

FOR THE
IB DIPLOMA
PROGRAMME



Extended Essay

Paul Hoang
Joseph Koszary



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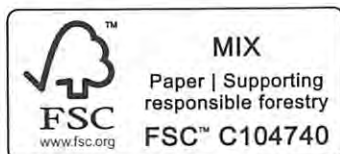
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Contents

Introduction	iv
CHAPTER 1 Understanding the assessment criteria	2
CHAPTER 2 Developing a suitable research question	22
CHAPTER 3 The formal presentation of the extended essay	46
CHAPTER 4 Academic integrity	56
CHAPTER 5 Citation and referencing	70
CHAPTER 6 The role of the extended essay supervisor	82
CHAPTER 7 The importance of reflections	102
CHAPTER 8 Showing evidence of critical thinking	116
CHAPTER 9 The interdisciplinary extended essay	128
CHAPTER 10 Managing the extended essay process	144
Top ten tips for writing a successful extended essay	153
Extended essay student checklist	154
Answers	157
Index	171

Introduction

How to use this book

Welcome to the extended essay (EE) for the IB Diploma.

This book will help prepare you for your EE in an efficient and logical way. Each chapter of the book looks at a different aspect of the EE in detail, while different activities and practice exercises are also included to help you check your understanding.

To ensure you aim for your best grade in the EE, this book:

- includes an opening infographic spread in each chapter
- builds skills for success through a range of strategies and detailed expert advice, such as formulating effective research questions for the EE
- covers all the IB requirements with clear and concise explanations, such as the assessment criteria and rules on academic integrity
- demonstrates what is required to get the best grade
- adds reference to the IB learner profile and approaches to learning (ATL) skills.

Key features of this guide include:

Expert tip

These tips appear throughout the book and provide guidance on steps you can take and key considerations to help you boost your final grade.

Common mistake

Potential pitfalls are highlighted for students in the form of 'Common mistake' boxes. Watch out for these!

Tasks

A number of short tasks are included in the chapters. These tasks give you the opportunity to apply your knowledge in example situations, reinforcing your learning and further preparing you for your EE.

Definitions

◆ Definitions of important terms are provided in the chapters.

ATL ACTIVITY

ATL skills activities get you to think critically about real-world applications of topics.

Chapter summary

At the end of each chapter, key knowledge is distilled into a concise checklist to help you review everything you have learned over the previous pages.

END-OF-CHAPTER QUIZ

At the end of each chapter, a short quiz is included to test the knowledge you have learned and help consolidate your understanding.



The IB learner profile icon indicates material that is particularly useful to help you towards developing the following attributes: to be inquirers, knowledgeable, thinkers, communicators, principled, open-minded, caring, risk-takers, balanced and reflective.

Aims of the extended essay

The EE aims to provide students with the opportunity to:

- experience the excitement of intellectual exploration
- engage in student-led academic research on a topic of personal interest
- develop skills in research, thinking, self-management and communication
- reflect on the learning experience of completing an EE.

Overview of the extended essay

- The EE is part of the compulsory core for all IB Diploma Programme students who must submit an academic essay of up to 4000 words.
- It requires approximately 40 hours of work by the student.
- It involves 3–5 hours of supervision with each student.
- There are three mandatory reflection sessions, including a final *viva voce*. Students are permitted to have check-in meetings in between these compulsory sessions.
- As part of the reflection process and assessment criterion E, students must submit a reflective statement of no more than 500 words as soon as possible after the *viva voce*.
- Candidates must anonymize their essay; instead of using their name or candidate number, the personal code or student code (for example, nqh510) should be used.
- The essay is marked out of 30 (criterion-based assessment), based on five grade bands:
 - Grade A = The essay is of an excellent standard
 - Grade B = The essay is of a good standard
 - Grade C = The essay is of a satisfactory standard
 - Grade D = The essay is of a mediocre standard
 - Grade E (a failing condition) = The essay is of an elementary standard.
- The EE is externally marked by an IB examiner using five assessment criteria:
 - Criterion A = Framework for the essay (6 marks)
 - Criterion B = Knowledge and understanding (6 marks)
 - Criterion C = Analysis and line of argument (6 marks)
 - Criterion D = Discussion and evaluation (8 marks)
 - Criterion E = Reflection (4 marks).

About the authors and authors' acknowledgements

Paul Hoang is a highly experienced IB educator with over 25 years of teaching experience. He has held the position of vice-principal and Diploma Programme coordinator at a prestigious IB World School in Hong Kong. Paul has authored best-selling textbooks, including *Economics for the IB Diploma*, endorsed by the International Baccalaureate, ManageBac, and Pamoja Education, *IB Business Management: Prepare for Success*, and *Cambridge IGCSE and O Level Economics*, endorsed by Cambridge Assessment International Education. He is an experienced examiner for various examination boards and a seasoned IB workshop leader. Paul is a consultant and author for InThinking and IB School Improvement, focusing on student engagement and performance through school assessment data. He is also the Subject Lead for Economics and Business Management with ManageBac.

Dedicated to David Cottam, John Nixon and Marc Morris – thank you for opening so many doors of opportunities for me while you were the Principals of Sha Tin College.

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Dedicated to Lindsay Tandy and Paul Hoang for their generosity and support.

Chapter 1

Understanding the assessment criteria

Criterion A Framework for the essay

6
marks

Guiding question: Do the research question, research methods and structural conventions followed provide an effective framework for the essay?

Research question:

- Is your research question clearly stated and focused? (Your research question must be phrased as a question, with a question mark.)
- Does your completed essay continuously relate to your research question? (Many essays lose marks by not sticking to the question.)

Research methods:

- How are you going to carry out your research?
- How will you analyse and show your findings?
- Have you selected an appropriate range of relevant source(s) and/or method(s), and used them effectively in relation to your topic and research question?

Structure:

- Is your essay laid out in the conventional way expected of such essays?
 - Is your essay set out according to the IB's extended essay recommendations?
- For example:

- Have you used Arial or Times New Roman font in point size 11 or 12?
- Have you used 1.5 or double line spacing?
- Have you used A4 size in portrait orientation and numbered your pages?

Criterion B Knowledge and understanding

6
marks

Guiding question: Does the student demonstrate knowledge and understanding of the subject matter being used in their research?

Knowledge:

- Is your selection of source materials relevant and appropriate to the research question?

Understanding – Terminology:

- Have you used relevant terminology consistently and accurately to demonstrate your understanding of the subject?

Understanding – Concepts:

- Have you used relevant concepts effectively to demonstrate your understanding of the subject?

Criterion C Analysis and line of argument

6
marks

Guiding question: Does the student analyse the information presented in the essay and produce a coherent line of argument?

Analysis:

- How deep is your analysis?

Line of argument:

- Have you analysed your research effectively, and maintained a clear focus on the research question?

Criterion D Discussion and evaluation

8
marks

Guiding question: Does the student discuss the findings and evaluate the essay?

Discussion:

- Is your argument reasoned, effective and focused, and developed from your research?

Evaluation:

- Is your conclusion consistent with your argument? (If it is a good one, it may throw up other questions.)

Criterion E Reflection

4
marks

Guiding question: Does the student evaluate the effect of the extended essay learning experience on them as a learner?

Evaluative:

- Do your reflections show intellectual and personal engagement?

Growth:

- How thoroughly have you considered ideas and actions in response to setbacks experienced in your research process?

Understanding the assessment criteria

Definitions

◆ **Assessment objectives (AOs)** define the overall goals, skills and knowledge students should be able to achieve through their learning and completion of a task. They have been used by the IB to help guide the design and development of the extended essay. There are four AOs for the extended essay.

◆ **Assessment criteria** are the more specific standards or requirements used to actually grade or mark a student's achievement of the overall AOs. They are more detailed than the AOs and are less 'behind-the-scenes' and more 'front-and-centre' so as to be focused on by the students, supervisors and examiners. The assessment criteria of the EE deliberately encourage a variety of approaches and responses due to the variety of subjects they can be written in. There are five assessment criteria for the EE.

The new assessment criteria

Your extended essay (EE) is a journey of intellectual discovery. Like many journeys, it can be easy to take a wrong turn and go off course. One of the most important ways of navigating this journey is by using the **assessment criteria**. They are an invaluable tool that you must keep in focus throughout the process of researching, developing and writing your EE. This chapter will help you gain a deeper understanding of how you will be assessed and therefore how to produce a successful EE.



■ **Figure 1.1** The assessment criteria are your compass

Your EE is externally assessed by an examiner using five assessment criteria and will receive a mark out of 30. These criteria are generic, meaning they can be applied to all EEs in the different subject areas and to interdisciplinary EEs. Further guidance on interpreting the criteria within each subject can be found in the 'Subject-specific guidance' section of the *IB Extended essay guide*, and more details on how the criteria can be interpreted in an interdisciplinary EE can be found in **Chapter 9 The interdisciplinary extended essay**.

The assessment criteria are as follows:

■ **Table 1.1** Assessment criteria for the extended essay

Criterion	Criterion focus	Available marks
Criterion A	Framework for the essay	6 marks
Criterion B	Knowledge and understanding	6 marks
Criterion C	Analysis and line of argument	6 marks
Criterion D	Discussion and evaluation	8 marks
Criterion E	Reflection	4 marks
		30 marks

Task 1

Highlight key words from the assessment criteria. Do some 'visual thinking' by creating a mind map or diagram of these key words. Show visually how they connect, how they might be grouped and the connotations of each word. Look up definitions of any that you are unsure of. This will help you to gain a better understanding of each of the assessment criteria used to mark your essay.

Summary of changes to the assessment criteria

The assessment criteria have changed from the previous iteration of the EE. This is something you need to keep in mind when looking at old resources, websites or exemplars from the previous version of the EE.

Below is a summary of the main changes:

■ **Table 1.2** Summary of main changes to the assessment criteria

Previous version	May 2027 onwards
Total number of marks is 34	Total number of marks is 30
Criterion C 'Critical thinking' marked out of 12	Split into criterion C 'Analysis and line of argument' marked out of 6 and criterion D 'Discussion and evaluation' marked out of 8
Criterion D 'Formal presentation' marked out of 4	Merged into criterion A 'Framework for the essay' as the strand 'structure', which contributes to a total mark out of 6 for the criterion
Criterion E 'Engagement' marked out of 6, based on three written reflections produced after each of the corresponding three mandatory reflection sessions on the reflections on progress and planning form (RPPF)	Criterion E 'Reflection' marked out of 4, now based on one reflective statement written on the reflection and progress form (RPF) after the viva voce , with a focus on the growth of the learner and an emphasis on skills development and transfer

Definitions

◆ **Mark bands** 'zoom in' even further and are used to break each of the five assessment criterion into level descriptors. These descriptors describe how well each criterion may have been achieved. Each of these descriptors corresponds to a range of marks to differentiate student performance.

◆ **Reflection and progress form (RPF)** is a form that is sent off to the IB alongside your extended essay. It records when your three mandatory reflections took place and, most importantly, includes your reflective statement of up to 500 words. More details on this can be found in **Chapter 7 The importance of reflections**.

◆ **Viva voce** means 'with the living voice' and is a discussion that takes place as part of your third and final mandatory reflection session at the end of the extended essay process. It involves a reflection on the entire process and can be used to generate many of the ideas that end up in your RPF reflective statement.

Expert tip

The IB expects the criteria to be a useful resource to consult throughout the entire process of developing the EE. With this in mind, make sure you use the assessment criteria to help inform you of what to include when writing the extended essay. It is important that you know how you will be assessed for this compulsory component of the Diploma Programme (DP).

The assessment objectives

To clarify, **assessment objectives (AO)** define the overall goals of a task; assessment criteria zoom in and are used to measure how well you have achieved these goals; and **mark bands** zoom in even further and provide detail on how to measure your achievement of the criteria and award a final mark. See the definitions of these terms for more detail.

The five assessment criteria used by the examiner to produce your final mark out of 30 are based on the following four assessment objectives for the EE:

- Knowledge and understanding
- Application and analysis
- Synthesis and evaluation
- Communication of research.

These AOs are essentially the 'behind-the-scenes' overall aims of the EE, and you will need to achieve all of them to score highly. The assessment criteria, on the other hand, go into more specific detail and are used to measure to what extent you have achieved these objectives using the mark bands. Many of the terms and strands used in the assessment criteria come from these AOs, so it is worth developing an understanding of them before fully exploring the more specific assessment criteria that will be applied to your EE by the examiner.

Task 2

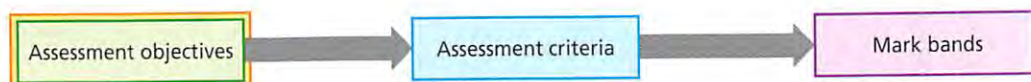
Rank the four assessment objectives (AOs) in order, starting with the ones you think you are most confident with. For the bottom two, jot down some ideas about how you might go about improving in these areas.



■ **Figure 1.3**
Understanding requires deeper thinking and drawing connections



■ **Figure 1.4** Application means putting things into practice



■ **Figure 1.2** Look at the assessment objectives, assessment criteria and mark bands

There are some key terms in these assessment objectives that you need to understand. In the following section, there is a quick description of each AO, along with some of the main ways they should be demonstrated as you develop your EE. Some of the assessment objectives have been kept together in their pairings (such as knowledge and understanding), while others have been separated out (such as application and analysis) for a clearer definition of each.

Knowledge and understanding

In simple terms, 'knowledge' is the gathering and accumulation of facts and information. This is sometimes referred to as 'lower order thinking' as it primarily focuses on gathering and recalling information. 'Understanding' goes beyond this basic recall and requires a deeper comprehension of the significance of this information in terms of its meaning, context and interconnections.

EE assessment criteria link: Criteria A and B

Knowledge and understanding is a core element of your EE. In assessment criterion A (Framework for the essay), your knowledge and understanding is shown through coming up with a relevant and purposeful research question. When explaining your research methods for the EE, you will also be showing knowledge and understanding of your subject area(s). More substantially, for assessment criterion B (Knowledge and understanding) you will use research to establish the deep knowledge of the subject matter needed for your analysis. In addition, your use of relevant terminology when dealing with this subject matter will help to further demonstrate your knowledge and understanding of the topic.

Knowledgeable: The EE is an excellent opportunity to explore knowledge in more depth and with more independence than may be possible in other areas of the IB Diploma Programme. Consider it an opportunity to become something of a specialist on a particular topic by becoming particularly knowledgeable about it.

Application

Application involves knowing something in abstract and being able to apply, or use, it in practice. This often means taking learned material and knowledge and using it in new and concrete situations.

EE assessment criteria link: Criterion C

Criterion C (Analysis and line of argument) requires application. Most pertinently, you will need to apply your knowledge of research methods to gather the information necessary to form your lines of argument in the essay. For example, a geography EE may involve applying knowledge of how to take water samples in a scientific manner to gather necessary primary research data. You will also need to be able to apply your knowledge of the terminology and concepts of your subject to your research when developing insights and discussing your lines of argument.

ATL ACTIVITY

Thinking skills

Analysis is just one aspect of the thinking skills you will demonstrate in the extended essay process – in what other ways do you think you will be using thinking skills in the EE?

■ Analysis

This is a higher order thinking skill that is focused on taking the bigger picture and then being able to recognize patterns, connections and structures within it. In simple terms, this means seeing how the 'whole' is created by the 'parts'.

EE assessment criteria link: Criterion C

Once you have gathered your subject matter or information (this should come from secondary sources and primary research where appropriate and permitted), you need to show that you can analyse it to gain marks for criterion C (Analysis and line of argument). This means you must identify what is relevant, consider patterns and connections, and then use this to form arguments and conclusions that help answer your research question.

● Expert tip

'Primary research' is original data you have gathered through first-hand research such as experiments. 'Secondary research' is data gathered by others. Note that secondary research (including a review of the literature available on your chosen topic) is a requirement for any extended essay, regardless of pathway or subject(s) chosen. Note that most DP subjects allow you to use primary research sources as well, so long as these are appropriate to the research question and add value to the essay. If you intend to use primary research in the EE, check the subject-specific guidance to find out the rules on collecting primary research in your chosen subject(s).

■ Synthesis

This means combining various elements and creating something new. It is built on the skills mentioned previously: you take your knowledge and understanding, apply it, analyse it, and then combine all these elements to form your own ideas and conclusions. This is an integral element of the EE as you should not simply be repeating what others have said, but should be forming your own arguments and interpretations.

EE assessment criteria link: Criteria C, D and E

In the context of the EE, this primarily involves taking your analysed subject matter and coming to new conclusions that help answer your research question. This is important as it shows you have gone beyond simply *describing* existing knowledge; you have *synthesized* your own interpretations and drawn your own conclusions. This aligns with assessment criterion C (Analysis and line of argument), assessment criterion D (Discussion and evaluation) and assessment criterion E (Reflection).

■ Evaluation

This means making judgements about the value of the material for a given purpose or of a particular approach you have taken. It therefore requires an awareness of the strengths and limitations of material and/or of an approach to research. It shows that you are being critical and academic rather than simply taking things at face value. You should show that you have considered the significance, quality and merit of different sources of information, conclusions you come to, and different approaches you have taken in the course of developing your EE.

EE assessment criteria link: Criteria C, D and E

The evaluation assessment objective particularly shows up in assessment criterion D (Discussion and evaluation), which assesses an important aspect of the EE. Being evaluative shows you are being mature, academic and critical by considering the strengths and weaknesses of your own work and the work of others. This includes evaluating your research by gauging the effectiveness of your research methods and the merits of any primary and/or



■ **Figure 1.5** Judging the quality of research approaches and materials is an integral part of your evaluation

secondary sources you come across or come up with. You will also evaluate the conclusions you come to when answering your research question. Finally, on the reflection and progress form (RPF), you will have to evaluate your experience of the extended essay process as a whole by writing a single reflection statement (see Chapter 7 The importance of reflections for more details).

Common mistake

A common mistake is that students underestimate the importance of evaluation, often adding only a token evaluation paragraph towards the end of their essay. Instead, you should evaluate throughout the essay. This is particularly important whenever you have made a choice – consider *why* you made that choice and how effective the outcome has been. For example, why did you choose a particular research approach and how effective was it? Why did you use a particular secondary source and how effective was it?



Reflective: Evaluation is a significant aspect of reflection (assessment criterion E). Consider the strengths and weaknesses of everything, from your sources to your own approach to the process of developing your EE. Getting into the habit of reflecting and evaluating will ensure you become an effective lifelong learner.

Task 3

Now you have a clearer understanding of the terminology used in the assessment objectives, list a time when you have used each of the skills in your DP studies. You will likely find that you have already gained significant experience.

Communication of research

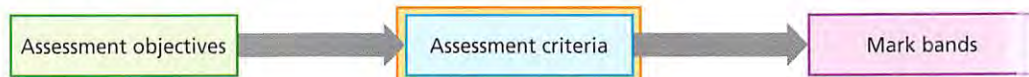
This assessment objective is about effectively presenting and sharing your findings, conclusions and the implications of your research. Complex inquiries can be challenging to present in a clear way, so thinking about how you communicate your exploration is another aspect of how you will be assessed.


EE assessment criteria link: Criterion A

You will be communicating your research through the extended essay itself and need to do so in a formal and academic style that is fit for a 4000-word research project. This includes using the structural and presentational conventions of academic essays in your chosen subject area(s). These structural aspects, along with an appropriate research question and research methods, form the foundational framework of the EE referred to in criterion A.

Breakdown of the assessment criteria

Now that you have a clearer understanding of the assessment objectives and the language used, it is time to look at the five assessment criteria. Remember, these assessment criteria are the ones actually used by the EE examiner to award marks for your essay and establish your final grade. Criteria A, B, C and D are applied to the extended essay itself, and criterion E is applied separately to your reflective statement on the RPF.



 **Figure 1.6** It is important that you understand the assessment criteria

On the following pages, you will find each criterion broken down and explained using these headings:

- **Guiding question:** This is the question the EE examiners will be asking themselves when they look at each assessment criterion. It is helpful to consider how the examiner will perceive your EE as an outsider with no prior knowledge of you as a learner.

- **Strands:** Each assessment criterion is divided into sub-sections to add specificity and make it easier to apply to the essay. Strands represent the key focus of each assessment criterion that you need to consider in turn when producing your EE.
- **Overview:** This is a broad explanation of the overall assessment criterion and its significance.
- **Strands breakdown:** This section explains each of the strands to help you understand what the EE examiners are considering when awarding marks. Each of these comes with some useful tips from an EE examiner and IB EE Workshop Leader to help you perform better in each area.

■ Assessment criterion A: Framework for the essay (6 marks)

Guiding question: Do the research question, research methods and structural conventions provide an effective framework for the essay?

Strands: Research question; research methods; structure.

Overview: This assessment criterion addresses the foundation and presentation of the essay. The research question (RQ) forms the foundation of your EE. Its quality, research methods and structure are evaluated under this criterion. See **Chapter 2 Developing a suitable research question** for further details.

Strands breakdown

Research question: Your research question is central to your EE and sums up what you are investigating.

Top tips for the research question:

- Your research question may evolve as you go through the process of developing your EE – do not feel confined by the initial research question; it can change as your thinking and understanding changes.
- The RQ needs to be focused and suitable in scope for a 4000-word essay. Make sure it is narrow enough to avoid needing more than 4000 words to do it justice.
- Clarity is important – the RQ should be sophisticated, but not overly wordy or complicated. Remember, you can expand on it in the introductory section of your EE if you feel it needs further elaboration.
- The RQ should allow for the development of a strong line of argument. The best EEs argue a conclusion that clearly answers the research question based on a broad range of relevant evidence.
- The RQ should be academic. This means it should not lead to a self-evident answer that is obvious from the question itself. Instead, it should clearly require thorough research, analysis and a well-constructed line of argument to be effectively answered.
- See **Chapter 2 Developing a suitable research question** for more detailed advice.

● Expert tip

As you write your EE, ensure you maintain focus on your RQ throughout the essay. You should do this explicitly by linking your work to the RQ at various points throughout, and not only in your conclusion.

● Common mistake

Many students mistakenly believe that using complex language makes a better RQ. In reality, the most effectively phrased research questions are those expressed with clarity and simplicity. Avoid over-complicating the phrasing of your RQ.

Task 4

Find an EE RQ suitable for one of your subjects (you can use an internet search engine, look elsewhere in this textbook or find one in the *Extended essay guide*). Consider each of the top tips on research questions on the previous page – does the RQ tick (✓) each and every one of them? How could it be improved? Jot down some notes. This experience will help you when it comes to forming your own research question for the EE.



■ **Figure 1.7** Research methods relate to how you research, including generating primary data

Definitions

◆ Research methods

are the specific tools and procedures used to actually collect and analyse data.

◆ Research methodology

is the broader research strategy you take and the rationale for doing so. This 'lens', or approach you take to researching, helps determine which research methods you use.

Research methods: This assesses how you went about your research. **Research methods** are the specific tools and procedures used to collect and analyse data, and they will vary significantly depending on your subject area. For example, a Language A essay will focus on researching critical commentary of a text on academic databases whereas a biology essay will likely involve practical experiments and the use of relevant primary data.

Top tips for research methods:

- You should show you have drawn on research methods that are suitable for the subject(s) your EE is registered in. This will vary depending on your chosen subject area or interdisciplinary subject areas. They generally fall within the categories of primary research (such as questionnaires/surveys, interviews and experiments) and secondary research (such as literature-based research, including databases, government publications and academic journals).
- Summarize your **research methodology** in the introduction. You also need to explain which research methods this methodology involves and how they are connected to your subject.
- There should be evidence showing how you applied your chosen research methods. This links back to the *application* element of the 'application and analysis' assessment objective (AO) discussed earlier in the chapter.
- For secondary research, there should be enough sources of suitable quality to allow effective research using your chosen methods. The sources should be of an academic nature and reliable (see **Chapter 5 Citation and referencing** for more details).

Structure: This covers the broad structure of your response as well as the presentational details. It assesses whether you have communicated your research appropriately and effectively. As explained in the 'communication of research' assessment objective (AO), you must use the structural and presentational conventions of your subject area.

Top tips for structure:

- Academic essays follow a broad, three-part (introduction, main body and conclusion) structure.
- Within these sections, particularly the main body, you should consider subheadings and sub-sections to keep your essay clear and organized.
- Structure within your paragraphs is also important. One such common structure is PEEL paragraphs: Point, Evidence, Explain, Link back to RQ.
- Consider whether your subject has any specific structural conventions, for example maps with legends and scales, labelled diagrams, and so on.
- Consistently use a recognized and well-organized citation and referencing system throughout your essay.
- See **Chapter 3 The formal presentation of the extended essay** for more detailed advice about the structure of the EE.

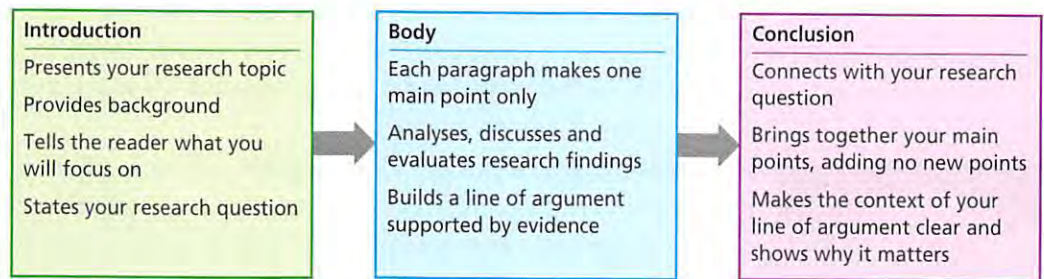
Expert tip

A focus on the outline of your argument, academic context, scope, worthiness and methodology in your introduction can help with assessment criterion A (Framework for the essay). Using these key words and providing some concise detail will signal to the examiner that you have evaluated your research question and approach effectively, therefore helping you gain marks in assessment criterion A.

Common mistake

It can be tempting to demonstrate the vast depths of knowledge you have accumulated from the research process. However, restraint is needed – your research question will be narrow, and the word count limitations require you to be selective with what you include. Only incorporate knowledge that is directly relevant to answering your specific research question.

- Further advice on any specific structural conventions for your EE subject(s) can be found in the 'Subject-specific guidance' section of the IB *Extended essay guide*.



■ **Figure 1.8** Structure of the extended essay

■ Assessment criterion B: Knowledge and understanding (6 marks)

Guiding question: Does the student demonstrate knowledge and understanding of the subject matter used in their research?

Strands: Knowledge; understanding – terminology; understanding – concepts.

Overview: To best understand this assessment criterion, it helps to explore the difference between knowledge and understanding. 'Knowledge' is having the information and facts obtained through study and research. 'Understanding' is being able to make sense of this knowledge and grasp its significance. In simple terms, your research is gaining the knowledge, while your understanding is comprehending what you have found.

Strands breakdown

Knowledge: This refers to you demonstrating that your research methods (see assessment criterion A) have been used to explore the topic and build your knowledge of its subject matter. This can come from secondary sources and, where appropriate to your research question and permitted in the subject, primary research. In all cases, your research must be relevant to the topic and should support the development of your arguments. This knowledge should be carefully selected and effectively used to address the research question.

Top tips for knowledge:

- While you are doing your research and reading, have a system for recording what might be relevant for your essay and bibliography. This should include the citation details and a summary of why the source might be useful to you.
- Read a wide variety of material: textbooks and internet searches are a start, but you should also go beyond this by looking at sources such as academic journals and books.
- Being selective is important. Once you have gathered knowledge from your secondary and (where the subject permits) primary sources, you need to evaluate and be selective with what is relevant to your topic and research question – do not exhaustively include all your background knowledge in your EE.
- As the focus of your essay may be outside of the contents of the relevant subject guide (syllabus), any subject matter or concept not specifically used in the subject guide can also be used, if relevant, to demonstrate your understanding in your RQ in the EE.



■ **Figure 1.9** Make sure you understand and use the specific language of your subject

Common mistake

Terminology usage needs to be relevant and purposeful. It can sometimes be tempting to use as much terminology as you can, but this can often compromise clarity. Ensure terminology is used in a way that adds to your line of argument and does not overload your response with technical language, making it difficult to follow your line of argument.

- To achieve top marks, you are required to show comprehensive and relevant research materials have been used to establish knowledge. This means that your research, whether it is primary or secondary, is detailed (or 'comprehensive') and clearly related ('relevant') to your research question. Essentially, your research needs to have clearly led to a deeper and more effective knowledge of your topic and has enabled you to draw conclusions that answer your research question.

Understanding (terminology): Every subject has its own specialized terminology, often referred to as jargon, which is used and understood by experts in that field. You need to show you are fluent with the terminology of the subject area to be able to effectively explore the topic in the context of your RQ.

Top tips for understanding (terminology):

- Making a list of relevant subject-specific terminology to draw on can be useful when writing your essay. This also demonstrates fluency with the academic language of your chosen subject area(s).
- When drafting your essay, colour-coding any use of terminology can visually ensure consistent use of subject-specific terminology throughout your response. Note that the final version of your EE should not include colour-coding or highlighted text.

Task 5

To show how quickly you can build up an understanding of terminology, make a list of terminology related to the extended essay that you have come across so far in this guide. Once you have done so, continue to add to it as you go through the later chapters in this book. This jargon will serve you well when you go through the process of developing your EE and when you are looking back and reflecting on it.

Understanding (concepts): These are the key ideas around which the knowledge is developed. You can also think of these ideas as the categories, labels or lenses through which the knowledge can be organized and explored. For example, in English A the key concepts are communication, creativity, culture, identity, perspective, representation and transformation; any of these could be used to centre your focus on when studying a particular text. This makes it easier to draw links between ideas and analyses, as well as to come to conclusions.

Top tips for understanding (concepts):

- Concepts are key for drawing connections and can often help establish links between different disciplines and subjects. For example, 'sustainability' can be used as a conceptual lens to categorize knowledge in geography, design technology, business management, economics, biology and many other areas.
- You should familiarize yourself with the concepts and frameworks associated with your area of study. Some may have been explored in the classroom, while others may be new to you as you show academic initiative when exploring an area of academic interest. Note that the IB does not give a specific number or list the types of concepts that you should use in the EE. Instead, use and explain the most relevant concept(s) effectively to demonstrate your understanding of the subject matter and topic under investigation.
- Providing clear definitions of the concepts being used in your EE can help to gain marks for assessment criterion B. Include clear definitions in your introductory section of the essay.

Task 6

Research the key concepts for your Diploma subjects of study. Map out these concepts and see whether there are any subjects that have the same concept. If your subjects do not have any identical concepts, which ones have similarities? You might find some interesting interdisciplinary links that could inspire you into taking the interdisciplinary pathway when developing your EE.



Figure 1.10 A good essay will rely on well-researched and specific-subject knowledge

- Mention your chosen concept(s) throughout your essay and include examples that are relevant to the discussion and your RQ.
- Using concepts shows that you can deal with and process your knowledge. It is an example of higher order thinking skills and shows that you are analysing and interpreting your knowledge.

Assessment criterion C: Analysis and line of argument (6 marks)

Guiding question: Does the student analyse the information presented in the essay and produce a coherent line of argument?

Strands: Analysis; line of argument.

Overview: Once you have gathered knowledge and information through your research, you need to do something with it. The guide describes this as having your research and then bringing out 'its essential elements and structure'. Essentially, you sort out which findings from your research are relevant to your EE. These findings then need to be analysed and used to form a developed line of argument that leads to your conclusions that answer the research question.

Strands breakdown

Analysis: This is where you go beyond simply summarizing and describing knowledge and show that you can do something with it. This is built on and aided by the skills assessed in criterion B, where you show you can research knowledge, organize it into concepts and use subject-specific terminology when dealing with it. This organized knowledge now needs to be examined in depth using critical thinking and reasoning to draw your own conclusions.

Top tips for analysis:

- Effective analysis in the EE requires critical thinking – you should be making connections and gaining deeper insights about your subject matter (both the topic and RQ). **Chapter 8 Showing evidence of critical thinking** expands on this in more detail.
- Having a sophisticated understanding of tools and theories associated with your topic that you can then apply to your RQ is a way of demonstrating clear analysis. You may want to discuss relevant subject-specific tools and theories with your supervisor when developing your EE.
- The understanding of concepts from assessment criterion B is important for underpinning your analysis.
- The understanding of subject-specific terminology from assessment criterion B is also important to ensure that you can express your analysis in a sophisticated and articulate manner, thereby avoiding being highly descriptive.

Line of argument: For this strand, it is important to remember you are answering a research question: an inquiry that has been chosen because of your passions and curiosity. To answer the RQ effectively, there should be a guided structure to your essay where you guide the examiner through your thinking to generate clear conclusions that go at least some way to answering your question.

Inquirers: The DP is about nurturing your curiosity. If you are not excited by exploring and answering your research question, you have not come up with an effective topic for you as a learner. See **Chapter 2 Developing a suitable research question** for more advice about this.

Top tips for line of argument:

- Engage the reader. Though it may sound strange, your essay should *engage* the examiner. Each EE examiner reads dozens of essays, so having a clear, well-crafted line of argument



will make it easier for examiners to follow your reasoning. You must remain broadly academic and formal in your language, but there is leeway for your 'voice' to come through and for the occasional flourish.

- Think 'development'. Early sections of your essay should set the scene and establish the necessary knowledge and terminology. You should then guide the examiner through a logical flow of analysis. Finally, you should draw everything together in your conclusion.
- Your line of argument should show clear links between your overall research question, the findings of your research and the conclusions you come to. Showing how these elements are connected and relevant to each other is an important part of creating a cohesive and effective response.
- Maintain and defend your arguments consistently throughout. The essay should consistently be focused on addressing and answering your central research question.
- Consider subheadings and discourse markers (or 'signposts') that make clear when you are moving on in your thinking and how the sections are connected.

Expert tip

Students often think that evaluation and evidence of critical thinking should appear in a separate paragraph at the end of their essays. In fact, the best evaluation is integrated into the arguments presented throughout an essay instead of being placed as an isolated section.

Task 7

Using an exemplar essay in one of your subjects of study, skim read the essay and make notes on the following questions:

- How did the writer guide the reader through their argument?
- To what extent did they maintain focus on their overarching research question?
- Did you find it easy to follow the writer's thought process and line of reasoning as they argued their conclusions?
- What worked and did not work in terms of making it effective?

Reflect on these answers to develop your own extended essay.

Assessment criterion D: Discussion and evaluation (8 marks)

Guiding question: Does the student discuss the findings and evaluate the essay?

Strands: Discussion; evaluation.

Overview: This assessment criterion is worth the most marks. It primarily covers the discussion of your findings and an evaluation of the effectiveness of your essay in addressing the research question. Communication is key here: there is little point researching and developing interesting interpretations if you then struggle to communicate them in the essay – the months of hard work needs to be clearly expressed in your EE for the examiner to appreciate your efforts.

Strands breakdown

Discussion: Having considered your research, selected what is relevant and analysed it, you need to discuss your opinions and conclusions based on the evidence gathered and presented in the essay. This should be clear and compelling, in part aided by the underlying structure of the line of argument, which is also assessed in criterion C.

Top tips for discussion:

- Your discussion should be balanced and of an academic nature, being clearly rooted in the evidence presented in the response. Avoid bias but show an awareness of bias in any material that you draw upon by evaluating it (see the next strand).
- Clarity is important – your ideas should be clearly and compellingly expressed.

Common mistake

Avoid using a thesaurus and do not just use the most complicated words you can think of. Explaining complicated ideas with clear and simple language will result in a more elegant and easy-to-follow essay.



Figure 1.11 It takes a critical mind to evaluate your own writing

- Discuss why you chose your particular line of argument and show that you have considered alternative perspectives.
- Ensure that your discussion remains balanced by incorporating different opinions and perspectives.
- Engage the reader – as explained in assessment criterion C, some sense of ‘voice’ can go a long way to making your exploration compelling and uniquely your own.

Task 8

Though only a part of the discussion strand, let’s consider your ‘voice’. Make notes on your social voice and your academic voice in a mind map. For example, do you tend to use humour when speaking socially? Do you use lots of slang? Academically, do you tend to use lots of complicated words? Do you write long sentences or simpler ones for clarity?

It is important you have a sense of your own style before embarking upon a 4000-word essay. Consider what works well regarding your essay writing style and what might need tweaking to suit such a long response. Also consider what will provide a sense of ‘voice’ in your essay.

Evaluation: Your discussion should extend to evaluating the effectiveness of your essay in regard to addressing the research question. This is an important part of writing academically and shows that you are approaching the task with a mature and critical mind.

Top tips for evaluation:

- Evaluation should take place throughout your essay, not just at the end. Discussing the scope of your essay in your introduction, critically assessing the strengths and weaknesses of your analysis and secondary sources in the main body, and weighing the merits of different positions as you analyse all come under the umbrella term of ‘evaluation’.
- Consider the strengths and limitations of your research materials – what is effective about your exploration and where do its limitations lie? This can apply to any primary and secondary research that you have conducted to address the research question.
- Show an understanding of the explicit and implicit perspectives and arguments presented by the authors of secondary sources. Critically engaging with sources will help you maintain academic rigour.
- When evaluating your overall essay, discuss whether or not you were ultimately able to answer the research question effectively and whether your research methods were well chosen.

Expert tip

Students are encouraged to use a researcher’s reflection space (RRS) to help with their reflections. The RRS can take any suitable form, such as illustrations, journal entries or even an online blog. Your personal opinions, feelings, values and other comments in relation to the research question and topic being studied can be recorded in the RRS. See **Chapter 7 The importance of reflections** for further details and suggestions about using the RRS.

In addition, there are very clear rules about the word count and formatting of the essay, and these must be closely adhered to. See **Chapter 3 The formal presentation of the extended essay** for further details of the formal requirements for presentation of the EE.



Communicators: Expressing yourself and sharing perspectives is important in education and beyond. The EE is an excellent opportunity to show you can communicate with your supervisor and with the wider academic community and can express an academic inquiry in a 4000-word response.



■ **Figure 1.12** Reflection is a key component of the extended essay

Expert tip

Details of the assessment criterion you have just read are generic guidelines on how to interpret the assessment criteria for all EEs. Make sure you also read the subject-specific advice given in the *Extended essay guide* in relation to your chosen subject(s). You should then discuss this with your EE supervisor to help you to better understand each assessment criterion in the context of your chosen topic and the research question.

■ Assessment criterion E: Reflection (4 marks)

Guiding question: Does the student evaluate the impact of the extended essay learning experience on them as a learner?

Strands: Evaluative; growth

Overview: Unlike assessment criteria A to D, this assessment criterion is not applied to your actual essay. It is instead used to assess your reflective statement on the RPF. This is where you reflect not on the subject matter of your essay, but the broader experience of developing your extended essay in general. This reflective statement is based on the three mandatory reflection sessions you undertake as part of the EE process and is no more than 500 words long. **Chapter 7 The importance of reflections** looks at this in more detail.

Note that zero marks will be awarded for assessment criterion E if the RPF is blank or if the reflective statement is written in a language other than that of the accompanying essay.

Strands breakdown

Evaluative: The key word here is 'value'. You need to consider the value of the experience and its impact on you as a learner, with explicit examples of how you have been able to develop and transfer skills.

Top tips for reflection (evaluation):

- Consider obstacles you had to overcome and how you adapted when faced with challenges.
- Consider using vocabulary from the IB learner profile and ATL skills when discussing how you used and enhanced your skills (refer to **Chapter 7 The importance of reflections** for further guidance on this).
- Give specific examples of how you have been able to transfer skills developed over the course of completing the EE in other contexts.

Growth: Reflect on your growth as a consequence of completing the extended essay.

Top tips for reflection on growth include asking yourself questions such as:

- Were there any changes in your perspective on your topic as you researched, expanded your knowledge and performed analysis? How did these changes in perspective impact your decision making?
- How might your experiences and insights shape your future thinking?
- How do you envisage transferring the skills and lessons you have learned to other circumstances, including future studies, career or life in general?

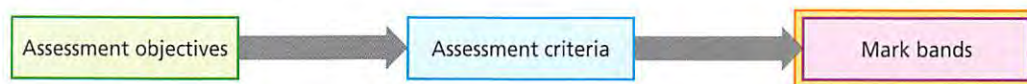
● Task 9

Let's do some 'preflection'. Think back to extended pieces of work you have had to complete. Write down notes for the following prompts:

- To what extent can you maintain focus when working? What holds you back? For example, you might need to turn off your phone because you can never quite resist the temptation to check your latest notifications.
- What do you typically struggle with most when writing academic essays? For example, you might find the planning stages difficult, whereas the eventual writing of the essay itself often comes quite naturally.
- Is there a common target in your essay writing that has come up regardless of subject area? For example, do your essays tend to have paragraph topics that stray from the focus of your essay titles?
- What are your particular strengths that will help you with the EE? For example, you might be someone who is very good at scheduling your time between various tasks without becoming overwhelmed.
- What are your areas for improvement that may make the EE more challenging? For example, you might have little experience with researching secondary sources.

The marking process

Now that you understand the assessment criteria, you need to know how they are used to determine your final mark.



■ **Figure 1.13** How is your final mark determined?

■ The best-fit approach



■ **Figure 1.14** Examiners will adopt a 'best-fit' approach to marking

Examiners are instructed to use a 'best-fit' approach in the assessment of your EE. The IB provides mark bands (for example, criterion A is broken down into 1–2, 3–4 and 5–6 mark bands) to judge the level of your responses, and examiners assess your EE using the different mark bands for each assessment criterion. The best-fit model allows examiners to use their judgement in crediting you for what is in your essay instead of penalizing you for what might be missing. The various mark bands can be found in the *Extended essay guide*.

The aim of the best-fit approach to marking is to find the level descriptor that most accurately conveys your level of attainment. It means that the mark you are awarded (for each assessment criterion) is the one that most fairly reflects the balance of achievement against the various mark bands. It is not necessary for every indicator of a level descriptor to be met for that mark to be awarded, hence the phrase 'best-fit' approach. The EE examiners will use their professional judgement to credit you for what is in your essay.

It is also worth remembering that you can gain the highest mark band descriptor for each assessment criterion without having to write a faultless essay. Examiners are instructed to mark positively and to award the highest levels where appropriate – this is good news for you as a candidate!

● Common mistake

The internal assessment (IA) and EE are distinct and different components. Do not assume that what is acceptable for an IA is also permissible for an EE, even within the same subject. For example, the use of a prescribed key concept is required in the Higher Level Business Management and Economics IAs, but this is not a formal requirement in the EE. Reading the EE subject report for your subject will help you to avoid making any self-penalizing mistakes. These reports summarize feedback from EE examiners in each subject area and can be a useful resource to read through. If you struggle to access any, your supervisor should be able to provide them for you (but remember, older reports from before 2027 will be based on the previous format of the EE – they will still be broadly useful, but elements such as the mark scheme have since changed).

■ Grading the extended essay

Once the examiner confirms your marks for the EE, you are awarded a grade according to the grade boundaries and **grade descriptors**. Although the boundaries can change from year to year, the descriptors provided later in this section will remain the same.

Remember, you must achieve a grade D or higher in both your theory of knowledge (TOK) and EE to be awarded the IB Diploma. In combination with your grade for TOK, you can earn up to three points toward the total score of your IB Diploma, as shown in Table 1.3 over the page.

Definition

◆ **Grade descriptors** describe what qualities an essay at each of the final grades should exhibit.

Expert tip

Refer to these descriptors throughout the entire process. Towards the end of developing your EE, think of each quality as a kind of checklist and see which grade your EE is getting the most ticks in. This will give you some sense of what grade your EE would likely receive if submitted in its current state, and what areas you can focus on improving before final submission.

■ Table 1.3 The TOK–EE Matrix

Theory of knowledge (TOK)						
Extended essay	Grade awarded	A	B	C	D	E or N
	A	3	3	2	2	Failing condition
	B	3	2	2	1	
	C	2	2	1	0	
	D	2	1	0	0	
E or N	Failing condition					

The grade descriptors for each grade level follow below. The full details can be found in the *Extended essay guide*. They are a bit more general than the mark scheme, and remember it is the mark scheme that will be used by the examiner to come to a final mark for your essay.

So, what are the descriptors actually used for? Your supervisor will provide a predicted grade to the IB when your EE is submitted (they will not, however, provide a mark out of 30). To do this, they look at the grade descriptors and see which your EE best fits into. Also, senior examiners will use the grade descriptors to set the grade boundaries, ensuring that the essays within particular marks fulfil the qualities described in each descriptor.

Grade A

Key words: Effective, excellent, consistent, sustained.

Overview: This is the top grade and is reserved for extended essays that score towards the very top end of the mark scheme. Students achieving this grade will have fully engaged with the process and will have produced an excellent essay. The learning objectives earlier in the chapter provide a neat summary of what you need to do well to achieve such a grade: you will have demonstrated excellent knowledge and understanding, application and analysis, synthesis and evaluation, and communication of research.

Qualities:

- The student demonstrates effective research skills, resulting in a well-focused and appropriate research question that can be explored within the scope of the chosen topic.
- There is effective engagement with relevant research areas, methods and sources.
- There is excellent knowledge and understanding of the topic within the wider context of the relevant discipline.
- There is effective application of source material and correct use of subject-specific terminology and/or concepts that further supports this.
- Conclusions are consistent, relevant and thoroughly analysed.
- Arguments demonstrate sustained reasoning and are effectively supported by evidence.
- Research is critically evaluated.
- Coherence, consistency and effective use of structural conventions support readability to an excellent degree.
- Reflection on the extended essay learning experience is consistently evaluative and includes specific examples.
- Reflection shows consistent evidence of the learner's growth and transfer of learning.

■ Grade B

Key words: Appropriate, good, mostly, reasonably.

Overview: A grade B means that you have done everything well and some things excellently. As you can see from the key words, many qualities will be considered 'good', with the others being 'mostly'. This will result in a strong EE that shows you have engaged with the process and fulfilled the learning objectives effectively, if imperfectly.

Qualities:

- The student demonstrates appropriate research skills, resulting in a research question that can be explored within the scope of the chosen topic.
- There is reasonably effective engagement with relevant research areas, methods and sources.
- There is good knowledge and understanding of the topic in the broader context of the relevant discipline.
- There is reasonably effective application of source material and reasonable use of subject-specific terminology and/or concepts.
- Conclusions are consistent and accurately analysed.
- Arguments demonstrate reasoning and are often supported by evidence.
- Research occasionally shows critical evaluation.
- Coherence, consistency and the use of structural conventions support readability to a good degree.
- Reflection on the extended essay learning experience is partially evaluative and includes specific examples.
- Reflection often shows evidence of the learner's growth and transfer of learning.

■ Grade C

Key words: Demonstrates, partially, some, attempted.

Overview: A key word that stands out from this descriptor is 'attempted'. Though not everything may have been successful, you will have shown an awareness of the requirements for the EE and made a solid attempt at all of them, even if some ended up being unsuccessful. The basics are present, but you will have some clear areas for improvement in the future.

Qualities:

- The student demonstrates evidence of research undertaken, leading to a research question that is not necessarily expressed in a way that can be explored within the scope of the chosen topic.
- There is partially effective engagement with mostly appropriate research areas, methods and sources. However, there are some discrepancies in these processes, although these do not interfere with the planning and approach.
- There is some knowledge and understanding of the topic within the broader context of the discipline, and the knowledge is mostly relevant.
- There is an attempt at applying source material and appropriate terminology and concepts, along with an attempt to synthesize research results, with partially relevant analysis.
- Conclusions are partly supported by the evidence.
- Arguments are descriptive rather than analytical.
- There is partially successful evaluation of the research.

- The essay lacks coherence and consistency at times, and structural conventions are irregularly applied, but this does not significantly hinder readability.
- Reflection on the extended essay learning experience is descriptive and includes some specific examples. Reflection occasionally shows evidence of the learner's growth and transfer of learning.

■ Grade D

Key words: Lack of, at times, some, limited, some relevant, irrelevant.

Overview: This is the lowest grade that can be achieved without an automatic failing of the IB Diploma. There will often be unsuccessful attempts at most qualities of an effective EE, though some may be lacking entirely, as seen in the first bullet point below, which refers to a 'lack of research'. Typically, students achieving this grade will not have engaged with the EE process as much as necessary and may have failed to act on advice from their supervisor.

Qualities:

- The student demonstrates inadequate research, resulting in unsatisfactory focus and a research question that is not answerable within the scope of the chosen topic.
- At times there is engagement with appropriate research, methods and sources, but discrepancies in those processes occasionally interfere with the planning and approach.
- There is some relevant knowledge and understanding of the topic in the wider context of the discipline, but at times the knowledge is irrelevant.
- There is an attempt to apply source material, but inaccuracies in the use or underuse of terminology and concepts are evident.
- There is irrelevant analysis and inconsistent conclusions as a result of a descriptive discussion.
- There is a lack of evaluation.
- The limited coherence and consistency of the essay and absence of structural conventions hinders readability.
- The reflection on the extended essay learning experience is descriptive.
- Reflection on the learner's growth is limited to a description of the process, and there is no evidence of transfer of learning.

■ Grade E (a failing condition)

Key words: Little or no, limited, lack of, ineffective, inconsistent, inaccurate.

Overview: An essay achieving this grade has been particularly ineffective, and essays awarded this grade are rare. If an EE gets an E, the student fails the IB Diploma. It is unlikely a grade like this would be a surprise as a supervisor would have flagged the EE as a grave concern throughout the process and before submission. By following your supervisor's guidance and putting genuine effort into your EE, you will be well on your way to achieving a good grade.

Qualities:

- The student demonstrates minimal or no research, a lack of focus and an ineffective research question.
- There is a generally unsystematic approach and a resulting unfocused research question.
- There is limited engagement with limited research and sources.
- There is generally limited and only partially accurate knowledge and understanding of the topic in the wider context of the relevant discipline.

Expert tip

Remember that being awarded an E grade for the extended essay will automatically result in you failing the overall IB Diploma. Work closely with your supervisor to ensure this does not happen to you!

- There are ineffective connections in the application of source material, and inaccuracies in the terminology and/or concepts used.
- The results of research are summarized with inconsistent analysis.
- There is an attempted outline of an argument, but one that is generally descriptive in nature.
- The lack of coherence and consistency and absence of structural conventions significantly hinders readability.
- Reflection on the learning experience of the EE is very limited, with no evidence of transfer of learning.

A final note is that the grade boundaries are not pre-set but are arrived at following the marking of the EEs for a particular examination session. Historically, these grade boundaries have remained stable, given that the nature of the EE does not change. Nevertheless, the IB has been known to change the grade boundaries when necessary, such as during the global Covid-19 pandemic. Therefore, grade boundaries are not available until following the first examination of the new *Extended essay guide* in 2027.

Chapter summary

- There are four assessment objectives and five assessment criteria for the EE.
- The assessment criteria are applied holistically, meaning evidence of each criterion should be shown throughout the whole essay.
- The assessment criterion that is worth the most marks is criterion D (Discussion and evaluation) – worth 8 marks out of 30.
- An E grade in the EE is a failing condition for the whole IB Diploma.
- It is strongly recommended that you record your reflections (of the whole EE process) in your researcher's reflection space (RRS). At the end of the process, you will write a reflective statement on the reflection and progress form (RPF). The RPF has a word limit of 500 words and is worth up to 4 marks.
- Examiners will mark your EE using the best-fit model – you will be credited for what is in your essay, instead of being penalized for what is missing.
- The best-fit approach means that it is not necessary for every indicator of a grade descriptor to be met for that mark band to be awarded.
- The assessment criteria and maximum marks per criterion are shown in Table 1.1 at the start of this chapter. They add up to the overall maximum of 30 marks for the EE.

END-OF-CHAPTER QUIZ

	Question	True	False
1	The research question for your EE must be phrased as a question.		
2	The assessment criteria are all worth equal marks.		
3	The reflective statement on the RPF is not assessed as the mandatory reflection sessions do not carry any marks.		
4	You are strongly recommended to complete a researcher's reflection space (RRS).		
5	A grade E in the EE is no longer a failing condition.		
6	Essays that are descriptive in nature do not score highly.		
7	The maximum word limit for the reflection component of the assessment (the RPF) is 500 words.		
8	The maximum number of words for the extended essay is 4000 words.		
9	The EE is marked out of a total of 30 points.		
10	The IB recommends supervisors spend 5 hours with each candidate.		

Chapter 2

Developing a suitable research question

Is your research question ...

... clearly stated?

... focused enough to be answered in 4000 words?

... open to amendment or change if your research takes you in a different direction?

... likely to lead to an interesting and engaging answer?

... genuinely a question, rather than a statement, which could lead to an essay that is descriptive rather than investigative?

... on a topic that really interests you?

... a good balance of not being too simplistic, which could lead to an answer that is obvious from the start, or too complicated, which could be impossible to draw a conclusion from?

... factual (rather than hypothetical, which can be difficult or impossible to answer)?

Does your research question ...

... invite a critical examination of the topic in respect of integrating knowledge, concepts, theories, perspectives or methods, or a combination of these?

... encourage analysis, evaluation and synthesis (rather than description, unsupported generalizations and value judgements)?

... relate specifically and clearly to an IB Diploma subject, or two DP subjects for the interdisciplinary essay?

... lend itself to a sufficiently wide range of sources?

... meet the demands of the five assessment criteria?

Developing a suitable research question

Purpose of the extended essay

Before developing a suitable research question (RQ), it is important to remind yourself why you are creating one.

The extended essay is an incredible opportunity to explore a topic that *you* are interested in. Throughout your schooling, though there may have been a degree of choice, you will primarily have been following curricula and topics of study that were chosen by others. The extended essay hands control over to you, allowing you to choose an area of interest and really delve into it in a way that will prepare you for the independence of further study at university or of being an adult in the workplace. This is expressed best in the four aims of the EE:

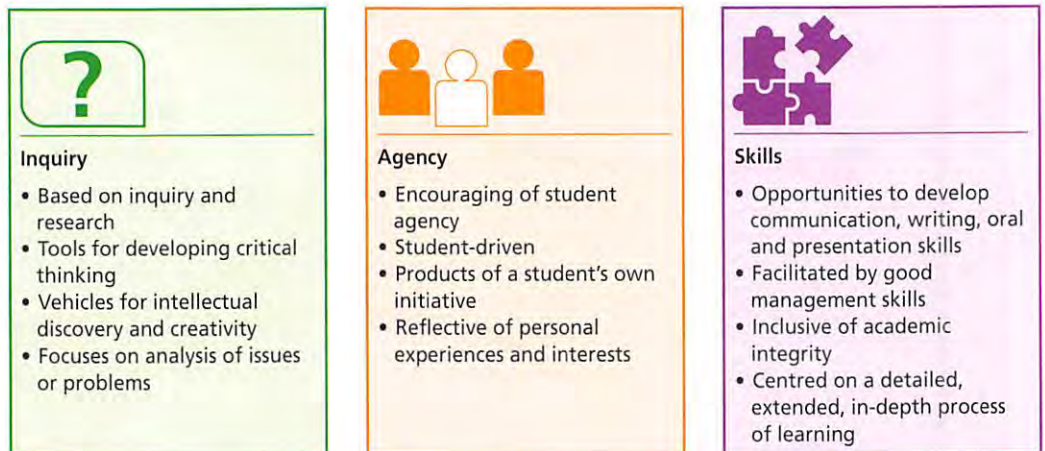
- experience the excitement of intellectual exploration
- engage in student-led academic research on a topic of personal interest
- develop skills in research, thinking, self-management and communication
- reflect on the learning experience of doing an extended essay.

You should see the EE as an exciting opportunity. By following the advice in this textbook, you will help to ensure the EE experience is an incredibly rewarding one that will also develop skills you will find useful in the future.

ATL ACTIVITY

Self-management skills

Independence is valuable when managed correctly. Over the process of the EE, what self-management skills do you think you will need to be using? See the back of the book for some suggestions.



■ Figure 2.1 Common features of research projects

You are ultimately producing a 4000-word academic exploration of a topic of personal interest. As shown in Figure 2.1, you will be harnessing skills developed during your years of schooling: research, self-management, agency and reflection. If you have completed the PYP and MYP, you will have had some very useful experience practising these skills in the PYP exhibition and the MYP personal project. The extended essay takes things to the next level. Some of the benefits of the EE to consider before you embark on developing your research question follow.

A culmination

The EE represents the culmination of your education up until this point – a chance to exercise all of the skills you have built up over years of study. There is a reason this task comes after many of you have come through the PYP and MYP and are completing the DP – you are on the verge of heading out into the world, perhaps going on to further study or into the workplace, and now is the chance to show you are ready for it.

Passion and curiosity

You have chosen your six subjects of study for the Diploma Programme and have had some time studying them. You should already have some sense of which subject(s) particularly make you feel passionate. Perhaps you felt strongly about a women's suffrage pamphlet you looked at in your Language A course, or a case study of the impact of climate change in geography. Or perhaps it is curiosity that is guiding you – maybe you keep asking yourself, 'To what extent does magnesium really impact seed germination?' in biology or 'How did that unorthodox advertising campaign for the energy drink company manage to be so effective?' in business management. Either way, you now have the opportunity to actually follow these passions and curiosities in your EE, and with the added academic support of your subject teachers, your EE supervisor and your librarian. This is an example of you having *agency*, an ability to make choices about your education and follow them through in a supportive environment.



Inquirers: The EE provides you with an ideal opportunity, through research, to pursue your interest in learning and apply the research and academic skills necessary to investigate a probing topic and research question. Consider how you might be able to demonstrate the skills of an inquiry in your EE. These skills can also be useful for your mandatory reflection meetings with your supervisor (see Chapter 7 The importance of reflections).

Celebration

Your EE is a celebration too – it is a chance to feel proud of yourself. By the end of this process, you will have produced a 4000-word academic essay that is a testament to your intellectual curiosity and skills as a researcher and writer. On some level, all of the IB learner profile characteristics will be used, and you will see the benefit of your past years of study and schooling.

University or college preparation

The majority of DP students will continue their studies at college or university. As you progress into higher education, more of the onus is on you to be independent and to be proactive in your learning, with less oversight from teachers and professors. The EE offers an excellent stepping-stone to this next exciting stage of your education.

Independent

Many of you will soon leave home for university or work, beginning your journey into adulthood. As stated above, independence or 'self-management' is going to be a large part of your future. You will need to structure your time, develop ideas, meet deadlines and generally be a very independent learner. The EE is a chance to show you can do this – you will have some guidance, of course, but the EE is very much a student-led process.



■ **Figure 2.2** Your EE is great preparation for the independence of learning in higher education

Task 1

Consider how each of the IB learner profile attributes can be applied to the extended essay.

Match the numbered attribute to the correct letter of the connection to the extended essay.

Attribute		Connection to the extended essay	
1	Inquirers	A	Students acquire in-depth knowledge of their topic through exploration of current literature and/or research.
2	Knowledgeable	B	As researchers, students will explore and include an appropriately wide range of points of view.
3	Thinkers	C	By clearly demonstrating the relevance of their topic, students exhibit their personal commitment to making a difference in the lives of others.
4	Communicators	D	Through research, students activate their interest in learning and apply the skills necessary to conduct an inquiry.
5	Principled	E	Students use well-evidenced, considered conclusions on their topic, and reflect on the transformative nature of their EE experience.
6	Open-minded	F	Students explore new areas or novel situations and courageously defend their positions.
7	Caring	G	Students make reasoned analysis of their research topic and apply critical-thinking skills in a creative way.
8	Risk-takers	H	Students show balance by understanding the importance of intellectual development is reinforced by the research process.
9	Balanced	I	As ethical researchers, students exercise academic integrity in all aspects of their work, showing respect for the ideas and works of others.
10	Reflective	J	Students effectively express ideas and information in an academic way.

Process of developing a suitable research question: The pre-research or exploration stage

The development of an EE can be split into three main stages:

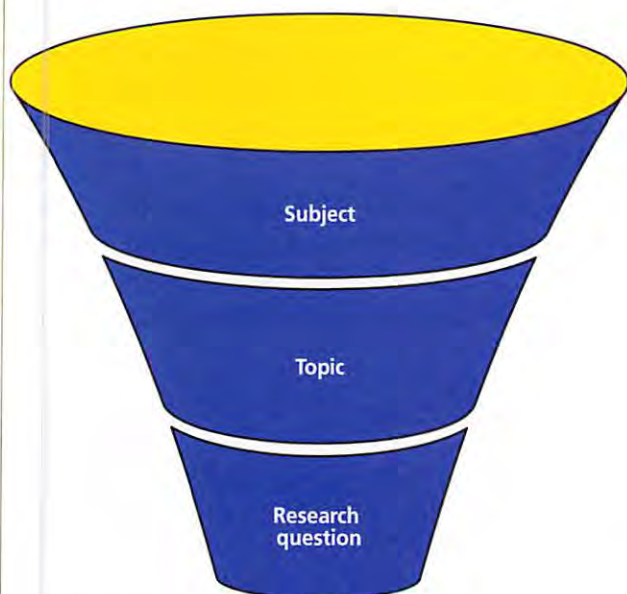


■ **Figure 2.3** The pre-research (or exploration) stage is the first of the three stages of developing your EE

This chapter will guide you through the first of these three stages, focusing on developing an appropriate research question that can be taken forward to the research or data-gathering stage. First, you will establish the basics of what a research question is and is not, before considering what you will need to have in place before beginning the process, how to find areas of interest in your subject(s), and how to develop these into an effective RQ that is viable for the remainder of the EE. Essentially, you need to narrow down from a subject area to a topic to a research question, with each stage being more specific than the previous one.

Remember that you must choose between two pathways for your extended essay:

- 1 Subject-focused pathway
- 2 Interdisciplinary pathway.



■ **Figure 2.4** Establishing your RQ involves a process of narrowing down from your subject area

Expert tip

You can think of the process of developing an EE as an inquiry cycle, with the following stages:

- **Connect:** Connecting with your passions and curiosity to narrow down your subject area
- **Wonder:** Wondering more deeply about what you would like to find out in your subject area by coming up with a topic and then a research question
- **Investigate:** Gathering secondary research and primary sources (where appropriate and permitted) to help answer your research question
- **Construct:** Constructing meaning through analysis of the gathered sources and creating a plan for your essay
- **Express:** Writing your 4000-word essay
- **Reflect:** The final *viva voce* and writing of the reflective statement (see **Chapter 7 The importance of reflections**), but reflection will of course have taken place throughout the entire process.

What is a research question?

The research question (RQ) is the central inquiry you aim to answer in your extended essay. It is crucial that you understand what a RQ actually is before you start the process of developing one yourself. It is also worth noting at this stage that even the best RQ can and will evolve throughout the process, and there may even be some false starts that require revising or redefining your question. This is all quite common, so there is no need to panic.

A research question is the query you are intending to address or answer through researching and writing your EE. By framing your RQ as a question, you can develop an argument that ultimately presents an answer to your initial inquiry. Unsurprisingly, it should be central to your 4000-word essay, so coming up with an effective and considered research question is an incredibly important part of the entire process.



Risk-takers: In choosing your topic, you are developing an area of inquiry that may well involve a topic or RQ that you do not currently have lots of knowledge and understanding of. Exploring new areas and justifying why you are doing so can be a little intimidating, but taking these sorts of risks is how you grow and develop as a learner and as a person.

Below are some tips for the research question to help you better understand it (also refer to the information on assessment criterion A in **Chapter 1 Understanding the assessment criteria** for further details):

- **Critical analysis:** A good RQ encourages critical analysis rather than shallow, descriptive or narrative responses. It should require use of knowledge, concepts, theories, perspectives, methods, or a combination of all of these in order to come to a justified conclusion.
- **Line of argument:** You need to be able to develop a strong line of argument. You are essentially convincing the examiner of the validity of your response to the RQ. This is an important consideration when developing a RQ as it is explicitly mentioned in assessment criterion C. Refer to **Chapter 1 Understanding the assessment criteria** for further advice about this assessment criterion.

Definition

◆ A **double-barrelled research question** is one that combines two questions into one, such as, 'To what extent does Yanagihara use structure **and** cultural references to convey the impact of trauma in the novel *A Little Life*?' In this example, analysing both structure **and** cultural references will likely be too much to cover, and each focus could have been a separate EE research question. Keep the focus narrow.

- **Focused:** 'Scope' is something important to consider. It may seem that 4000 words is a lot to write, but you will use up this word count surprisingly fast. Your RQ needs to be narrow enough to be effectively answered in a 4000-word essay. In particular, you need to avoid vague or **double-barrelled research questions** that require you to cover too much within the limits of the 4000-word EE.
- **Sophisticated:** The assessment criteria emphasize the importance of higher-order thinking skills for a successful EE. The RQ should not be so simple that there is an obvious self-evident answer from the outset. Deeper thinking processes can be encouraged by using sentence stems such as 'How significant ...?', 'How successful ...?', 'To what extent ...?' and 'What if ...?' to frame your RQ.



Common mistake

It is important for you to consider a research question that you can respond to comfortably within the 4000-word count limit of the extended essay. Therefore, you should avoid research questions that are too broad to complete within this limit or too narrow that you are unable to reach the maximum word limit.



Task 2

Having read the expert tips, can you explain what is wrong with the following examples of research questions? What could you change about them to make them more effective? Make sure you check the answers section of this textbook for more insight into effective research questions.

Language A: How have children's advertisements changed over the last 50 years?

Biology: How does soap kill the gut bacterium *Lactocaseibacillus casei* Shirota?

Business management: How have Oreo's marketing strategies helped them become successful?

What to have in place before developing your research question

Before beginning the process of coming up with your research question, it is important to have a few things in place. Your EE coordinator will undoubtedly give you some advice and help orientate you into the process at your school, but the advice that follows will also be very useful.

■ Researcher's reflection space (RRS)

Think of the researcher's reflection space (RRS) as your learning journal, where you compile your notes, ideas and reflections throughout the EE process. It is good practice to share your RRS with your supervisor during your check-in meetings and formal reflection sessions (see Chapter 7 The importance of reflections for more details about this).

At this stage, you can collect your initial thoughts and any responses to activities you complete from this chapter as you progress through. Your RRS will be invaluable later when reflecting on the development of your research question during the initial reflection session (see Chapter 7 The importance of reflections).

Your school might have a suggested format for the RRS, but here is some further inspiration of approaches you may take:

Old school

There is a certain charm to physical media, particularly in this age of widespread information technology and online content. If you appreciate the tactile experience of pen and paper, you might want to consider one of the options below. However, when basing a RRS on physical media, there will inevitably be some digital notes and research that you must either print or keep track of digitally alongside your physical RRS.

- **Scrapbook:** A large scrapbook allows flexibility, meaning that you can paste in documents, draw diagrams, handwrite notes and generally get creative with your RRS. This approach is particularly useful for EEs in the arts, including dance, music, theatre, visual arts and film.
- **Notebook:** A smaller notebook or notepad is great for handwritten notes that document your reflection and progress yet still allows flexibility if you want to add small diagrams or doodles.

The professional

If you envision yourself as a future CEO, dressed in smart business attire and handing out formal business cards, this approach is for you. In that case, use a trusted and reliable form of notetaking.

- **Word processor:** Standard word processors are an obvious choice for the RRS. Cloud-based word processing programs are recommended as they are automatically backed up and can be accessed by multiple users (your supervisor will want to have access, for example). Some software will allow more flexibility with multimedia, so consider your likely needs given your chosen subject area, topic and research question.

The tech-savvy

As a tech-savvy individual, you likely spend time troubleshooting tech issues for your parents or guardians. Why not leverage your status as a 'digital native' and use online platforms that offer greater flexibility and versatility for the RRS?

- **Tablet apps:** More and more apps built around tablets with styluses are blending the best of both worlds: the tactility of handwritten notes with the flexibility of digital documents. Many apps also enable you to embed PDF files, stickers and audio notes to accompany your written ones.
- **Digital whiteboards:** If you prefer an organized yet expensive canvas, digital whiteboard apps are also a good option. Many allow the embedding of videos and PDF files to help collect and organize all your ideas in what is essentially a digital version of a scrapbook.

Expert tip

Remember to have a backup of your work. The easiest way of doing so is to use a word processing platform that keeps your files live and in the cloud such as Google Docs or OneDrive. This has the added benefit of the file being accessible to your supervisor if you provide them with sharing rights.

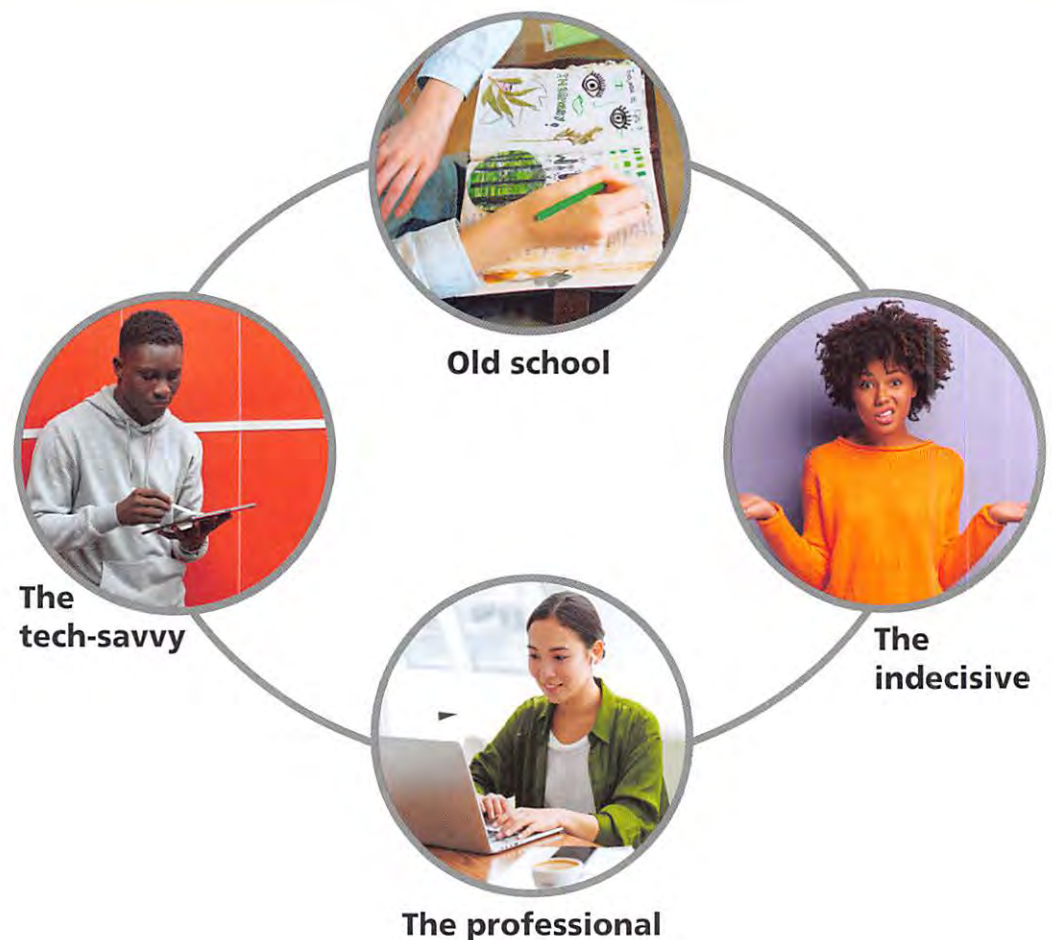
The indecisive

Making decisions can be challenging. Throughout the EE process, you will need to make numerous decisions as you develop your EE, but if all the previous options sound applicable to you in their own ways, then why not combine them?

- **Blended RRS:** A blended RRS offers greater flexibility. There is no stipulation from the IB for your RRS to be in one specific document, but you need to ensure you keep things organized as it is easy to lose track of things over such an extended period. You can combine handwritten notes with digital notes, using whichever format best suits each situation, then collating all of this together.

Task 3

Having read the advice above, you can now create your RRS. You can change the format later, at any time before the viva voce (final formal reflection session), but it is important you keep a record of the process from the outset. Any notes you have already made during the EE process can be added to your RRS.



■ Figure 2.5 A blended RRS can give the best of all worlds

Extended essay guide and Extended essay support material

Now you have your RRS, it is worth taking a moment to be reminded of some resources you will need to read through. The IB has published two documents that are vital for you and your supervisor to refer to throughout the EE process: the *Extended essay guide* and the *Extended essay support material* (first assessment 2027). These documents are very important and will be used by EE coordinators and supervisors to understand what they are aiming for with the EE process at your school. With this latest revision of the EE, both publications are more student-friendly and can be very helpful for understanding the process.

The *Extended essay guide* provides a comprehensive explanation of the task. While reading the entire guide is unnecessary, there are many sections that are relevant to understanding the EE development process. In particular, you should refer to the section towards the end of the *Extended essay guide* that provides subject-specific guidance for your chosen EE subject. This section includes examples of research questions and guidance on how the assessment criteria are particularly applied to EEs in the various subject groups (Language A, Language B, Classical Languages, Individuals and Societies subjects, Sciences, Mathematics and Arts). It is also worth reading the sections on cross-disciplinary subjects, as you may consider the option to write an EE in either environmental systems and societies (ESS) or literature and performance. This allows more flexibility in your RQ as these two DP subjects each combine studies in two subject groups. ESS integrates Individuals and Societies and the Sciences, while Literature and Performance brings together Language and Literature and the Arts. Note that these cross-disciplinary subjects are **not** the same as the interdisciplinary EE, which is covered separately in Chapter 9 The interdisciplinary extended essay.

The other main document is the *Extended essay support material*. As the name suggests, it is targeted at supporting students, not just teachers. This document was written by IB teachers experienced in supporting students and teachers through the EE process. As such, it includes ideas, background information and tools that can help students and supervisors alike in getting through the EE process successfully.

So, having set up your RRS, it is time to start generating some more notes with the following task.

Task 4

Skim through the advice given for each of your DP subject groups in the *Extended essay guide*. Make some basic notes on what kinds of RQs are suggested, and any particular advice given. Also read the section on the interdisciplinary EE, as this may end up being the pathway you take when you develop your RQ. These notes will help you in the next stage (narrowing things down).

Narrowing things down

■ Connecting with curiosity and considering topics

The freedom of the EE can be overwhelming. It is therefore important to start narrowing things down. There is no set process for coming to a suitable RQ, but the approach explained below should help you.

Having made notes in your RRS on your six DP subjects, you already have a better sense of what is possible and what is most likely to keep you engaged throughout the EE process. It is time to narrow things down.

We are going to explore three of your six DP subjects in more detail and consider some potential EE topics for them. From these topics, you can develop more specific research questions. Having three is useful on an intellectual level as it provides more variety of thought and options, but it is also useful on a practical level as there is often no guarantee you will get your first-choice subject (depending on the policy of your individual school).

Before narrowing down to your three DP subjects, take the following into consideration:

- **HL vs SL:** It is worth factoring in the level of study of your subjects. Completing an EE in an SL subject is completely fine (you are technically allowed to complete the EE in a subject you do not study, but unsurprisingly this is often not advisable!). In contrast, you study your HL subjects in far more depth, and therefore develop a deeper and wider set of knowledge, concepts, theories, perspectives and methods to draw on when developing your EE.
- **Passion:** The EE is an involved and lengthy process, so a subject you are passionate about is more likely to keep you motivated and engaged as you develop your EE. You will most likely have only begun your studies in each subject, but you will have some sense of which subjects engage you intellectually and which present more of a challenge.
- **Topics:** Consider the topics you have already studied and those that you will study. This will help provide ideas for the kinds of topics you might end up writing about. It is important that you do not reproduce any work that you have studied in class, but topics covered might serve as the inspiration or a starting point for your own research.

Expert tip

Consider your choice of an HL or SL subject carefully. You need to have sufficient depth of subject knowledge and background reading to write the 4000-word essay in an analytical and critical way. Nevertheless, note that you have complete freedom to choose your EE subject. While HL subjects are typically studied in more depth, this doesn't mean you cannot explore SL subjects or even areas you haven't formally studied but are passionate about. Many students, due to career aspirations, are required to select specific HL subjects, which sometimes forces them to exclude a subject they are deeply interested in (such as Group 6 subjects, which often fall in this category). The EE could create an opportunity to give these SL subjects more of a focus.

Task 5

Based on your thoughts so far, choose the three subjects you think would be most interesting for developing an EE.

Once you have done so, it is time to start exploring! You need to start considering which topics you might write an EE about in each of the three subjects.

There are lots of resources you can use to help generate these topics and ideas, but here are a few to get you started:

- **Notes:** Your own notes are a good place to start. Topics covered in class might inspire you to explore further, and the EE is an excellent opportunity to do so. Your lessons may have briefly introduced intriguing topics or subject content, presenting opportunities to explore them in greater depth through your EE.
- **Subject teachers:** Having a quick conversation with your subject teachers can also be a useful place to find topic ideas. They will have experience with EEs in the past and will have subject knowledge to support you accordingly.
- **Course guides:** Looking at the syllabus for your three shortlisted subjects lets you know what topics are coming

up in class, what kinds of topics exist within the subject area, and can get you thinking about possible avenues of exploration for the EE.

It is up to you how you record these ideas in your RRS, but one suggestion is to use mind maps. As you write down topic ideas, you can surround these with sub-topics and even possible questions. By doing so, you might also notice interesting connections between your subjects at this stage. Try to colour-code or draw labelled connections between your different subjects in your mind maps. This may lead you to consider the interdisciplinary pathway (see **Chapter 9 The interdisciplinary extended essay**) or a cross-disciplinary subject.

Once you have some ideas for your three subject areas, highlight promising ones and create a ranking of your top three. Choose the ones that seem to have the most potential, not just in terms of investigations, but in terms of keeping you engaged, curious and passionate as you delve deeper into the process. You are hopefully getting closer to your eventual research question!



■ Figure 2.6 Four steps to developing a research question

Pre-research (exploration) stage

Taking your top-ranked subject and topic, it is time to conduct some preliminary research. This is essentially gathering more content and ideas around your topic that you can then use to form a suitable research question. It also helps confirm the topic has the necessary depth for a 4000-word investigation.

You may or may not already have actual research questions swirling around in your head at this point, but it is better to do some basic reading into your topic before forming your initial research question. This pre-research should not be extensive; you are only skimming the surface of the topic to spark your curiosity. The more of a sense you have of your topic, the more options and ideas you will have for an actual research question.

At this point, it is also important to remember what was mentioned earlier in the chapter: your RQ can evolve or may even be unsuitable, requiring you to revisit the start of the process. This stage is all about exploring, and when exploring you often get lost, need to turn back, reflect and go in a different direction. Don't worry, you still have alternative topics and subjects to turn to.

Task 6

Complete the following tasks to develop your topic area, documenting your notes and any reflections in your RRS:

- **Initial research and background reading:** As research is so central to the extended essay, you need to ensure that sufficient information exists to be gathered. If you struggle to find enough information at this stage, it is unlikely to lead to an effective RQ. Consider the following questions when conducting initial pre-research into your topic:
 - What has already been written about this topic?
 - Is it easy to find relevant sources of information?
 - Is there a suitable range of sources available?
 - Is there a range of views and perspectives on the topic?
 - Are interesting questions starting to emerge from your reading on the topic?
- **Ethics and academic integrity:** As you head out into the world of academic research, you need to consider

whether this topic will run into any possible ethical concerns. See **Chapter 4 Academic integrity** for more information on what is and is not acceptable within the context of the EE. If you are worried there may be ethical issues, raise them immediately with a subject teacher or your supervisor for some advice.

Remember, by exploring your topic in the pre-research (exploration) stage, you are simply taking initial steps into the possibilities. Much deeper research is to come if you end up taking this topic forward and developing it into a research question.

However, you may find that there is little depth or interest in what initially seemed like a promising topic. If that is the case, don't worry, as you can go back to the previous stage and look into one of the other topics or subjects you considered as part of the 'connecting with curiosity' stage.

If you are happy with your topic, move on to the next stage.

Going from a topic to a research question

Topics are broad; research questions are specific. An example for digital society (group 3 subject) is as follows:

- Topic: An investigation into management information systems in the manufacturing industry.
- Research question: To what extent has factory work in Vietnam been transformed by automation and AI in the last decade?

As you can see, a research question involves far more specificity.

So, now you have considered a topic of interest and found that it has some depth, you need to decide on a particular research question of your own that gets you especially curious and seems worthy of academic investigation. It also means you will have something to 'answer', which is necessary for you to create a line of argument in your EE.

If you end up sticking with this initial research question, it will almost certainly evolve as you develop your EE. It is often the case that the final submission of the essay has a very different RQ from the one you began with. This can occur for various reasons, from tweaking phrasing for clarity to your research taking an unexpected path.

In this section, you will find some useful research question stems. Examples of some actual research questions can be found towards the end of this chapter.

Common mistake

Your research question should be expressed as a probing question, ending with a question mark. Too often, students propose a hypothesis or a premise in place of an actual question.

Common mistake

Simply tweaking your topic and adding a question mark at the end will not make an effective research question. Typically, a focused research question is phrased very differently from the overall topic (broad).

■ What makes an effective research question?

Now is the time to come up with a specific research question. This set of activities will help you through the process.

You need to form a research question that has the following qualities:

- **Focused and worthy:** You must be clear about what you specifically intend to address in your essay. It also needs to be significant, meaning there is not an obvious answer – it is not worth going through the process of inquiry if there is nothing academically worth inquiring about.
- **Feasible within 4000 words:** Your question must be neither too broad nor too narrow. If you are looking at a variety of factors in your potential RQ, for example, consider narrowing it down to just one. If you are unsure whether the RQ will need 400 or 40,000 words, consult your supervisor or subject teacher.
- **Analytical and arguable:** It is essential that your research question does not lead to a descriptive or overly simple response. There should be a clear argument you can make that involves analysis and interpretation when responding to the research question.

Ultimately, you need to consider your main objective and how best to phrase that as a research question.

Testing your understanding of what makes an effective research question

With this in mind, complete the following activities to further develop your understanding of effective research questions before finally coming up with your own.

● Task 7

Which of these are good topics for creating suitable research questions and why? Copy out and complete the table below, then check the answers at the back of this book.

- 1 A comparison of wars.
- 2 Aspects of the First World War that led to medical advances.
- 3 'The fact that she is not immune to persuasion makes Anne Elliot one of Jane Austen's most admirable and sympathetic characters.' Discuss.
- 4 Comic books can be considered as art. Discuss.
- 5 The development of a tragic hero from Homer's *Iliad* to Eddie Carbone in Arthur Miller's *A View from the Bridge*.

- 6 An investigation and redesign of a rotational laundry rack for elderly people.
- 7 A comparison of traditional markets and supermarkets.
- 8 A study of Pi.
- 9 The benefits and costs that Disneyland brings to Paris.
- 10 The degree of complexities of B vitamins in comparison to DEET in preventing mosquito bites.

Essay title number	Good or bad?	Reasons
1		
2		
3		

● Task 8

- 1 Choose three of the questions from Task 7 that are ineffective topics for research questions and re-write them so that they become better inquiry questions that are more suitable for an EE.
- 2 What might make an effective research question for each of the following topics?
 - **History:** Second World War

- **Psychology:** Depression
- **Mathematics:** Population growth
- **Visual Arts:** World's tallest buildings
- **Film:** *The Lord of the Rings*

For example, a visual arts extended essay on tall buildings should consider the aesthetic aspects of their design.

Task 9

Consider why the following are unsuitable topics for EE research questions. Which subject would they fit into?

- The origins of the Cold War
- English novels
- How to design a space shuttle
- Why should we expect a flu epidemic?
- When should we expect the next tsunami?
- Do Dry Shirts work? How do they work?
- Are Chinese medicines effective?
- Was Albert Einstein an atheist?
- The NBA in China

Forming your own research question

Having completed these tasks, it is time to come up with your own research question based on your current idea for a topic. Before forming your research question, complete the following:

- 1 Review the subject-specific guidance for your preferred EE subject and pay particular attention to the advice on and examples of research questions in that subject area.
- 2 Read the 'Research question stems' section below.
- 3 Read the 'Research question examples' section that follows.

Once you have done this, form your own research question before reading the next section of this chapter.

Research question stems

You can use question 'stems' – these are structures for questions that can be adapted for a more specific topic. These stems help you to structure your RQ and responses more effectively. This is usually just a starting point and should evolve into more unique research questions as you develop your EE and refine your research.

Many are broken down by subject, but most are transferable, and the list is by no means exhaustive.

Descriptive vs analytical stems

Avoiding descriptive stems:

Question stems such as 'How do ...' and 'What is ...' often lead to extended essays that are descriptive rather than analytical. Explaining 'how' something happens usually leads to describing a process without presenting an argument. 'What' is similar – you end up focusing on what happens in a process in a largely descriptive way, simply making a declarative response rather than an inquiry-focused one.

Analytical and inquiry-focused stems:

In contrast, 'To what extent ...', 'How effective ...' and 'How accurate/reliable ...' use 'how' and 'what' in more evaluative phrases that create a far more analytical and evaluative extended essay. Responses to these types of stems require critical thinking and evaluation to reach a clear conclusion that answers the research question.



■ **Figure 2.7** A good stem will allow your research question to bloom into an effective extended essay

Subject-specific stems

The following question stems are more detailed and lend themselves to particular subjects. These should be seen as potential starting points for crafting your research question, emphasizing the importance of originality. This is not only because your original inquiry should lead to a unique RQ, but also for reasons of academic integrity.

Language A:

- 1 To what extent does [author] utilize [literary device/s] to convey [theme/idea] in [work]?
- 2 How does [character] in [work] exemplify the struggle between [concept] and [concept]?
- 3 In what ways does [literary aspect of work] reflect the cultural and historical context of [time period]?
- 4 What role does [symbol] play in the development of [theme] in [work] by [author]?
- 5 How does [author]'s use of [narrative technique] affect the reader's perception of [character/event] in [work]?

History:

- 1 To what extent did [event] influence the development of [political/social/economic] structures in [region/country]?
- 2 To what extent did the policies of [leader] influence [group/country/issue] during [time period]?
- 3 What were the most significant causes and consequences of [historical event] for [specific aspect of society]?
- 4 In what ways did [movement/event] challenge the existing power structures in [country/region]?
- 5 How did [technological innovation] contribute to changes in [societal aspect] during [time period]?

Sciences:

- 1 How does [scientific phenomenon] affect [biological/chemical/physical process] in [specific context]?
- 2 What are the implications of [scientific discovery/innovation] on [field/industry]?
- 3 To what extent can [scientific method/technique] be effective in solving [specific problem]?
- 4 How do environmental factors influence [specific aspect] of [biological/chemical/physical system]?
- 5 What is the relationship between [variable] and [variable] in the context of [scientific study]?

Psychology:

- 1 To what extent does [theory/concept] explain the [type of behaviour] of [group/individual] in [specific situation]?
- 2 To what extent does [psychological phenomenon] have an effect on [aspect of mental health] in [population]?
- 3 How effective is [therapeutic approach] in treating [specific disorder]?
- 4 How do [social/cultural factors] influence the development of [behaviour/attitude] in [group]?
- 5 To what extent does [type of intervention] effectively treat [aspect of behaviour/cognition] in [specific context]?



■ **Figure 2.8** If you were writing an EE on economics, what question stem would you use for your RQ?

Economics:

- 1 How effective is [economic policy] in influencing [specific economic indicator] in [country/region]?
- 2 What are the effects of [market structure] on [industry/market] in [country/region]?
- 3 To what extent does [economic theory] explain [economic phenomenon] in [specific context]?
- 4 How do [socio-economic factors] influence [aspect of economic behaviour] in [population]?
- 5 What role does [institution] play in the economic development of [country/region]?

Global politics:

- 1 How does [political theory] apply to the governance of [country/region]?
- 2 What are the impacts of [policy/reform] on [aspect of society] in [country/region]?
- 3 To what extent do [political movements] shape the political landscape of [country/region]?
- 4 How do [international relations factors] influence the foreign policy of [country] towards [country/region]?
- 5 What are the effects of [legislation/policy] on [demographic group] in [country/region]?

Arts (dance, music, theatre, visual arts and film):

- 1 How does [artist/movement] use [medium/technique] to convey [theme/idea]?
- 2 To what extent does [artwork/genre] reflect the cultural and historical context of [time period]?
- 3 What influence did [artist/movement] have on the development of [specific art form]?
- 4 How does [element/style] in [artwork/film/music] contribute to its overall impact on the audience?
- 5 What role does [art form/medium] play in the expression of [social/political] issues in [context]?

■ Research question examples

To help you formulate your own research question, the following section provides some examples of RQs from various subject areas. Your supervisor or EE coordinator will be able to share additional examples.

■ **Table 2.1**

Group 1 Language A: Studies in language and literature	
Quick tips	<ul style="list-style-type: none"> • Ensure your focus remains 'literary'. You may explore a social, political or philosophical issue, but the focus of the RQ must be on how this idea is explored in a literary/linguistic context. • Avoid overly biographical, historical, psychological or sociological topics as these make it hard to maintain a focus on literary/language analysis and discussion. • Texts must have literary merit. This refers to the quality and significance of a written work, based on its originality, insights and enduring value. Literary merit is often distinguished by its ability to engage readers, provoke thought and stand the test of time.
Group 1 subjects, essays titles and research question examples	
English language and literature	How and to what effect is rhetoric used in selected National Union of Women's Suffrage Societies' pamphlets from 1910 to 1914?
	To what extent are the changing visual elements and graphology of toy advertisements an indication of changing child gender attitudes since the 1960s?
English literature	To what extent does the portrayal of transgenderism in Virginia Woolf's <i>Orlando: A Biography</i> serve as a form of empowerment, especially for women?
	How does Thackeray convey the idea that 19th-century English society prioritized external appearance over moral principles in <i>Vanity Fair</i> ?

■ Table 2.2

Group 2 Language B: Language acquisition	
Quick tips	<ul style="list-style-type: none"> • There are three main areas you can explore: <ul style="list-style-type: none"> – Language use – Literary analysis – A study of the culture itself. • You could analyse a text to explore how language is developed and used by native speakers or in literature. • You could also investigate the culture or history of a country where the target language is dominant, focusing on a socio-cultural issue specific to the target language.
Group 2 subjects, essays titles and research question examples	
Spanish	<p>¿Cuál es la importancia de las mujeres en 'la casa de Bernarda Alba' y 'Bodas de Sangre' por García Lorca?</p> <p>What is the importance of women in <i>The House of Bernarda Alba</i> and <i>Blood Wedding</i> by García Lorca?</p> <p>'Agua para Chocolate', ¿cómo influyen las recetas y los remedios caseros en las interacciones, emociones y amor entre los personajes?</p> <p>In the novel <i>Like Water for Chocolate</i>, how do recipes and home remedies influence the interactions, emotions and romantic relationships between the characters?</p>
French	<p>Dans quelle mesure les interdictions de fumer dans les lieux publics sont-elles un avantage pour le reste du monde?</p> <p>To what extent can the ban on smoking in public places in France be seen as an advantage for the rest of the world?</p> <p>Dans quelle mesure peut-on dire que la Loi de 2010 interdisant la dissimulation du visage dans l'espace public en France est-elle une mesure nécessaire pour sauvegarder les valeurs républicaines?</p> <p>Is the law of 2010 that prevents people from covering their face in public spaces a necessary measure in order to preserve the Republic's values?</p>
Chinese language A (bilingual diploma)	<p>老北京的成长故事----《城南旧事》中的复调手法体现</p> <p>How does the author of novel <i>My Memories of Old Beijing</i> use polyphony to achieve her writing purpose?</p> <p>诗歌借鉴的实现方式-----以《繁星春水》为例，探究泰戈尔的《飞鸟集》对冰心诗集风格的影响</p> <p>How does the writing style of <i>Stray Birds</i> written by the poet Tagore influence the Chinese poetry <i>Flows Stars</i> written by Chinese poet Bing Xin?</p>
Chinese language B	<p>从香港交通发展的历史看香港社会文化变迁</p> <p>How does the change of the traditional Chinese characters to simplified characters affect the learning of Chinese culture?</p> <p>浅析繁体字被简体字取代所带来的文化缺失</p> <p>How does the development of transportation in Hong Kong represent the culture change of Hong Kong society?</p>
Japanese	<p>日本料理と中国料理</p> <p>How is Japanese food different from Chinese food?</p> <p>高校生の生活</p> <p>In what ways is school life for Japanese high school students and Chinese high school students similar?</p>

■ Table 2.3

Group 3 Individuals and Societies	
Quick tips	<p>An EE in Individuals and Societies will give you the opportunity to:</p> <ul style="list-style-type: none"> challenge cultural assumptions or contest definitions and descriptions of the social world, or assumptions about human nature develop, through an in-depth study, a critical inquiry into the human condition and its possibilities increase your knowledge of a subject within Individuals and Societies by exploring relevant subject literature select different theories and concepts in Individuals and Societies subjects, then apply suitable methodologies to formulate an argument develop a more informed and a more sophisticated understanding of the dynamics of the social world.
Group 3 subjects, essays titles and research question examples	
Business management	To what extent did targeted collaborations by The North Face between 2021 and 2023 influence its market share and consumer engagement metrics?
	How effective has McDonald's 'Create Your Own Menu' strategy been in developing market growth in Hong Kong?
Digital society	How has the increase in information shared on social media challenged democratic institutions (with a focus on the case of Cambridge Analytica)?
	To what extent can productive work cultures be maintained with robotic colleagues through the use of automation and AI?
Economics	To what degree has the fall in the exchange rate of the pound sterling following Brexit affected the tourism industry in the Lake District, UK?
	To what extent is private education in Singapore recession-proof?
Geography	To what extent has the environmental levy on plastic bags been successful worldwide (with a focus on studies based in two different regions)?
	To what extent do marine aquaculture sites influence eutrophication of seawater in Plover Cove, Hong Kong?
Global politics	To what extent is female leadership better at facing and resolving conflict (with a focus on responses to terrorist attacks in New Zealand and France)?
	To what extent is the large amount of personal data collected by mobile apps a breach of the right to privacy (the case of Meta in the EU)?
History	To what extent was the ideology of 'continuous revolution' the main cause of the Chinese Cultural Revolution?
	To what extent can Lenin's rise to power in 1917 be attributed to foreign intervention?
Philosophy	To what extent has Simone de Beauvoir's existentialism challenged Western patriarchal views of female sexuality?
	Can metaphysical interpretations of gender be effectively applied in contemporary philosophical discourse?
Psychology	To what extent is art therapy effective in reducing symptoms in Major Depressive Disorder?
	To what degree does personality affect relative levels of stress in the medical profession?
Social and cultural anthropology	How useful is the concept of performance to explain bodily experiences in women's current political demonstrations from a feminist theoretical perspective?
	To what extent do witchcraft beliefs influence the women of the Bhil tribe?
World religions	Why are Orthodox Jews more resistant to the ordination of women as pulpit rabbis than Reform Jews?
	To what extent can evangelical conceptions of Christian eschatology result in internal inconsistencies within evangelical theology?

■ Table 2.4

Group 4 Sciences	
Quick tips	<ul style="list-style-type: none"> It is easy to be too ambitious with sciences research questions – keep it manageable and be mindful of your access to resources and facilities that may be necessary for your research. Your RQ should offer the opportunity to investigate and collect data using scientific methodology. Your RQ must lead to findings that are valid and evidence-based.
Group 4 subjects, essays titles and research question examples	
Biology	What is the impact of humidity (as a result of changing weather patterns due to climate change) on the rate of growth of agricultural crops in the United States as simulated with the use of coriander?
	How does the variation in pigmentation in different perennial leaves affect the rate at which photosynthesis occurs?
Chemistry	How does an increasing number of methylene groups in alcohols affect their ability to dissolve fatty acids as a solvent when finding the iodine number?
	How does the molar ratio of oil to methanol (1:0.5, 1:1, 1:6, 1:12, 1:15) affect the yield of biodiesel as measured by biodiesel recovery (%) produced from the transesterification of soybean oil with 1.4% w/w KOH as a catalyst?
Computer science	To what extent does the performance and accuracy of detection algorithms such as YOLO, SSD and Faster R-CNN vary when used to detect and recognize pedestrians in autonomous driving scenarios?
	To what extent does parallelism improve the runtime performance of breadth-first search on graphs of varying size?
Design technology	How do the ergonomics of classroom furniture affect student concentration and productivity?
	How can the interior design of public housing maximize comfort and safety for residents?
Physics	How does the speed of the blades affect the lift of a drone?
	How does the distance between modules affect the output velocity of a projectile in a Gauss Cannon?
Sports, exercise and health science	To what extent do isometric and plyometric training affect the ability to increase driving distance of 16–18-year-old male elite golfers?
	To what extent are higher rates of ACL injuries in women than men due to anatomical differences?

Note that for Group 4 subjects, the sciences essays can be distinguished from other extended essays by the development of falsifiable hypotheses, replicable data and the use of peer-reviewed publications. Hence, while a sciences essay can be based on primary data, it must also have a supporting secondary research component, including peer-reviewed publications.

■ Table 2.5

Group 5 Mathematics	
Quick tips	<ul style="list-style-type: none"> Your RQ could explore an issue in mathematics that is beyond the syllabus. This is known as a <i>theoretical</i> essay in mathematics. Mathematics is all around us, so one option is a RQ that investigates how mathematics can be used to explore an issue of personal interest, for example your CAS project, a hobby or a sport from which you can gather some meaningful data. This is known as a <i>practical</i> essay in mathematics. Your RQ does not have to lead to an EE that is entirely theoretical or entirely practical – they are often a blend of the two.
Group 5 subjects, essays titles and research question examples	
Mathematics	How do linear algebra and group theory contribute to optimizing the Rubik's Cube solving algorithms?
	To what extent do musical scales follow a mathematical geometric progression?
	To what extent can the sound frequency response on a pair of noise-cancelling headphones be modelled using the Fourier transform?

Expert tip

Given that mathematics essays often include extensive algebra, the actual final word count for your extended essay is highly probable to fall short of 4000 words. Note that equations, formulae and calculations are *not* included in the word count.

■ Table 2.6

Group 6 Arts	
Quick tips	<ul style="list-style-type: none"> Your RQ should integrate primary sources (such as artworks, film, live performances, music concerts, play texts, screenplays, scripts and scores) with researched secondary sources and critical evaluation. Ensure your chosen primary sources provide enough content to sustain a 4000-word essay.
Group 6 subjects, essays titles and research question examples	
Dance	To what extent was voguing a response to the rejection of the LGBTQ community and what is its relevance today?
	To what extent does Pina Bausch through her choreography reflect on societal issues relating to gender roles in post-war Germany?
Film	How does John Wells use camera movement, framing and blocking to portray the concept of leadership in the individual in the film <i>Burnt</i> ?
	How do lighting techniques contribute to effective film production in Hong Kong?
Music	To what effect does Rob Hubbard use genre techniques in the composing of chiptune music?
	How does Northern classical Indian music impact modern Western heavy metal musical structure?
Theatre	What are the prominent production values that serve to promote the intentions of Theatre of Comedy and Theatre of the Absurd?
	How does drama positively impact children in their primary years of education?
Visual arts	To what extent is traditional Ukiyo-e printmaking in Japan reflected in contemporary Manga cartoons?
	To what extent did Mary Blair's concept art and the visual narratives of other fantasy illustrations shape the enchanted realm and empower women?

■ Table 2.7

Cross-disciplinary subjects	
Quick tips	<ul style="list-style-type: none"> Note that an essay in cross-disciplinary subjects is separate from the interdisciplinary pathway (see Chapter 9 The interdisciplinary extended essay for information about the interdisciplinary extended essay). Your RQ should cover a topic of interest drawing from approaches, theories, concepts and methodologies of your chosen discipline. An environmental systems and societies (ESS) RQ explores the interrelationship between environmental systems and societies holistically, drawing on elements of biology, ecology and geography. A literature and performance (L&P) RQ must examine a written text and the transformation or adaptation of that text into a different artistic form or genre. The essay should be grounded in a text and then explore in detail its transformation or adaptation into a realized performance. Note that the assessment task is dedicated to exploring adaptations between written texts and any Group 6 subject.
Cross-disciplinary subjects, essays titles and research question examples	
Environmental systems and societies	How do people's attitudes to the environment vary according to income (a case study in the Fo Tan region of Hong Kong)?
	Given its ecological value, to what extent is Jone's Cove at Sai Kung Peninsula managed sustainably?
Literature and performance	How have the changes in Watson in the television production <i>Elementary</i> affected the portrayal of both Holmes and Watson?
	How does Jerome Robbins' choreography of <i>West Side Story</i> transform the original meaning and effect of Shakespeare's <i>Romeo and Juliet</i> ?

Stress-testing your RQ

Now you have an actual research question, you need to double-check it is viable before moving on to the second of the three major stages of developing an EE; the research or data-gathering stage. To do so, you can put it through some tests to build further confidence in its feasibility.



■ **Figure 2.9** Stress testing ensures your research question can withstand the rigours of the EE development process without crumbling

Task 10

Perform the following tasks to assess the feasibility of your research question.

- **Subject specialists/supervisor:** Asking a subject expert is one of the easiest and quickest ways of getting a sense of how viable your RQ is. You may have been assigned a supervisor by this stage. If not, asking a teacher of the relevant subject area can be incredibly helpful.
- **Further pre-research:** Now you have gone from a topic to a research question, you have a more precise idea of what you want to investigate. Do some further pre-research to confirm that there is enough out there for it to be an effective investigation.

- **Research question reflection:** Consider the following questions regarding your initial research question:
 - Is your RQ sufficiently narrow to be addressed within the 4000-word limit and the timeframe of the EE process?
 - Is it realistic to find enough sources of information for this topic to write a sustained and substantiated argument?
 - Consult the assessment criteria from the previous chapter. Is your RQ likely to lead to an EE that will fulfil all five assessment criteria?
 - Is the RQ specific to a single IB subject? If not, reconsider an interdisciplinary essay. See **Chapter 9 The interdisciplinary extended essay** for further details about this pathway.
 - Is your RQ something you are genuinely interested in and feel excited about the prospects of exploring?

Expert tip

There is additional advice about the pre-research stage of the EE outlined in the IB document *Extended essay support material*.

How did your research question fare in stress tests (feasibility tests)?

Pass: Congratulations! You have a research question to explore. Read the rest of this chapter for advice on what to do next.

Fail: If your research question has proved unfeasible then fear not; there are two options for you:

- **Evolve and adapt your research question:** The RQ is fluid and will change throughout the process of developing your EE. If it shows potential, consider tweaking the approach or perspective you were taking on the topic you have been exploring. Remember, you can speak with a teacher or your supervisor about this.
- **Back to the drawing board:** If it is looking like your RQ is unsuitable, you can consider a different RQ in the same subject or go back a few steps and consider your second- or third-ranked DP subjects. Do not worry! A major part of the EE is dealing with setbacks and handling them constructively. It is entirely normal to have to go back to the drawing board and start again. In any case, this experience will provide material for your RPF reflective statement at a later stage (see **Chapter 7 The importance of reflections**).

Expert tip

An effective research question is the foundation of a good extended essay. It will have a significant impact on all assessment criteria, as outlined in the next section.



■ **Figure 2.10** The quality of your research question has an impact on all of the assessment criteria

Looking ahead

The research and data-gathering stage comes next. This is where you begin your research, using primary and secondary sources as appropriate. Before moving on, read this quick reminder of the assessment criteria and how they relate specifically to the research question to double-check it is appropriate. More details can be found in **Chapter 1 Understanding the assessment criteria**.

■ How your research question relates to the assessment criteria

The quality of your research question has an impact on all of the assessment criteria. Here is a brief overview of how it will impact each assessment criterion.

Criterion A: Framework for the essay (6 marks)

- This assessment criterion is most clearly related to your choice of a good RQ as it includes the specific strand 'research question'. At the top of the mark bands, the examiner is looking for a research question that is relevant to the topic of your investigation, is clear and is focused in relation to the scope of the essay. If the question is not clearly stated or is too broad in scope (given the 4000-word limit), then your essay will score in the lowest level descriptor (1–2 marks). If the RQ is more clearly stated but the discussion is only partially focused on your research question, then your essay is likely to score 3–4 marks for this assessment criterion.
- Your research question will also have an impact on the research methods and structure strands because your central inquiry topic will define what methods are needed to investigate it, and the structural elements of your EE will have to suit the subject and topic of your RQ.

Criterion B: Knowledge and understanding (6 marks)

- This criterion assesses how effectively you gather knowledge relevant to your RQ and use these source materials and subject-specific content in your EE. You will score a low mark (1–2 marks) if the research materials have limited or partial relevance to your research question. Therefore, ensure that your RQ allows you to find sufficient and appropriate evidence. If you cannot gather the necessary information from a variety of sources, including contrasting evidence, it may be better to simply change your research question.
- Students often wonder what is an appropriate number of sources to use in their essay. The answer to this varies tremendously depending upon the topic selected for research but, in general, aim for at least ten (double digits). Identify at least ten potential sources for your research question.
- However, there are some very good essays that have relatively few sources because of the nature of the topic and RQ studied. Look at the bibliography/works cited sections of some successful exemplar essays to get a sense of the typical number of sources for your chosen subject(s). Above all, ensure your sources directly address the research question, prioritizing quality over quantity. Check with your supervisor if you are unsure.

Criterion C: Analysis and line of argument (6 marks)

- This assessment criterion particularly links to your RQ in the line of argument strand. You need a sustained line of argument that clearly links to the research question to achieve the highest mark descriptor (5–6 marks).



■ **Figure 2.11** You have 500 words to write your reflective statement on the RPF

Expert tip

You may find that you need to change your research question as your research progresses. It is common to uncover previously unknown aspects of your topic that are more interesting than your original focus. The dynamic nature of the research process often reveals new facts, leading you to adjust your direction. As long as you check with your supervisor, this should not be a problem and can lead to a more engaging and exciting essay.

- The analysis strand is linked to your RQ, requiring the sources and data analysed to be directly relevant.

Criterion D: Discussion and evaluation (8 marks)

- This assessment criterion connects to your RQ, as the discussion of findings should be balanced and directly address the question.
- The evaluative aspects of your EE should explore its strengths and limitations in addressing or answering your RQ. If your investigation fails to answer your RQ fully, this should be acknowledged, discussed and evaluated.

Criterion E: Reflection (4 marks)

When reflecting on your EE, consider your choice of RQ and its effectiveness in guiding your research. You should include these reflective thoughts as part of your reflective statement on the reflection and progress form (RPF).

Chapter summary

- Before you start, consider what others have already written about the topic. What is already known about this topic and research question?
- Avoid using a research question that is unclear, vague or too broad.
- Do not make your research question too simplistic or too complicated.
- Choose a research question on a topic or subject that is of genuine interest to you.
- Your research question must be phrased as a probing question that is worthy of further academic research.
- Your research question should lend itself to a good range of accessible and relevant sources.
- An effective research question is the foundation of your EE and impacts all five of the assessment criteria.
- The best EEs consider carefully how the research question relates to all of the assessment criteria (see **Chapter 1 Understanding the assessment criteria** for details and tips about understanding the assessment criteria).

END-OF-CHAPTER QUIZ

	Question	True	False
1	The research question should always be phrased as a probing question.		
2	Criterion A (Framework for the essay) assesses the quality of the research question.		
3	Criterion A (Framework for the essay) is worth 6 marks.		
4	The research question may fall into a number of subject areas as long as those subjects are clearly stated.		
5	A descriptive research question is likely to lead to a narrative essay that will score poorly under assessment criterion C (Analysis and line of argument).		
6	You may only develop an EE in a subject you study at HL.		
7	It is permitted to change or alter your EE research question even after starting your research and your initial meeting with your supervisor.		
8	The research question has no direct relevance to criterion D (Discussion and evaluation).		
9	Your research question should be restated in the introduction of your EE.		
10	The research question should be very specific and narrow to allow for effective treatment within the word limit of 4000 words.		