

THE 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 *Vade Mecum*
- 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.

The extended essay and the IB learner profile

The learning involved in researching and writing the extended essay is closely aligned with the development of many of the characteristics described in the IB learner profile. Students are, to a large extent, responsible for their own independent learning, through which they acquire and communicate in-depth knowledge and understanding. The research process necessarily involves intellectual risk-taking and extensive reflection; open-mindedness, balance and fairness are key prerequisites for a good extended essay.

Students and teachers familiar with the IB Middle Years Programme (MYP) will find that the extended essay is a natural progression from the MYP personal project.

Relationship to theory of knowledge

Whichever subject is chosen, the extended essay shares with the theory of knowledge (TOK) course a concern with interpreting and evaluating evidence, and constructing reasoned arguments. Where the two differ is in the emphasis placed on the research process and its formal outcomes. These aspects are of primary importance in the extended essay but are given much less weight in TOK: in the *Theory of knowledge guide* (March 2006) the section describing the TOK assessment tasks states that “neither the [TOK] essay nor the presentation is primarily a research exercise”. At a more abstract level, both TOK and the extended essay promote reflection on the nature of knowledge and on how new knowledge is produced.

International dimensions

Some extended essay subjects include cross-cultural questions within them. Others invite such an approach. Whatever the subject, the extended essay student should strive to find relevant information from a diverse range of sources.

AIMS of the Extended Essay

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.

OBJECTIVES of the Extended Essay

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.

Note: "material" has different meanings in different subjects. It may be data or information; it may be arguments or evidence.

RESPONSIBILITIES of the SCHOOL

It is **required** that the school:

- ensures that extended essays conform to the regulations outlined in this guide
- ensures that students determine the subject for their extended essay from the approved extended essay list (in the *Vade Mecum*) before choosing the topic
- ensures that each student has an appropriately qualified supervisor, who is a teacher within the school
- provides supervisors and students with the general and subject-specific information, and guidelines for the extended essay, contained in this guide
- provides supervisors with recent extended essay subject reports
- ensures that supervisors are familiar with the IBO document *Academic honesty*
- explains to students the importance of the extended essay in the overall context of the Diploma Programme
- explains to students that they will be expected to spend approximately 40 hours on their extended essay.

It is **strongly recommended** that the school:

- sets internal deadlines for the stages of producing the extended essay, including provision for a concluding interview (*viva voce*)
- ensures that students have been taught the necessary research skills
- provides appropriate training for supervisors

RESPONSIBILITIES of the Faculty Advisor / 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
- reads and comments on the first draft only of the extended essay (but does **not** edit the draft)
- monitors the progress of the extended essay to offer guidance and to ensure that the essay is the student's own work; and reads the final version to confirm its authenticity
- submits a predicted grade for the student's extended essay to IBCA
- 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.

It is **strongly recommended** that the supervisor:

- reads recent extended essay reports for the subject
- spends between three and five hours with each student, including the time spent on the *viva voce*
- ensures that the chosen research question is appropriate for the subject
- advises students on:
 - access to appropriate resources (such as people, a library, a laboratory)
 - techniques of information-/evidence-/data-gathering and analysis
 - writing an abstract
 - documenting sources
- conducts a short, concluding interview (*viva voce*) with the student before completing the supervisor's report.

The student may work with or consult external sources, but it remains the responsibility of the supervisor within the school to complete all the requirements described above.

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 (in the *Vade Mecum*)
- 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).

Recommended: things to do

Examiners' reports frequently emphasize the following positive steps.

Before starting work on the extended essay, students should:

- 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.

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

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.

There are a number of different documentation styles available for use when writing research papers; most are appropriate in some academic disciplines but not others. The supervisor should help the student decide on a style for the particular subject of the essay. It is important to remember that, whatever style is chosen, it must be applied consistently. When choosing the documentation style, the student needs to have a clear understanding of how it is to be used before embarking on the research task. The 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.

Major documentation styles

The following are examples of acceptable documentation styles.

- American Political Science Association (APSA)
- American Psychological Association (APA)
- Chicago/Turabian
- Council of Biology Editors (CBE)
- Harvard citation and referencing guide
- Modern Language Association (MLA)
- Numbered references

Finding information about such systems is not difficult. Entering a string such as "academic referencing" into an Internet search engine will bring up lots of useful material. Reputable university sites often allow comparison of several different systems (and do not usually disappear overnight). One such example (accessed 13 March 2006) is <http://www.wisc.edu/writing/Handbook/Documentation.html>. There are numerous other online guides to creating bibliographies, as well as printed writers' handbooks.

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, e-mails, Internet sites and interviews.

Internet references should include the title of the extract used as well as the web site address, the date it was accessed and, if possible, the author. Caution should be exercised with information on web sites 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 USE of OTHER MATERIALS

Apart from graphic material, materials in other media may be submitted only as supporting appendices and should not detract from the written content of the extended essay.

Computers

The use of computers is encouraged where they are appropriate as tools for analysing data relevant to the subject of the extended essay. Material such as a hard copy of computer output may be included in the extended essay, but any associated program should be referred to or reproduced, if original, only as an appendix.

Computer programs may only be included (in particular circumstances) in computer science and physics essays. (See the "Computer science" and "Physics" sections for further details.)

CDs, DVDs and audio-visual materials

The model for the extended essay is a paper in an academic journal. Hence, materials such as these should not normally be included. They are liable to be lost or damaged and the examiner will probably not have time to look at them.

Specimen materials

Specimen materials used in, or produced by, investigations do not form part of the extended essay and must **not** be submitted. Photographic evidence may be submitted in place of such material.

THE VIVE VOCE

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, web site). 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

Using the assessment criteria

The method of assessment used by the IBO is criterion-related. That is to say, the method of assessment judges each student in relation to identified assessment criteria and not in relation to the work of other students.

- The aim is to find, for each criterion, the descriptor that conveys most adequately the achievement level attained by the student. The process, therefore, is one of approximation. In the light of any one criterion, a student's work may contain features denoted by a high achievement level descriptor combined with features appropriate to a lower one. A professional judgment should be made in identifying the descriptor that approximates most closely to the work.
- Having scrutinized the work to be assessed, the descriptors for each criterion should be read, starting with level 0, until one is reached that describes an achievement level that the work being assessed does not match as well as the previous level. The work is therefore best described by the preceding achievement level descriptor and this level should be recorded.
- Only whole numbers should be used, not partial points such as fractions or decimals.
- The highest descriptors do not imply faultless performance and assessors and teachers should not hesitate to use the extremes, including zero, if they are appropriate descriptions of the work being assessed.
- Descriptors should not be considered as marks or percentages, although the descriptor levels are ultimately added together to obtain a total. It should not be assumed that there are other arithmetical relationships; for example, a level 4 performance is not necessarily twice as good as a level 2 performance.
- A student who attains a particular achievement level in relation to one criterion will not necessarily attain similar achievement levels in relation to the others. It should not be assumed that the overall assessment of the students will produce any particular distribution of scores.

All extended essays are externally assessed by examiners appointed by the IBO, 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.

The diploma points 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	N
	Good B	3	2	1	1	0	N
	Satisfactory C	2	1	1	0	0	N
	Mediocre D	2	1	0	0	0	N
	Elementary E	1	0	0	0	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

ASSESSMENT CRITERIA

This section provides an overview of what each criterion assesses in the extended essay. Further advice on interpreting the assessment criteria is provided within the guidelines for each subject in the “Details—subject specific” section.

A: research question

(Objectives 1 and 2)

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 the introduction 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 the introduction 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 the introduction and sharply focused, making effective treatment possible within the word limit.

B: introduction

(Objectives 1 and 5)

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.

C: investigation

(Objectives 1 and 3)

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.

D: knowledge and understanding of the topic studied

(Objectives 3 and 7)

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.

E: reasoned argument

(Objectives 1 and 4)

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.

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

(Objective 7)

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.

G: use of language appropriate to the subject

(Objective 6)

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.

H: conclusion

(Objectives 1, 4 and 5)

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.

I: formal presentation

(Objective 5)

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.

J: abstract

(Objective 5)

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.

K: holistic judgment

(Objective 1)

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.

REGULATIONS

The *General regulations: Diploma Programme* states that, in addition to subject requirements, the IB diploma has additional requirements that include the completion and submission of an extended essay in a subject available for this purpose. These general regulations also state that schools must comply with the details and procedures in the *Vade Mecum* (the procedures manual for Diploma Programme coordinators and teachers), which gives detailed information about the administration of this diploma requirement.

The requirement

Every IB diploma student must submit an extended essay. Extended essays may only be submitted by students in the “diploma” or “retake” categories. Students in the “retake” category may submit either a new extended essay for assessment, registered in the same or a different subject, or a revised extended essay.

Supervision

It is the school’s responsibility to ensure that each student submitting an extended essay is supervised by a teacher at the school where the student is registered for Diploma Programme examinations. The teacher must have appropriate qualifications and/or experience in the subject chosen by the student, and must be familiar with the Diploma Programme. The teacher who is supervising a student’s work on his or her extended essay, known as “the supervisor”, must not be related to the student.

Language in which the extended essay is written

Extended essays submitted in a group 1 or group 2 language must be written in that language, with the exception of Latin and classical Greek. Extended essays for subjects in groups 3 to 6, and in Latin and classical Greek, must be written in English, French or Spanish.

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.

Choice of subject

The Diploma Programme subject chosen for the extended essay does not have to be one of the subjects being studied by the student for his or her diploma. The list of available subjects, including groups 1 and 2, is given in the *Vade Mecum*. Extended essays cannot be submitted in theory of knowledge, school-based syllabuses and pilot subjects, with exceptions for the latter two categories listed in the *Vade Mecum*.

Students at RHS may select from the following EE subject areas:

English	Economics	Environmental Systems
French	History	Mathematics
Spanish	Music	Physics
Biology	Peace/Conflict Studies	Politics
Chemistry	Psychology	Social Anthropology
Computer Science	Theatre Arts	Visual Arts
World Religions	Information Technology in a Global Society	
Human Rights	Film	

The Extended Essay Process for Rockville HS IB DP Candidates

(note: specific due dates and deadlines will be identified by the TOK teacher within the general timeline outlined below)

Step One – September - Grade 11

By the end of September, students will

- understand the Extended Essay and its requirements:
- review and read the Extended Essay packet
- visit the RHS Media Center for a general introduction to research tools and strategies
- review and understand the importance of academic honesty when writing the EE and review problems related to plagiarism
- complete, sign and submit student contract and parent support forms (FORM A)

Step Two – October - Grade 11

By the end of October, students will

- review sample Extended Essays in disciplines of interest
- select an area of interest
- complete preliminary reading and investigation on topics in that area of interest
- develop and refine two possible EE research questions within the topic of interest
- submit two possible EE research questions (with elaboration /explanation) to TOK teacher (FORM B)

Step Three – November - Grade 11

By the end of November, students will

- receive an EE faculty advisor
- schedule a first meeting with the faculty advisor to narrow and refine research question (FORM C)

Step Four – December/January – Grade 11

By the end of December/January, students will

- meet with their EE Advisor to refine their EE research question
- visit a professional or college-level library
- begin bibliographic research and identify a minimum of SIX relevant, reputable, and reliable sources (no more than THREE may be Internet Sources –for each Internet source complete a Source Evaluation Form) – Use Noodlebib
- submit annotated bibliographic research information to TOK teacher (FORM D)
- review annotated bibliographic research information with EE Advisor

Step Four – February/March – Grade 11

By the end of March, students will

- take notes on their identified sources - use Noodletools or Notecards
- expand bibliographic source list as needed (continue to add to annotated bibliography)
- submit a sample of 40 notecards to TOK teacher for review and feedback
- review notecards with EE Advisor
- continue to take notes on sources as needed

Step Five – April – Grade 11

By the end of April, students will

- continue to take notes on sources as needed and advised by TOK teacher and EE Advisor
- continue to add to annotated bibliographic source list as needed
- organize notecards and develop a thorough working outline complete with introductory paragraph (submit to TOK teacher for review and feedback)
- review working outline with EE Advisor (continue to share expanded notecards and expanded annotated bibliography)

-revise working outline as needed

Step Six – May /June – Grade 11

Prior to the start of the 2nd semester exam period, students will

-write a rough draft of their EE based on the working outline and correctly cite sources (minimum of 2000 words) – complete works cited page as required by the EE

-submit two copies of the rough draft (one for the TOK teacher/IB coordinator to hold on file and one for the EE advisor)

-meet with EE Advisor to review the rough draft (without marking) and provide guided written / oral feedback in order to continue to work on/revise EE prior to the start of the next school year

Step Seven – June/July/August – Grade 11/12

Prior to the start of school, students will

-continue to revise and add to EE rough draft (complete draft as needed – add to word count)

Step Eight- September – Grade 12

By the middle of September, students will

-complete 2nd rough draft and meet with EE Advisor for review and feedback and completion of the VIVE VOCE

-write abstract, table of contents, title page and revise works cited page (through TOK 2 class)

Step Nine – October – Grade 12

By the middle of October (date to be announced), students will

-submit TWO copies of all required EE materials to the IB Coordinator following the appropriate formal presentation guidelines:

-IB cover sheet

-title page

-table of contents

-Introduction

-Body and Development

-Conclusion

-Works Cited page

-Abstract

Step Ten – November – Grade 12

By the middle of November (prior to the Thanksgiving vacation), students will

-help to plan and organize the EE Expo in cooperation with the IB Coordinator

-invite parents, students, selected staff, and EE advisors to EE Expo to celebrate their research and accomplishments

Extended Essay

Student Contract/Parent Support Form

DUE: _____

NAME: _____ (please print)

I have read the guidelines for the Extended Essay and fully understand the nature and expectations for completion of this independent research project.

I will abide by the IB regulations, guidelines and timetables contained in this document. I will fulfill my responsibilities for meeting with my assigned EE advisor. I will complete the EE to the best of my abilities.

I understand that I must work independently to complete the requirements of the EE. I must schedule time to meet with my EE Advisor on a regular basis and attend the Media Center Orientation. I will also adhere to the EE calendar or make specific arrangements with the IB Coordinator prior to published deadlines.

Student's Signature

Date

PARENT SUPPORT FORM

I have reviewed the guidelines of the Extended Essay (EE) assignment with my child. I understand the importance of this assignment and the level of commitment required to successfully complete the EE. I will endeavor to support the efforts of my child to ensure his/her success.

I may be contacted via the following:

Email: _____

Cell Phone: _____

Home Phone: _____

Work Phone: _____

Parent/Guardian Signature

Date

RHS – IB DP Candidates

FORM B

Extended Essay

EE Subject Area Proposal and Preliminary Research Questions

DUE: _____

NAME: _____ (please print)

1. CIRCLE below TWO EE Subject Area Proposals.

Group 1 English

Group 2 French Spanish

Biology Chemistry Computer Science Economics

Environmental Systems History Mathematics

Music Physics Peace/Conflict Studies Politics

Psychology Social Anthropology Theatre Arts Visual Arts

World Religions

2. IDENTIFY TWO preliminary research questions (**one for each Subject Area circled above**)

A. _____

B. _____

Extended Essay

EE Advisor Assignments and Acceptance

DUE: _____

NAME: _____ (please print)

I, _____, accept the student named above as an EE

(EE advisor's name – please print)

Advisee in the indicated EE Subject Area.

EE Subject Area

EE Advisor Signature

Date

NOTE: EE students: upon return receipt of this form and the assignment of an EE Advisor, please contact your EE Advisor to set up an initial meeting to review your preliminary research question and strategize your approach to EE research.

(by _____)

RHS – IB DP Candidates

FORM D

Extended Essay

Annotated Bibliographic / Source Information

DUE: _____

NAME: _____ (please print)

RESEARCH

QUESTION: _____

NOTE: A minimum of 6 different sources are required. THREE of the SIX must be PRINT sources (non-Internet). Complete a Source Evaluation Form for each Internet source. (see your TOK teacher for Source Evaluation Forms)

COMPLETE your Annotated Bibliographic Information on NOODLEBIB and print a copy for your TOK teacher.

When your Annotated Bibliography has been checked and returned, meet with your EE Advisor to review your progress and share the Annotated Bibliography.