



IB Psychology

Extended essay guidelines



Nature of the extended essay

The extended essay is an in-depth study of a focused topic chosen from the list of approved Diploma Programme subjects—normally one of the student's six chosen subjects for the IB diploma. It is intended to promote high-level research and writing skills, intellectual discovery and creativity. It provides students with an opportunity to engage in personal research in a topic of their own choice, under the guidance of a supervisor (a teacher in the school). This

leads to a major piece of formally presented, structured writing, in which ideas and findings are communicated in a reasoned and coherent manner, appropriate to the subject chosen. It is recommended that completion of the written essay is followed by a short, concluding interview, or *viva voce*, with the supervisor. The extended essay is assessed against common criteria, interpreted in ways appropriate to each subject.

The extended essay is:

- compulsory for all Diploma Programme students
- externally assessed and, in combination with the grade for theory of knowledge, contributes up to three points to the total score for the IB diploma
- a piece of independent research/investigation on a topic chosen by the student in cooperation with a supervisor in the school
- chosen from the list of approved Diploma Programme subjects, published in the Handbook of procedures for the Diploma Programme
- presented as a formal piece of scholarship containing no more than 4,000 words
- the result of approximately 40 hours of work by the student
- concluded with a short interview, or *viva voce*, with the supervising teacher (recommended).

In the Diploma Programme, the extended essay is the prime example of a piece of work where the student has the opportunity to show knowledge, understanding and enthusiasm about a topic of his or her choice. In those countries where it is the norm for interviews to be required prior to acceptance for employment or for a place at university, the extended essay has often proved to be a valuable stimulus for discussion.

Aims

The aims of the extended essay are to provide students with the opportunity to:

- pursue independent research on a focused topic
- develop research and communication skills
- develop the skills of creative and critical thinking
- engage in a systematic process of research appropriate to the subject
- experience the excitement of intellectual discovery.

Assessment objectives

In working on the extended essay, students are expected to:

1. plan and pursue a research project with intellectual initiative and insight
2. formulate a precise research question
3. gather and interpret material from sources appropriate to the research question
4. structure a reasoned argument in response to the research question on the basis of the material gathered
5. present their extended essay in a format appropriate to the subject, acknowledging sources in one of the established academic ways
6. use the terminology and language appropriate to the subject with skill and understanding
7. apply analytical and evaluative skills appropriate to the subject, with an understanding of the implications and the context of their research.

Responsibilities of the supervisor

It is required that the supervisor:

- provides the student with advice and guidance in the skills of undertaking research
- encourages and supports the student throughout the research and writing of the extended essay
- discusses the choice of topic with the student and, in particular, helps to formulate a well-focused research question
- ensures that the chosen research question satisfies appropriate legal and ethical standards with regard to health and safety, confidentiality, human rights, animal welfare and environmental issues
- is familiar with the regulations governing the extended essay and the assessment criteria, and gives copies of these to the student
- monitors the progress of the extended essay to offer guidance and to ensure that the essay is the student's own work (this may include presenting a section of the essay for supervisor comment)
- reads and comments on one completed draft only of the extended essay (but does not edit the draft)
- reads the final version to confirm its authenticity
- submits a predicted grade for the student's extended essay to IB
- completes the supervisor's report (if the extended essay cover is not signed by both the student and the supervisor, the essay will not be accepted for assessment and may be returned to the school)

- provides an explanation in the report in cases where the number of hours spent with the student in discussing the extended essay is zero; in particular, it is necessary to describe how it has been possible to guarantee the authenticity of the essay in such circumstances
- writes a report and presents it to the school's Diploma Programme coordinator if malpractice, such as plagiarism, is suspected in the final draft.

Responsibilities of the student

It is required that students:

- choose a topic that fits into one of the subjects on the approved extended essay list
- observe the regulations relating to the extended essay
- meet deadlines
- acknowledge all sources of information and ideas in an approved academic manner.

It is strongly recommended that students:

- start work early
- think very carefully about the research question for their essay
- plan how, when and where they will find material for their essay
- plan a schedule for both researching and writing the essay, including extra time for delays and unforeseen problems
- record sources as their research progresses (rather than trying to reconstruct a list at the end)
- have a clear structure for the essay itself before beginning to write
- check and proofread the final version carefully
- make sure that all basic requirements are met (for example, all students should get full marks for the abstract).

Advice to students from examiners

Recommended: things to do

- read the assessment criteria
- read previous essays to identify strengths and possible pitfalls
- spend time working out the research question (imagine the finished essay)
- work out a structure for the essay.

During the research process, and while writing the essay, students should:

- start work early and stick to deadlines
- maintain a good working relationship with their supervisor
- construct an argument that relates to the research question
- use the library and consult librarians for advice
- record sources as they go along (rather than trying to reconstruct a list at the end)
- choose a new topic and a research question that can be answered if there is a problem with the original topic
- use the appropriate language for the subject
- let their interest and enthusiasm show.

After completing the essay, students should:

- write the abstract
- check and proofread the final version carefully.

Recommended: things to avoid

Examiners' reports also mention these things to be avoided at all costs.

- Students should not work with a research question that is too broad or too vague, too narrow, too difficult or inappropriate. A good research question is one that asks something worth asking and that is answerable within 40 hours/4,000 words. It should be clear what would count as evidence in relation to the question, and it must be possible to acquire such evidence in the course of the investigation. If a student does not know what evidence is needed, or cannot collect such evidence, it will not be possible to answer the research question.

In addition, students should not:

- forget to analyse the research question
- ignore the assessment criteria

- collect material that is irrelevant to the research question
- use the internet uncritically
- plagiarize
- merely describe or report (evidence must be used to support the argument)
- repeat the introduction in the conclusion
- cite sources that are not used.

One further piece of advice is as follows: the more background a student has in the subject, the better the chance he or she has of writing a good extended essay. Choosing to write the extended essay in a subject that is not being studied as part of the Diploma Programme often leads to lower marks.

Researching and writing the extended essay

The research process

When researching the extended essay, students should do the following.

1. Choose the approved Diploma Programme subject for the extended essay.
 - Read the assessment criteria and the relevant subject guidance.
2. Choose a topic.
3. Formulate a well-focused research question.
4. Plan the investigation and writing process.
 - Identify how and where they will gather material.
 - Identify which system of academic referencing they will use, appropriate to the subject of the essay.
 - Set deadlines for themselves that will allow them to meet the school's requirements.
5. Plan a structure (outline headings) for the essay. This may change as the investigation develops but it is useful to have a sense of direction.
6. Undertake some preparatory reading.
 - If students discover that it will not be possible to obtain the evidence needed in the time available, the research question should be changed. This should be done sooner rather than later: students should not lose time waiting and hoping that something will turn up. Students should go back to stage 3, 2 or 1, and choose a new research question that can be answered.

7. Carry out the investigation.

- The material gathered should be assembled in a logical order, linked to the structure of the essay. Only then will students know whether they have enough evidence for each stage of the argument so that they can proceed to the next.
- Students should be prepared for things to go wrong. Sometimes they may discover something later in the investigation that undermines what they thought had been established earlier on. If that happens, the investigation plan needs to be revised.

Writing the extended essay

The structure of the essay is very important. This is what helps students to organize the argument, making best use of the evidence gathered. The required elements of the final work to be submitted are listed here. More details about each element are given in the “Formal presentation of the extended essay” section. Please note that the order in which they are presented here is not necessarily the order in which they should be written.

- Title page
- Abstract
- Contents page
- Introduction
- Body (development/methods/results)
- Conclusion
- References and bibliography
- Appendices

Students should use the chosen system of academic referencing as soon as they start writing. That way, they are less likely to forget to include a citation. It is also easier than trying to add references at a later stage. Most modern word processors are helpful with this.

Some students draft the introduction first. If students do that, they must be prepared to revise it once the essay is complete.

The main task is writing the body of the essay, which should be presented in the form of a reasoned argument. The form of this varies with the subject of the essay but, as the argument develops, it should be clear to the reader what relevant evidence has been discovered, where/how it has been discovered and how it supports the argument. In most subjects, sub-headings within the main body of the essay will help the reader to understand the argument (and will also help the student to keep on track).

Once the main body of the essay is complete, it is possible to finalize the introduction (which tells the reader what to expect) and the conclusion (which says what has been achieved, including notes of any limitations and any questions that have not been resolved).

Any information that is important to the argument should not be included in appendices or footnotes/endnotes.

The examiner is not bound to read notes or appendices, so an essay that is not complete in itself will lose marks.

The remaining stages in writing the essay take time but are not difficult. Students need to check that they have cited sources for all material that is not their own, and that the citations are complete and consistent with the chosen referencing system. The bibliography should list only the sources used in the essay. The whole essay needs to be proofread carefully (computer spelling and grammar checkers are useful but will not do everything). Pages must be numbered and the contents page must be completed. The abstract is normally written last.

Formal presentation of the extended essay

The extended essay should be written in a clear, correct and formal academic style, appropriate to the subject from which the topic is drawn. The use of word processors is encouraged.

The length of the extended essay

The upper limit is 4,000 words for all extended essays. This upper limit includes the introduction, the body, the conclusion and any quotations, but **does not include**:

- the abstract
- acknowledgments
- the contents page
- maps, charts, diagrams, annotated illustrations and tables
- equations, formulas and calculations
- citations/references (whether parenthetical or numbered)
- footnotes or endnotes
- the bibliography
- appendices.

Essays containing more than 4,000 words are subject to penalties and examiners are not required to read material in excess of the word limit.

Title

The title should provide a clear indication of the focus of the essay. It should be precise and not necessarily phrased in the form of a question.

Abstract

An abstract not exceeding 300 words must be included with the essay submitted. It does not serve as an introduction, but presents an overview of the extended essay, and should, therefore, be **written last**.

The inclusion of an abstract is intended to encourage students to examine closely the development of an argument within the extended essay and the pertinence of any conclusions that are reached. It is also designed to allow readers to understand quickly the contents of the extended essay.

The minimum requirements for the abstract are for it to state clearly:

- the research question being investigated
- the scope of the investigation
- the conclusion(s) of the extended essay.

The abstract should be typed or word processed on one side of a sheet of paper, and placed immediately after the title page.

Contents page

A contents page must be provided at the beginning of the extended essay and all pages should be numbered. An index is not required.

Illustrations

Presentation and overall neatness are important, and it is essential that illustrative material, if included, is well set out and used effectively. Graphs, diagrams, tables and maps are effective only if they are clearly labelled and can be interpreted with ease. All such material that is incorporated into the extended essay must be directly related to the text and acknowledged where appropriate. The use of photographs and other images is acceptable only if they are captioned and/or annotated and are used to illustrate a specific point made in the extended essay.

Bibliographies, references and citations

An extended essay must reflect intellectual honesty in research practices and provide the reader with the exact sources of quotations, ideas and points of view through accurate bibliographies and referencing. Producing accurate citations, referencing and a bibliography is a skill that students should be seeking to perfect. Documenting the research in this way is vital: it allows readers to evaluate the evidence for themselves and it shows the student's understanding of the importance of the sources used.

Failure to comply with this requirement will be viewed as plagiarism and will, therefore, be treated as a case of malpractice.

What is a bibliography?

A bibliography is an alphabetical list of every source used to research and write the essay. Sources that are not cited in the body of the essay, but were important in informing the approach taken, should be cited in the introduction or in an acknowledgment. The bibliography should list only those sources cited.

The MLA documentation style should be applied in both the final draft of the essay and in the initial research stages of taking notes. This is good practice, not only for producing a high-quality final product, but also for reducing the opportunities and temptation to plagiarize.

More information about the MLA referencing system can be found here:

<http://owl.english.purdue.edu/owl/resource/747/01/>

What is a reference?

A reference is a way of indicating to the reader, in an orderly form, where information has been obtained. A reference provides all the information needed to find the source material. References must be cited because they acknowledge the sources used, and enable the reader to consult the work and verify the data that has been presented.

References must be given whenever someone else's work is quoted or summarized. References can come from many different sources, including books, magazines, journals, newspapers, emails, internet sites and interviews.

Internet references should include the title of the extract used as well as the website address, the date it was accessed and, if possible, the author. Caution should be exercised with information on websites that do not give references or that cannot be cross-checked against other sources. The more important a particular point is to the essay, the more the quality of its source needs to be evaluated.

Any references to interviews should state the name of the interviewer, the name of the interviewee, the date and the place of the interview.

What is a citation?

A citation is a shorthand method of making a reference in the body of an essay, which is then linked to the full reference at the end of the essay. A citation provides the reader with accurate references so that he or she can locate the source easily. How sources are cited varies with the particular documentation style that has been chosen.

Page numbers should normally be given when referencing printed material: in some styles this will be in the citation, in others in the full reference. Once again, it is important to emphasize that there must be consistency of method when citing sources.

Appendices, footnotes and endnotes

Appendices, footnotes and endnotes are not an essential section of the extended essay and examiners are not required to read them, so care should be taken to include all information of direct relevance to the analysis and argument in the main body of the essay. An essay that attempts to evade the word limit by including important material in notes or appendices risks losing marks under several criteria.

Unless considered essential, complete lists of raw data should not be included in the extended essay.

Students should not constantly refer to material presented in an appendix as this may disrupt the continuity of the essay.

The *viva voce* (concluding interview)

The *viva voce* is a short interview between the student and the supervisor, and is a recommended conclusion to the extended essay process. Students who do not attend the *viva voce* may be disadvantaged.

The *viva voce* serves the following purposes.

- A check on plagiarism and malpractice in general
- An opportunity to reflect on successes and difficulties in the research process
- An opportunity to reflect on what has been learned
- An aid to the supervisor's report

The *viva voce* should last between 10 and 15 minutes. This is included in the recommended amount of time the supervisor should spend with the student. The following are examples of questions that can be asked, which should be adapted to the particular essay and student.

- "I am not clear what you mean on page XXX. You quote Y: could you explain a little more about what this tells us?"

- “On page *** you cite Z. I couldn’t find this reference (for example, website). Could you tell me more about it?”
- “What have been the high and low points of the research and writing processes?”
- “What were the most interesting aspects of the process? Did you discover anything that surprised you?”
- “What have you learned through writing this essay? Is there any advice you would want to pass on to someone just starting out on an extended essay?”
- “Is there anything else that you would particularly like me to mention in my report?”

In conducting the viva voce and writing the report, supervisors should bear in mind the following.

- Examiners want to know that students understand any material (which must be properly referenced) that they have included in their essays. This is particularly important in subjects like mathematics. 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 report on it.
- Minor slips in citation and referencing may lose the odd mark. If there appear to be major shortcomings, the supervisor should investigate thoroughly. No essay should be authenticated if the supervisor believes it contains plagiarism.
- In assessing criterion K (holistic judgment), examiners will take into account any information given in the report about unusual intellectual inventiveness or persistence in the face of unexpected difficulties.
- The report 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 end positively. Completion of a major piece of work such as the extended essay is something for students to feel good about.

Assessment criteria

All extended essays are externally assessed by examiners appointed by the IB, and are marked on a scale from 0 to 36. This maximum score is made up of the total criterion levels available for each essay. The total score obtained on the scale 0 to 36 is used to determine in which of the following bands the extended essay is placed.

This band, in conjunction with the band for theory of knowledge, determines the number of diploma points awarded for these two requirements. See the following “Award of diploma points” section for further details.

The band descriptors are:

- A** Work of an excellent standard
- B** Work of a good standard
- C** Work of a satisfactory standard
- D** Work of a mediocre standard
- E** Work of an elementary standard.

Award of diploma points

The extended essay contributes to the overall diploma score through the award of points in conjunction with theory of knowledge. A maximum of three points are awarded according to a student’s combined performance in both the extended essay and theory of knowledge.

Both the extended essay and theory of knowledge are measured against published assessment criteria. According to the quality of the work, and based on the application of these assessment criteria, a student’s performance in each of the extended essay and theory of knowledge will fall into one of the five bands described previously.

The total number of points awarded is determined by the combination of the performance levels achieved by the student in both the extended essay and theory of knowledge according to the following matrix.

		Theory of knowledge					
		Excellent A	Good B	Satisfactory C	Mediocre D	Elementary E	Not submitted
Extended essay	Excellent A	3	3	2	2	1 + Failing condition*	N
	Good B	3	2	1	1	Failing condition*	N
	Satisfactory C	2	1	1	0	Failing condition*	N
	Mediocre D	2	1	0	0	Failing condition*	N
	Elementary E	1 + Failing condition*	Failing condition*	Failing condition*	Failing condition*	Failing condition*	N
	Not submitted	N	N	N	N	N	N

A student who, for example, writes a good extended essay and whose performance in theory of knowledge is judged to be satisfactory will be awarded 1 point, while a student who writes a mediocre extended essay and whose performance in theory of knowledge is judged to be excellent will be awarded 2 points.

A student who fails to submit an extended essay will be awarded N for the extended essay, will score no points, and will not be awarded a diploma.

Performance in both the extended essay and theory of knowledge of an elementary standard is a failing condition for the award of the diploma.

* From 2010 onwards, 28 points overall will be required to be eligible for the diploma if a student attains an "E" grade in either the extended essay or theory of knowledge. As previously, a grade "A" in one of the requirements earns an extra point even if the other is a grade "E". Attaining a grade "E" in both the extended essay and theory of knowledge continues to represent an automatic failure.

Criterion A: research question

This criterion assesses the extent to which the purpose of the essay is specified. In many subjects, the aim of the essay will normally be expressed as a question and, therefore, this criterion is called the "research question". However, certain disciplines may permit or encourage different ways of formulating the research task.

Achievement level	Descriptor
0	The research question is not stated in either the introduction or on the title page or does not lend itself to a systematic investigation in an extended essay in the subject in which it is registered .
1	The research question is stated in either the introduction or on the title page but is not clearly expressed or is too broad in scope to be treated effectively within the word limit .
2	The research question is clearly stated in either the introduction or on the title page and is sharply focused, making effective treatment possible within the word limit .

Criterion B: introduction

This criterion assesses the extent to which the introduction makes clear how the research question relates to existing knowledge on the topic and explains how the topic chosen is significant and worthy of investigation.

Achievement level	Descriptor
0	Little or no attempt is made to set the research question into context. There is little or no attempt to explain the significance of the topic .
1	Some attempt is made to set the research question into context. There is some attempt to explain the significance of the topic and why it is worthy of investigation .
2	The context of the research question is clearly demonstrated. The introduction clearly explains the significance of the topic and why it is worthy of investigation .

Criterion C: investigation

This criterion assesses the extent to which the investigation is planned and an appropriate range of sources has been consulted, or data has been gathered, that is relevant to the research question. Where the research question does not lend itself to a systematic investigation in the subject in which the essay is registered, the maximum level that can be awarded for this criterion is 2.

Achievement level	Descriptor
0	There is little or no evidence that sources have been consulted or data gathered, and little or no evidence of planning in the investigation.
1	A range of inappropriate sources has been consulted, or inappropriate data has been gathered, and there is little evidence that the investigation has been planned.
2	A limited range of appropriate sources has been consulted, or data has been gathered, and some relevant material has been selected. There is evidence of some planning in the investigation.
3	A sufficient range of appropriate sources has been consulted, or data has been gathered, and relevant material has been selected. The investigation has been satisfactorily planned.
4	An imaginative range of appropriate sources has been consulted, or data has been gathered, and relevant material has been carefully selected. The investigation has been well planned.

Criterion D: knowledge and understanding of the topic studied

Where the research question does not lend itself to a systematic investigation in the subject in which the essay is registered, the maximum level that can be awarded for this criterion is 2. "Academic context", as used in this guide, can be defined as the current state of the field of study under investigation. However, this is to be understood in relation to what can reasonably be expected of a pre-university student. For example, to obtain a level 4, it would be sufficient to relate the investigation to the principal lines of inquiry in the relevant field; detailed, comprehensive knowledge is not required.

Achievement level	Descriptor
0	The essay demonstrates no real knowledge or understanding of the topic studied.
1	The essay demonstrates some knowledge but little understanding of the topic studied. The essay shows little awareness of an academic context for the investigation.
2	The essay demonstrates an adequate knowledge and some understanding of the topic studied. The essay shows some awareness of an academic context for the investigation.
3	The essay demonstrates a good knowledge and understanding of the topic studied. Where appropriate, the essay successfully outlines an academic context for the investigation.
4	The essay demonstrates a very good knowledge and understanding of the topic studied. Where appropriate, the essay clearly and precisely locates the investigation in an academic context.

Criterion E: reasoned argument

This criterion assesses the extent to which the essay uses the material collected to present ideas in a logical and coherent manner, and develops a reasoned argument in relation to the research question. Where the research question does not lend itself to a systematic investigation in the subject in which the essay is registered, the maximum level that can be awarded for this criterion is 2.

Achievement level	Descriptor
0	There is no attempt to develop a reasoned argument in relation to the research question.
1	There is a limited or superficial attempt to present ideas in a logical and coherent manner, and to develop a reasoned argument in relation to the research question.
2	There is some attempt to present ideas in a logical and coherent manner, and to develop a reasoned argument in relation to the research question, but this is only partially successful.
3	Ideas are presented in a logical and coherent manner, and a reasoned argument is developed in relation to the research question, but with some weaknesses.
4	Ideas are presented clearly and in a logical and coherent manner. The essay succeeds in developing a reasoned and convincing argument in relation to the research question.

Criterion F: application of analytical and evaluative skills appropriate to the subject

Achievement level	Descriptor
0	The essay shows no application of appropriate analytical and evaluative skills.
1	The essay shows little application of appropriate analytical and evaluative skills.
2	The essay shows some application of appropriate analytical and evaluative skills, which may be only partially effective.
3	The essay shows sound application of appropriate analytical and evaluative skills.
4	The essay shows effective and sophisticated application of appropriate analytical and evaluative skills.

Criterion G: use of language appropriate to the subject

Achievement level	Descriptor
0	The language used is inaccurate and unclear. There is no effective use of terminology appropriate to the subject .
1	The language used sometimes communicates clearly but does not do so consistently. The use of terminology appropriate to the subject is only partly accurate .
2	The language used for the most part communicates clearly. The use of terminology appropriate to the subject is usually accurate .
3	The language used communicates clearly. The use of terminology appropriate to the subject is accurate, although there may be occasional lapses .
4	The language used communicates clearly and precisely. Terminology appropriate to the subject is used accurately, with skill and understanding .

Criterion H: conclusion

This criterion assesses the extent to which the essay incorporates a conclusion that is relevant to the research question and is consistent with the evidence presented in the essay.

Achievement level	Descriptor
0	Little or no attempt is made to provide a conclusion that is relevant to the research question.
1	A conclusion is attempted that is relevant to the research question but may not be entirely consistent with the evidence presented in the essay .
2	An effective conclusion is clearly stated; it is relevant to the research question and consistent with the evidence presented in the essay. It should include unresolved questions where appropriate to the subject concerned .

Criterion I: formal presentation

This criterion assesses the extent to which the layout, organization, appearance and formal elements of the essay consistently follow a standard format. The formal elements are: title page, table of contents, page numbers, illustrative material, quotations, documentation (including references, citations and bibliography) and appendices (if used).

Achievement level	Descriptor
0	The formal presentation is unacceptable, or the essay exceeds 4,000 words.
1	The formal presentation is poor.
2	The formal presentation is satisfactory.
3	The formal presentation is good.
4	The formal presentation is excellent.

Criterion J: abstract

The requirements for the abstract are for it to state clearly the research question that was investigated, how the investigation was undertaken and the conclusion(s) of the essay.

Achievement level	Descriptor
0	The abstract exceeds 300 words or one or more of the required elements of an abstract (listed above) is missing.
1	The abstract contains the elements listed above but they are not all clearly stated.
2	The abstract clearly states all the elements listed above.

Criterion K: holistic judgment

The purpose of this criterion is to assess the qualities that distinguish an essay from the average, such as intellectual initiative, depth of understanding and insight. While these qualities will be clearly present in the best work, less successful essays may also show some evidence of them and should be rewarded under this criterion.

Achievement level	Descriptor
0	The essay shows no evidence of such qualities.
1	The essay shows little evidence of such qualities.
2	The essay shows some evidence of such qualities.
3	The essay shows clear evidence of such qualities.
4	The essay shows considerable evidence of such qualities.

Academic honesty

The student is ultimately responsible for ensuring that his or her extended essay is authentic, with the work or ideas of others fully and correctly acknowledged. Additionally, it is the responsibility of a supervisor to confirm that, for each student he or she has supervised, to the best of his or her knowledge, the version of the extended essay submitted for assessment is the authentic work of the student.

Both plagiarism and collusion are forms of malpractice that incur a penalty. The same piece of work, or two versions of the same work, cannot be submitted to meet the requirements of both the extended essay and another assessment component of a subject contributing to the diploma or an additional certificate.

The extended essay in psychology

Overview

An extended essay in psychology provides students with an opportunity to investigate an area within the field of psychology that is based upon personal interest, and which may well go beyond the Diploma Programme psychology course. Students are able to pursue actively a research question that will develop their analytical and communication skills, and their understanding of behaviour. At the same time, the extended essay aims to introduce students to the excitement of academic discovery.

The current Psychology guide defines the nature of the subject as “the systematic study of behaviour and experience”. Students should have a well-developed understanding of what falls within the scope of psychology when they are developing their topic. Psychology involves studying the behaviour of human as well as non-human animals. It has its own specialist terms, methods and literature. It is essential for students undertaking an extended essay in psychology to have a reasonable understanding of the subject and its methodologies.

Psychology is not a “residual” category for essays that do not fit into any other extended essay subject. Students must choose topics that lend themselves to psychological investigation and analysis, and must carefully consider their choice of topic in terms of the assessment criteria.

Choice of topic

An extended essay in psychology allows students to investigate a topic of personal interest in a systematic manner.

The essay should be based on a well-focused research question that the student attempts to answer throughout the course of the essay. The essay should be considered more of an investigative, analytical argument than a research hypothesis to be uncovered by use of research methods in a formal psychological study.

Data collection and research methods, such as experiments, surveys, observations and case studies, are not appropriate for a psychology extended essay, and should not form part of the student's project.

Psychology is a broad field that has many subsets and specialties, providing a wide range of possible topics. Past experience strongly suggests that personal interest plays an important role in the success of an essay and it is recommended that students consider their own personal interests, such as sport or child development, as a starting point in the process.

After selecting a field of interest, students can then consider areas of investigation within that field in order to narrow the scope of their essay and research question. For example, a student might be highly interested in commercial aviation. Many large commercial airlines employ psychologists to investigate pilot performance and factors such as stress or emergency management. A research question that may follow from this could be “To what extent has research on stress with airline pilots improved airline safety standards?”. Additional examples are provided later in this section.

The topic selected need not be from the current Psychology guide. In fact, some of the most interesting, engaging and successful extended essays are not necessarily based

solely on material learned as part of the psychology course. Essays confined to the guide often produce descriptive, dispassionate accounts of classic psychological research.

Supervisors do not need to have detailed knowledge of the student's topic: this is a less important factor in topic selection than availability of resources, student interest and the scope of the essay.

Topics that generally fall within the area labelled as “pop psychology” or “self-help” are usually not appropriate for the extended essay. As noted in the definition, psychology is a systematic study. Psychologists conduct research studies and develop theories in their attempt to understand behaviour and experience. Psychology extended essays must be supported with careful and appropriate citation of relevant theories and/or studies within psychology. This implies that the best resources are academic and psychological research journals and texts.

Anecdotal support or references from popular publications do not form an appropriate base from which to develop an extended essay in psychology. Additionally, popular topics such as eating disorders, dysfunctional behaviour (such as schizophrenia and depression) and forensic psychology pose a challenge to students unless they have a tightly focused research question. These are very ambitious topics that need far more time and experience than students have at their disposal.

The research question must be focused and provide direction for a psychological argument, issue or topic. Topics that are general in nature inevitably lead to a descriptive and superficial recounting of what can be found in many resources, rather than the development of an argument that attempts to answer a specific question. A more focused question leads to a more tightly developed essay that makes appropriate use of psychological research as the basis for a reasoned argument. While the research question does not need to be phrased as a question, to encourage focus within the essay, it is often helpful to the student if the research question is thought about as an actual question itself. In this way, students can ask themselves “Have I answered this question?”. It is also appropriate for the title to be phrased similarly to the research question, which, again, refocuses the development of the essay.

The choice of topic is best described as a logical process that starts with a field of psychology that is of personal interest to the student. This choice may be further refined to a topic of study within the broader field. From this decision, a research question is developed that may best be constructed in the form of a question, followed by a statement of intent that indicates the approach that is going to be used in answering the question. In this way, the approach to the topic chosen may be even further clarified. Some examples of this could be the following. (see next page)

Student interests	Football: "Choking" under pressure during an important match
Field of psychology	Sport psychology
Topic	Arousal and athletic performance
Research question	What levels of psychological arousal are most effective for players in team sports?
Approach	<p>Arousal levels and their effects on athletic performance have been subjected to many studies.</p> <p>One of several comparative approaches could be used, for example, qualitative and quantitative methods, collectivist and individualist cultures, male and female. These approaches could include reference to gender, methods, ethics or culture. It is suggested that students consider the advantages of confining their research to one specific sport for which they have enthusiasm and, preferably, personal experience in performing.</p>
Student interests	Perception, culture, website design
Field of psychology	Cognitive psychology
Topic	Cultural differences in perception and eye movement patterns
Research question	How can findings from psychological research on perception differences between Asians and Americans be applied to website design?
Approach	<p>Research must be conducted from secondary sources to establish the extent of perceptual differences that are claimed to exist between the two cultures. How are findings from relevant studies applied to strategies that involve visual perception and eye movement patterns, and what industries use this information?</p> <p>Specifically, how do international website designers interpret these findings in designing their websites?</p>
Student interests	Physiotherapy: Recovering from injury
Field of psychology	Learning
Topic	Learning physical skills
Research question	To what extent does immediate feedback, employing digitized moving images of the self, help in the learning process in developing a physical skill?
Approach	<p>The focus is on re-educating the leg muscles of a patient learning to walk again while recovering from a chronic leg injury. By focusing on one of these examples or similar physical actions, the student may consider the advantages of digitized software that allows the patient to have immediate feedback on their movement. On a split screen, this action can be compared to that of a perfect model. The movement can also be compared in a similar way with "stickmen" images on a four-way split screen. The student might consider how this learning method compares to traditional coaching or training, and consider ethical implications. The methodologies used to interpret the efficacy of each learning strategy could be evaluated.</p>

The choice of topic is crucial for achieving a high mark for the extended essay. Choosing the topic needs a period of thoughtful reflection where consideration is given, even at this early stage, to the potential argument, analysis and evaluation that may develop over the course of writing the essay. Topics that do not lend themselves well to analysis, evaluation or debate are unlikely to be the best choices for a student.

Treatment of the topic

Students submitting extended essays in psychology must be fully aware that the discipline has its own unique terms, methods, ethical standards and evaluative commentary. Students should not attempt to prepare an extended essay in psychology if they have not studied the subject formally. The type of knowledge and analytical skills required for a psychology extended essay are best developed through direct learning experiences derived from the Diploma Programme psychology course. Schools where psychology is not taught must be aware that students who submit extended essays in psychology with no formal exposure to the subject risk earning very low marks.

Specific reference to relevant psychology concepts, theories and studies must be integrated throughout each extended essay; these form the basis for the development of an argument in response to the research question. Essays that take a common sense or anecdotal approach will not earn high marks. Students should incorporate relevant psychological research, and demonstrate critical awareness and understanding of the material. Analysis should go beyond description or recitation of published material and include original analysis by the student.

An important skill that is developed throughout the psychology course is that of evaluative commentary and argument. One of the aims of all group 3 subjects is that students develop an understanding of the contestable nature of the content, as well as a toleration of uncertainty, that often comes from studying the behaviour of individuals and societies. Extended essays submitted in psychology should also demonstrate such understanding.

Research and claims should be carefully evaluated to develop a well-rounded understanding of the topic being investigated. When students make assertions in their extended essays, these should always be supported by evidence that is drawn from psychological theories or studies. The current Psychology guide includes a framework for evaluation that trains students to address cultural, ethical, gender or methodological considerations that may affect the interpretation of behaviour resulting from a particular study or theory. Comparative analysis might also be an evaluative strategy relevant for inclusion in an extended essay. Students should keep these considerations in mind when selecting a topic, defining a research question and developing an argument.

The IB has published a set of ethical guidelines for the internal assessment component of the psychology course. While the requirements of a psychology extended essay are very different from those of the internal assessment, the ethical guidelines also apply to this project. Students and supervisors share the responsibility of ensuring that the extended essay does not breach established ethical guidelines. Many topics within psychology are sensitive and personal in nature, and careful consideration should be given to all possible ethical issues before students embark on the process of developing their essay.

Frequent reference to the assessment criteria by both the supervisor and the student will help keep a sharper focus on the essay.

Interpreting the assessment criteria

Criterion A: research question

The research question may be written in the form of a question, proposition or statement. It should be focused on a topic that is clearly relevant to psychology, deals with behaviour and is able to be addressed consistently throughout the extended essay.

Criterion B: introduction

This section should place the research question in the context of existing knowledge and understanding of the topic. The student's personal experience or views should not appear in this section. Previous psychological studies that can be related to the research question should be considered. The studies that are introduced here may be generally supportive but they are unlikely to answer the research question in an entirely satisfactory manner. It is part of the student's task to identify strengths, weaknesses and omissions of past work, and to show how his or her essay could help to resolve some of the problems that have been identified.

Criterion C: investigation

There is a wide range of resources available for questions that are likely to be raised in extended essays related to psychology. These include textbooks, academic journals, films, television, radio, newspapers and internet-based sources. Film, television, radio, newspapers and internet-based sources should be treated with considerable caution since the material they contain may be neither accurate nor valid. The essay should present findings and theories from these sources in an evaluative context and students should not necessarily accept their findings at face value.

A healthy and informed scepticism should be maintained towards material from film, television, radio, newspapers and internet-based sources, until authoritative judgment allows their findings or theories to become accepted. Although the argument presented in the essay may be supported by the student's own observations, the presentation or analysis of such material should be used for illustrative purposes only and should form no more than a very minor part of the evidence used.

Criterion D: knowledge and understanding of the topic studied

Evidence and findings from empirical studies and their related theories should be an integral part of extended essays for psychology. Such material may refer to human or non-human animals and their associated behaviours. Where appropriate, students should draw on cultural, ethical, gender and methodological considerations; they should show how these aspects may affect the interpretation of the research question that is the focus of the essay.

Criterion E: reasoned argument

The research question should be the central focus of the argument as it is developed throughout the essay. As the argument is constructed, it often creates conflict between varying theories and findings from studies. The student should explain and analyse these different views and marshal those essential points that support the argument that is being advanced. It is the task of the student to persuade the reader of the reasons for, and validity of, his or her view. This is best accomplished by using a logical approach where successive salient points are built up, one upon the other.

Criterion F: application of analytical and evaluative skills appropriate to the subject

Demanding cognitive effort is needed to apply analytical and evaluative factors created by the student. The analysis and evaluation need to be covered in depth since these will lead to the crux of the argument. There is also an opportunity for the student to use reflexivity—a consideration of his or her own experiences and views that have contributed to the methods used in the investigation and the interpretation of points that have arisen.

Criterion G: use of language appropriate to the subject

Psychology is a subject that uses its terminology in a specific manner and students are expected to show this in their essays. Students who have not studied psychology as a specific part of an academic course are strongly urged to become thoroughly acquainted with the language used by psychologists and how it is applied within the discipline.

Criterion H: conclusion

The conclusion is a synthesis of the argument that has preceded it. It is the end point of a logical process that has been established by employing a succession of psychological studies and theories to justify the case that has been presented.

Criterion I: formal presentation

This criterion relates to the extent to which the essay conforms to academic standards about the way in which research papers should be presented. The presentation of essays that omit a bibliography or that do not give references for quotations is deemed unacceptable (level 0). Essays that omit one of the required elements—title page, table of contents, page numbers—are deemed no better than satisfactory (maximum level 2), while essays that omit two of them are deemed poor at best (maximum level 1).

Criterion J: abstract

The abstract is judged on the clarity with which it presents an overview of the research and the essay, not on the quality of the research question itself, nor on the quality of argument or the conclusions.

Criterion K: holistic judgment

Qualities that are rewarded under this criterion include intellectual initiative, insight, and breadth and depth of understanding. Ways of demonstrating such qualities include:

- choice of a relevant research question that extends the student's thinking but is also feasible within the time available
- location and judicious use of resources
- analysis and evaluation of psychological material to produce salient points for the argument
- use of a reflexive approach that involves the views and imagination of the student to make a unique contribution to understanding the topic.

The information in this document is taken from:

The International Baccalaureate Organization ® *Extended Essay Guide (First examinations 2013)*