Guiding questions

The questions listed below are designed to use with students during their check-in and/or reflection sessions. They fall into three stages:

- initial—deciding on an area of research
- interim—during the research and writing process
- final—summative reflection on the EE process.

Overview of supervisor role

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<th>The supervisor:</th>
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<td>• provides the student with advice on the research process and help with the requisite skills</td>
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<td>• encourages and supports the student throughout the research and writing of the EE</td>
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<td>• guides the student in formulating a well-focused research question that satisfies appropriate legal and ethical standards</td>
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<td>• is not expected to verify content within the student’s EE; it is the student’s responsibility to make sure credible and accurate sources have been used</td>
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<td>• is responsible for authenticating that the essay is the student’s own work</td>
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The following table provides some example guiding questions that you might use during the supervision process with students in both their check-in and reflection sessions. These are neither prescriptive nor exhaustive, and it is not expected that you would ask every question. The questions have been organized based on the three stages of the EE process.

First formal reflection session

This initial reflection session should be a dialogue between the student and the supervisor based on the student’s initial explorations. It is recommended that the student sends their supervisor an outline of their research proposal ahead of the meeting in order to give the supervisor the opportunity to review their work. This will ensure that the reflection session is focused and productive.

Topics of discussion that should arise during this session include:

- a review of the requirements and assessment criteria for the subject
- a review of ethical and legal implications, if applicable
- a dialogue about possible approaches and any potential problems that might arise
- a discussion of strategies for developing the student's ideas for the essay and expanding the research so that the essay starts to take form
- probing and challenging questions that will help the student focus their thinking; this should lead to the development of the student’s working research question
- an outline of the next steps that the student should undertake in order to refine their question; this should take the form of a research and writing timeline.

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| Initial Conf 1, 2 | Deciding on an area of research:  
  - Topic  
  - Possible methods  
  - Designing a research question  
  - Approach  
  - Audience | • What has motivated you to research this topic?  
• What do you already know about the topic?  
• What are some of the ideas/questions you have about this topic?  
• What background reading have you done, if any?  
• What are the EE requirements for the subject in which your topic is located?  
• Does your topic fit in with the chosen subject |
- Do you understand the nature of the EE?
- Have you chosen a viable area of research?
- What sections of the guide might be helpful to you at this time?
- Have you had any training in subject research skills?
- How are you planning to organize yourself and manage your researcher's reflection space?
- What do you think are the next steps in conducting your research?
- Have you chosen a provisional research question that meets the subject criteria?
- Where are you searching for reliable sources?
- Will you be able to collect sufficient resources to effectively answer the research question?
- Will you need to revise your research question to ensure it promotes an analytical approach?
- What challenges/obstacles have you encountered, if any?
- What can you do about them?
- What background information and/or data do you need to move forward to formulate a research question?
- Have you developed a working research question?
- What preliminary research question or questions are guiding your investigation?
- Have you been made aware of any ethical issues in relation to the intended topic and proposed research methods?
- Are there any ethical issues to be considered?
- Do you have a good grounding in the relevant theories, methodologies or findings of the subject?
- What is your theoretical/conceptual base for this topic?
- What approaches to the topic/research question have you or might you develop for this topic?
  (See Extended essay guide for subject examples.)
- Are you attaching drawings, MindMaps®, or recordings that show your thinking in your RRS?
- What are the key resources you have investigated so far? (Students may have developed an annotated bibliography as part of the RRS.)
- What needs to be done next?
- When will you begin writing and how are you planning to manage your time?
- What is the goal for the next meeting?
**The interim reflection session**

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

During this session the supervisor might discuss:
- a completed piece of sustained writing from the student in order to ensure that they understand the academic writing requirements, including referencing formats
- whether an appropriate range of sources has been accessed and how the student is critically evaluating the origin of those sources
- what the student now has to do in order to produce the full draft of their essay, and ways and means of breaking down the task into manageable steps.

By the end of the interim reflection session both student and supervisor should feel satisfied that there is:
- a clear and refined research question
- a viable argument on which to base the essay
- a sufficient range of appropriate sources
- a clear vision for the final steps in the writing process.

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

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| Interim Conf 3, 4 | - Reviewing credible sources  
- Reviewing a clear and refined research question  
- Reviewing methodology used  
- Reviewing the development of the essay  
- Reviewing a viable argument on which to base the essay | - Where are you now in the research process?  
- What have you achieved so far and how did you manage this?  
- What challenges have you faced and what strategies have you used to overcome these?  
- Have you encountered any obstacles/problems in the research process and how have you overcome them?  
- How are you conducting independent research and adhering to the academic honesty policy?  
- Is the research question clear and refined?  
- How has your understanding of the question/topic changed?  
- What changes need to be made in order to complete this research?  
- What have you learned that might affect the way you continue?  
- Are there any inconsistencies in your argument and analysis?  
- Is your argument well structured and coherent?  
- Have you provided enough evidence to support a reasoned argument?  
- Have you critically evaluated this research?  
- Will the examiner be able to follow your line of argument throughout the essay?  
- Are there any last-minute adjustments or changes that you might make to improve your essay? |
**Final reflection session (viva voce)**

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

The viva voce is conducted once the student has uploaded the final version of their extended essay to the IB for assessment. At this point in the process no further changes can be made to the essay. The viva voce is a celebration of the completion of the essay and a reflection on what the student has learned from the process.

The viva voce is:

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

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

In conducting the viva voce and writing their comments on the Reflections on planning and progress form, supervisors should bear in mind the following:

- The form is an assessed part of the extended essay. The form must include: comments made by the supervisor that are reflective of the discussions undertaken with the student during their supervision/reflection sessions; the student’s comments; and the supervisor’s overall impression of the student’s engagement with the research process.
- An incomplete form resulting from supervisors not holding reflection sessions, or students not attending them, could lead to criterion E (engagement) being compromised.
- In assessing criterion E (engagement), examiners will take into account any information given on the form about unusual intellectual inventiveness. This is especially the case if the student is able to demonstrate what has been learned as a result of this process or the skills developed.
- Examiners want to know that students understand any material (which must be properly referenced) that they have included in their essays. If the way the material is used in context in the essay does not clearly establish this, the supervisor can check the student’s understanding in the viva voce and comment on this on the Reflections on planning and progress form.
- If there appear to be major shortcomings in citations or referencing, the supervisor should investigate thoroughly. No essay should be authenticated if the supervisor believes the student may be guilty of plagiarism or some other form of academic misconduct.
- The comment made by the supervisor should not attempt to do the examiner’s job. It should refer to things, largely process-related, that may not be obvious in the essay itself.
- Unless there are particular problems, the viva voce should begin and end positively. Completion of a major piece of work such as the extended essay is a great achievement for students.

**Tip**

Following this final session, the student is required to complete the last student comment section of the Reflections on planning and progress form, sign and date it and submit it to their supervisor, who must then add their own comments, sign and date the form. The supervisor must then upload the form into the e-coursework system, confirm the authenticity of both the form and essay, and submit them to the IB for assessment as one portfolio. Please refer to the section “Protocols for completing and submitting the Reflections on planning and progress form” for more information.

Failure to complete or sign the Reflections on planning and progress form may result in:

- a delay in a grade being issued for the extended essay
- criterion E being compromised; in other words, the examiner may not be able to apply criterion E due to missing or lacking information
- the essay being referred as a possible case of academic misconduct as a result of not being authenticated

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<td>Final</td>
<td>- Celebration of the completion of the essay&lt;br&gt;- Outcome of the process&lt;br&gt;- ATL skills learned&lt;br&gt;- Reflection on what has been learned both in terms of the research topic and process</td>
<td>- To what extent were your initial ideas realized?&lt;br&gt;- Were your original plans/ideas realistic and appropriate?&lt;br&gt;- What do you think your successes were in this process?&lt;br&gt;- What was the most rewarding aspect of the entire process?&lt;br&gt;- How will this experience prepare you for future work of this nature (in college or employment?)</td>
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