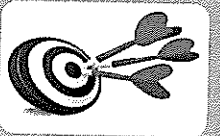
Adjusting action

EE link: What should I do to counteract problems or limitations with my research approach?



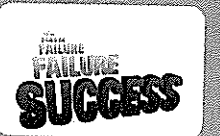
Gap filling

EE link: What is missing from my research or analysis? What else should I be doing?



Re-evaluating goals

EE link: What is my research pointing to that differs from my initial hypothesis or position? Has my research focus changed?



Celebrating failure

EE link: What have I learned from my mistakes or choices made as part of my research? How successful was I in overcoming them?

So what is good reflection?

Although this will vary from situation to situation, broadly speaking it is safe to say that good and poor reflecting will be characterized by the following features:



Good reflection

- meaningful
- individual
- ongoing and episodic
- formative
- corrective
- uncomfortable
- productive
- social
- challenging

Poor reflection

- descriptive only
- complaining
- criticizing only
- boring
- linear or static
- politically correct
- tick box
- hour counting
- a single task

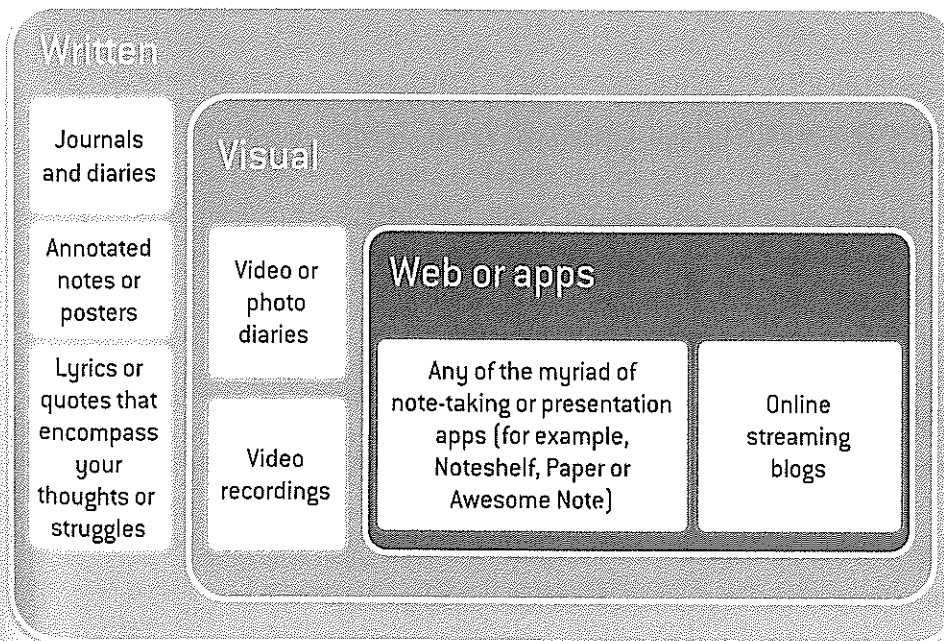
Good reflecting should challenge you, your assumptions and your approach. It should be social in nature as you seek to find solutions to problems through dialogue and discourse with experts. Good reflecting should always correct bad practice or erroneous steps in your research. It should be an ongoing process and generally episodic in nature rather than a one-off task you complete at the end. Most importantly, it should be meaningful, by which is meant it should help you realize what worked and what didn't and thus point you towards finding appropriate solutions or support.

How can I reflect?

All students should create a "space" where they can keep notes, clippings from useful articles, video files, annotations, scribbled ideas and anything that helps build the Extended Essay.

What form this "space" takes is completely up to you.

A traditional approach is to keep a running journal with clippings and annotations (much like a scrapbook only that the focus is your Extended Essay's research question). However, you should not be limited to this, especially when you have access to a myriad of digital platforms and spaces that can help contain and exhibit your work.



What should I include in my Researcher's Reflection Space (RRS)?

The key to making this space work is to include:

- **Reading:** A log of your reading as you complete it. (This could be in the form of a bibliography and/or some short notes on what you thought you gained from each source, even if minimal to non-existent! Remember, good reflection acknowledges mistakes made or incorrect paths followed.)
- **Notes:** Brief notes on your developing (often changing) thoughts on your RQ as a result of your reading and research
- **Challenges:** Register any challenges (even frustrations) and what you did about them, especially if they revolve around the research itself. Avoid simply complaining about things such as missed opportunities or time wasted. Reflect on how you can avoid these issues in future.
- **Visuals:** Include annotated diagrams, charts, illustrations or images that help 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 reflection

Below is a list of key questions that you should consider when writing your core reflections in your Researcher's Reflection Space which could then inform what you end up including in the assessed Reflections on Planning and Progress Form (RPPF). Each key question below is subdivided into additional stimuli questions to help guide your reflections along a more research focus. 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 question

1. How effective were your choices?

- a. In what way(s) did your chosen methodology produce a definite or satisfactory answer to your RQ?
- 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 RQ? What implication did that have on your conclusion (for example, "it produced a more sharply focused conclusion").
- e. To what extent did your primary research consider (most) all key variables or factors in external agents (such as socio-cultural influences, gender or researcher bias)?
- 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 in 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?

- Did your research bring to light any material or data that forced you to rethink your approach or adjust your RQ accordingly?
- Did your methodological approach or choice of sources consistently yield the required results or were changes/additions required?
- In what way(s) did your Extended Essay compel you to seek out new modes of note taking or overall organization (for example, time management)?
- To what extent did you include a wide variety of source material (that is, not just internet sources)?
- Did your argument require a greater balance of opinion that forced you to do wider reading or additional primary research?
- 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?

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

Note

The RPPF is not intended to be a place where you mention any medical or personal problems you may have encountered. Any adverse circumstances will be communicated to the IB via your IB Diploma Coordinator through a different channel, so seek their guidance if that applies to you.

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 Reflections on Planning and Progress Form (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 Extended Essay 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?

First reflection

- I was attracted to Anna Comnena's the *Alexiad* 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 now 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 rule of her nephew Manuel I. My current list includes, Runciman, France, Macrides, Christomides and Hill.

Interim reflection

- 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 the *Alexiad* and mapped out her account against the political events of Manuel I's reign and quickly discovered some interesting overlaps (building works, 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 her 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 the *Alexiad* 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.

Final reflection

- 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 a broader context and thus gave me a framework for interpreting what Comnena was able to do within the context of her time.