

# Extended Essay Student Manual



Dear Extended Essay Student Candidates:

The Extended Essay is a compulsory component of the IB Program. This essay is designed to give the student an opportunity to complete critical research on a subject they are studying at Turner Fenton Secondary School. The students will require subject specific skill guidance. Over the two year IB continuum our students are expected to develop key skills in the research process and in writing to help them build the expertise they will need to accomplish their task. Research is an important component of most university curricula and the Extended Essay is looked at by many schools as an indication of your readiness to do university research. The students are encouraged to provide evidence of careful planning and academic research as well as meeting all required due dates.

It is important to remember that there are many people in the school who are available to support you throughout the Extended Essay process by providing guidance, suggestions and technical assistance.

Once the students have chosen the general subject for their Extended Essay, they will approach a Turner Fenton Secondary School teacher to act as their EE Mentor. This teacher must agree to the arrangement and should have in depth knowledge of the subject they have chosen to research. Any teacher at TFSS or any administrator or guidance counsellor can be a Mentor.

The EE supervisor has subject expertise; he or she will be able to provide the student with help in formulating their research question and guiding them towards the appropriate sources. It is not the job of the supervisor to edit the extended essay.

Good luck with the Extended Essay process. Be sure to take advantage of the assistance of the Extended Essay coordinator, if any questions or concerns arise. We will be glad to help you!

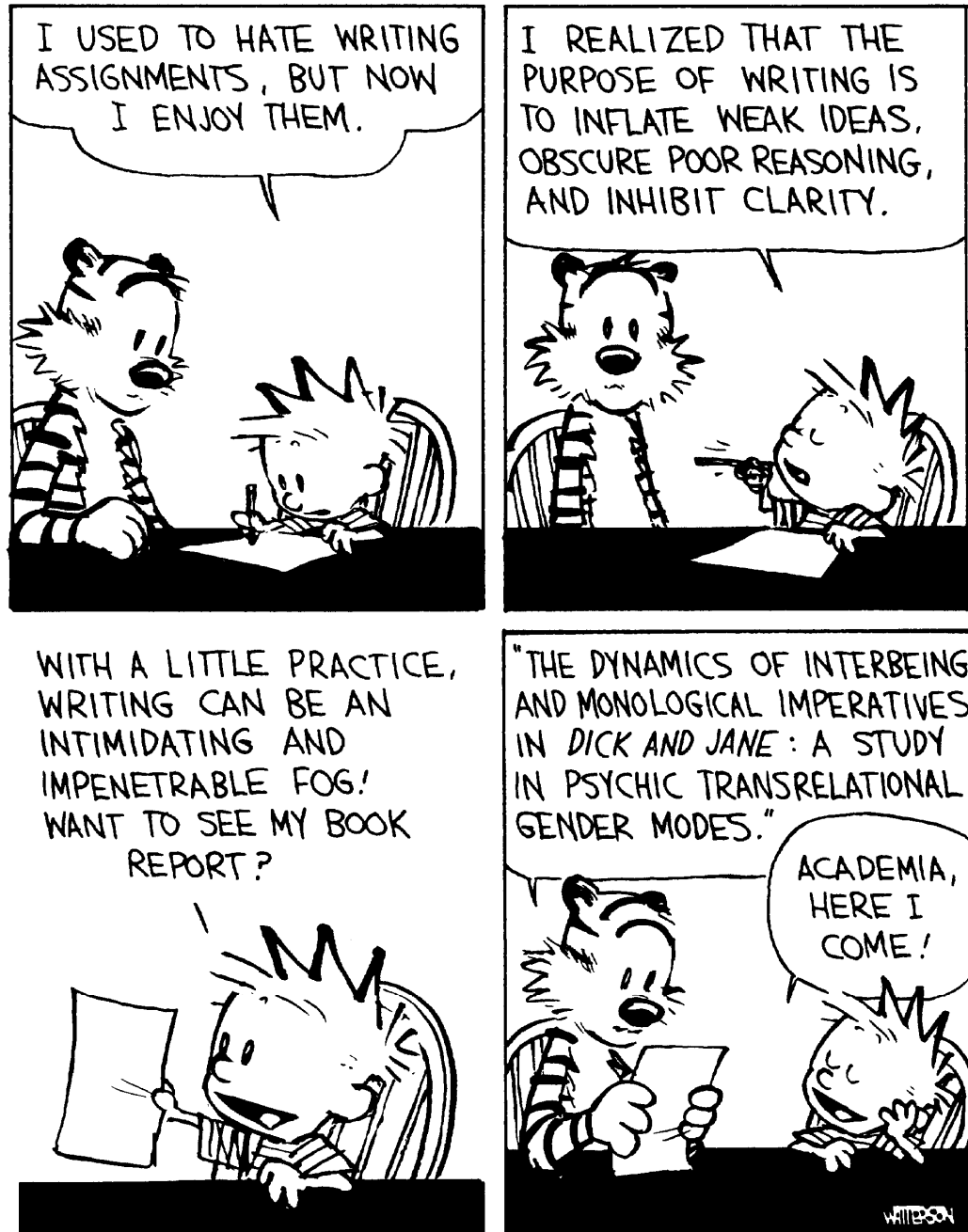
With Our Thanks,

Mme. Roe-Etter IB coordinator  
Ms. Snyder EE coordinator

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# Structure of the



# Extended Essay

# IBO Mission Statement

**The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.**

**To this end the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment.**

**These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.**

## Purpose 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 teacher mentor.

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.

# IB Learner Profile

The aim of all IB programmes is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet; help to create a better and more peaceful world.

## IB learners strive to be:

**Inquirers** They develop their natural curiosity. They acquire the skills necessary to conduct inquiry and research and show independence in learning. They actively enjoy learning and this love of learning will be sustained throughout their lives.

**Knowledgeable** They explore concepts, ideas and issues that have local and global significance. In so doing, they acquire in-depth knowledge and develop understanding across a broad and balanced range of disciplines.

**Thinkers** They exercise initiative in applying thinking skills critically and creatively to recognize and approach complex problems, and make reasoned, ethical decisions.

**Communicators** They understand and express ideas and information confidently and creatively in more than one language and in a variety of modes of communication. They work effectively and willingly in collaboration with others.

**Principled** They act with integrity and honesty, with a strong sense of fairness, justice and respect for the dignity of the individual, groups and communities. They take responsibility for their own actions and the consequences that accompany them.

**Open-minded** They understand and appreciate their own cultures and personal histories, and are open to the perspectives, values and traditions of other individuals and communities. They are accustomed to seeking and evaluating a range of points of view, and are willing to grow from the experience.

**Caring** They show empathy, compassion and respect towards the needs and feelings of others. They have a personal commitment to service, and act to make a positive difference to the lives of others and to the environment.

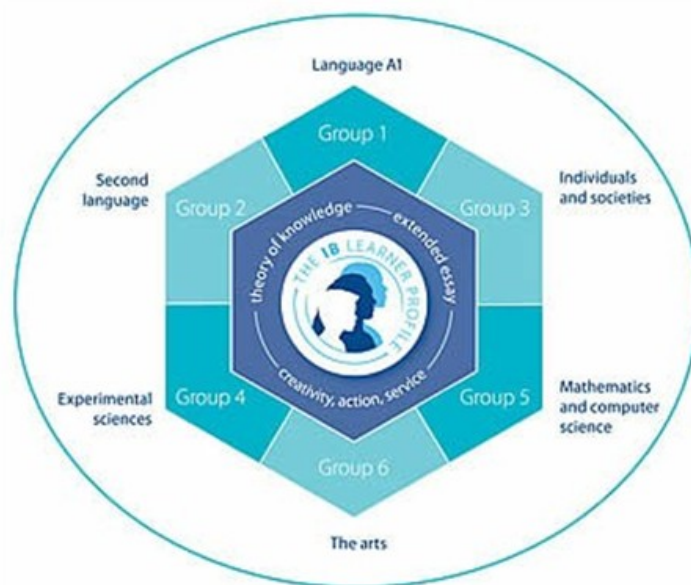
**Risk-takers** They approach unfamiliar situations and uncertainty with courage and forethought, and have the independence of spirit to explore new roles, ideas and strategies. They are brave and articulate in defending their beliefs.

**Balanced** They understand the importance of intellectual, physical and emotional balance to achieve personal well-being for themselves and others.

**Reflective** They give thoughtful consideration to their own learning and experience. They are able to assess and understand their strengths and limitations in order to support their learning and personal development

# The Diploma Programme Hexagon

The course is presented as six academic areas enclosing a central core. It encourages the concurrent study of a broad range of academic areas. Students study: two modern languages (or a modern language and a classical language); a humanities or social science subject; an experimental science; mathematics; one of the creative arts. It is this comprehensive range of subjects that makes the Diploma Programme a demanding course of study designed to prepare students effectively for university entrance. In each of the academic areas students have flexibility in making their choices, which means they can choose subjects that particularly interest them and that they may wish to study further at university.



## The diploma points matrix

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

# Supervisor responsibilities

It is **required** that the supervisor:

1. Provides the student with advice and guidance in the skills of undertaking research
2. Encourages and supports the student throughout the research and writing of the extended essay
3. Discusses the choice of topic with the student and, in particular, helps to formulate a well-focused research question
4. 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
5. Is familiar with the regulations governing the extended essay and the assessment criteria, and gives copies of these to the student (**done by the EE coordinator**)
6. Reads and comments on the first draft only of the extended essay (but does **not** edit the draft)
7. 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
8. Submits a predicted grade for the student's extended essay to the EE coordinator
9. Provides evidence or explanation in writing to validate the number of hours spent with the student in discussing the extended essay (Mentor Monitoring Record & Exit Interview Form)
10. Completes the supervisor's report (**done by the EE coordinator**)
11. Writes a report and presents it to the school's Diploma Programme coordinator if malpractice, such as plagiarism, is suspected in the final draft (**done by the EE coordinator**).

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

1. reads recent extended essay reports for the subject (available online on the OCC)
2. spends between three and five hours with each student, including the time spent on the *viva voce*
3. ensures that the chosen research question is appropriate for the subject
4. advises students on:
  - i. access to appropriate resources (such as people, a library, a laboratory)
  - ii. techniques of information-/evidence-/data-gathering and analysis
  - iii. writing an abstract
  - iv. documenting sources

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 Students

It is **required** that students:

1. Choose a topic that fits into one of the subjects on the approved extended essay list (in the *Vade Mecum*)
2. Observe the regulations relating to the extended essay
3. Meet deadlines
4. Acknowledge all sources of information and ideas in an approved academic manner.

It is **strongly recommended** that students:

1. Start work early
2. Think very carefully about the research question for their essay
3. Plan how, when and where they will find material for their essay
4. Plan a schedule for both researching and writing the essay, including extra time for delays and unforeseen problems
5. Record sources as their research progresses (rather than trying to reconstruct a list at the end)
6. Have a clear structure for the essay itself before beginning to write
7. Check and proofread the final version carefully
8. Make sure that all basic requirements are met (for example, all students should get full marks for the abstract).

## Recommended: things to do

**IB Examiners' reports frequently emphasize the following positive steps.**

Before starting work on the extended essay, students should:

1. Read the assessment criteria
2. Read previous essays to identify strengths and possible pitfalls
3. Spend time working out the research question (imagine the finished essay)
4. Work out a structure for the essay.

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

1. Start work early and stick to deadlines
2. Maintain a good working relationship with their supervisor
3. Construct an argument that relates to the research question
4. Use the library and consult librarians for advice
5. Record sources as they go along (rather than trying to reconstruct a list at the end)
6. Choose a new topic and a research question that **can** be answered if there is a problem with the original topic
7. Use the appropriate language for the subject
8. Let their interest and enthusiasm show.

After completing the essay, students should:

1. Write the abstract
2. Check and proofread the final version carefully.

## Recommended: things to avoid

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

1. Students **should not** work with a research question that is too broad or too vague, too narrow, too difficult or inappropriate.
2. A good research question is one that asks something worth asking and that is answerable within 40 hours/4,000 words.
3. 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.
4. 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 Extended Essay 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. Rather it is the order they will appear in the completed Extended Essay.

- |                 |                                |
|-----------------|--------------------------------|
| 1. Title page   | 5. Body                        |
| 2. Content page | (development/methods/results)  |
| 3. Abstract     | 6. Conclusion                  |
| 4. Introduction | 7. Appendices                  |
|                 | 8. References and bibliography |

Students should use the chosen system of academic referencing (Subject Specific) 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.

## The *Viva Voce* (Exit Interview)

The *viva voce* is a short interview between the student and the supervisor, held at the conclusion to the extended essay process. Students who do not attend the *viva voce* may not submit their Extended Essay.

**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 by the student
- An aid to the mentor's in process

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 (3-5 hours over the year long process).

The following are examples of questions that can be asked, which should be adapted to the particular essay and student.

- “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 completing the exit interview form, mentors 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 Research and Writing Process

### Research

Topic



Focus



Search for Sources



Research Question



Preparatory Reading



Working Outline



Assemble Sources/Materials



Recording Information/Data

### Writing

**Shaping the Outlines**

Basic outline

Skeleton outline

Supporting details



**Rough Draft**

Title page

Abstract

Contents

Introduction

Body/methods/results

Conclusion

Illustrations

Appendix

Documentation



Revising and Editing



Proofreading



Final Copy

# ACADEMIC HONESTY AND MALPRACTICE

## 1. Academic Honesty

1.1 All Diploma Programme candidates must understand the basic meaning and significance of concepts that relate to academic honesty, especially authenticity and intellectual property. Ensuring that candidates understand and respect academic honesty should not be confined to original authorship and ownership of creative material: academic honesty includes, for example, proper conduct in relation to the written examinations. In reality, it is probably easier to explain what is academic dishonesty, with direct reference to plagiarism, collusion and cheating in examinations. However, whenever possible, the topic should be treated in a positive way, stressing the benefits of properly conducted academic research and a respect for the integrity of all forms of assessment for the Diploma Programme. This is preferable to simply warning candidates that plagiarism, collusion, cheating, etc. are unacceptable and will be penalized by the IBO.

1.2 An authentic piece of work is one that is based on the candidate's individual and original ideas with the ideas and work of other fully acknowledged. Therefore, all assignments, written or oral, completed by a candidate for assessment must wholly and authentically use that candidate's own language and expression. Where sources are used or referred to, whether in the form of direct quotation or paraphrase, such sources must be fully and appropriately acknowledged.

1.3 The concept of intellectual property is potentially a difficult one for candidates to understand because there are many different forms of intellectual property, such as patents, registered designs, trademarks, moral rights and copyright. Candidates must at least be aware that forms of intellectual and creative expression (for example, works of literature, art or music) must be respected and are normally protected by law.

## 2. Malpractice

2.1 The Regulations define malpractice as behaviour that results in, or may result in, the candidate or any other candidate gaining an unfair advantage in one or more assessment components. Malpractice includes:

a) Plagiarism: this is defined as the representation of the ideas or work of an author or another person as the candidate's own

b) Collusion: this is defined as supporting malpractice by another candidate, as in allowing one's work to be copied or submitted for assessment by another

c) Duplication of work: this is defined as the presentation of the same work for different assessment components and/or diploma requirements

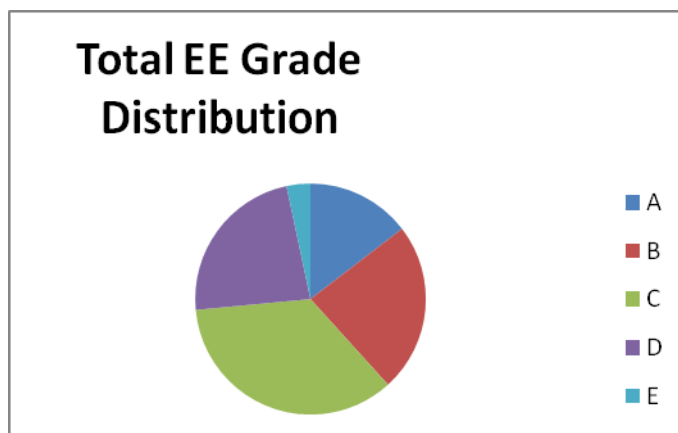
d) Any other behaviour that gains an unfair advantage for a candidate or that affects the results of another candidate (for example, taking unauthorized material into an examination room, misconduct during an examination, falsifying a CAS record).

**Excerpted from: *Academic Honesty: Guidance for Schools*. Geneva, Switzerland: IBO, 2003**

## Extended Essay Results May 2008

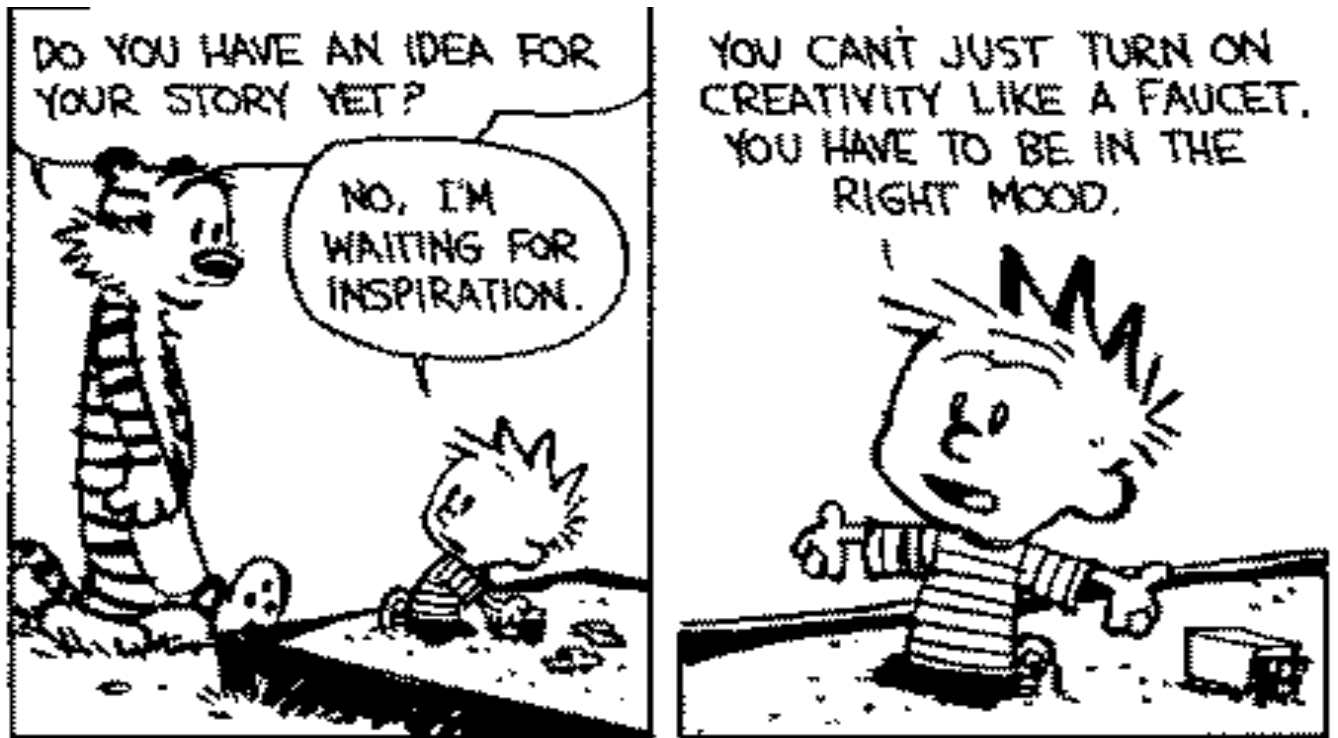
EE grade awarded per subject group	A	B	C	D	E	Total of candidates awarded grade	Total of all registered candidates	Percentage of candidates awarded grade
Group 1	1,187	1,373	2,194	1,017	177	5,948	5,991	99.28%
Group 2	417	434	858	391	41	2,141	2,159	99.17%
Group 3	1,607	3,027	8,185	6,214	1,486	20,519	20,691	97.43%
Group 4	328	839	2,361	2,086	581	6,195	6,238	99.31%
Group 5	123	137	361	287	91	999	1,010	98.91%
Group 6	405	494	971	643	105	2,618	2,640	99.17%
PS	64	131	239	138	19	591	598	98.83%
Total	4,131	6,435	15,169	10,776	2,500	39,011	39,327	98.87%
Percentage of candidates awarded a particular grade	10.59%	16.50%	38.88%	27.62%	6.41%			

### Percentage of grades awarded: extended essay May 2008





# TFSS



## Extended Essay Forms

## Extended Essay Due Dates

- It is very important that you keep to this time line and meet with your mentors/advisor at their convenience.
- Keep all outlines and drafts of your work and a backup electronic copy on a USB or disk.
- It is the expectation of all students to arrange a meeting with their Mentor at each stage of progress. These meetings should be recorded and verified and the paperwork submitted in September of Year Two.

By this Date	You Must Have Completed
<b>October (Year One)</b>	Decide on a subject and secure a Mentor.  Read through the EE Guide to ensure an understanding of all guidelines. <ul style="list-style-type: none"> <li>• Take a copy of all relevant pages from the guide to your first meeting with your Mentor.</li> </ul>
<b>November (Year One)</b>	Refine your topic and approach. <ul style="list-style-type: none"> <li>• Key points from the EE Guide</li> <li>• Reading/research that you did up to this point</li> <li>• Discuss suitable areas of research.</li> </ul>
<b>December (Year One)</b>	Develop a working research question. Refine your area of study. Confirm your topic and subject area with the EE Faculty Advisor.
<b>January (Year One)</b>	Work out a reading list or bibliography and/or a list of equipment required <ul style="list-style-type: none"> <li>• Talk to the librarian about finding resources</li> <li>• Set goals prior to the next meeting – this should include: creating a rough outline for your essay.</li> </ul>
<b>February (Year One)</b>	Ensure that all experiments have been started and all preliminary research completed.
<b>March (Year One)</b>	Develop a rough outline of your essay from title page to bibliography. Be prepared to discuss your essay in terms of: your aim, hypothesis, sources of information/experiment details, areas of concern
<b>April (Year One)</b>	Complete the first draft of your EE.
<b>May (Year One)</b>	Refine Arguments and Complete the second draft. Write the Abstract.
<b>June (Year One)</b>	Submit a Final Draft of the EE to your Mentor for Review and Comment. REMEMBER your mentor will only read your essay ONCE and they do NOT edit your work. They only provide feedback.
<b>July to August (Year One)</b>	Edit and Refine your Final Draft.
<b>September 1-15<sup>th</sup> (Year Two)</b>	Turn-It-In.com report printed and a completed Extended Essay verified by your mentor.  Final meeting – Exit Interview (viva voce) with your mentor.
<b>FINAL DUE DATE</b>  <b>September Year Two</b>	Submission of TWO copies of your EE with all supporting documentation.

# Extended Essay Rubric

## 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 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

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

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

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

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**

<b>Achievement Level</b>	<b>Descriptor</b>
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**

<b>Achievement Level</b>	<b>Descriptor</b>
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**

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.

<b>Achievement Level</b>	<b>Descriptor</b>
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

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

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 <b>or</b> 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

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.

## Extended Essay Mentor Proposal

Your Name & Student Number:

Research topic (this should be fairly general):

Aims of the research:

Research question (this should be very focused):

Methods:

Types of sources to be used (e.g., periodicals; newspapers; books; Internet sites – which must be fully cited, not just the address; interviews — if interviews will be used, please state who you are planning to interview and who they are)

How I will have access to these sources?

## Contract for Supervision of Extended Essay

I, \_\_\_\_\_ (name of student), Propose to write an extended essay in \_\_\_\_\_ (name of subject) on the topic of \_\_\_\_\_ Under the supervision of \_\_\_\_\_ (name of supervisor).

- I have and read and understood the latest version of the general guidelines regarding the extended essay, as well as the guidelines specific to the subject I have chosen. OR
- I undertake to read and understand the latest version of the general guidelines regarding the extended essay, as well as the guidelines specific to the subject I have chosen.
- I agree to abide by the deadlines as specified, as may be modified in consultation with my supervisor.
- I understand and will abide by the school policy with regard to academic honesty, and shall scrupulously cite all references and sources of ideas, quotations, data, diagrams, illustrations and other information which I use in my extended essay. I also agree that I will be solely responsible for any breaches of academic integrity in the writing of my essay.

### **I fully understand that my supervisor's responsibility will be**

- To encourage and support me in my efforts
- To provide advice of a subject specific nature
- To provide guidance in developing the research skills necessary in the subject area of the essay.
- To ensure that the essay is my own work
- To complete the supervisor's report.

### **I also fully understand that my supervisor's responsibility does NOT extend to**

- Getting me started/telling me what to do
- Giving me a research question
- Giving me the source material
- Editing and proof-reading my work
- Checking calculations and correcting errors
- Guaranteeing success.

**I understand that my supervisor can declare this agreement void if I fail to fulfill its conditions. In particular, I understand and agree that I will not receive the IB Diploma if I am unable to satisfy my supervisor about the authenticity of my extended essay.**

\_\_\_\_\_  
Student Signature & Date

\_\_\_\_\_  
Supervisor Signature & Date

(Submit to Miss Snyder when completed)



# Extended Essay Final Topic Confirmation

Due by December 1<sup>st</sup> (Year One) to Your Mentor

Student Name & Number \_\_\_\_\_

Subject Area: \_\_\_\_\_

**Topic**

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**Research Question**

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**Supervisor's Name** \_\_\_\_\_

**Supervisor's Signature** \_\_\_\_\_

**Date** \_\_\_\_\_

## Extend Essay Mentoring Monitoring Record

(print as many pages as needed)

**Student Name:** \_\_\_\_\_ **IB Number:** \_\_\_\_\_

**EE Subject:** \_\_\_\_\_ **Mentor's Name:** \_\_\_\_\_

Meeting Date	Duration of Meeting	Discussion Topic	Mentor Initials	Student Initials

Final Exit Meeting Date	Total Time Spent with Mentor	Essay Completed	Turn-It-In Report Completed	Student Signature:
		<div>YES NO</div>	<div>YES NO</div>	<div>Mentor Signature:</div>

# Glossary of command terms

Students should be familiar with the following key terms and phrases used in examination questions, which are to be understood as described below. Although these terms will be used frequently in examination questions, other terms may be used to direct students to present an argument in a specific way.

**Analyse** Break down in order to bring out the essential elements or structure. Compare Give an account of the similarities between two (or more) items or situations, referring to both (all) of them throughout.

**Compare and contrast** Give an account of similarities and differences between two (or more) items or situations, referring to both (all) of them throughout.

**Contrast** Give an account of the differences between two (or more) items or situations, referring to both (all) of them throughout.

**Define** Give the precise meaning of a word, phrase, concept or physical quantity.

**Describe** Give a detailed account.

**Discuss** Offer a considered and balanced review that includes a range of arguments, factors or hypotheses. Opinions or conclusions should be presented clearly and supported by appropriate evidence.

**Distinguish** Make clear the differences between two or more concepts or items.

**Evaluate** Make an appraisal by weighing up the strengths and limitations.

**Examine** Consider an argument or concept in a way that uncovers the assumptions and interrelationships of the issue.

**Explain** Give a detailed account including reasons or causes.

**Identify** Provide an answer from a number of possibilities.

**Justify** Give valid reasons or evidence to support an answer or conclusion.

**To what extent** Consider the merits or otherwise of an argument or concept. Opinions and conclusions should be presented clearly and supported with appropriate evidence and sound argument.

# Final Format Suggestions

## Abstract

Maximum word count 300 words – DO NOT GO OVER!!!

Three paragraph format

### 1<sup>st</sup> Paragraph

- 75 to 100 words in length
- Must include the Research Question & Thesis
- Must outline the purpose of the paper

### 2<sup>nd</sup> Paragraph

- 100 to 125 words in length
- Cover the scope of the investigation
- Detail limits and boundaries of your research
- What are you going to prove in your EE
- Outline key resources consulted

### 3<sup>rd</sup> Paragraph

- 50 to 75 words
- Outline the conclusion reached in your EE

## Research Question

Must be included in all of the following locations:

- Abstract
- Table of Content
- Opening Paragraph

Your Research Question must be able to be reasonably answered in 4000 words

## Thesis

Must be located in all of the following locations:

- Abstract
- Table of Content
- Opening Paragraph
- Conclusion

Your Thesis must answer your Research Question and be clear in purpose

## Table of Content

It should include all of the following:

- Research Question
- Thesis
  - Introduction and page number
  - Arguments and related page numbers
  - Sub-headings and related page numbers
  - Conclusion and page number
  - Appendix and page numbers
  - Bibliography and page number

Format and structure will depend on subject

## Title Page

Your title should be 1/3 from the top of the page and centered

- 12 font -- Times New Roman

Your personal information should be included in the bottom right corner

- Your full name (as it will appear on your IB Diploma)
- Your IB Student Number
- School Name (Turner Fenton Secondary School)
- Your subject area (ie. History, English, Chemistry)

## Format Structure

- 1 inch boarder on all pages (2.5 cm)
- 12 font Time New Roman
- double space
- Page Number – Top right corner (NOT on cover page / title page)

## Final Submission

- TWO copies needed
- Treasury Binding ONLY
- Turn-It-In.com Originality Report
- Mentor Monitoring Record
- Exit Interview Form
- Extended Essay Rubric

# DUE: September Year Two

# Extended Essay Check List

	Action	Check
1	Is the essay within 4000 words?	
2	Is there a title page?	
3	Is there a table of content?	
4	Are all of the pages numbered? In the top right corner of the page?	
5	Are all diagrams, charts and graphs indexed and labelled and sources referenced where applicable?	
6	Are all necessary terms defined or explained?	
7	Is every reference cited in a footnote or internally?	
8	Are your references cited <i>consistently</i> and <i>correctly</i> ?	
9	Does the Bibliography include <i>all and only</i> the works of reference you have consulted?	
10	Does the Bibliography specify <i>author(s)</i> , <i>title</i> , and <i>the date of publication and publisher</i> for every reference?	
11	Are the Bibliography sources cited <i>consistently</i> and <i>correctly</i> ?	
12	Does the Appendix contain only relevant information?	
13	Are all references to the Appendix clearly <i>cross-referenced and labelled</i> ?	
14	Is your research question stated on the table of content?	
15	Is your research question stated and in bold in the Introduction?	
16	Is your research question restated and in bold in the Conclusion?	
17	Is your thesis/hypothesis stated on the table of content?	
18	Is your thesis/hypothesis stated in the Introduction? Conclusion?	
19	Is the scope of the investigation stated in the Introduction?	
20	Does your Conclusion address unresolved questions?	
21	Does your Conclusion address new questions that have emerged?	
22	Are your <i>Introduction</i> and <i>Conclusion</i> titled in your table of content?	
23	Is your Abstract within 300 words?	
24	Does your Abstract contain the <i>research question</i> (in bold), the <i>scope of the investigation</i> and <i>the conclusion reached</i> ?	
25	Submit your completed essay to Turn-it-in.com and print your originality report.	

# Final Assessment Criteria Checklists

## Checklist Part A

- ☐ Does the Research Question address only one IB Subject Area?
- ☐ Can the topic be fully argued in 4000 words?
- ☐ Is the research question a single sentence?
- ☐ Does the Research Question lend itself to a systematic investigation?
- ☐ Systematic Investigation: The methodical examination to be undertaken to complete the EE.
- ☐ Is the Research Question sharply focused?
- ☐ Has the scope of the investigation been sufficiently refined?
- ☐ Scope: The range of content to be covered within the EE.
- ☐ Has an IB command term been used in the Research Question?
- ☐ Is the Research Question located on the Table of Content?
- ☐ Is the Research Question located in the Abstract?
- ☐ Is the Research Question located in the Introduction?
- ☐ Is the Research Question located in the Conclusion?

## Checklist Part B

- ☐ Is the Research Question set within a clear context?
- ☐ Context: The framework the EE topic.
- ☐ Has the relevance of the topic been outlined in the Introduction?
- ☐ Is the topic worthy of study?
- ☐ Has the EE topic been linked to a specific course demand
- ☐ Is the Research Question located in the Introduction?
- ☐ Is the Thesis/Hypothesis located in the Introduction?
- ☐ Is the Scope of the Investigation outlined in the Introduction

## Checklist Part C

- ☐ Is there an acceptable number of sources? (English – 1, Others 5-10)
- ☐ Is there an acceptable range of sources? (Primary vs. Secondary)
- ☐ Is the data/evidence gathered creditable? (Academic Sources)
- ☐ Is there evidence of planning?
- ☐ Have ideas been presented in an imaginative manner?
- ☐ If only 1 point was awarded in Part A no more than 2 can be awarded in Part C.

### **Checklist Part D**

- ☐ Is there a clear evidence of subject specific content knowledge?
- ☐ Is there an understanding of the topic studied?
- ☐ Is there evidence of Academic Context within the investigation?
- ☐ Academic Context: Evidence provided which represents the leadings schools of thought within the subject area.
- ☐ Only the exceptional submissions should receive full marks in their section
- ☐ If only 1 point was awarded in Part A no more than 2 can be awarded in Part D.

### **Checklist Part E**

- ☐ Do the arguments structured to support the thesis?
- ☐ Do the arguments support the Research Question?
- ☐ Are the argument balanced in length?
- ☐ Which is the strongest argument?
- ☐ Ensure that the final argument is not the weakest?
- ☐ If only 1 point was awarded in Part A no more than 2 can be awarded in Part E.

### **Checklist Part F**

- ☐ Understanding needed of subject specific skills (see specific subject guides)
- ☐ Has each piece of data/evidence been analyzed?
- ☐ Has the topic relevance been revealed within the critical analysis?
- ☐ Has the 'how' and 'why' been considered within the context of the topic?
- ☐ Have the subject specific skills from the subject guide been demonstrated?

### **Checklist Part G**

- ☐ Has the language been refined to be as specific as possible?
- ☐ Consider re-wording the sentences to create simple and clear statements.
- ☐ Has appropriate subject specific terminology been incorporated into the EE?
- ☐ Has there been evidence of both application and understanding of key terminology?

### **Checklist Part H**

- ☐ Has an effective conclusion been reached?
- ☐ Has a clear conclusion been stated?
- ☐ Has the Research Question been restated in the Conclusion?
- ☐ Where appropriate: Include any unresolved questions tied to the subject under study.



### **Checklist Part I**

- ☐ Does the EE exceed 4000 words?
- ☐ Does the Title Page meet TFSS requirements? See sample.
- ☐ Does the Table of Content meet the TFSS requirements? See sample.
- ☐ Does the Abstract meet the TFSS requirements? See sample.
- ☐ Are the page numbers located in the top right corner of each page?
- ☐ Does the referencing follow one standard format? (Subject standardization required)
- ☐ Bibliography should include only sources which are directly cited within the EE.
- ☐ Appendices should only be used if required by the subject discipline.
- ☐ Has the EE been presented with standard 1 inch (2.5cm margins)?
- ☐ Has the EE been double spaced?

### **Checklist Part J**

- ☐ Does the Abstract exceed 300 words?
- ☐ Does the Abstract have three paragraphs?
- ☐ Is the total word count located at the bottom of the Abstract?
- ☐ Is the Research Question located in the first paragraph?
- ☐ Is the Thesis located within the first paragraph?
- ☐ Is the purpose of the EE outlined in the first paragraph?
- ☐ Is the scope of the investigation outlined in the second paragraph?
- ☐ Is the method of the investigation outlined in the second paragraph?
- ☐ Are the key sources/resources outlined in the second paragraph?
- ☐ Is the conclusion to the EE outlined in the third paragraph?
- ☐ Are any unanswered questions not addressed in the EE outlined in the third paragraph?

### **Checklist Part K**

- ☐ What distinguishes this EE from the average?
- ☐ Is there evidence of Intellectual initiative on the part of the student?
- ☐ To what extent did the student exhibit understanding and insight?
- ☐ Did the student adhere to an established schedule?

# Viva Voce Exit Interview

The *viva voce* should last 10 to 15 minutes.

**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 Mentor should discuss each question with the student and mark the corresponding boxes then sign the completed form for submission by the student with their completed Extended Essay.**

Questions?	Acceptable	Unacceptable
Has the research question been clearly stated in the introduction, conclusion and abstract?		
Has the thesis statement been clearly stated in the introduction, conclusion and abstract?		
Is the Extended Essay Total word count under 4000 words?		
Is the abstract complete and under 300 words?		
Does the student fully understand the content submitted?		
Has all material been properly referenced?		
Has a Turn-it-in.com verification report been printed?		
Does the Turn-it-in.com report indicate less than 40% source reference material?		
What have you learned through writing this essay?		
What were the most interesting aspects of the EE process?		
Did you discover anything that surprised you?		
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?		
Assessing Criterion K – Holistic Judgement		

Additional Comments Required for any Unacceptable Indicators:

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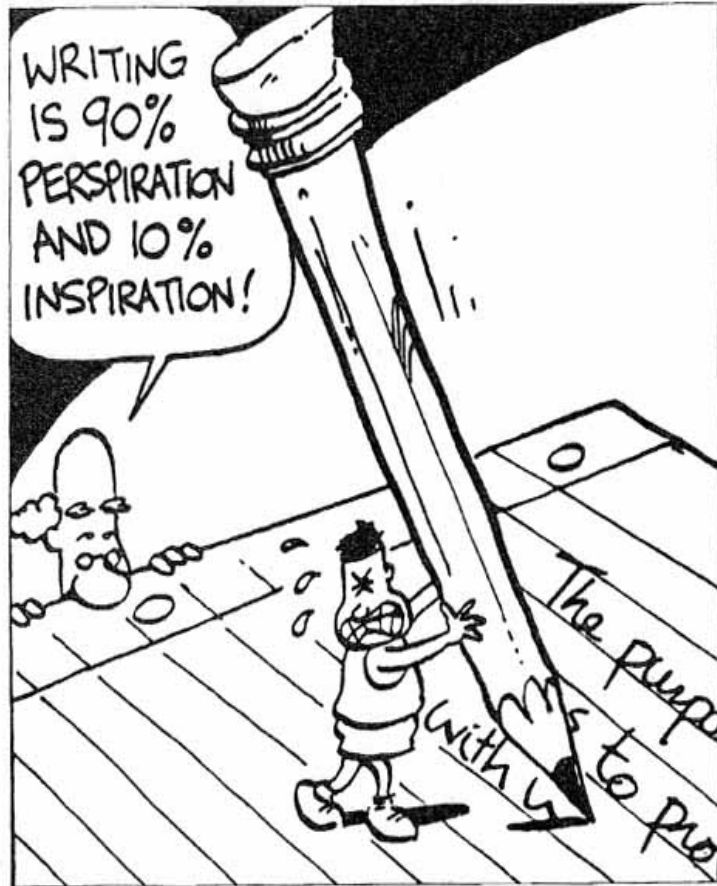


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Date: \_\_\_\_\_ Extended Essay Subject Area: \_\_\_\_\_

Mentor Signature: \_\_\_\_\_ Student Signature: \_\_\_\_\_

# TFSS



## Extended Essay Activities

# Research Question

Why not instead refine your topic to one technique and frame a question that aims to explore that technique's efficacy? Exploring "Is hypnosis (or primal screaming, or group therapy or whatever) a valuable strategy to use in psychotherapy?" would do more justice to the assignment. And it would be easier to look for direct evidence in that area.

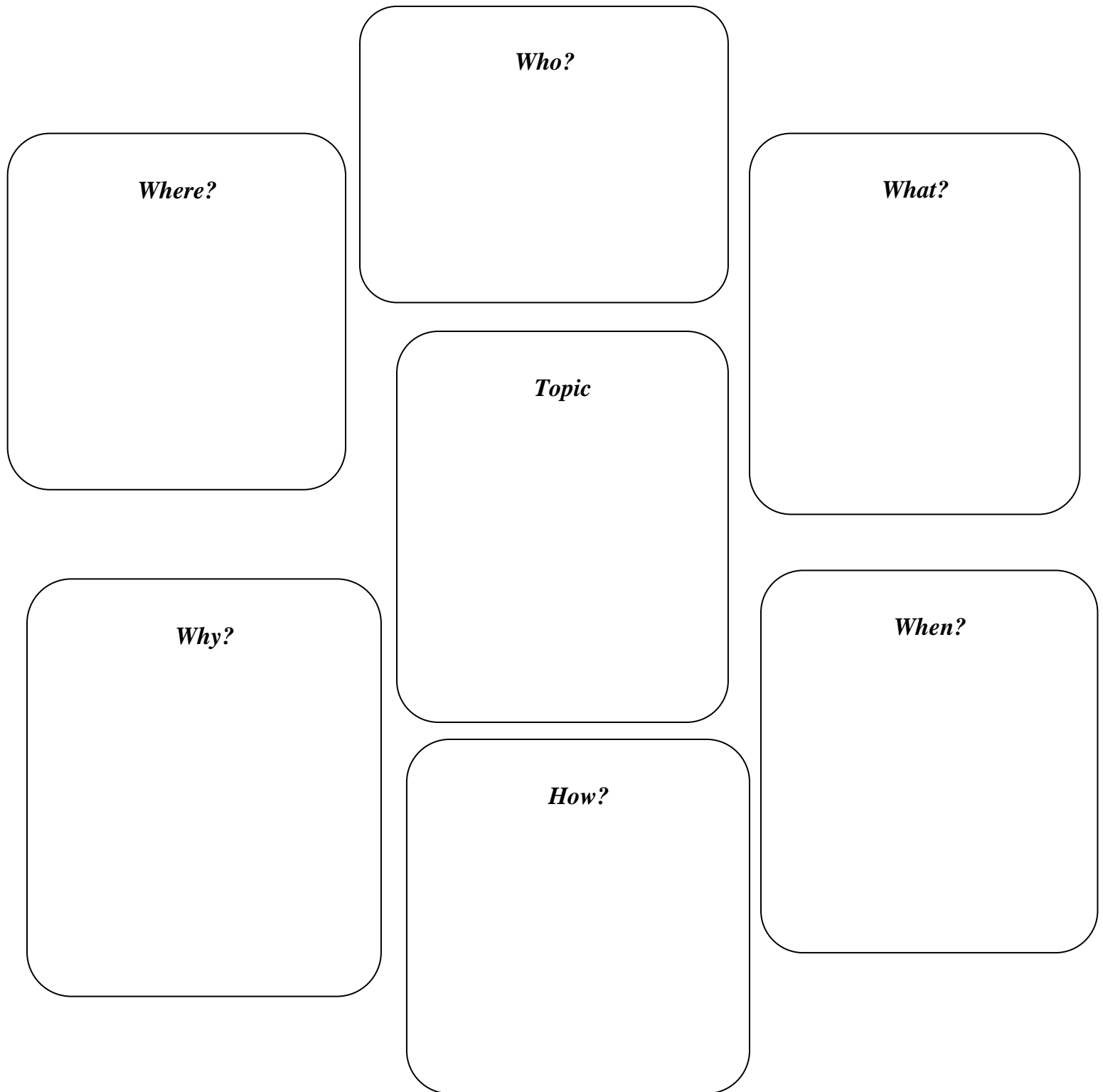
## EVALUATE YOUR OWN RESEARCH QUESTION

Ask the following 8 questions to evaluate the quality of your research question and the ease with which you should be able to answer it:

1. Does the question deal with a topic or issue that interest me enough to spark my own thoughts and opinions?
2. Is the question easily and fully researchable?
3. What type of information do I need to answer the research question?  
e.g., The research question, "What impact has deregulation had on commercial airline safety?," will obviously require certain types of information:
  - statistics on airline crashes before and after
  - statistics on other safety problems before and after
  - information about maintenance practices before and after
  - information about government safety requirements before and after
4. Is the scope of this information reasonable? (e.g., can I really research 30 on-line writing programs developed over a span of 10 years?)
5. Given the type and scope of the information that I need, is my question too broad, too narrow, or o.k.?
6. What sources will have the type of information that I need to answer the research question (journals, books, internet resources, government documents, and people)?
7. Can I access these sources?
8. Given my answers to the above questions, do I have a good quality research question that I actually will be able to answer by doing research?

**Evaluation Tip: Contact your EE Mentor if you're not sure whether your research question fulfills the assignment.**

# Writing Research Questions Graphic Organizer



*Where?*

*Who?*

*What?*

*Topic*

*Why?*

*How?*

*When?*

# Research Question Refinement

For each of the topic ideas, refine into a sharply focused research question.

**Biology** -- Factors that affect the germination of seeds

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**Computer Science** – Artificial Intelligence

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**English** – Pride and Prejudice

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**History** – The Soviet Union under Stalin

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**Mathematics** – Prime Numbers

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# Writing a Thesis Statement

A thesis statement is a sentence that expresses the main ideas of your essay and answers the research question posed by your extended essay. It offers the examiner an immediate and simple way to follow what the essay will be discussing and what you as a writer are setting out to tell them.

## General Thesis Statement Tips

- A thesis statement generally consists of two parts: your topic, and then the analysis, explanation(s), or assertion(s) that you're making about the topic. The kind of thesis statement you write will depend on what kind of extended essay you're writing.
- A thesis statement is an extremely specific statement -- it should cover only what you want to discuss in your extended essay, and be supported with specific evidence. The scope of your paper will be determined by your topic and the 4000 word maximum length of the extended essay.
- Generally, a thesis statement appears at the end of the first paragraph of an essay, so that readers will have a clear idea of what to expect as they read.
- You can think of your thesis as a map or a guide both for yourself and your audience.
- As you write and revise your paper, it is acceptable to change your thesis statement -- sometimes you do not discover what you really intended to say about our topic until you have started to write. Ensure that your 'final' thesis statement accurately shows what will be covered in your paper.

## Argumentative Thesis Statements

In an argumentative paper, you are making a claim about a topic and justifying this claim with reasons and evidence. This claim could be an opinion, a policy proposal, an evaluation, a cause-and-effect statement, or an interpretation. However, this claim must be a statement that people could possibly disagree with, because the goal of your paper is to convince your audience that your claim is true based on your presentation of your reasons and evidence. An argumentative thesis statement will tell your audience:

- your claim or assertion
- the reasons/evidence that support this claim
- the order in which you will be presenting your reasons and evidence

Example: Barn owls' nests should not be eliminated from barns because barn owls help farmers by eliminating insect and rodent pests.

A reader who encountered this thesis would expect to be presented with an argument and evidence that farmers should not get rid of barn owls when they find them nesting in their barns.

Questions to ask yourself when writing an argumentative thesis statement:

- What is my claim or assertion?
- What are the reasons I have to support my claim or assertion?
- In what order should I present my reasons?

## Analytical Thesis Statements

In an analytical paper, you are breaking down an issue or an idea into its component parts, evaluating the issue or idea, and presenting this breakdown and evaluation to your audience. An analytical thesis statement will explain:

- what you are analyzing
- the parts of your analysis
- the order in which you will be presenting your analysis

Example: An analysis of barn owl flight behaviour reveals two kinds of flight patterns: patterns related to hunting prey and patterns related to courtship.

A reader who encountered that thesis in a paper would expect an explanation of the analysis of barn owl flight behaviour, and then an explanation of the two kinds of flight patterns.

Questions to ask yourself when writing an analytical thesis statement:

- What did I analyze?
- What did I discover in my analysis?
- How can I categorize my discoveries?
- In what order should I present my discoveries?

## Expository (Explanatory) Thesis Statements

In an expository paper, you are explaining something to your audience. An expository thesis statement will tell your audience:

- what you are going to explain to them
- the categories you are using to organize your explanation
- the order in which you will be presenting your categories

Example: The lifestyles of barn owls include hunting for insects and animals, building nests, and raising their young.

A reader who encountered that thesis would expect the paper to explain how barn owls hunt for insects, build nests, and raise young.

Questions to ask yourself when writing an expository thesis statement:

- What am I trying to explain?
- How can I categorize my explanation into different parts?
- In what order should I present the different parts of my explanation?



# Thesis Statements

## What this handout is about

This handout describes what a thesis statement is, how thesis statements work in your writing, and how you can discover or refine one for your draft.

## Introduction

Writing in high school often takes the form of persuasion—convincing others that you have an interesting, logical point of view on the subject you are studying. Persuasion is a skill you practice regularly in your daily life. You persuade your roommate to clean up, your parents to let you borrow the car, your friend to vote for your favourite candidate or policy. In high school, course assignments often ask you to make a persuasive case in writing. You are asked to convince your reader of your point of view. This form of persuasion, often called academic argument, follows a predictable pattern in writing. After a brief introduction of your topic, you state your point of view on the topic directly and often in one sentence. This sentence is the thesis statement, and it serves as a summary of the argument you'll make in the rest of your paper.

## What is a thesis statement?

### A thesis statement:

- tells the reader how you will interpret the significance of the subject matter under discussion.
- is a road map for the paper; in other words, it tells the reader what to expect from the rest of the paper.
- directly answers the question asked of you. A thesis is an interpretation of a question or subject, not the subject itself. The subject, or topic, of an essay might be World War II or Moby Dick; a thesis must then offer a way to understand the war or the novel.
- makes a claim that others might dispute.
- is usually a single sentence somewhere in your first paragraph that presents your argument to the reader. The rest of the paper, the body of the essay, gathers and organizes evidence that will persuade the reader of the logic of your interpretation.

If your assignment asks you to take a position or develop a claim about a subject, you may need to convey that position or claim in a thesis statement near the beginning of your draft. The assignment may not explicitly state that you need a thesis statement because your instructor may assume you will include one. When in doubt, ask your instructor if the assignment requires a thesis statement. When an assignment asks you to analyze, to interpret, to compare and contrast, to demonstrate cause and effect, or to take a stand on an issue, it is likely that you are being asked to develop a thesis and to support it persuasively.

## How do I get a thesis?

A thesis is the result of a lengthy thinking process. Formulating a thesis is not the first thing you do after reading an essay assignment. Before you develop an argument on any topic, you have to collect and

organize evidence, look for possible relationships between known facts (such as surprising contrasts or similarities), and think about the significance of these relationships. Once you do this thinking, you will probably have a "working thesis," a basic or main idea, an argument that you think you can support with evidence but that may need adjustment along the way.

Writers use all kinds of techniques to stimulate their thinking and to help them clarify relationships or comprehend the broader significance of a topic and arrive at a thesis statement.

## How do I know if my thesis is strong?

Even if you do not have time to get advice elsewhere, you can do some thesis evaluation of your own. When reviewing your first draft and its working thesis, ask yourself the following:

- *Do I answer the question?* Re-reading the question prompt after constructing a working thesis can help you fix an argument that misses the focus of the question.
- *Have I taken a position that others might challenge or oppose?* If your thesis simply states facts that no one would, or even could, disagree with, it's possible that you are simply providing a summary, rather than making an argument.
- *Is my thesis statement specific enough?* Thesis statements that are too vague often do not have a strong argument. If your thesis contains words like "good" or "successful," see if you could be more specific: *why* is something "good"; *what specifically* makes something "successful"?
- *Does my thesis pass the "So what?" test?* If a reader's first response is, "So what?" then you need to clarify, to forge a relationship, or to connect to a larger issue.
- *Does my essay support my thesis specifically and without wandering?* If your thesis and the body of your essay do not seem to go together, one of them has to change. It's o.k. to change your working thesis to reflect things you have figured out in the course of writing your paper. Remember, always reassess and revise your writing as necessary.
- *Does my thesis pass the "how and why?" test?* If a reader's first response is "how?" or "why?" your thesis may be too open-ended and lack guidance for the reader. See what you can add to give the reader a better take on your position right from the beginning.

## Examples

Suppose you are taking a course on 19th-century America, and the instructor hands out the following essay assignment: Compare and contrast the reasons why the North and South fought the Civil War. You turn on the computer and type out the following:

*The North and South fought the Civil War for many reasons, some of which were the same and some different.*

This weak thesis restates the question without providing any additional information. You will expand on this new information in the body of the essay, but it is important that the reader know where you are heading. A reader of this weak thesis might think, "What reasons? How are they the same? How are they different?" Ask yourself these same questions and begin to compare Northern and Southern attitudes (perhaps you first think, "The South believed slavery was right, and the North thought slavery was wrong"). Now, push your comparison toward an interpretation—why did one side think slavery was right and the other side think it was wrong? You look again at the evidence, and you decide that you are

going to argue that the North believed slavery was immoral while the South believed it upheld the Southern way of life. You write:

*While both sides fought the Civil War over the issue of slavery, the North fought for moral reasons while the South fought to preserve its own institutions.*

Now you have a working thesis! Included in this working thesis is a reason for the war and some idea of how the two sides disagreed over this reason. As you write the essay, you will probably begin to characterize these differences more precisely, and your working thesis may start to seem too vague. Maybe you decide that both sides fought for moral reasons, and that they just focused on different moral issues. You end up revising the working thesis into a final thesis that really captures the argument in your paper:

*While both Northerners and Southerners believed they fought against tyranny and oppression, Northerners focused on the oppression of slaves while Southerners defended their own right to self-government.*

Compare this to the original weak thesis. This final thesis presents a way of *interpreting* evidence that illuminates the significance of the question. *Keep in mind that this is one of many possible interpretations of the Civil War—it is not the one and only right answer to the question.* There isn't one right answer; there are only strong and weak thesis statements and strong and weak uses of evidence.

Let's look at another example. Suppose your literature professor hands out the following assignment in a class on the American novel: Write an analysis of some aspect of Mark Twain's novel *Huckleberry Finn*. "This will be easy," you think. "I loved *Huckleberry Finn*!" You grab a pad of paper and write:

*Mark Twain's Huckleberry Finn is a great American novel.*

Why is this thesis weak? Think about what the reader would expect from the essay that follows: you will most likely provide a general, appreciative summary of Twain's novel. The question did not ask you to summarize; it asked you to analyze. Your professor is probably not interested in your opinion of the novel; instead, she wants you to think about *why* it's such a great novel—what do Huck's adventures tell us about life, about America, about coming of age, about race relations, etc.? First, the question asks you to pick an aspect of the novel that you think is important to its structure or meaning—for example, the role of storytelling, the contrasting scenes between the shore and the river, or the relationships between adults and children. Now you write:

*In Huckleberry Finn, Mark Twain develops a contrast between life on the river and life on the shore.*

Here's a working thesis with potential: you have highlighted an important aspect of the novel for investigation; however, it's still not clear what your analysis will reveal. Your reader is intrigued, but is still thinking, "So what? What's the point of this contrast? What does it signify?" Perhaps you are not sure yet, either. That's fine—begin to work on comparing scenes from the book and see what you discover. Free write, make lists, jot down Huck's actions and reactions. Eventually you will be able to clarify for yourself, and then for the reader, why this contrast matters. After examining the evidence and considering your own insights, you write:

*Through its contrasting river and shore scenes, Twain's Huckleberry Finn suggests that to find the true expression of American democratic ideals, one must leave "civilized" society and go back to nature.*

This final thesis statement presents an interpretation of a literary work based on an analysis of its content. Of course, for the essay itself to be successful, you must now present evidence from the novel that will convince the reader of your interpretation.

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## How to Generate a Thesis Statement

A strong thesis statement will usually include the following four characteristics:

- Select a subject upon which reasonable individuals could disagree
- Consider a subject that can be adequately examined given the nature of the extended essay
- It should express one clear central idea
- It should assert your conclusions about a subject

*Brainstorm the topic.*

*Refine the topic.*

*Take a clear position on the topic.*

*Use specific language, common to the subject area.*

*Make an assertion based on clearly stated support.*

# Argument

## What this handout is about

This handout will define what an argument is and explain why you need one in most of your academic essays.

## Arguments are everywhere

You may be surprised to hear that the word "argument" does not have to be written anywhere in your assignment for it to be an important part of your task. In fact, making an argument—expressing a point of view on a subject and supporting it with evidence—is often the aim of academic writing.

Most material you learn in high school is or has been debated by someone, somewhere, at some time. Even when the material you read or hear is presented as simple "fact," it may actually be one person's interpretation of a set of information. Instructors may call on you to examine that interpretation and defend it, refute it, or offer some new view of your own. In writing assignments, you will almost always need to do more than just summarize information that you have gathered or regurgitate facts that have been discussed in class. You will need to develop a point of view on or interpretation of that material and provide evidence for your position.

If you think that "fact," not argument, rules intelligent thinking, consider an example. For nearly 2000 years, educated people in many Western cultures believed that bloodletting—deliberately causing a sick person to lose blood—was the most effective treatment for a variety of illnesses. The "fact" that bloodletting is beneficial to human health was not widely questioned until the 1800's, and some physicians continued to recommend bloodletting as late as the 1920's. We have come to accept a different set of "facts" now because some people began to doubt the effectiveness of bloodletting; these people argued against it and provided convincing evidence. Human knowledge grows out of such differences of opinion, and scholars like your instructors spend their lives engaged in debate over what may be counted as "true," "real," or "right" in their fields. In their courses, they want you to engage in similar kinds of critical thinking and debate.

Argumentation is not just what your instructors do. We all use argumentation on a daily basis, and you probably already have some skill at crafting an argument. The more you improve your skills in this area, the better you will be at thinking critically, reasoning, making choices, and weighing evidence.

## Making a claim

What is an argument? In academic writing, an argument is usually a main idea, often called a "claim" or "thesis statement," backed up with evidence that supports the idea. In the majority of college papers, you will need to make some sort of claim and use evidence to support it, and your ability to do this well will separate your papers from those of students who see assignments as mere accumulations of fact and detail. In other words, gone are the happy days of being given a "topic" about which you can write anything. It is time to stake out a position and prove why it is a good position for a thinking person to hold.

Claims can be as simple as "Protons are positively charged and electrons are negatively charged," with evidence such as, "In this experiment, protons and electrons acted in such and such a way." Claims can also be as complex as "The end of the South African system of apartheid was inevitable," using reasoning and evidence such as, "Every successful revolution in the modern era has come about after the government in power has given and then removed small concessions to the uprising group." In either case, the rest of your paper will detail the reasoning and evidence that have led you to believe that your position is best.

When beginning to write a paper, ask yourself, "What is my point?" For example, the point of this handout is to help you become a better writer, and we are arguing that an important step in the process of writing effective arguments is understanding the concept of argumentation. If your papers do not have a main point, they cannot be arguing for anything. Asking yourself what your point is can help you avoid a mere "information dump." Consider this: your instructors probably know a lot more than you do about your subject matter. Why, then, would you want to provide them with material they already know? Instructors are usually looking for two things:

1. Proof that you understand the material, AND
2. A demonstration of your ability to use or apply the material in ways that go beyond what you have read or heard.

This second part can be done in many ways: you can critique the material, apply it to something else, or even just explain it in a different way. In order to succeed at this second step, though, you must have a particular point to argue.

Arguments in academic writing are usually complex and take time to develop. Your argument will need to be more than a simple or obvious statement such as "Frank Lloyd Wright was a great architect." Such a statement might capture your initial impressions of Wright as you have studied him in class; however, you need to look deeper and express specifically what caused that "greatness." Your instructor will probably expect something more complicated, such as "Frank Lloyd Wright's architecture combines elements of European modernism, Asian aesthetic form, and locally found materials to create a unique new style," or "There are many strong similarities between Wright's building designs and those of his mother, which suggests that he may have borrowed some of her ideas." To develop your argument, you would then define your terms and prove your claim with evidence from Wright's drawings and buildings and those of the other architects you mentioned.

## Evidence

Do not stop with having a point. You have to back up your point with evidence. The strength of your evidence, and your use of it, can make or break your argument. You already have the natural inclination for this type of thinking, if not in an academic setting. Think about how you talked your parents into letting you borrow the family car. Did you present them with lots of instances of your past trustworthiness? Did you make them feel guilty because your friends' parents all let them drive? Did you whine until they just wanted you to shut up? Did you look up statistics on teen driving and use them to show how you didn't fit the dangerous-driver profile? These are all types of argumentation, and they exist in academia in similar forms.

Every field has slightly different requirements for acceptable evidence, so familiarize yourself with some arguments from within that field instead of just applying whatever evidence you like best. Pay attention to your textbooks and your instructor's lectures. What types of argument and evidence are they



using? The type of evidence that sways an English instructor may not work to convince a sociology instructor. Find out what counts as proof that something is true in that field. Is it statistics, a logical development of points, something from the object being discussed (art work, text, culture, or atom), the way something works, or some combination of more than one of these things?

Be consistent with your evidence. Unlike negotiating for the use of your parents' car, an extended essay is not the place for an all-out blitz of every type of argument. You can often use more than one type of evidence within a paper, but make sure that within each section you are providing the reader with evidence appropriate to each claim. So, if you start a paragraph or section with a statement like "Putting the student seating area closer to the basketball court will raise player performance," do not follow with your evidence on how much more money the university could raise by letting more students go to games for free. Information about how fan support raises player morale, which then results in better play, would be a better follow-up. Your next section could offer clear reasons why undergraduates have as much or more right to attend an undergraduate event as wealthy alumni—but this information would not go in the same section as the fan support stuff. You cannot convince a confused person, so keep things tidy and ordered.

## Counterargument

One way to strengthen your argument and show that you have a deep understanding of the issue you are discussing is to anticipate and address counterarguments or objections. By considering what someone who disagrees with your position might have to say about your argument, you show that you have thought things through, and you dispose of some of the reasons your audience might have for not accepting your argument.

You can generate counterarguments by asking yourself how someone who disagrees with you might respond to each of the points you've made or your position as a whole. If you can't immediately imagine another position, here are some strategies to try:

- Do some research. It may seem to you that no one could possibly disagree with the position you are arguing, but someone probably has. For example, some people argue that the American Civil War never ended. If you are making an argument concerning, for example, the outcomes of the Civil War, you might wish to see what some of these people have to say.
- Talk with a friend or with your teacher. Another person may be able to imagine counterarguments that haven't occurred to you.
- Consider your conclusion or claim and the premises of your argument and imagine someone who denies each of them. For example, if you argued "Cats make the best pets. This is because they are clean and independent," you might imagine someone saying "Cats do not make the best pets. They are dirty and needy."

Once you have thought up some counterarguments, consider how you will respond to them—will you concede that your opponent has a point but explain why your audience should nonetheless accept your argument? Will you reject the counterargument and explain why it is mistaken? Either way, you will want to leave your reader with a sense that your argument is stronger than opposing arguments.

When you are summarizing opposing arguments, be charitable. Present each argument fairly and objectively, rather than trying to make it look foolish. You want to show that you have seriously considered the many sides of the issue and that you are not simply attacking or caricaturing your opponents.

It is usually better to consider one or two serious counterarguments in some depth, rather than to give a long but superficial list of many different counterarguments and replies.

Be sure that your reply is consistent with your original argument. If considering a counterargument changes your position, you will need to go back and revise your original argument accordingly.

## Audience

Audience is a very important consideration in argument. A lifetime of dealing with your family members has helped you figure out which arguments work best to persuade each of them. Maybe whining works with one parent, but the other will only accept cold, hard statistics. Your kid brother may listen only to the sound of money in his palm. It's usually wise to think of your audience in an academic setting as someone who is perfectly smart but who doesn't necessarily agree with you. You are not just expressing your opinion in an argument ("It's true because I said so"), and in most cases your audience will know something about the subject at hand—so you will need sturdy proof. At the same time, do not think of your audience as clairvoyant. You have to come out and state both your claim and your evidence clearly. Do not assume that because the instructor knows the material, he or she understands what part of it you are using, what you think about it, and why you have taken the position you've chosen.

## Critical reading

Critical reading is a big part of understanding argument. Although some of the material you read will be very persuasive, do not fall under the spell of the printed word as authority. Very few of your instructors think of the texts they assign as the last word on the subject. Remember that the author of every text has an agenda, something that he or she wants you to believe. This is OK—everything is written from someone's perspective—but it's a good thing to be aware of.

Take notes either in the margins of your source (if you are using a photocopy or your own book) or on a separate sheet as you read. Put away that highlighter! Simply highlighting a text is good for memorizing the main ideas in that text—it does not encourage critical reading. Part of your goal as a reader should be to put the author's ideas in your own words. Then you can stop thinking of these ideas as facts and start thinking of them as arguments.

When you read, ask yourself questions like "What is the author trying to prove?" and "What is the author assuming I will agree with?" Do you agree with the author? Does the author adequately defend her argument? What kind of proof does she use? Is there something she leaves out that you would put in? Does putting it in hurt her argument? As you get used to reading critically, you will start to see the sometimes hidden agendas of other writers, and you can use this skill to improve your own ability to craft effective arguments.

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## Introductions

### What this handout is about

This handout will explain the functions of introductions, offer strategies for writing effective ones, help you check your drafted introductions, and provide you with examples of introductions to be avoided.

### The role of introductions

Introductions and conclusions can be the most difficult parts of papers to write. Usually when you sit down to respond to an assignment, you have at least some sense of what you want to say in the body of your paper. You might have chosen a few examples you want to use or have an idea that will help you answer the main question of your assignment: these sections, therefore, are not as hard to write. But these middle parts of the paper can't just come out of thin air; they need to be introduced and concluded in a way that makes sense to your reader.

Your introduction and conclusion act as bridges that transport your readers from their own lives into the "place" of your analysis. If your readers pick up your paper about education in the autobiography of Frederick Douglass, for example, they need a transition to help them leave behind their world and to help them temporarily enter the world of nineteenth-century American slavery. By providing an introduction that helps your readers make a transition between their own world and the issues you will be writing about, you give your readers the tools they need to get into your topic and care about what you are saying. Similarly, once you've hooked your reader with the introduction and offered evidence to prove your thesis, your conclusion can provide a bridge to help your readers make the transition back to their daily lives.

### Why bother writing a good introduction?

**You never get a second chance to make a first impression.** The opening paragraph of your paper will provide your readers with their initial impressions of your argument, your writing style, and the overall quality of your work. A vague, disorganized, error-filled, off-the-wall, or boring introduction will probably create a negative impression. On the other hand, a concise, engaging, and well-written introduction will start your readers off thinking highly of you, your analytical skills, your writing, and your paper. This impression is especially important when the audience you are trying to reach (your instructor) will be grading your work.

**Your introduction is an important road map for the rest of your paper.** Your introduction conveys a lot of information to your readers. You can let them know what your topic is, why it is important, and how you plan to proceed with your discussion. In most academic disciplines, your introduction should contain a thesis that will assert your main argument. It should also, ideally, give the reader a sense of the kinds of information you will use to make that argument and the general organization of the paragraphs and pages that will follow. After reading your introduction, your readers should not have any major surprises in store when they read the main body of your paper.

**Ideally, your introduction will make your readers want to read your paper.** The introduction should capture your readers' interest, making them want to read the rest of your paper. Opening with a compelling story, a fascinating quotation, an interesting question, or a stirring example can get your readers to see why this topic matters and serve as an invitation for them to join you for an interesting intellectual conversation.

## Strategies for writing an effective introduction

**Start by thinking about the question (or questions) you are trying to answer.** Your entire essay will be a response to this question, and your introduction is the first step toward that end. Your direct answer to the assigned question will be your thesis, and your thesis will be included in your introduction, so it is a good idea to use the question as a jumping off point. Imagine that you are assigned the following question:

*Education has long been considered a major force for American social change, righting the wrongs of our society. Drawing on the Narrative of the Life of Frederick Douglass, discuss the relationship between education and slavery in 19th-century America. Consider the following: How did white control of education reinforce slavery? How did Douglass and other enslaved African Americans view education while they endured slavery? And what role did education play in the acquisition of freedom? Most importantly, consider the degree to which education was or was not a major force for social change with regard to slavery.*

You will probably refer back to your assignment extensively as you prepare your complete essay, and the prompt itself can also give you some clues about how to approach the introduction. Notice that it starts with a broad statement, that education has been considered a major force for social change, and then narrows to focus on specific questions from the book. One strategy might be to use a similar model in your own introduction—start off with a big picture sentence or two about the power of education as a force for change as a way of getting your reader interested and then focus in on the details of your argument about Douglass. Of course, a different approach could also be very successful, but looking at the way the professor set up the question can sometimes give you some ideas for how you might answer it.

**Decide how general or broad your opening should be.** Keep in mind that even a "big picture" opening needs to be clearly related to your topic; an opening sentence that said "Human beings, more than any other creatures on earth, are capable of learning" would be too broad for our sample assignment about slavery and education. If you have ever used Google Maps or similar programs, that experience can provide a helpful way of thinking about how broad your opening should be.

Imagine that you're researching Washington DC. If what you want to find out is whether Washington DC is at roughly the same latitude as Rome, it might make sense to hit that little "minus" sign on the online map until it has zoomed all the way out and you can see the whole globe. If you're trying to figure

out how to get from Toronto to Ottawa, it might make more sense to zoom in to the level where you can see most of South Western Ontario (but not the rest of the world, or even the rest of Canada). The question you are asking determines how "broad" your view should be. In the sample assignment above, the questions are probably at the "state" or "city" level of generality. But the introductory sentence about human beings is mismatched—it's definitely at the "global" level. When writing, you need to place your ideas in context—but that context doesn't generally have to be as big as the whole galaxy!

**Try writing your introduction last.** You may think that you have to write your introduction first, but that isn't necessarily true, and it isn't always the most effective way to craft a good introduction. You may find that you don't know what you are going to argue at the beginning of the writing process, and only through the experience of writing your paper do you discover your main argument. It is perfectly fine to start out thinking that you want to argue a particular point, but wind up arguing something slightly or even dramatically different by the time you've written most of the paper. The writing process can be an important way to organize your ideas, think through complicated issues, refine your thoughts, and develop a sophisticated argument. However, an introduction written at the beginning of that discovery process will not necessarily reflect what you wind up with at the end. You will need to revise your paper to make sure that the introduction, all of the evidence, and the conclusion reflect the argument you intend. Sometimes it's easiest to just write up all of your evidence first and then write the introduction last—that way you can be sure that the introduction will match the body of the paper.

**Don't be afraid to write a tentative introduction first and then change it later.** Some people find that they need to write some kind of introduction in order to get the writing process started. That's fine, but if you are one of those people, be sure to return to your initial introduction later and rewrite if necessary.

**Open with an attention grabber.** Sometimes, especially if the topic of your paper is somewhat dry or technical, opening with something catchy can help. Consider these options:

1. an intriguing example (for example, the mistress who initially teaches Douglass but then ceases her instruction as she learns more about slavery)
2. a provocative quotation (Douglass writes that "education and slavery were incompatible with each other")
3. a puzzling scenario (Frederick Douglass says of slaves that "[N]othing has been left undone to cripple their intellects, darken their minds, debase their moral nature, obliterate all traces of their relationship to mankind; and yet how wonderfully they have sustained the mighty load of a most frightful bondage, under which they have been groaning for centuries!" Douglass clearly asserts that slave owners went to great lengths to destroy the mental capacities of slaves, yet his own life story proves that these efforts could be unsuccessful.)
4. a vivid and perhaps unexpected anecdote (for example, "Learning about slavery in the American history course at Frederick Douglass High School, students studied the work slaves did, the impact of slavery on their families, and the rules that governed their lives. We didn't discuss education, however, until one student, Mary, raised her hand and asked, 'But when did they go to school?' That modern high school students could not conceive of an American childhood devoid of formal education speaks volumes about the centrality of education to American youth today and also suggests the significance of the deprivation of education in past generations.")
5. a thought-provoking question (given all of the freedoms that were denied enslaved individuals in the American South, why does Frederick Douglass focus his attentions so squarely on education and literacy?)

**Pay special attention to your first sentence.** Start off on the right foot with your readers by making sure that the first sentence actually says something useful and that it does so in an interesting and error-free way.

**Be straightforward and confident.** Avoid statements like "In this paper, I will argue that Frederick Douglass valued education." While this sentence points toward your main argument, it isn't especially interesting. It might be more effective to say what you mean in a declarative sentence. It is much more convincing to tell us that "Frederick Douglass valued education" than to tell us that you are going to say that he did. Assert your main argument confidently. After all, you can't expect your reader to believe it if it doesn't sound like you believe it!

## How to evaluate your introduction draft

Ask a friend to read it and then tell you what he or she expects the paper will discuss, what kinds of evidence the paper will use, and what the tone of the paper will be. If your friend is able to predict the rest of your paper accurately, you probably have a good introduction.

## Five kinds of less effective introductions

**1. The place holder introduction.** When you don't have much to say on a given topic, it is easy to create this kind of introduction. Essentially, this kind of weaker introduction contains several sentences that are vague and don't really say much. They exist just to take up the "introduction space" in your paper. If you had something more effective to say, you would probably say it, but in the meantime this paragraph is just a place holder.

*Example: Slavery was one of the greatest tragedies in American history. There were many different aspects of slavery. Each created different kinds of problems for enslaved people.*

**2. The restated question introduction.** Restating the question can sometimes be an effective strategy, but it can be easy to stop at JUST restating the question instead of offering a more specific, interesting introduction to your paper. The professor or teaching assistant wrote your questions and will be reading ten to seventy essays in response to them—he or she does not need to read a whole paragraph that simply restates the question. Try to do something more interesting.

*Example: Indeed, education has long been considered a major force for American social change, righting the wrongs of our society. The Narrative of the Life of Frederick Douglass discusses the relationship between education and slavery in 19th century America, showing how white control of education reinforced slavery and how Douglass and other enslaved African Americans viewed education while they endured. Moreover, the book discusses the role that education played in the acquisition of freedom. Education was a major force for social change with regard to slavery.*

**3. The Webster's Dictionary introduction.** This introduction begins by giving the dictionary definition of one or more of the words in the assigned question. This introduction strategy is on the right track—if you write one of these, you may be trying to establish the important terms of the discussion, and this move builds a bridge to the reader by offering a common, agreed-upon definition for a key idea. You may also be looking for an authority that will lend credibility to your paper. However, anyone can look a word up in the dictionary and copy down what Webster says—it may be far more interesting for you (and your reader) if you develop your own definition of the term in the specific context of your class and

assignment, or if you use a definition from one of the sources you've been reading for class. Also recognize that the dictionary is also not a particularly authoritative work—it doesn't take into account the context of your course and doesn't offer particularly detailed information. If you feel that you must seek out an authority, try to find one that is very relevant and specific. Perhaps a quotation from a source reading might prove better? Dictionary introductions are also ineffective simply because they are so overused. Many graders will see twenty or more papers that begin in this way, greatly decreasing the dramatic impact that any one of those papers will have.

*Example: Webster's dictionary defines slavery as "the state of being a slave," as "the practice of owning slaves," and as "a condition of hard work and subjection."*

**4. The "dawn of man" introduction.** This kind of introduction generally makes broad, sweeping statements about the relevance of this topic since the beginning of time. It is usually very general (similar to the place holder introduction) and fails to connect to the thesis. You may write this kind of introduction when you don't have much to say—which is precisely why it is ineffective.

*Example: Since the dawn of man, slavery has been a problem in human history.*

**5. The book report introduction.** This introduction is what you had to do for your elementary school book reports. It gives the name and author of the book you are writing about, tells what the book is about, and offers other basic facts about the book. You might resort to this sort of introduction when you are trying to fill space because it's a familiar, comfortable format. It is ineffective because it offers details that your reader already knows and that are irrelevant to the thesis.

*Example: Frederick Douglass wrote his autobiography, Narrative of the Life of Frederick Douglass, An American Slave, in the 1840s. It was published in 1986 by Penguin Books. In it, he tells the story of his life.*

## Works consulted

All quotations are from Frederick Douglass, *Narrative of the Life of Frederick Douglass, An American Slave*, edited and with introduction by Houston A. Baker, Jr., New York: Penguin Books, 1986.

# Paragraph Development

## What this handout is about

This handout will help you understand how paragraphs are formed, how to develop stronger paragraphs, and how to completely and clearly express your ideas.

## What is a paragraph?

Paragraphs are the building blocks of papers. Many students define paragraphs in terms of length: a paragraph is a group of at least five sentences; a paragraph is half a page long, etc. In reality, though, the unity and coherence of ideas among sentences is what constitutes a paragraph. A paragraph is defined as

"a group of sentences or a single sentence that forms a unit" (Lunsford and Connors 116). Length and appearance do not determine whether a section in a paper is a paragraph. For instance, in some styles of writing, particularly journalistic styles, a paragraph can be just one sentence long. Ultimately, a paragraph is a sentence or group of sentences that support one main idea. In this handout, we will refer to this as the "controlling idea," because it controls what happens in the rest of the paragraph.

## How do I decide what to put in a paragraph?

Before you can begin to determine what the composition of a particular paragraph will be, you must first decide on a working thesis for your paper. What is the most important idea that you are trying to convey to your reader? The information in each paragraph must be related to that idea. In other words, your paragraphs should remind your reader that there is a recurrent relationship between your thesis and the information in each paragraph. A working thesis functions like a seed from which your paper, and your ideas, will grow. The whole process is an organic one—a natural progression from a seed to a full-blown paper where there are direct, familial relationships between all of the ideas in the paper.

The decision about what to put into your paragraphs begins with the germination of a seed of ideas; this "germination process" is better known as brainstorming. There are many techniques for brainstorming; whichever one you choose, this stage of paragraph development cannot be skipped. Building paragraphs can be like building a skyscraper: there must be a well-planned foundation that supports what you are building. Any cracks, inconsistencies, or other corruptions of the foundation can cause your whole paper to crumble.

So, let's suppose that you have done some brainstorming to develop your thesis. What else should you keep in mind as you begin to create paragraphs? Every paragraph in a paper should be

- **Unified**—All of the sentences in a single paragraph should be related to a single controlling idea (often expressed in the topic sentence of the paragraph).
- **Clearly related to the thesis**—The sentences should all refer to the central idea, or thesis, of the paper (Rosen and Behrens 119).
- **Coherent**—The sentences should be arranged in a logical manner and should follow a definite plan for development (Rosen and Behrens 119).
- **Well-developed**—Every idea discussed in the paragraph should be adequately explained and supported through evidence and details that work together to explain the paragraph's controlling idea (Rosen and Behrens 119).

## How do I organize a paragraph?

There are many different ways to organize a paragraph. The organization you choose will depend on the controlling idea of the paragraph. Below are a few possibilities for organization, with brief examples.

- **Narration:** Tell a story. Go chronologically, from start to finish.
- **Description:** Provide specific details about what something looks, smells, tastes, sounds, or feels like. Organize spatially, in order of appearance, or by topic.
- **Process:** Explain how something works, step by step. Perhaps follow a sequence—first, second, third.
- **Classification:** Separate into groups or explain the various parts of a topic.
- **Illustration:** Give examples and explain how those examples prove your point.



## 5-step process to paragraph development

Let's walk through a 5-step process to building a paragraph. Each step of the process will include an explanation of the step and a bit of "model" text to illustrate how the step works. Our finished model paragraph will be about slave spirituals, the original songs that African Americans created during slavery. The model paragraph uses illustration (giving examples) to prove its point.

### Step 1. Decide on a controlling idea and create a topic sentence

Paragraph development begins with the formulation of the controlling idea. This idea directs the paragraph's development. Often, the controlling idea of a paragraph will appear in the form of a topic sentence. In some cases, you may need more than one sentence to express a paragraph's controlling idea. Here is the controlling idea for our "model paragraph," expressed in a topic sentence:

**Model controlling idea and topic sentence**— *Slave spirituals often had hidden double meanings.*

### Step 2. Explain the controlling idea

- Paragraph development continues with an expression of the rationale or the explanation that the writer gives for how the reader should interpret the information presented in the idea statement or topic sentence of the paragraph. The writer explains his/her thinking about the main topic, idea, or focus of the paragraph. Here's the sentence that would follow the controlling idea about slave spirituals:

**Model explanation**—*On one level, spirituals referenced heaven, Jesus, and the soul; but on another level, the songs spoke about slave resistance.*

### Step 3. Give an example (or multiple examples)

- Paragraph development progresses with the expression of some type of support or evidence for the idea and the explanation that came before it. The example serves as a sign or representation of the relationship established in the idea and explanation portions of the paragraph. Here are two examples that we could use to illustrate the double meanings in slave spirituals:

**Model example A**— *For example, according to Frederick Douglass, the song "O Canaan, Sweet Canaan" spoke of slaves' longing for heaven, but it also expressed their desire to escape to the North. Careful listeners heard this second meaning in the following lyrics: "I don't expect to stay / Much longer here. / Run to Jesus, shun the danger. / I don't expect to stay."*

**Model example B**— *Slaves even used songs like "Steal Away to Jesus (at midnight)" to announce to other slaves the time and place of secret, forbidden meetings.*

### Step 4. Explain the example(s)

The next movement in paragraph development is an explanation of each example and its relevance to the topic sentence and rationale that were stated at the beginning of the paragraph.

This explanation shows readers why you chose to use this/or these particular examples as evidence to support the major claim, or focus, in your paragraph.

Continue the pattern of giving examples and explaining them until all points/examples that the writer deems necessary have been made and explained. NONE of your examples should be left unexplained. You might be able to explain the relationship between the example and the topic sentence in the same sentence which introduced the example. More often, however, you will need to explain that relationship in a separate sentence. Look at these explanations for the two examples in the slave spirituals paragraph:

**Model explanation for example A**— *When slaves sang this song, they could have been speaking of their departure from this life and their arrival in heaven; however, they also could have been describing their plans to leave the South and run, not to Jesus, but to the North.*

**Model explanation for example B**—*[The relationship between example B and the main idea of the paragraph's controlling idea is clear enough without adding another sentence to explain it.]*

### **Step 5. Complete the paragraph's idea or transition into the next paragraph**

The final movement in paragraph development involves tying up the loose ends of the paragraph and reminding the reader of the relevance of the information in this paragraph to the main or controlling idea of the paper. At this point, you can remind your reader about the relevance of the information that you just discussed in the paragraph. You might feel more comfortable, however, simply transitioning your reader to the next development in the next paragraph. Here's an example of a sentence that completes the slave spirituals paragraph:

**Model sentence for completing a paragraph**— *What whites heard as merely spiritual songs, slaves discerned as detailed messages. The hidden meanings in spirituals allowed slaves to sing what they could not say.*

*Notice that the example and explanation steps of this 5-step process (steps 3 and 4) can be repeated as needed. The idea is that you continue to use this pattern until you have completely developed the main idea of the paragraph.*

## **Here is a look at the completed "model" paragraph:**

*Slave spirituals often had hidden double meanings. On one level, spirituals referenced heaven, Jesus, and the soul, but on another level, the songs spoke about slave resistance. For example, according to Frederick Douglass, the song "O Canaan, Sweet Canaan" spoke of slaves' longing for heaven, but it also expressed their desire to escape to the North. Careful listeners heard this second meaning in the following lyrics: "I don't expect to stay / Much longer here. / Run to Jesus, shun the danger. / I don't expect to stay." When slaves sang this song, they could have been speaking of their departure from this life and their arrival in heaven; however, they also could have been describing their plans to leave the South and run, not to Jesus, but to the North. Slaves even used songs like "Steal Away to Jesus (at midnight)" to announce to other slaves the time and place of secret, forbidden meetings. What whites heard as merely spiritual songs, slaves discerned as detailed messages. The hidden meanings in spirituals allowed slaves to sing what they could not say.*



# Troubleshooting paragraphs

**1) Problem: the paragraph has no topic sentence.** Imagine each paragraph as a sandwich. The real content of the sandwich—the meat or other filling—is in the middle. It includes all the evidence you need to make the point. But it gets kind of messy to eat a sandwich without any bread. Your readers don't know what to do with all the evidence you've given them. So, the top slice of bread (the first sentence of the paragraph) explains the topic (or controlling idea) of the paragraph. And, the bottom slice (the last sentence of the paragraph) tells the reader how the paragraph relates to the broader argument. In the original and revised paragraphs below, notice how a topic sentence expressing the controlling idea tells the reader the point of all the evidence.

## Original paragraph

*Piranhas rarely feed on large animals; they eat smaller fish and aquatic plants. When confronted with humans, piranhas' first instinct is to flee, not attack. Their fear of humans makes sense. Far more piranhas are eaten by people than people are eaten by piranhas. If the fish are well-fed, they won't bite humans.*

## Revised paragraph

*Although most people consider piranhas to be quite dangerous, they are, for the most part, entirely harmless. Piranhas rarely feed on large animals; they eat smaller fish and aquatic plants. When confronted with humans, piranhas' first instinct is to flee, not attack. Their fear of humans makes sense. Far more piranhas are eaten by people than people are eaten by piranhas. If the fish are well-fed, they won't bite humans.*

Once you have mastered the use of topic sentences, you may decide that the topic sentence for a particular paragraph really shouldn't be the first sentence of the paragraph. This is fine—the topic sentence can actually go at the beginning, middle, or end of a paragraph; what's important is that it is in there somewhere so that readers know what the main idea of the paragraph is and how it relates back to the thesis of your paper. Suppose that we wanted to start the piranha paragraph with a transition sentence—something that reminds the reader of what happened in the previous paragraph—rather than with the topic sentence. Let's suppose that the previous paragraph was about all kinds of animals that people are afraid of, like sharks, snakes, and spiders. Our paragraph might look like this (the topic sentence is underlined):

*Like sharks, snakes, and spiders, piranhas are widely feared. Although most people consider piranhas to be quite dangerous, they are, for the most part, entirely harmless. Piranhas rarely feed on large animals; they eat smaller fish and aquatic plants. When confronted with humans, piranhas' first instinct is to flee, not attack. Their fear of humans makes sense. Far more piranhas are eaten by people than people are eaten by piranhas. If the fish are well-fed, they won't bite humans.*

**2) Problem: the paragraph has more than one controlling idea.** If a paragraph has more than one main idea, consider eliminating sentences that relate to the second idea, or split the paragraph into two or more paragraphs, each with only one main idea. In the following paragraph, the final two sentences branch off into a different topic; so, the revised paragraph eliminates them and concludes with a sentence that reminds the reader of the paragraph's main idea.

### Original paragraph

*Although most people consider piranhas to be quite dangerous, they are, for the most part, entirely harmless. Piranhas rarely feed on large animals; they eat smaller fish and aquatic plants. When confronted with humans, piranhas' first instinct is to flee, not attack. Their fear of humans makes sense. Far more piranhas are eaten by people than people are eaten by piranhas.*

### Revised paragraph

*Although most people consider piranhas to be quite dangerous, they are, for the most part, entirely harmless. Piranhas rarely feed on large animals; they eat smaller fish and aquatic plants. When confronted with humans, piranhas' first instinct is to flee, not attack. Their fear of humans makes sense. Far more piranhas are eaten by people than people are eaten by piranhas. If the fish are well-fed, they won't bite humans.*

**3) Problem: transitions are needed within the paragraph.** You are probably familiar with the idea that transitions may be needed between paragraphs or sections in a paper. Sometimes they are also helpful within the body of a single paragraph. Within a paragraph, transitions are often single words or short phrases that help to establish relationships between ideas and to create a logical progression of those ideas in a paragraph. This is especially likely to be true within paragraphs that discuss multiple examples. Let's take a look at a version of our piranha paragraph that uses transitions to orient the reader:

*Although most people consider piranhas to be quite dangerous, they are, except in two main situations, entirely harmless. Piranhas rarely feed on large animals; they eat smaller fish and aquatic plants. When confronted with humans, piranhas' instinct is to flee, not attack. But there are two situations in which a piranha bite is likely. The first is when a frightened piranha is lifted out of the water—for example, if it has been caught in a fishing net. The second is when the water level in pools where piranhas are living falls too low. A large number of fish may be trapped in a single pool, and if they are hungry, they may attack anything that enters the water.*

In this example, you can see how the phrases "the first" and "the second" help the reader follow the organization of the ideas in the paragraph.

### Works consulted

Lunsford, Andrea and Robert Collins. *The St. Martin's Handbook, Annotated Instructor's Edition*. 5th Ed. New York: St. Martin's, 2003.

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## Evaluating Print Sources

# What this handout is about

This handout will discuss strategies to evaluate secondary printed sources—books, journal articles, magazines, etc.—based on three criteria: objectivity, authority, and applicability to your particular assignment. Printed sources, whether primary or secondary, provide the evidence for most of the academic essays you will write in college. Non-print sources, such as web pages, works of art (performance and fine), and interviews often provide significant source material for analysis but are not covered in this handout.

## Introduction

While you may associate research papers with history, the study of most disciplines involves the collection and interpretation of data with the intent of making and supporting an argument. To do this, you must use some printed texts, whether they are primary documents or secondary sources that analyze primary sources.

If you have never written a research paper at the level of an extended essay, the process may appear daunting. The first step, of course, is to develop a topic that investigates a problem important to your discipline.

So you come up with a good idea and head to the library to begin research. A university library is a great place to start with millions of books and journals. Which ones are useful to your study? What if the information they present is false, outdated, or biased to the point of inaccuracy? How can you tell? This handout will help answer these questions.

Researchers approach an unfamiliar source and ask questions of it with the intention of discovering clues that will tell them if they can trust the source and if it can add anything to the argument. The steps that are outlined below may appear drawn-out and perfunctory to some; each step is outlined in detail so that both novice and advanced researchers can benefit. It will help you approach your sources more carefully and critically.

## Primary and secondary sources

This handout will focus on how to evaluate secondary sources, but the critical skills you learn here will help in analyzing primary sources too. Before we can get to secondary sources, we need to differentiate primary from secondary sources. Primary sources come in various shapes and sizes, and often you have to do a little bit of research about the source to make sure you have correctly identified it.

In a nutshell, a primary source was produced at the same time that the events described in the source took place. Sound easy? In most cases it is. Here are some examples and problem areas:

**Diaries** and **letters** written by people who were participants in the actions they describe are easy to classify as primary sources, but what about **memoirs** or **autobiographies**? These are usually written well after the events took place and often will tell you more about the period in which they were written than about the period they describe.

What about **newspapers**? The author of an article presents an interpretation, but if the article reports current events, it is primary. If the article reports past events, it is secondary. Keep in mind that an article about a past event can present valuable primary evidence concerning the author's context.

What about **fiction**? If you are studying the novel or poem for its own sake, it is a primary source. If you are using the novel or poem as evidence—a historical novel, for example—it is a secondary source. In the same vein, a 19th-century **history textbook** can be considered a primary source if you are studying how the work was influenced by the period in which it was written or how it fits into a continuum of historical analysis (that is called historiography).

Check out this table to help differentiate primary and secondary sources.

Primary	Secondary
<i>The Tempest</i> by William Shakespeare	An article that analyzes the motif of the 'savage other' in <i>The Tempest</i> .
<i>The Diary of Anne Frank</i>	A book about the Holocaust
The Declaration of Independence	A biography of Thomas Jefferson
Population statistics on Ethiopia from <i>The World Factbook</i>	An article titled "The impact of population growth on infant mortality in Ethiopia."

Secondary sources will inform most of your writing in college. You will often be asked to research your topic using primary sources, but secondary sources will tell you which primary sources you should use and will help you interpret those primary sources. To use them well, however, you need to think critically about them.

There are two parts of a source that you need to analyze: the text itself and the argument within the text.

## Evaluating the text

You evaluate a text to determine the objectivity of the author and the credibility of the work. Do not assume that your sole motive or goal is to eliminate sources. While this may be a consequence of your analysis, your goal should be to understand the context of the work so you can assess how it can inform your argument. To do this, you must analyze the text according to three criteria: the author, the publisher, and the date of publication.

### Author

Remember back at the beginning of this handout I wrote that critically analyzing sources is all about asking questions? Well, here is where you show off that skill. The next time you pick up a book in the library, look at the author's name. Have you heard of her? Do you know if he is cited in other books on the subject? Has your instructor mentioned the author's name? Is she affiliated with a university (which may or may not add to her authority)? Does the author acknowledge an organizational affiliation? The acknowledgements and preface are good places to get the answers to most of these questions.

## **Publisher**

The questions you will ask about the publisher are similar to those asked about the author. Look in the first few pages of the book for the copyright and publisher information. Did a university press—for example, UW Press, UT Press—publish the text? Did a popular press—Jones and Bartlett, Harcourt, Brace, Jovanovich—publish it? You can be relatively sure that if a university press published the book, it has been held to a high academic standard. Popular presses differ in their standards. You may have to look at other aspects of the book (see below for tips on identifying tone and audience) or look at other books produced by the same publisher to judge the credibility of the text. Remember, you are not looking for ways to exclude works. Rather, you are trying to understand the context in which the book was written so you can better analyze its content.

## **Date of Publication**

If you are researching a current issue, it stands to reason that you want the most up-to-date sources you can find. If your topic is not so current, it is often acceptable to go back ten or even twenty years for your sources. If there is a more recent book on the same topic, make sure that you look at it. Maybe the author found new evidence that drastically alters the argument of the first book. The age of a work can be easy to determine, but it is sometimes tricky. The page that has the entire publisher's information has a copyright date. Has the work been translated? If so, that date is probably the date of the translation. Is there more than one date listed on the page? In that case, you probably have a newer edition. If so, the author wrote most of the book at the time of the first date of publication, although new information may have been added since then.

## **Objectivity**

After analyzing the text, you may find some bias. That does not mean you should discard it. Perhaps the author thanks an anti-homosexual religious organization for funding his research on same-sex marriages. You may be tempted to toss the book aside because you feel that a biased work will not provide the 'facts.' But you may be missing out on some good evidence. No secondary work is going to give you the 'facts.' Secondary sources provide interpretations of primary data. Every interpretation is influenced by the author's context. Find out where the author is coming from and use the evidence accordingly. For example, the book about same-sex marriages funded by the Southern Baptist Convention may provide a clear presentation of the conservative side of the issue. Paired with a book that provides a liberal interpretation, the conservative book may provide valuable information about the various positions within the discussion.

## **Evaluating an argument**

Analyzing the author, publisher, and age of the text provides a good place to start your analysis. You should not stop there, however. You have to move beyond the appraisal of the text and begin to analyze the content. To do this, you can use the same technique of asking questions and searching for responses.

## **Applicability**

Is the work applicable to your study? The first place to look for answers is the table of contents. A book can have a great title but then can be full of tangential ideas or take an approach that simply may not add to your study. The next place to check out is the index. The index is a wonderful resource for

researchers. You can use it to quickly jump to particular passages if your topic is well defined. More often, you'll scan the index to get a feel for the authority and scope of the text. Often you can learn most of what a book can tell you by reading the preface and the introduction and scanning the table of contents and index.

## **Argument**

Analyzing the argument gets to the heart of a critical approach to your sources. While this task may seem daunting at first, here are some tips and techniques you can learn to make it a lot easier.

- Is the information supported by evidence? Take a good look at the footnotes or endnotes. What kinds of sources did the author use? Does the bibliography mention the important books in the field?
- What is the major claim or thesis of the book or article? Is it clear what the author is trying to prove?
- What are the primary assumptions on which the author bases the argument's main claim? Do you agree with those assumptions? Is the author taking too much liberty in making those assumptions?
- Check out the Book Review Index in the Reference section of the library. Read what other scholars have written about this book. Are the reviews generally positive? Do they consider the book useful or important to the field? This is not considered cheating. On the contrary, it will enable you to read the book with your eyes open, so to speak.

## **Audience**

An analysis of the audience can tell you a lot about how much authority a book or article can claim. Most of what you uncovered in your analysis of the text will inform your judgment of the intended audience. You can find out more by looking at how the book is written and what type of format it is written in. Is the work full of technical terms or graphs? Then the audience may be academic. Is the language very simple with lots of pictures? Then the audience may be a younger crowd, or the book may be intended for light reading. If you are reading a newspaper or magazine, look at the advertisements. Who does the publisher hope will read the source? An advertisement for Lexus automobiles or Johnny Walker Red scotch in "Newsweek" may indicate a wealthy, educated (and possibly male) audience. An advertisement in "People" for Tommy Hilfiger or Pepsi may indicate a different audience.

## **Tone**

The tone of a book is how the author represents himself or herself through language. Strong and impassioned language may indicate to you that the author is too emotionally connected to the work to provide an objective analysis. Most academic authors try to appear impartial in their writing by always writing in the third person and staying away from loaded adjectives. Here are some questions you can ask about the author's tone:

- Does the author's language seem impartial to you? Are wild claims made? Is a lot of emotional language used?
- Does the author remain focused on the argument? Does he or she jump from point to point without completing any thoughts?
- Does the author seem objective? Does the information appear to be propaganda to you? Is a specific agenda put forth through the selection of data or the manipulation of evidence?

Remember, finding a bias does not necessarily mean you should discard the book. Take it in stride and use it accordingly.

## Authority

Answers to all the questions posed above will help you determine whether you can accept a source as an authority. Can you trust it? What can you trust about it? There is no easy way to answer that question, but by carefully approaching both the text and the argument you can feel more confident about the source.

## Following the trail

It may happen that you come up with a topic and go to the library to find sources. You sit down with ten books that you gleaned from a keyword search on the library's online catalogue. You put all ten books through the critical analysis steps outlined above, and only one fits all your criteria. What do you do now? Go back to the library catalogue? Browse the shelves near where you found the first ten? Those methods may work, but a quicker way is to follow the trail of sources in the one book you have decided to use. Look at the footnotes and bibliography. Note titles that the author relies on or refers to as pillars of the discipline. Then look up those book or articles in the library catalogue and begin the critical analysis process all over again. This time, however, you know what one author thinks about the book, so it already has achieved a level of authority or importance. Following the trail from one book or article to others can lead to an understanding of the entire structure of the literature on a particular topic.

## Apply what you've learned

Now that you know the key terms and what questions to ask, put your newfound knowledge to the test. What questions would you ask of this handout?

- Is the author an authority?
- Is the author biased?
- Can I learn anything from this handout?

## Works consulted

Booth, Wayne C., et al. *The Craft of Research*. Chicago: University of Chicago Press, 2003.

Ede, Lisa. *Work in Progress: A Guide to Academic Writing and Revising*. Boston: Bedford/St. Martins, 2001.

<http://www.library.cornell.edu/okuref/research/skill26.htm>



# Statistics

"There are lies, damned lies, and statistics."

—Mark Twain

## What this handout is about

The purpose of this handout is to help you use statistics to make your argument as effectively as possible.

## Introduction

Numbers are power. Apparently freed of all the squishiness and ambiguity of words, numbers and statistics are powerful pieces of evidence that can effectively strengthen any argument. But statistics are not a panacea. As simple and straightforward as these little numbers promise to be, statistics, if not used carefully, can create more problems than they solve.

Many writers lack a firm grasp of the statistics they are using. The average reader does not know how to properly evaluate and interpret the statistics he or she reads. The main reason behind the poor use of statistics is a lack of understanding about what statistics can and cannot do. Many people think that statistics can speak for themselves. But numbers are as ambiguous as words and need just as much explanation.

In many ways, this problem is quite similar to that experienced with direct quotes. Too often, quotes are expected to do all the work; are treated as part of the argument, rather than a piece of evidence requiring interpretation. But if you leave the interpretation up to the reader, who knows what sort of off-the-wall interpretations may result? The only way to avoid this danger is to supply the interpretation yourself.

But before we start writing statistics, let's actually read a few.

## Reading statistics

As stated before, numbers are powerful. This is one of the reasons why statistics can be such persuasive pieces of evidence. However, this same power can also make numbers and statistics intimidating. That is, we too often accept them as gospel, without ever questioning their veracity or appropriateness. While this may seem like a positive trait when you plug them into your paper and pray for your reader to submit to their power, remember that before we are writers of statistics, we are readers. And to be effective readers means asking the hard questions. Below you will find a useful set of hard questions to ask of the numbers you find.

### 1. Does your evidence come from reliable sources?

This is an important question not only with statistics, but with any evidence you use in your papers. As we will see in this handout, there are many ways statistics can be played with and misrepresented in order to produce a desired outcome. Therefore, you want to take your statistics from reliable sources. This is not to say that reliable sources are infallible, but only that they are probably less likely to use deceptive practices. With a credible source, you may not need to worry as much about the questions that



follow. Still, remember that reading statistics is a bit like being in the middle of a war: trust no one; suspect everyone.

## **2. What is the data's background?**

Data and statistics do not just fall from heaven fully formed. They are always the product of research. Therefore, to understand the statistics, you should also know where they come from. For example, if the statistics come from a survey or poll, some questions to ask include:

- Who asked the questions in the survey/poll?
- What, exactly, were the questions?
- Who interpreted the data?
- What issue prompted the survey/poll?
- What (policy/procedure) potentially hinges on the results of the poll?
- Who stands to gain from particular interpretations of the data?

All these questions are a way of orienting yourself toward possible biases or weaknesses in the data you are reading. The goal of this exercise is not to find "pure, objective" data but to make any biases explicit, in order to more accurately interpret the evidence.

## **3. Are all data reported?**

In most cases, the answer to this question is easy: no, they aren't. Therefore, a better way to think about this issue is to ask whether all data have been presented in context. But it is much more complicated when you consider the bigger issue, which is whether the text or source presents enough evidence for you to draw your own conclusion. A reliable source should not exclude data that contradicts or weakens the information presented.

An example can be found on the evening news. If you think about ice storms, which make life so difficult in the winter, you will certainly remember the newscasters warning people to stay off the roads because they are so treacherous. To verify this point, they tell you that the Highway Patrol has already reported 25 accidents during the day. Their intention is to scare you into staying home with this number. While this number sounds high, some studies have found that the number of accidents actually goes down on days with severe weather. Why is that? One possible explanation is that with fewer people on the road, even with the dangerous conditions, the number of accidents will be less than on an "average" day. The critical lesson here is that even when the general interpretation is "accurate," the data may not actually be evidence for the particular interpretation. This means you have no way to verify if the interpretation is in fact correct.

There is generally a comparison implied in the use of statistics. How can you make a valid comparison without having all the facts? Good question. You may have to look to another source or sources to find all the data you need.

## **4. Have the data been interpreted correctly?**

If the author gives you her statistics, it is always wise to interpret them yourself. That is, while it is useful to read and understand the author's interpretation, it is merely that—an interpretation. It is not the final word on the matter. Furthermore, sometimes authors (including you, so be careful) can use

perfectly good statistics and come up with perfectly bad interpretations. Here are two common mistakes to watch out for:

- *Confusing correlation with causation.* Just because two things vary together does not mean that one of them is causing the other. It could be nothing more than a coincidence or both could be caused by a third factor. Such a relationship is called spurious.

The classic example is a study that found that the more firefighters sent to put out a fire, the more damage the fire did. Yikes! I thought firefighters were supposed to make things better, not worse! But before we start shutting down fire stations, it might be useful to entertain alternative explanations. This seemingly contradictory finding can be easily explained by pointing to a third factor that causes both: the size of the fire. What is the lesson here? Correlation does not equal causation. So it is important not only to think about showing that two variables co-vary, but also about the causal mechanism.

- *Ignoring the margin of error.* When survey results are reported, they frequently include a margin of error. You might see this written as "a margin of error of plus or minus 5 percentage points." What does this mean? The simple story is that surveys are normally generated from samples of a larger population, and thus they are never exact. There is always a confidence interval within which the general population is expected to fall. Thus, if I say that the number of UNC students who find it difficult to use statistics in their writing is 60%, plus or minus 4% that means, assuming the normal confidence interval of 95%, that with 95% certainty we can say that the actual number is between 56% and 64%.

Why does this matter? Because if after introducing this handout to the students of TFSS, a new poll finds that only 56%, plus or minus 3%, are having difficulty with statistics. However, consider that the actual change is not significant because it falls within the margin of error for the original results. What is the lesson here? Margins of error matter, so you cannot just compare simple percentages.

Finally, you should keep in mind that the source you are actually looking at may not be the original source of your data. That is, if you find an essay that quotes a number of statistics in support of its argument, often the author of the essay is using someone else's data. Thus, you need to consider not only your source, but the author's sources as well.

## Writing statistics

As you write with statistics, remember your own experience as a reader of statistics. Don't forget how frustrated you were when you came across unclear statistics and how thankful you were to read well-presented ones. It is a sign of respect to your reader to be as clear and straightforward as you can be with your numbers. Nobody likes to be played for a fool. Thus, even if you think that changing the numbers just a little bit will help your argument; do not give in to the temptation.

As you begin writing, keep the following in mind. First, your reader will want to know the answers to the same questions that we discussed above. Second, you want to present your statistics in a clear, unambiguous manner. Below you will find a list of some common pitfalls in the world of statistics, along with suggestions for avoiding them.

## 1. The mistake of the "average" writer

Nobody wants to be average. Moreover, nobody wants to just see the word "average" in a piece of writing. Why? Because nobody knows exactly what it means? There is not one, not two, but three different definitions of "average" in statistics, and when you use the word, your reader has only a 33.3% chance of guessing correctly which one you mean.

For the following definitions, please refer to this set of numbers:

**5, 5, 5, 8, 12, 14, 21, 33, 38**

- Mean (arithmetic mean)

This may be the most average definition of average (whatever that means). This is the weighted average—a total of all numbers included divided by the quantity of numbers represented. Thus the mean of the above set of numbers is  $5+5+5+8+12+14+21+33+38$ , all divided by 9, which equals 15.644444444444 (Wow! That is a lot of numbers after the decimal—what do we do about that? Precision is a good thing, but too much of it is over the top; it does not necessarily make your argument any stronger. Consider the reasonable amount of precision based on your input and round accordingly. In this case, 15.6 should do the trick.)

- Median

Depending on whether you have an odd or even set of numbers, the median is either a) the number midway through an odd set of numbers or b) a value halfway between the two middle numbers in an even set. For the above set (an odd set of 9 numbers), the median is 12. ( $5, 5, 5, 8 < 12 < 14, 21, 33, 38$ )

- Mode

The mode is the number or value that occurs most frequently in a series. If, by some cruel twist of fate, two or more values occur with the same frequency, then you take the mean of the values. For our set, the mode would be 5, since it occurs 3 times, whereas all other numbers occur only once.

As you can see, the numbers can vary considerably, as can their significance. Therefore, the writer should always inform the reader which average he or she is using. Otherwise, confusion will inevitably ensue.

## 2. Match your facts with your questions

Be sure that your statistics actually apply to the point/argument you are making. If we return to our discussion of averages, depending on the question you are interesting in answering, you should use the proper statistics.

Perhaps an example would help illustrate this point. Your professor hands back the midterm. The grades are distributed as follows:

#### Grade # Received

100	4
98	5
95	2
63	4
58	6

The professor felt that the test must have been too easy, because the average (*MEDIAN*) grade was a 95.

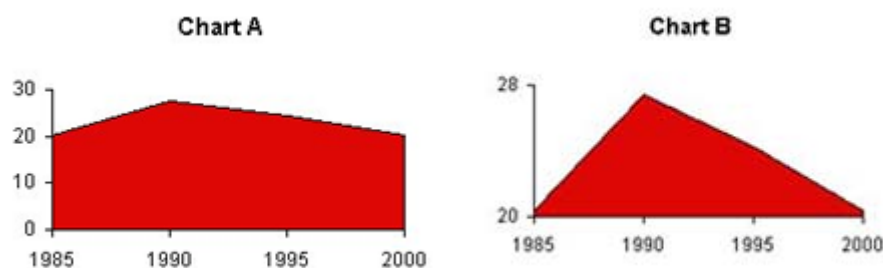
When a colleague asked her about how the midterm grades came out, she answered, knowing that her classes were gaining a reputation for being "too easy," that the average (*MEAN*) grade was an 80.

When your parents ask you how you can justify doing so poorly on the midterm, you answer, "Don't worry about my 63. It is not as bad as it sounds. The average (*MODE*) grade was a 58."

I will leave it up to you to decide whether these choices are appropriate. Selecting the appropriate facts or statistics will help your argument immensely. Not only will they actually support your point, but they will not undermine the legitimacy of your position. (Think about how your parents will react when they learn from the professor that the average (*MEDIAN*) grade was 95.) The best way to maintain precision is to specify which of the three forms of "average" you are using.

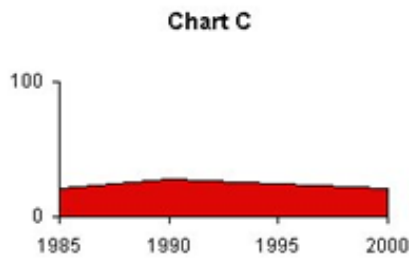
### 3. Show the entire picture

Sometimes, you may misrepresent your evidence by accident and misunderstanding. Other times, however, misrepresentation may be slightly less innocent. This can be seen most readily in visual aids. Do not shape and "massage" the representation so that it "best supports" your argument. This can be achieved by presenting charts/graphs in numerous different ways. Either the range can be shortened (to cut out data points which do not fit, e.g., starting a time series too late or ending it too soon), or the scale can be manipulated so that small changes look big and vice versa. Furthermore, do not fiddle with the proportions, either vertically or horizontally. The fact that *USA Today* seems to get away with these techniques does make them OK for an academic argument.

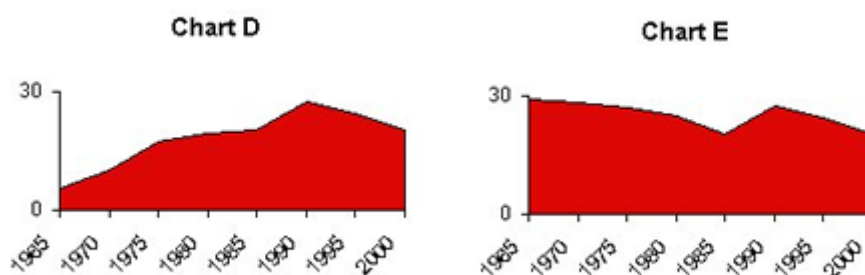


Charts A, B, and C all use the same data points, but the stories they seem to be telling are quite different. Chart A shows a mild increase, followed by a slow decline. Chart B, on the other hand, reveals a steep jump, with a sharp drop-off immediately following. Conversely, Chart C seems to demonstrate that there was virtually no change over time. These variations are a product of changing the scale of the chart. One

way to alleviate this problem is to supplement the chart by using the actual numbers in your text, in the spirit of full disclosure.



Another point of concern can be seen in Charts D and E. Both use the same data as charts A, B, and C for the years 1985-2000, but additional time points, using two hypothetical sets of data, have been added back to 1965. Given the different trends leading up to 1985, consider how the significance of recent events can change. In Chart D, the downward trend from 1990 to 2000 is going against a long-term upward trend, whereas in Chart E, it is merely the continuation of a larger downward trend after a brief upward turn.



One of the difficulties with visual aids is that there is no hard and fast rule about how much to include and what to exclude. Judgment is always involved. In general, be sure to present your visual aids so that your readers can draw their own conclusions from the facts and verify your assertions. If what you have cut out could affect the reader's interpretation of your data, then you might consider keeping it.

#### **4. Give bases of all percentages**

Because percentages are always derived from a specific base, they are meaningless until associated with a base. So even if I tell you that after this reading this handout, you will be 23% more persuasive as a writer, that is not a very meaningful assertion because you have no idea what it is based on—23% more persuasive than what?

Let's look at crime rates to see how this works. Suppose we have two cities, Springfield and Shelbyville. In Springfield, the murder rate has gone up 75%, while in Shelbyville, the rate has only increased by 10%. Which city is having a bigger murder problem? Well, that's obvious, right? It has to be Springfield. After all, 75% is bigger than 10%.

Hold on a second, because this is actually much less clear than it looks. In order to really know which city has a worse problem, we have to look at the actual numbers. If I told you that Springfield had 4 murders last year and 7 this year, and Shelbyville had 30 murders last year and 33 murders this year, would you change your answer? Maybe, since 33 murders are significantly more than 7. One would certainly feel safer in Springfield, right?

Not so fast, because we still do not have all the facts. We have to make the comparison between the two based on equivalent standards. To do that, we have to look at the per capita rate (often given in rates per 100,000 people per year). If Springfield has 700 residents while Shelbyville has 3.3 million, then Springfield has a murder rate of 1,000 per 100,000 people, and Shelbyville's rate is merely 1 per 100,000. Gadzooks! The residents of Springfield are dropping like flies. I think I'll stick with nice, safe Shelbyville, thank you very much.

Percentages are really no different from any other form of statistics: they gain their meaning only through their context. Consequently, percentages should be presented in context so that readers can draw their own conclusions as you emphasize facts important to your argument. Remember, if your statistics really do support your point, then you should have no fear of revealing the larger context that frames them.

## **Important questions to ask (and answer) about statistics**

- a. Is the question being asked relevant?
- b. Do the data come from reliable sources?
- c. Margin of error/confidence interval—when is a change really a change?
- d. Are all data reported, or just the best/worst?
- e. Are the data presented in context?
- f. Have the data been interpreted correctly?
- g. Does the author confuse correlation with causation?

## **Conclusion**

Now that you have learned the lessons of statistics, you have two options. Use this knowledge to manipulate your numbers to your advantage, or use this knowledge to better understand and use statistics to make accurate and fair arguments. The choice is yours. Nine out of ten writers, however, prefer the latter, and the other one later regrets his or her decision.

# Transitions

## What this handout is about

In this crazy, mixed-up world of ours, transitions glue our ideas and our essays together. This handout will introduce you to some useful transitional expressions and help you employ them effectively.

## The function and importance of transitions

In both academic writing and professional writing, your goal is to convey information clearly and concisely, if not to convert the reader to your way of thinking. Transitions help you to achieve these goals by establishing logical connections between sentences, paragraphs, and sections of your papers. In other words, transitions tell readers what to do with the information you present to them. Whether single words, quick phrases or full sentences, they function as signs for readers that tell them how to think about, organize, and react to old and new ideas as they read through what you have written.

Transitions signal relationships between ideas such as: "Another example coming up—stay alert!" or "Here's an exception to my previous statement" or "Although this idea appears to be true, here's the real story." Basically, transitions provide the reader with directions for how to piece together your ideas into a logically coherent argument. Transitions are not just verbal decorations that embellish your paper by making it sound or read better. They are words with particular meanings that tell the reader to think and react in a particular way to your ideas. In providing the reader with these important cues, transitions help readers understand the logic of how your ideas fit together.

## Signs that you might need to work on your transitions

How can you tell whether you need to work on your transitions? Here are some possible clues:

- Your mentor has given comments like "choppy," "jumpy," "abrupt," "flow," "need signposts," or "how is this related?" on your papers.
- Your readers (mentors, EE markers, friends, or classmates) tell you that they had trouble following your organization or train of thought.
- You tend to write the way you think—and your brain often jumps from one idea to another pretty quickly.
- You wrote your paper in several discrete "chunks" and then pasted them together.

## Organization

Since the clarity and effectiveness of your transitions will depend greatly on how well you have organized your paper, you may want to evaluate your paper's organization before you work on transitions. In the margins of your draft, summarize in a word or short phrase what each paragraph is about or how it fits into your analysis as a whole. This exercise should help you to see the order of and connection between your ideas more clearly.

If after doing this exercise you find that you still have difficulty linking your ideas together in a coherent fashion, your problem may not be with transitions but with organization.



## How transitions work

The organization of your written work includes two elements: (1) the order in which you have chosen to present the different parts of your discussion or argument, and (2) the relationships you construct between these parts. Transitions cannot substitute for good organization, but they can make your organization clearer and easier to follow. Take a look at the following example:

*El Pais*, a Latin American country, has a new democratic government after having been a dictatorship for many years. Assume that you want to argue that *El Pais* is not as democratic as the conventional view would have us believe. One way to effectively organize your argument would be to present the conventional view and then to provide the reader with your critical response to this view. So, in Paragraph A you would enumerate all the reasons that someone might consider *El Pais* highly democratic, while in Paragraph B you would refute these points. The transition that would establish the logical connection between these two key elements of your argument would indicate to the reader that the information in paragraph B contradicts the information in paragraph A. As a result, you might organize your argument, including the transition that links paragraph A with paragraph B, in the following manner:

**Paragraph A:** points that support the view that *El Pais's* new government is very democratic.

**Transition:** Despite the previous arguments, there are many reasons to think that *El Pais's* new government is not as democratic as typically believed.

**Paragraph B:** points that contradict the view that *El Pais's* new government is very democratic.

In this case, the transition words "Despite the previous arguments," suggest that the reader should not believe paragraph A and instead should consider the writer's reasons for viewing *El Pais's* democracy as suspect.

As the example suggests, transitions can help reinforce the underlying logic of your paper's organization by providing the reader with essential information regarding the relationship between your ideas. In this way, transitions act as the glue that binds the components of your argument or discussion into a unified, coherent, and persuasive whole.

## Types of transitions

Now that you have a general idea of how to go about developing effective transitions in your writing, let us briefly discuss the types of transitions your writing will use.

The types of transitions available to you are as diverse as the circumstances in which you need to use them. A transition can be a single word, a phrase, a sentence, or an entire paragraph. In each case, it functions the same way: first, the transition either directly summarizes the content of a preceding sentence, paragraph, or section or implies such a summary (by reminding the reader of what has come before). Then it helps the reader anticipate or comprehend the new information that you wish to present.



1. **Transitions between sections**—Particularly in longer works, it may be necessary to include transitional paragraphs that summarize for the reader the information just covered and specify the relevance of this information to the discussion in the following section.
2. **Transitions between paragraphs**—If you have done a good job of arranging paragraphs so that the content of one leads logically to the next, the transition will highlight a relationship that already exists by summarizing the previous paragraph and suggesting something of the content of the paragraph that follows. A transition between paragraphs can be a word or two (*however, for example, similarly*), a phrase, or a sentence. Transitions can be at the end of the first paragraph, at the beginning of the second paragraph, or in both places.
3. **Transitions within paragraphs**—As with transitions between sections and paragraphs, transitions within paragraphs act as cues by helping readers to anticipate what is coming before they read it. Within paragraphs, transitions tend to be single words or short phrases.

## Transitional expressions

Effectively constructing each transition often depends upon your ability to identify words or phrases that will indicate for the reader the *kind* of logical relationships you want to convey. The table below should make it easier for you to find these words or phrases. Whenever you have trouble finding a word, phrase, or sentence to serve as an effective transition, refer to the information in the table for assistance. Look in the left column of the table for the kind of logical relationship you are trying to express. Then look in the right column of the table for examples of words or phrases that express this logical relationship.

Keep in mind that each of these words or phrases may have a slightly different meaning. Consult a dictionary or writer's handbook if you are unsure of the exact meaning of a word or phrase.

LOGICAL RELATIONSHIP	TRANSITIONAL EXPRESSION
Similarity	also, in the same way, just as ... so too, likewise, similarly
Exception/Contrast	but, however, in spite of, on the one hand ... on the other hand, nevertheless, nonetheless, notwithstanding, in contrast, on the contrary, still, yet
Sequence/Order	first, second, third, ... next, then, finally
Time	after, afterward, at last, before, currently, during, earlier, immediately, later, meanwhile, now, recently, simultaneously, subsequently, then
Example	for example, for instance, namely, specifically, to illustrate

<b>Emphasis</b>	even, indeed, in fact, of course, truly
<b>Place/Position</b>	above, adjacent, below, beyond, here, in front, in back, nearby, there
<b>Cause and Effect</b>	accordingly, consequently, hence, so, therefore, thus
<b>Additional Support or Evidence</b>	additionally, again, also, and, as well, besides, equally important, further, furthermore, in addition, moreover, then
<b>Conclusion/Summary</b>	finally, in a word, in brief, briefly, in conclusion, in the end, in the final analysis, on the whole, thus, to conclude, to summarize, in sum, to sum up, in summary

## Passive Voice

### What this handout is about

This handout will help you understand what the passive voice is, why many professors and writing instructors frown upon it, and how you can revise your paper to achieve greater clarity. Some things here may surprise you. We hope this handout will help you to understand the passive voice and allow you to make more informed choices as you write.

### Myths

So what is the passive voice? First, let's be clear on what the passive voice isn't. Below, we'll list some common myths about the passive voice:

#### 1. Use of the passive voice constitutes a grammatical error.

Use of the passive voice is not a grammatical error. It's a stylistic issue that pertains to clarity—that is, there are times when using the passive voice can prevent a reader from understanding what you mean.

#### 2. Any use of "to be" (in any form) constitutes the passive voice.

The passive voice entails more than just using a being verb. Using "to be" can weaken the impact of your writing, but it is occasionally necessary and does not *by itself* constitute the passive voice.

### 3. The passive voice always avoids the first person; if something is in first person ("I" or "we") it's also in the active voice.

On the contrary, you can very easily use the passive voice in the first person. Here's an example: "I was hit by the dodgeball."

### 4. You should never use the passive voice.

While the passive voice can weaken the clarity of your writing, there are times when the passive voice is OK and even preferable.

### 5. I can rely on my grammar checker to catch the passive voice.

See Myth #1. Since the passive voice isn't a grammar error, it's not always caught. Typically, grammar checkers catch only a fraction of passive voice usage.

Do any of these misunderstandings sound familiar? If so, you're not alone. That's why we wrote this handout. It discusses how to recognize the passive voice, when you should avoid it, and when it's OK.

## Defining the passive voice

A passive construction occurs when you make the object of an action into the subject of a sentence. That is, whoever or whatever is performing the action is not the grammatical subject of the sentence. Take a look at this passive rephrasing of a familiar joke:

*Why was the road crossed by the chicken?*

Who is doing the action in this sentence? The **chicken** is the one doing the action in this sentence, but the chicken is not in the spot where you would expect the grammatical subject to be. Instead, the road is the grammatical subject. The more familiar phrasing (why did the chicken cross the road?) puts the actor in the subject position, the position of doing something—the chicken (the actor/doer) crosses the road (the object). We use active verbs to represent that "doing," whether it be crossing roads, proposing ideas, making arguments, or invading houses (more on that shortly).

Once you know what to look for, passive constructions are easy to spot. Look for a form of "to be" (*is, are, am, was, were, has been, have been, had been, will be, will have been, being*) followed by a past participle. (The past participle is a form of the verb that typically, but not always, ends in "-ed." Some exceptions to the "-ed" rule are words like "paid" (not "payed") and "driven." (not "drived"). Here's a sure-fire formula for identifying the passive voice:

*form of "to be" + past participle = passive voice*

For example:

*The metropolis has been scorched by the dragon's fiery breath.*

*When her house was invaded, Penelope had to think of ways to delay her remarriage.*

**Not every sentence that contains a form of "have" or "be" is passive!** Forms of the word "have" can do several different things in English. For example, in the sentence "John has to study all afternoon," "has" is not part of a past-tense verb. It's a modal verb, like "must," "can," or "may"—these verbs tell how necessary it is to do something (compare "I have to study" versus "I may study"). And forms of "be" are not always passive, either—"be" can be the main verb of a sentence that describes a state of being, rather than an action. For example, the sentence "John is a good student" is not passive; "is" is simply describing John's state of being. The moral of the story: don't assume that any time you see a form of "have" and a form of "to be" together, you are looking at a passive sentence.

Need more help deciding whether a sentence is passive? Ask yourself whether there is an action going on in the sentence. If so, what is at the front of the sentence? Is it the person or thing that does the action? Or is it the person or thing that has the action done to it? In a passive sentence, the object of the action will be in the subject position at the front of the sentence. As discussed above, the sentence will also contain a form of be and a past participle. If the subject appears at all, it will usually be at the end of the sentence, often in a phrase that starts with "by." Take a look at this example:

The fish was caught by the seagull.

If we ask ourselves whether there's an action, the answer is yes: a fish is being caught. If we ask what's at the front of the sentence, the actor or the object of the action, it's the object: the fish, unfortunately for it, got caught, and there it is at the front of the sentence. The thing that did the catching—the seagull—is at the end, after "by." There's a form of be (was) and a past participle (caught). This sentence is passive.

Let's briefly look at how to change passive constructions into active ones. You can usually just switch the word order, making the actor and subject one by putting the actor up front:

*The metropolis has been scorched by the dragon's fiery breath.*

becomes

*The dragon scorched the metropolis with his fiery breath.*

*When her house was invaded, Penelope had to think of ways to delay her remarriage.*

becomes

*After suitors invaded her house, Penelope had to think of ways to delay her remarriage.*

To repeat, the key to identifying the passive voice is to look for *both* a form of "to be" *and* a past participle, which usually, but not always, ends in "-ed."

## Clarity and meaning

The primary reason why your instructors frown on the passive voice is that they often have to guess what you mean. Sometimes, the confusion is minor. Let's look again at that sentence from a student's paper on Homer's *The Odyssey*:

*When her house was invaded, Penelope had to think of ways to delay her remarriage.*

Like many passive constructions, this sentence lacks explicit reference to the actor—it doesn't tell the reader *who* or *what* invaded Penelope's house. The active voice clarifies things:

*After suitors invaded Penelope's house, she had to think of ways to fend them off.*

Thus many instructors—the readers making sense of your writing—prefer that you use the active voice. They want you to specify who or what is doing the action. Compare the following two examples from an anthropology paper on a Laotian village to see if you agree.

(passive) *A new system of drug control laws was set up.* (By whom?)

(active) *The Lao People's Revolutionary Party set up a new system of drug control laws.*

Here's another example, from the same paper, that illustrates the lack of precision that can accompany the passive voice:

*Gender training was conducted in six villages, thus affecting social relationships.*

And a few pages later:

*Plus, marketing links were being established.*

In both paragraphs, the writer never specifies the actors for those two actions (*Who* did the gender training? *Who* established marketing links?). Thus the reader has trouble appreciating the dynamics of these social interactions, which depend upon the actors conducting and establishing these things.

The following example, once again from that paper on *The Odyssey*, typifies another instance where an instructor might desire more precision and clarity:

*Although Penelope shares heroic characteristics with her husband, Odysseus, she is not considered a hero.*

*Who* does not consider Penelope a hero? It's difficult to tell, but the rest of that paragraph suggests that the *student* does not consider Penelope a hero (the topic of the paper). The reader might also conceivably think that the student is referring to critics, scholars, or modern readers of *The Odyssey*. One might argue that the meaning comes through here—the problem is merely stylistic. Yet style affects how your reader understands your argument and content. Awkward or unclear style prevents your reader from appreciating the ideas that are so clear to *you* when you write. Thus knowing how your reader might react enables you to make more effective choices when you revise. So after you identify instances of the passive, you should consider whether your use of the passive inhibits clear understanding of what you mean.

## **Summarizing history or literary plots with the passive voice: don't be a lazy thinker or writer!**

With the previous section in mind, you should also know that some instructors proclaim that the passive voice signals sloppy, lazy thinking. These instructors argue that writers who overuse the passive voice have not fully thought through what they are discussing and that this makes for imprecise arguments. Consider these sentences from papers on American history:

*The working class was marginalized.*  
*African Americans were discriminated against.*  
*Women were not treated as equals.*

Such sentences lack the precision and connection to context and cause that mark rigorous thinking. The reader learns little about the systems, conditions, human decisions, and contradictions that produced these groups' experiences of oppression. And so the reader—the instructor—questions the writer's understanding of these things.

It is especially important to be sure that your thesis statement is clear and precise, so think twice before using the passive voice in your thesis.

In papers where you discuss the work of an author—e.g., a historian or writer of literature—you can also strengthen your writing by not relying on the passive as a crutch when summarizing plots or arguments. Instead of writing

*It is argued that...*  
*or Tom and Huck are portrayed as...*  
*or And then the link between X and Y is made, showing that...*

you can heighten the level of your analysis by explicitly connecting an author with these statements:

*Anderson argues that...*  
*Twain portrays Tom and Huck as...*  
*Ishiguro draws a link between X and Y to show that...*

By avoiding passive constructions in these situations, you can demonstrate a more thorough understanding of the material you discuss.

## Scientific writing

All this advice works for papers in the humanities, you might note—but what about technical or scientific papers, including lab reports? Many instructors recommend or even require the passive voice in such writing. The rationale for using the passive voice in scientific writing is that it achieves "an objective tone"—for example, by avoiding the first person. To consider scientific writing, let's break it up into two main types: lab reports and writing about a scientific topic or literature.

### Lab reports

Although more and more scientific journals accept or even prefer first-person active voice (e.g., "then we sequenced the human genome"), some of your instructors may want you to remove yourself from your lab report by using the passive voice (e.g., "then the human genome was sequenced" rather than "then we sequenced the human genome"). Such advice particularly applies to the section on Materials and Methods, where a procedure "is followed."

While you might employ the passive voice to retain objectivity, you can still use active constructions in some instances and retain your objective stance. Thus it's useful to keep in mind the sort of active verbs you might use in lab reports. Examples include: support, indicate, suggest, correspond, challenge, yield, show.

Thus instead of writing

*A number of things are indicated by these results.*

you could write

*These results indicate a number of things.*

or *Further analysis showed/suggested/yielded...*

Ultimately, you should find out your instructor's preference regarding your use of the passive in lab reports.

## **Writing about scientific topics**

In some assignments, rather than reporting the results of your own scientific work, you will be writing about the work of other scientists. Such assignments might include literature reviews and research reports on scientific topics. You have two main possible tasks in these assignments: reporting what other people have done (their research or experiments) or indicating general scientific knowledge (the body of knowledge coming out of others' research). Often the two go together. In both instances, you can easily use active constructions even though you might be tempted by the passive—especially if you're used to writing your own lab reports in the passive.

You decide: Which of these two examples is clearer?

*Heart disease is considered the leading cause of death in the United States.* (passive)

or *Research points to heart disease as the leading cause of death in the United States.* (active)

Alternatively, you could write this sentence with human actors:

*Researchers have concluded that heart disease is the leading cause of death in the United States.*

The last two sentences illustrate a relationship that the first one lacks. The first example does not tell who or what leads us to accept this conclusion about heart disease.

Here's one last example from a report that describes angioplasty. Which sounds better to you?

*The balloon is positioned in an area of blockage and is inflated.*

or *The surgeon positions the balloon in an area of blockage and inflates it.*

You can improve your scientific writing by relying less on the passive. The advice we've given for papers on history or literature equally applies to papers in more "scientific" courses. No matter what field you're writing in, when you use the passive voice, you risk conveying to your reader a sense of uncertainty and imprecision regarding your writing and thinking.

## **"Swindles and perversions"**

Before we discuss a few instances when the passive might be preferable, we should mention one of the more political uses of the passive: to hide blame or obscure responsibility. *You* wouldn't do this, but you can learn how to become a critic of those who exhibit what George Orwell included among the "swindles and perversions" of writing. For example:



*Mistakes were made.*

*The Exxon Company accepts that a few gallons might have been spilled.*

By becoming critically aware of how others use language to shape clarity and meaning, you can learn how better to revise your own work. Keep Orwell's swindles and perversions in mind as you read other writers. Because it's easy to leave the actor out of passive sentences, some people use the passive voice to avoid mentioning who is responsible for certain actions.

## So when is it OK to use the passive?

Sometimes the passive voice is the best choice. Here are a few instances when the passive voice is quite useful:

**1. To emphasize an object.** Take a look at this example:

*100 votes are required to pass the bill.*

This passive sentence emphasizes the number of votes required. An active version of the sentence ("The bill requires 100 votes to pass") would put the emphasis on the bill, which may be less dramatic.

**2. To de-emphasize an unknown subject/actor. Consider this example:**

*Over 120 different contaminants have been dumped into the river.*

If you don't know who the actor is—in this case, if you don't actually know who dumped all of those contaminants in the river—then you may need to write in the passive. But remember, if you do know the actor, and if the clarity and meaning of your writing would benefit from indicating him/her/it/them, then use an active construction. Yet consider the third case.

**3. If your readers don't need to know who's responsible for the action.**

Here's where your choice can be difficult; some instances are less clear than others. Try to put yourself in your reader's position to anticipate how he/she will react to the way you have phrased your thoughts. Here are two examples:

*Baby Sophia was delivered at 3:30 a.m. yesterday.*(passive)

and

*Dr. Susan Jones delivered baby Sophia at 3:30 a.m. yesterday.*(active)

The first sentence might be more appropriate in a birth announcement sent to family and friends—they are not likely to know Dr. Jones and are much more interested in the "object"(the baby) than in the actor (the doctor). A hospital report of yesterday's events might be more likely to focus on Dr. Jones' role.



# Summary of strategies

## Identify

- Look for the passive voice: "to be" + a past participle (usually, but not always, ending in "-ed")
- If you don't see both components, move on.
- Does the sentence describe an action? If so, where is the actor? Is he/she/it in the grammatical subject position (at the front of the sentence) or in the object position (at the end of the sentence, or missing entirely)?
- Does the sentence end with "by..."? Many passive sentences include the actor at the end of the sentence in a "by" phrase, like "The ball was hit **by the player**" or "The shoe was chewed up **by the dog**." "By" by itself isn't a conclusive sign of the passive voice, but it can prompt you to take a closer look.

## Evaluate

- Is the doer/actor indicated? Should you indicate him/her/it?
- Does it really matter who's responsible for the action?
- Would your reader ask you to clarify a sentence because of an issue related to your use of the passive?
- Do you use a passive construction in your thesis statement?
- Do you use the passive as a crutch in summarizing a plot or history, or in describing something?
- Do you want to emphasize the object?

## Revise

- If you decide that your sentence would be clearer in the active voice, switch the sentence around to make the subject and actor one. Put the actor (the one doing the action of the sentence) in front of the verb.

## Towards active thinking and writing

We encourage you to keep these tips in mind as you revise. While you may be able to employ this advice as you write your first draft, that's not necessarily always possible. In writing, clarity often comes when you revise, not on your first try. Do not worry about the passive if that stress inhibits you in getting your ideas down on paper. But do look for it when you revise. Actively make choices about its proper place in your writing. There is nothing grammatically or otherwise "wrong" about using the passive voice. The key is to recognize when you should, when you shouldn't, and when your instructor just doesn't want you to. These choices are yours. We hope this handout helps you to make them.

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## Commas

### What this handout is about

This handout offers seven easy steps to becoming a comma superhero.

### Commas, commas, and more commas

Commas help your reader figure out which words go together in a sentence and which parts of your sentences are most important. Using commas incorrectly may confuse the reader, signal ignorance of writing rules, or indicate carelessness. Although using commas correctly may seem mysterious, it can be easy if you follow a few guidelines.

#### Beware of popular myths of comma usage:

- **MYTH: Long sentences need a comma.** A really long sentence may be perfectly correct without commas. The length of a sentence does not determine whether you need a comma.
- **MYTH: You should add a comma wherever you pause.** Where you pause or breathe in a sentence does not reliably indicate where a comma belongs. Different readers pause or breathe in different places.
- **MYTH: Commas are so mysterious that it's impossible to figure out where they belong!** Some rules are flexible, but most of the time, commas belong in very predictable places. You can learn to identify many of those places using the tips in this handout.

You probably already know at least one of the following guidelines and just have to practice the others. These guidelines are basically all you need to know; if you learn them once, you're set for most situations.

# 1. Introductory bits (small-medium-large)

Setting off introductory words, phrases, or clauses with a comma lets the reader know that the main subject and main verb of the sentence come later. There are basically three kinds of introductory bits: small, medium, and large ones. No matter what size they are, *an introductory bit cannot stand alone as a complete thought. It simply introduces the main subject and verb.*

There are small (just one word) introductory bits:

***Generally**, extraterrestrials are friendly and helpful.*

***Moreover**, some will knit booties for you if you ask nicely.*

There are medium introductory bits. Often these are two- to four-word prepositional phrases or brief *-ing* and *-ed* phrases:

***In fact**, Godzilla is just a misunderstood teen lizard of giant proportions.*

***Throughout his early life**, he felt a strong affinity with a playful dolphin named Flipper.*

***Frankly speaking**, Godzilla wanted to play the same kinds of roles that Flipper was given.*

***Dissatisfied with destruction**, he was hoping to frolick in the waves with his Hollywood friends.*

There are large introductory bits (more than 4 words). You can often spot these by looking for key words/groups such as *although*, *if*, *as*, *in order to*, and *when*:

***If you discover that you feel nauseated**, then you know you've tried my Clam Surprise.*

***As far as I am concerned**, it is the best dish for dispatching unwanted guests.*

## 2. FANBOYS

**FANBOYS** is a handy mnemonic device for remembering the coordinating conjunctions: For, And, Nor, But, Or, Yet, So. These words function as connectors. They can connect words, phrases, and clauses, like this:

**Words:** I am almost *dressed* **and** *ready*.

**Phrases:** My socks are *in the living room* **or** *under my bed*.

**Clauses:** *They smell really bad*, **so** *they will be easy to find*.

Notice the comma in the final example. You should always have a comma before **FANBOYS** that join two independent clauses (two subjects and two verbs that make up two complete thoughts). Look carefully at the next two sentences to see two independent clauses separated by **comma + FANBOYS**.

You wore a lovely hat, but you didn't wear anything else.
   
 My hamster loved to play, so I gave him a hula-hoop.

If you do not have two subjects and two verbs separated by the **FANBOYS**, you do not need to insert the comma before the **FANBOYS**. In other words, if the second grouping of words isn't a complete thought, don't use a comma. Try reading the words after **FANBOYS** all by themselves. Do they make a complete thought?

You wore a lovely hat but didn't wear anything else.
   
 My hamster loved to play and often ate marshmallows.

You can read your own writing in the same way. Read what comes after **FANBOYS** all by itself. If it's a complete thought, you need a comma. If not, you don't.

### 3. The dreaded comma splice

If you don't have **FANBOYS** between the two complete and separate thoughts, using a comma alone causes a "comma splice" or "fused sentence" (some instructors may call it a run-on). Some readers (especially professors) will think of this as a serious error.

**BAD:** *My hamster loved to play, I gave him a hula-hoop.*

**ALSO BAD:** *You wore a lovely hat, it was your only defence.*

To fix these comma splices, you can do one of four simple things: just add **FANBOYS**, change the comma to a semicolon, make each clause a separate sentence, or add a subordinator (a word like *because, while, although, if, when, since*, etc.)

**GOOD:** *You wore a lovely hat, for it was your only defence.*

**ALSO GOOD:** *You wore a lovely hat; it was your only defence.*

**STILL GOOD:** *You wore a lovely hat. It was your only defence.*

**TOTALLY GOOD:** *You wore a lovely hat because it was your only defence.*

### 4. FANBOY fakers

*However, therefore, moreover*, and other words like them are *not* **FANBOYS** (they are called conjunctive adverbs). They go between two complete thoughts, just like **FANBOYS**, but they take different punctuation. Why? Who cares? You just need to recognize that they are **not** **FANBOYS** (for, and, nor, but, or, yet, so—remember?), and you'll make the right choice.

When you want to use one of these words, you have two good choices. Check to see if you have a complete thought on both sides of the "conjunctive adverb." If you do, then you can use a period to make two sentences, or you can use a semicolon after the first complete thought. Either way, you'll use a comma after the faker in the second complete thought. Notice the subtle differences in punctuation here:

GOOD: Basketball is my favourite sport. *However*, table tennis is where I excel.

ALSO GOOD: Basketball is my favourite sport; *however*, table tennis is where I excel.

BAD: Basketball is my favourite sport, *however* table tennis is where I excel.

ALSO BAD: Basketball is my favourite sport, *however*, table tennis is where I excel.

## 5. X,Y, and Z

Put commas between items in a list. When giving a short and simple list of things in a sentence, the last comma (right before the conjunction—usually *and* or *or*) is optional, but it is never wrong. If the items in the list are longer and more complicated, you should always place a final comma before the conjunction.

EITHER: *You can buy life, liberty, and the pursuit of happiness in Los Angeles.*

OR: *You can buy life, liberty and the pursuit of happiness in Los Angeles.*

BUT ALWAYS: *A good student listens to his teachers without yawning, reads once in a while, and writes papers before they are due.*

## 6. Describers

If you have two or more adjectives (words that describe) that are *not* joined by a conjunction (usually *and*) and both/all adjectives modify the same word, put a comma between them.

*He was a bashful, dopey, sleepy dwarf.*

*The frothy, radiant princess kissed the putrid, vile frog.*

## 7. Interrupters

Two commas can be used to set off additional information that appears within the sentence but is separate from the primary subject and verb of the sentence. These commas help your reader figure out your main point by telling him or her that the words within the commas are not necessary to understand the rest of the sentence. In other words, you should be able to take out the section framed by commas and still have a complete and clear sentence.

*Bob Mills, a sophomore from Raleigh, was the only North Carolina native at the Japanese food festival in Cary.*

*Aaron thought he could see the future, not the past, in the wrinkles on his skin.*

*My chemistry book, which weighs about 100 pounds, has some really great examples.*

To see if you need commas around an interrupter, try taking the interrupter out of the sentence completely. If the sentence is still clear without the interrupter, then you probably need the commas.

## **Congratulations! You know how to use commas!**

**But wait—is there more?**

These guidelines cover the most common situations in writing, but you may have a stickier question. Below are some suggestions for finding some of the many other resources at your disposal.

If you are worried about punctuation in general, pick up a writing handbook from the library or the University bookstore. You'll find a list of handy resources below.

## **Works consulted**

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Kolln, Martha. *Understanding English Grammar*. New York: MacMillan Publishing Company, 2005.

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O'Conner, Patricia T. *Woe Is I*. New York: Riverhead Books, 2003.

# **Conclusions**

## **What this handout is about**

This handout will explain the functions of conclusions, offer strategies for writing effective ones, help you evaluate your drafted conclusions, and suggest conclusion strategies to avoid.

## **About conclusions**

Introductions and conclusions can be the most difficult parts of papers to write. While the body is often easier to write, it needs a frame around it. An introduction and conclusion frame your thoughts and bridge your ideas for the reader.

Just as your introduction acts as a bridge that transports your readers from their own lives into the "place" of your analysis, your conclusion can provide a bridge to help your readers make the transition

back to their daily lives. Such a conclusion will help them see why all your analysis and information should matter to them after they put the paper down.

Your conclusion is your chance to have the last word on the subject. The conclusion allows you to have the final say on the issues you have raised in your paper, to summarize your thoughts, to demonstrate the importance of your ideas, and to propel your reader to a new view of the subject. It is also your opportunity to make a good final impression and to end on a positive note.

Your conclusion can go beyond the confines of the assignment. The conclusion pushes beyond the boundaries of the prompt and allows you to consider broader issues, make new connections, and elaborate on the significance of your findings.

Your conclusion should make your readers glad they read your paper. Your conclusion gives your reader something to take away that will help them see things differently or appreciate your topic in personally relevant ways. It can suggest broader implications that will not only interest your reader, but also enrich your reader's life in some way. It is your gift to the reader.

## Strategies for writing an effective conclusion

One or more of the following strategies may help you write an effective conclusion.

- Play the "So What" Game. If you're stuck and feel like your conclusion isn't saying anything new or interesting, ask a friend to read it with you. Whenever you make a statement from your conclusion, ask the friend to say, "So what?" or "Why should anybody care?" Then ponder that question and answer it. Here's how it might go:

You: *Basically, I'm just saying that education was important to Douglass.*

Friend: *So what?*

You: *Well, it was important because it was a key to him feeling like a free and equal citizen.*

Friend: *Why should anybody care?*

You: *That's important because plantation owners tried to keep slaves from being educated so that they could maintain control. When Douglass obtained an education, he undermined that control personally.*

You can also use this strategy on your own, asking yourself "So What?" as you develop your ideas or your draft.

- Return to the theme or themes in the introduction. This strategy brings the reader full circle. For example, if you begin by describing a scenario, you can end with the same scenario as proof that your essay is helpful in creating a new understanding. You may also refer to the introductory paragraph by using key words or parallel concepts and images that you also used in the introduction.



- Synthesize, don't summarize: Include a brief summary of the paper's main points, but don't simply repeat things that were in your paper. Instead, show your reader how the points you made and the support and examples you used fit together. Pull it all together.
- Include a provocative insight or quotation from the research or reading you did for your paper.
- Propose a course of action, a solution to an issue, or questions for further study. This can redirect your reader's thought process and help her to apply your info and ideas to her own life or to see the broader implications.
- Point to broader implications. For example, if your paper examines the Greensboro sit-ins or another event in the Civil Rights Movement, you could point out its impact on the Civil Rights Movement as a whole. A paper about the style of writer Virginia Woolf could point to her influence on other writers or on later feminists.

## Strategies to avoid

- Beginning with an unnecessary, overused phrase such as "in conclusion," "in summary," or "in closing." Although these phrases can work in speeches, they come across as wooden and trite in writing.
- Stating the thesis for the very first time in the conclusion.
- Introducing a new idea or subtopic in your conclusion.
- Ending with a rephrased thesis statement without any substantive changes.
- Making sentimental, emotional appeals that are out of character with the rest of an analytical paper.
- Including evidence (quotations, statistics, etc.) that should be in the body of the paper.

## Four kinds of ineffective conclusions

1. The "That's My Story and I'm Sticking to It" Conclusion. This conclusion just restates the thesis and is usually painfully short. It does not push the ideas forward. People write this kind of conclusion when they can't think of anything else to say. Example: In conclusion, Frederick Douglass was, as we have seen, a pioneer in American education, proving that education was a major force for social change with regard to slavery.
2. The "Sherlock Holmes" Conclusion. Sometimes writers will state the thesis for the very first time in the conclusion. You might be tempted to use this strategy if you don't want to give everything away too early in your paper. You may think it would be more dramatic to keep the reader in the dark until the end and then "wow" him with your main idea, as in a Sherlock Holmes mystery. The reader, however, does not expect a mystery, but an analytical discussion of your topic in an academic style, with the main argument (thesis) stated up front. Example: (After a paper that lists numerous incidents from the book but never says what these incidents reveal about Douglass and his views on education): So, as the evidence above demonstrates, Douglass saw education as a way to undermine the slaveholders' power and also an important step toward freedom.
3. The "America the Beautiful"/"I Am Woman"/"We Shall Overcome" Conclusion. This kind of conclusion usually draws on emotion to make its appeal, but while this emotion and even sentimentality may be very heartfelt, it is usually out of character with the rest of an analytical paper. A more sophisticated commentary, rather than emotional praise, would be a more fitting tribute to the topic. Example: Because of the efforts of fine Americans like Frederick Douglass, countless others have seen the shining beacon of light that is education. His example was a torch that lit the way for others. Frederick Douglass was truly an American hero.



4. The "Grab Bag" Conclusion. This kind of conclusion includes extra information that the writer found or thought of but couldn't integrate into the main paper. You may find it hard to leave out details that you discovered after hours of research and thought, but adding random facts and bits of evidence at the end of an otherwise-well-organized essay can just create confusion. Example: In addition to being an educational pioneer, Frederick Douglass provides an interesting case study for masculinity in the American South. He also offers historians an interesting glimpse into slave resistance when he confronts Covey, the overseer. His relationships with female relatives reveal the importance of family in the slave community.

## Works consulted

All quotations are from:

Douglass, Frederick. *Narrative of the Life of Frederick Douglass, an American Slave*, edited and with introduction by Houston A. Baker, Jr., New York: Penguin Books, 1986.

Strategies for Writing a Conclusion. Literacy Education Online, St. Cloud State University. 18 May 2005 <<http://leo.stcloudstate.edu/acadwrite/conclude.html>>.

Conclusions. Nesbitt-Johnston Writing Center, Hamilton College. 17 May 2005 <<http://www.hamilton.edu/academic/Resource/WC/SampleConclusions.html>>.

## Making Note Cards

Ask these questions:

### Why do it?

Good note-taking strategies will help you read with more understanding and also save time and frustration when you write your extended essay. It is useful to take notes on index cards because it gives you the flexibility to change the order of your notes and group them together easily. You can buy a few packages of 4x6 index cards at most stationery stores.

### What to do before you begin?

1. **Know what kind of ideas you need to record**

Focus your approach to the topic before you start detailed research. Then you will read with a purpose in mind, and you will be able to sort out relevant ideas.

2. **Don't write down too much**

Your extended essay must be an expression of your own thinking, not a patchwork of borrowed ideas. Plan therefore to invest your research time in understanding your sources and integrating them into your own thinking. Use your note cards to record only ideas that are relevant to your focus on the topic; and summarize rather than copy out or paraphrase.

3. **Label your notes clearly**

This will save valuable time when organizing and writing your extended essay. Colour coding the arguments or relevant facts may also assist you in evaluating the amount and quality of your research gathered for each argument.

## How do I do it?

1. Write the subtopic heading of the note at the top of each note card.
2. Write only one main point on a note card
3. Only write information directly related to your Thesis.
4. Write only essential words, abbreviate when possible.
5. Be accurate: double check direct quotes and statistics.
6. Identify direct quotes with quotation marks and the person's name.
7. Bracket your own words [ ] when you add them into a quote.
8. Use ellipsis points (...) where you leave out non-essential words from a quote.
9. Distinguish between 'fact' and 'opinion'.
10. Include the source reference on the card.
11. Write the page number of the source after the note.
12. Evaluation of Source -- at the bottom of the note card provides a brief overview of the Origin, Purpose, Value and Limitation for the source. (Optional)
13. Use the word 'over' to indicate information on the back of the card.

## Sample Note Card

### FDR's Leadership

**Source:** Robert S. Mc Elvaine, *The Great Depression: America, 1929-1941* (1993)

**Quote:** "FRD's Leadership explains less about the changes the US underwent in the 1930s than does a fundamental shift in the values of the American people" {page 341}

**Opinion:** Foreign policy has been ignored except in those cases where it was directly related to the American Depression.

**Analysis:** Ties made between 1984 Regan's election and 1936 Democratic presidential nomination of FDR.

#### Evaluation of Source:

This book combines social and political history as to achieve a fuller comprehension of the biggest crisis Americans have faced in this century, the attempts to deal with that crisis and the resulting alternation of the nation's attitudes and politics. The Point of view of the source is Traditionalist - McElvaine's account of the Great Depression in the United States is a straightforward narrative, largely chronological. **over**

# Extended Essay

## Format & Structure



# The First Draft

This section covers supporting the submission of the first draft and your responsibilities in relation to providing feedback on the first draft.

## Writing a checklist

Another suggestion put forward by many experienced supervisors involves a checklist for the first draft and the final presentation copy.

There are many variations of the checklist:

- The first and most basic form of the checklist is one that is used by the student to guide them when presenting their first draft.
- The supervisor when reading through the first draft can use a similar checklist. This can be a little more sophisticated involving the dimensions of critical analysis, historical judgement and historical understanding.
- Both of these checklists can be used again, with some appropriate adjustments, for the final presentation copy.

They should include the following examples:

## Checking references and bibliographies

It is advisable to remind your students before the date for handing in the first draft that you do expect correct referencing and so on and remind them how to do it.

## Word count

This restriction is strictly enforced. Examiners are told not to read or mark beyond the 4,000 words if this is exceeded.

## *The first draft: Checklist*

As a start you should ensure that students include in their submission the following elements:

- research question
- contents page
- page numbers
- correct and consistent reference notes
- conclusion
- bibliography
- abstract.

## What about the abstract?

Please note: the abstract should not be written until the essay has been completed.

## Problems to look for:

### Essays with

- no research question and poor titles
- unsuitable and/or, too wide topics
- too long introductions
- weak and inconsistent referencing
- essays with only quotations referenced
- bibliographies not listed correctly,
- lack of focus for example, the essay answers a different question
- essays which exceed the word limit, and lie about it.

### *Identifying the easy marks*

*"A surprising number of essays would score 5, even 8 marks more with careful attention to such basic points"*

*Extended essay report (History) - May 2003*

### Saving marks the easy way

When asked, a principal examiner will frequently identify where the students lose easy marks. From their long experience of assessment, they have identified for this workshop where marks can be, (and are), lost:

Criteria	Problem	Marks lost
A	no research question (or thesis statement)	2
E	no conclusion	2
F	no abstract	2
	abstract exceeds 300 words	
G	research question, scope or conclusion is missing	
	essays exceeds 4,000 words	at least 3
	no contents page, page numbers	up to 3
J	no evaluation of sources	3

# Revising Drafts

*Rewriting is the essence of writing well—where the game is won or lost.*  
—William Zinsser

## What this handout is about

This handout will motivate you to revise your drafts and give you strategies to revise effectively.

## What does it mean to revise?

Revision literally means to "see again," to look at something from a fresh, critical perspective. It is an ongoing process of rethinking the paper: reconsidering your arguments, reviewing your evidence, refining your purpose, reorganizing your presentation, reviving stale prose.

## But I thought revision was just fixing the commas and spelling.

Nope. That's called proofreading. It's an important step before turning your paper in, but if your ideas are predictable, your thesis is weak, and your organization is a mess, then proofreading will just be putting a band-aid on a bullet wound. When you finish revising, that's the time to proofread.

## How about if I just reword things: look for better words, avoid repetition, etc.? Is that revision?

Well, that's a part of revision called editing. It's another important final step in polishing your work. But if you haven't thought through your ideas, then rephrasing them won't make any difference.

## Why is revision important?

Writing is a process of discovery, and you don't always produce your best stuff when you first get started. So revision is a chance for you to look critically at what you have written to see

- if it's really worth saying,
- if it says what you wanted to say, and
- if a reader will understand what you're saying.

## The process

### What steps should I use when I begin to revise?

Here are several things to do. But don't try them all at one time. Instead, focus on two or three main areas during each revision session.

- Wait awhile after you've finished a draft before looking at it again. The Roman poet Horace thought one should wait nine years, but that's a bit much. A day—a few hours even—will work. When you do return to the draft, be honest with yourself, and don't be lazy. Ask yourself what you really think about the paper.
- As the Scott Foresman Handbook for Writers puts it, "THINK BIG, don't tinker" (61). At this stage, you should be concerned with the large issues in the paper, not the commas.
- Check the focus of the paper: Is it appropriate to the assignment? Is the topic too big or too narrow? Do you stay on track through the entire paper?
- Think honestly about your thesis: Do you still agree with it? Should it be modified in light of something you discovered as you wrote the paper? Does it make a sophisticated, provocative point, or does it just say what anyone could say if given the same topic? Does your thesis generalize instead of taking a specific position? Should it be changed altogether?
- Think about your purpose in writing: Does your introduction state clearly what you intend to do? Will your aims be clear to your readers?

### **What are some other steps I should consider in later stages of the revision process?**

- Examine the balance within your paper: Are some parts out of proportion with others? Do you spend too much time on one trivial point and neglect a more important point? Do you give lots of detail early on and then let your points get thinner by the end?
- Check that you have kept your promises to your readers: Does your paper follow through on what the thesis promises? Do you support all the claims in your thesis? Are the tone and formality of the language appropriate for your audience?
- Check the organization: Does your paper follow a pattern that makes sense? Do the transitions move your readers smoothly from one point to the next? Do the topic sentences of each paragraph appropriately introduce what that paragraph is about? Would your paper work better if you moved some things around? Check your information: Are all your facts accurate? Are any of your statements misleading? Have you provided enough detail to satisfy readers' curiosity? Have you cited all your information appropriately?
- Check your conclusion: Does the last paragraph tie the paper together smoothly and end on a stimulating note, or does the paper just die a slow, redundant, lame, or abrupt death?

### **Whoa! I thought I could just revise in a few minutes.**

Sorry. You may want to start working on your next paper early so that you have plenty of time for revising. That way you can give yourself some time to come back to look at what you've written with a fresh pair of eyes. It's amazing how something that sounded brilliant the moment you wrote it can prove to be less-than-brilliant when you give it a chance to incubate.

### **But I don't want to rewrite my whole paper!**

Revision doesn't necessarily mean rewriting the whole paper. Sometimes it means revising the thesis to match what you've discovered while writing. Sometimes it means coming up with stronger arguments to defend your position, or coming up with more vivid examples to illustrate your points. Sometimes it

means shifting the order of your paper to help the reader follow your argument, or to change the emphasis of your points. Sometimes it means adding or deleting material for balance or emphasis. And then, sadly, sometimes revision does mean trashing your first draft and starting from scratch. Better that than having the teacher trash your final paper.

### **But I work so hard on what I write that I can't afford to throw any of it away.**

If you want to be a polished writer, then you will eventually find out that you can't afford NOT to throw stuff away. As writers, we often produce lots of material that needs to be tossed. The idea or metaphor or paragraph that I think is most wonderful and brilliant is often the very thing that confuses my reader or ruins the tone of my piece or interrupts the flow of my argument. A writing teacher once told my class to "Kill your babies." Sorry for the grim image, but she meant that writers must be willing to sacrifice their favourite bits of writing for the good of the piece as a whole. In order to trim things down, though, you first have to have plenty of material on the page. One trick is not to hinder yourself while you are composing the first draft because the more you produce, the more you will have to work with when cutting time comes.

### **But sometimes I revise as I go.**

That's OK. Since writing is a circular process, you don't do everything in some specific order. Sometimes you write something and then tinker with it before moving on. But be warned: there are two potential problems with revising as you go. One is that if you revise only as you go along, you never get to think of the big picture. The key is still to give yourself enough time to look at the essay as a whole once you've finished. Another danger to revising as you go is that you may short-circuit your creativity. If you spend too much time tinkering with what is on the page, you may lose some of what hasn't yet made it to the page. Here's a tip: Don't proofread as you go. You may waste time correcting the commas in a sentence that may end up being cut anyway.

### **How do I go about the process of revising? Any tips?**

- Work from hardcopy; it's easier on the eyes. Also, problems that seem invisible on the screen somehow tend to show up better on paper.
- Another tip is to read the paper out loud. That's one way to see how well things flow.
- Remember all those questions listed above? Don't try to tackle all of them in one draft. Pick a few "agendas" for each draft so that you won't go mad trying to see all at once if you've done everything.
- Ask lots of questions and don't flinch from answering them truthfully. For example, ask if there are opposing viewpoints that you haven't considered yet.

## **Concerns**

### **Whenever I revise, I just make things worse. I do my best work without revising.**

That's a common misconception that sometimes arises from fear, sometimes from laziness. The truth is, though, that except for those rare moments of inspiration or genius when the perfect ideas expressed in the perfect words in the perfect order flow gracefully and effortlessly from the mind, all experienced



writers revise their work. I wrote six drafts of this handout. Hemingway rewrote the last page of *A Farewell to Arms* thirty-nine times. If you're still not convinced, re-read some of your old papers. How do they sound now? What would you revise if you had a chance?

### **What can get in the way of good revision strategies?**

Don't fall in love with what you have written. If you do, you will be hesitant to change it even if you know it's not great. Start out with a working thesis, and don't act like you're married to it. Instead, act like you're dating it, seeing if you're compatible, finding out what it's like from day to day. If a better thesis comes along, let go of the old one. Also, don't think of revision as just rewording. It is a chance to look at the entire paper, not just isolated words and sentences.

### **What happens if I find that I no longer agree with my own point?**

If you take revision seriously, sometimes the process will lead you to questions you cannot answer, objections or exceptions to your thesis, cases that don't fit, loose ends or contradictions that just won't go away. If this happens (and it will if you think long enough), then you have several choices. You could choose to ignore the loose ends and hope your reader doesn't notice them, but that's risky. You could change your thesis completely to fit your new understanding of the issue, or you could adjust your thesis slightly to accommodate the new ideas. Or you could simply acknowledge the contradictions and show why your main point still holds up in spite of them. Most readers know there are no easy answers, so they may be annoyed if you give them a thesis and try to claim that it is always true with no exceptions no matter what.

### **How do I get really good at revising?**

The same way you get really good at golf, piano, or a video game—do it often. Take revision seriously, be disciplined, and set high standards for yourself. Here are three more tips:

- The more you produce, the more you can cut.
- The more you can imagine yourself as a reader looking at this for the first time, the easier it will be to spot potential problems.
- The more you demand of yourself in terms of clarity and elegance, the clearer and more elegant your writing will be.

### **How do I revise at the sentence level?**

Read your paper out loud, sentence by sentence, and follow Peter Elbow's advice: "Look for places where you stumble or get lost in the middle of a sentence. These are obvious awkwardness's that need fixing. Look for places where you get distracted or even bored—where you cannot concentrate. These are places where you probably lost focus or concentration in your writing. Cut through the extra words or vagueness or digression; get back to the energy. Listen even for the tiniest jerk or stumble in your reading, the tiniest lessening of your energy or focus or concentration as you say the words . . . A sentence should be alive" (*Writing with Power* 135).

Practical advice for ensuring that your sentences are alive:

- Use forceful verbs—replace long verb phrases with a more specific verb. For example, replace "She argues for the importance of the idea" with "She defends the idea."

- Look for places where you've used the same word or phrase twice or more in consecutive sentences and look for alternative ways to say the same thing OR for ways to combine the two sentences.
- Cut as many prepositional phrases as you can without losing your meaning. For instance, the following sentence, "There are several examples of the issue of integrity in *Huck Finn*," would be much better this way, "Huck Finn repeatedly addresses the issue of integrity."
- Check your sentence variety. If more than two sentences in a row start the same way (with a subject followed by a verb, for example), then try using a different sentence pattern.
- Aim for precision in word choice. Don't settle for the best word you can think of at the moment—use a thesaurus (along with a dictionary) to search for the word that says exactly what you want to say.
- Look for sentences that start with "It is" or "There are" and see if you can revise them to be more active and engaging.

## Works consulted/additional resources

Anson, Chris and Robert Schwegler. *The Longman Handbook for Writers and Readers*, 2nd edition. New York: Longman, 2000. See part II, "Drafting and Revising."

Elbow, Peter. *Writing With Power*. New York: Oxford UP, 1998. See especially Part III, "More Ways to Revise."

Hairston, Maxine, John Ruszkiewicz and Christy Friend. *The Scott, Foresman Handbook for Writers*. 6th ed. New York: Longman, 2002. See Chapter 5, "How do you Revise, Edit, and Proofread?"

Lanham, Richard. *Revising Prose*. 4th ed. Boston: Allyn and Bacon, 2000. This book is primarily concerned with stylistic revisions, making your prose forceful and elegant.

Lunsford, Andrea and Robert Connors. *The New St. Martin's Handbook*, 5th edition. Boston: Bedford/St. Martin's, 2003. See Chapter 4, "Revising and Editing."

Zinsser, William. *On Writing Well*. 6th ed. New York: HarperCollins, 2001. See Chapter 17, "Rewriting and Word Processing."

# Steps in Editing (proofreading) Your Papers

## Identify typical errors

Review graded or scored comments on your old papers, and list errors which were marked frequently. Be as specific as possible in gathering your list (for example, problems with introductory commas).

## Make a hierarchy

Determine which of the errors on your list occurred most often and/or cost you the most in points or letter grades. Rank the order the items on your list so that the most serious errors are on the top.

## Learn concepts

Make sure that you understand why you made the errors on your list. Use your hierarchy, write rules and sample sentences in your notebook or in the back of your dictionary.

## Write

Write your paper as you normally would, concentrating mainly on your ideas, not on rules or strategies.

## Apply your strategies

When you finish writing, take a break, and then apply the strategies one at a time, using the rules and sample sentences as reminders if you get stuck.

Remember that you are looking for specific errors, not reading the paper. Go completely through the paper looking for only one kind of error at a time.

You will be able to focus your concentration and energy better that way.

Please note: Editing is not a substitute for, but a supplement to, reading for meaning. For best results, use both methods.

## Proofreading Your Work

It is always difficult to find errors in one's own work. The words and sentences appear correct on rereading because if the writer had known better, he or she would not have made the errors in the first place. But a careful rereading of a paper aloud before it is turned in helps considerably.

Perhaps a checklist of common errors will serve as a guide for you. Keep this list and a grammar book with you as you read your paper over, checking every sentence for these items.

## Run-on Sentences and Sentence Fragments

Check each sentence to make sure it has a subject, a verb, and a complete thought.

Have you run two sentences together incorrectly without a period, conjunction or semicolon separating them?

## **Punctuation**

Have you ended every sentence with a period, question mark, or exclamation point?

Are your thoughts within sentences broken up correctly by commas for easier understanding?

Have you broken up series with commas?

Have you used a period after abbreviations?

## **Quotation Marks**

Did you remember to place exact quotes within quotation marks?

Did you place all periods and commas inside the quotation marks while placing semicolons and colons outside them?

## **Subject-Verb Agreements**

Check every subject and verb to make sure that if you have used a singular subject, you have also used a singular verb.

Similarly, a plural subject needs a plural verb.

## **Sentence Length**

Compute the average number of words per sentence. How close is that number compared to the average of 22?

Have you varied the length of sentences in each paragraph?

If your sentences are too long, break them into shorter units.

Sentences that are very short tend to produce a jerky style of writing.

Does each sentence follow clearly and logically from the one before it? Have you used some type of transitional device between each sentence?

## **Apostrophes**

Have you used them correctly to indicate possession? If you're unsure, check a grammar book.

## **Tenses**

Have you incorrectly jumped about in different tenses?

Have you used the correct form of the verb to express the tense you want?

## **Capitalization**

Have you capitalized names of persons, cities, countries, streets, and titles?

Have you capitalized a quotation according to the original and according to the needs of your sentence?

## **Spelling**

Check any word you have doubts about.

If you are unsure of the spelling of a certain word, look it up.

Be especially careful of the words listed as spelling nightmares: "ei" and "ie" words, words which add "-ing" and "ed," and words with one or more sets of double letters.

## **Paragraphing**

Does each paragraph have a topic sentence which states the main idea?

Have you used examples and vivid specific details to describe your topic?

Have you used explanatory sentences to give your opinion or judgment on the topic?

Have you included sentences which pertain only to that idea?

Are transitions used between sentences and paragraphs?

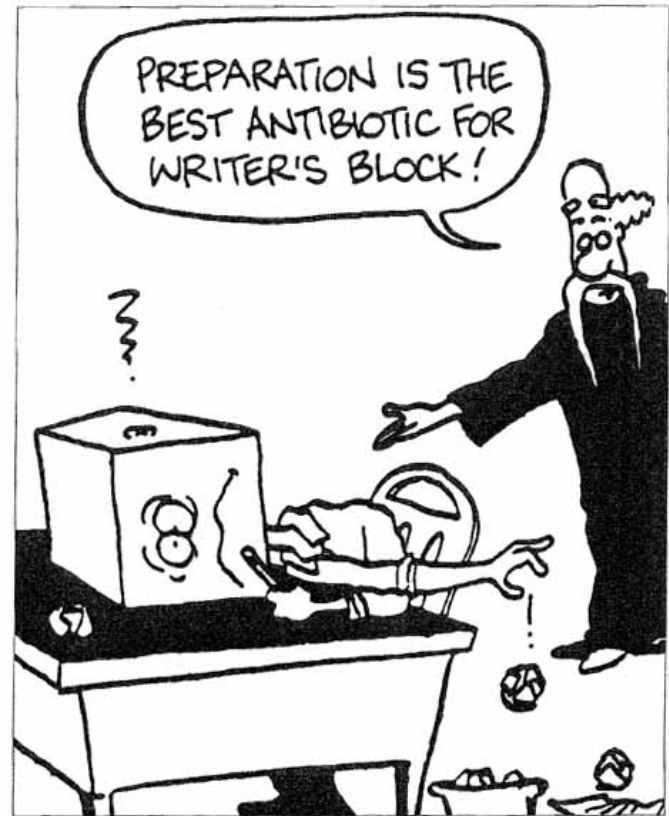
Is there a concluding sentence?

## **Omissions**

Have you left out any words in your sentences?

# Extended Essay

## Samples & Templates





**Turner Fenton Secondary School**

**Extended Essay Title**

**John Smith**

**1003-234**

**English Extended Essay**

**Total Word Count: 3789**



**Turner Fenton Secondary School**





**Turner Fenton  
Secondary School**

**Table of Contents**

Abstract ..... 1

    Research Question: Place your Research Question here. (Single spaced)

    Thesis: Place your thesis here. (Single spaced)

Introduction ..... 2

Argument 1 – (Titles will vary depending on EE subject) ..... 4

Argument 2 – ..... 7

Argument 3 – ..... 11

Argument 4 – ..... 13

Bibliography ..... 14

Appendix (Recommended for Science EEs Only)

Appendix A ..... 15

Appendix B ..... 16

Appendix C ..... 17

TOTAL WORD COUNT.....3798



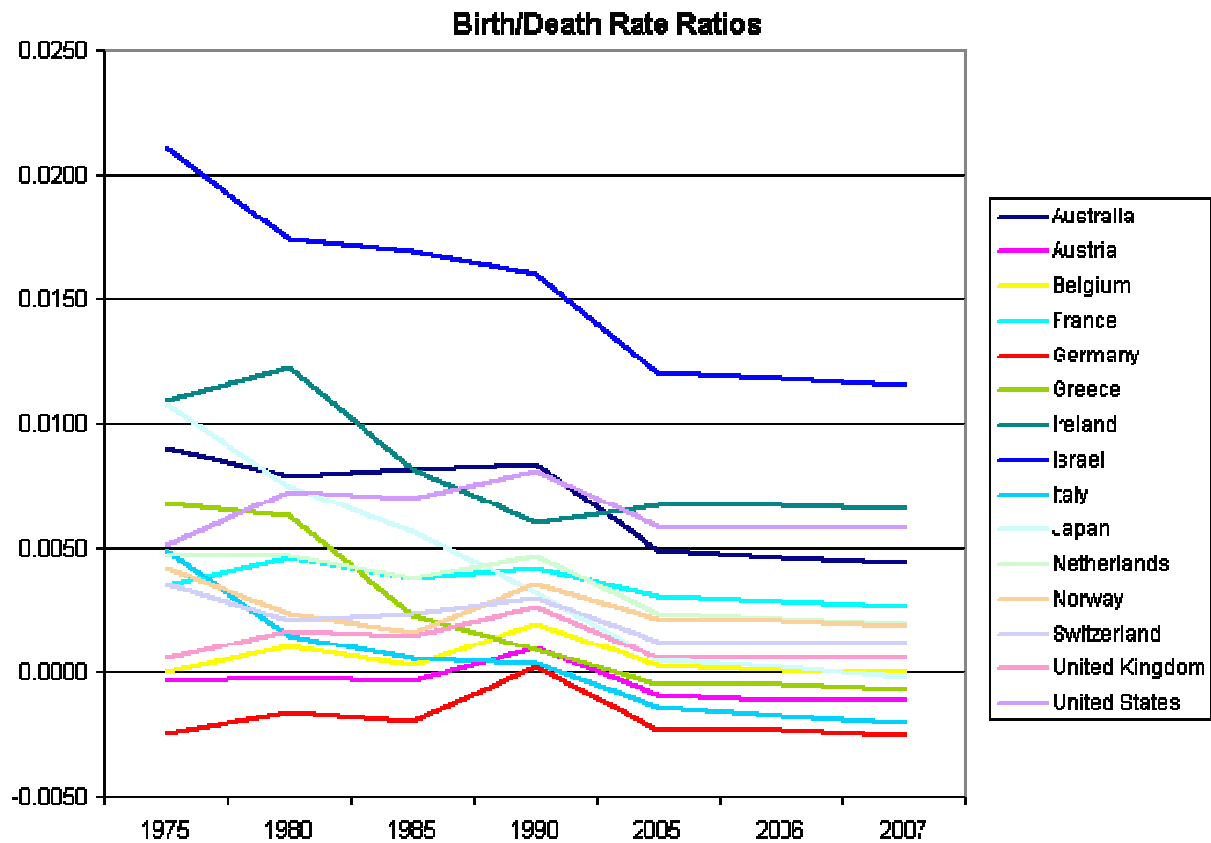
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## **Table of Contents**



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## Appendix A



McElroy, W.D., *Cell Physiology and Biochemistry*, 3rd ed., Foundations of Modern Biology Series (Englewood Cliffs, N.J.: Prentice-Hall, 1971).



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## **Appendix**



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### **Bibliography**

- Bohlman, Herbert M., and Mary Jane Dundas. The Legal, Ethical and International Environment of Business. 5th ed. Cincinnati, OH: West, 2002.
- Bolman, Lee G., and Terrence E. Deal. Leading with Soul: An Uncommon Journey of Spirit. Rev. ed. San Francisco: Jossey-Bass, 2001.
- Calvesi, Maurizio, and Lorenzo Canova, eds. Rejoice! 700 Years of Art for the Papal Jubilee. New York: Rizzoli, 1999.
- Cohen, Andrew, and J.L. Granatstein, eds. Trudeau's Shadow: The Life and Legacy of Pierre Elliott Trudeau. Toronto: Random, 1998.
- Heath, Joseph, and Andrew Potter. The Rebel Sell: Why the Culture Can't Be Jammed. 2nd ed. Toronto: Harper, 2005.
- Llewellyn, Marc, and Lee Mylne. Frommer's Australia 2005. Hoboken, NJ: Wiley, 2005.
- Summers, Anthony, and Robbyn Swan. Sinatra: The Life. New York: Knopf, 2005.



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## **Bibliography**



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## **Abstract**





## ABSTRACT

This experiment evaluates the effect of age and gender on the two photoreceptors in the human retina: rod cells which are responsible for peripheral vision and the detection of shapes and motion and three different types of cone cells responsible for the perception of colour. The research questions are: **Does the efficiency of the Rods and Cones decrease with Age? What is the efficiency of the L-cone versus the M-cone versus the S-cone? To what extent are the Rod cells more efficient than the three Cone cells? Does the efficiency of Rods and Cones differ between genders?**

In the experiment I used a vision disk which is a device to measure the angle of peripheral perception on the horizontal plane of the visual field. I conducted the experiment on a total of 75 people, divided into five different age groups, 32 of which were males and 43 were females. By using three different pointers with each one having a red/green/blue coloured dot on them, I was able to obtain values for colour sensitivity of the three different cones, as well as periphery values. By deriving average values for each age group, I was able to compare average rod and cone efficiency at different stages in life. Moreover, by subcategorizing the age groups into males vs. females, I could determine trends of photoreceptor efficiency according to gender.

I concluded that the efficiency of both photoreceptors decreases with age. In addition to that, the 'efficiency hierarchy' for cone cells is increasing from L-cone to S-cone to M-cone. The experiment showed that human rod cells are more efficient than cone cells. Lastly, the results indicated slightly that female photoreceptor efficiency is better than male photoreceptor efficiency. However, for this aspect no definite conclusions could be drawn due to insufficient data.

## **ABSTRACT**

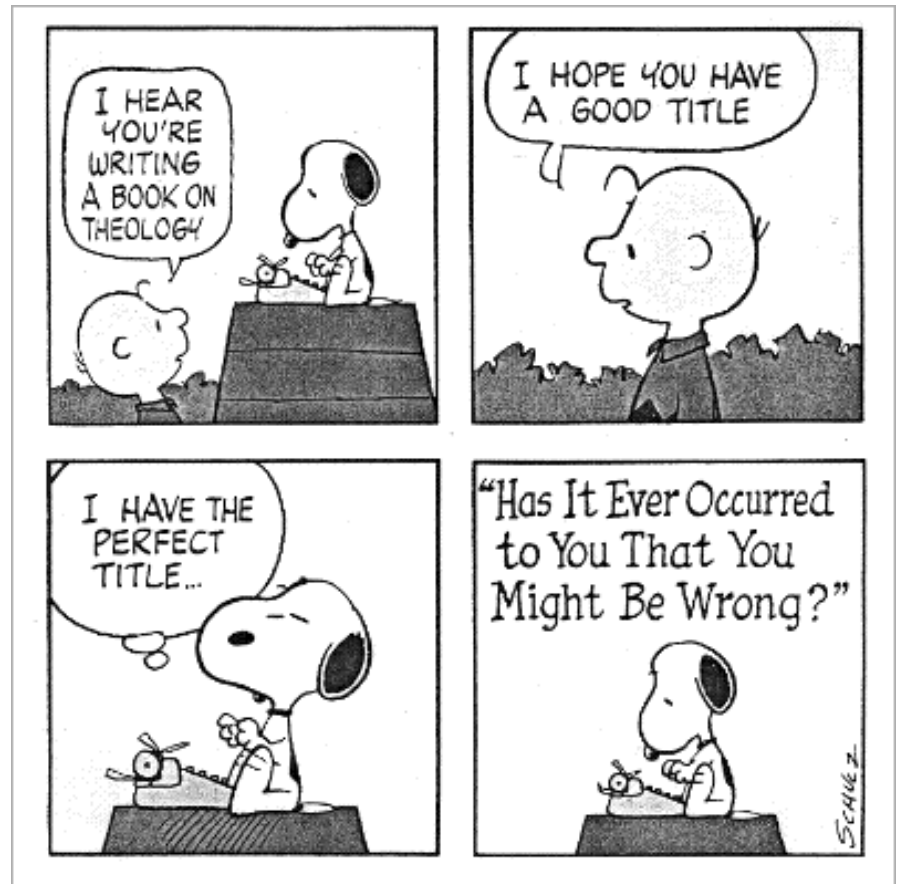
During the Second World War, many Jews fleeing Europe sought refuge in Shanghai, which had been controlled by the Japanese since 1937. When Jewish refugees arrived in 1938, they were initially treated well. In 1943, however, Japanese officials forced the community into a designated area. According to some historians, this change in policy resulted from Nazi influence. To what extent was German influence the principal reason for the change in policy?

To answer this question, Japanese relations with Germans, other foreigners and Jews are examined. Nazi officials were actively promoting anti-Jewish thought in Japan and their influence became more pervasive following the Japanese attack on Pearl Harbor in 1941. As well, the White Russians in Shanghai resented the refugees and were feeding Japanese officials with anti-Semitic propaganda. Finally, Japanese perceptions of Jews prior to 1938 and throughout the period are central to understanding the policy. Japanese government documents and secondary sources are used to interpret the three relationships.

The conclusion reached is that the establishment of the “ghetto” was based less on third-party influence than on Japanese pragmatism toward the Jews, which was characteristic of Japanese policy throughout the period. Japanese officials viewed Jewish people as superior, possessing vast amounts of power. When the refugees arrived, the Japanese believed that treating them well would result in the support of Jews in the United States. After Pearl Harbor, the possibility of gaining support from the United States became remote. Furthermore, worsening living conditions in Shanghai forced many Jewish refugees into poverty and crime. The Japanese decided that Jews were no longer useful in the war effort and created a ghetto to more closely monitor the activities of the refugees. This new policy was a pragmatic decision, rather than one based primarily on anti-Semitism from outside influences.

Word Count: 295

# TFSS



## Subject Suggestions & Examiner Reports

# Reflections of an Extended Essay Examiner

By: Hugh Robertson

The success of an extended essay is shaped largely during the preparatory stages. Major weaknesses, such as broad topics, lack of focus, and vague research questions, can be traced directly to the research phase. The iceberg analogy illustrates clearly the importance of the analysis/research/experimentation that underpins the completed essay.

Since the initial work is so crucial, consider following the steps outlined below as you prepare your extended essay.

- Select a subject in which you have an interest, preferably one of your diploma subjects.
- Read the subject guideline in The Extended Essay that is relevant to your subject.
- Meet your supervisor to discuss your choice of subject and to map out a schedule.
- Draw up a list of research topics that interest you.
- Discuss the topics with your supervisor and then decide on one.
- Read about your topic and narrow it to a number of challenging issues or problems.
- Select one issue or problem as the focus for your essay.
- Formulate a precise and challenging research question or a hypothesis.
- Undertake your analysis/research/experimentation using primary and secondary sources.
- Shape the structure of your answer by creating a series of detailed outlines.
- Rough out the complete essay from title page to bibliography.
- Revise and edit the rough draft carefully.
- Reread the assessment criteria to ensure that your draft addresses all of them.
- Remember that an extended essay has a central thesis, argument or point of view.

Once you have revised and edited your rough draft you are ready to assemble the final copy. The one-tenth of the iceberg above water represents your completed extended essay. Since one-tenth of the overall project counts for 100% of the mark, package it with painstaking care. Use the following list of common weaknesses as a checklist when you assemble your essay.

## **Title**

Provide a concise title that clearly indicates the focus of the essay. Do not use your research question or hypothesis as your title.

## **Abstract**

An abstract is not an introduction, although there is some overlap. An abstract is a synopsis of the essay. It also sets the tone of the essay.

## **Table of contents**

The contents page outlines the main sections with corresponding page numbers. It also indicates the structure of the essay.

## **Introduction**

Although not listed as a criterion of assessment, an introduction is an important component of an extended essay. The research question or purpose of the essay should be clearly spelled out and the thesis or argument should be succinctly stated.

## **Body and development**

This is the longest and most important section. Its sole function is the development and substantiation of the thesis or argument. Eliminate all irrelevant descriptive, narrative, biographical and anecdotal details.

## **Conclusion**

Remember that last impressions are lasting impressions. The conclusion pulls the essay together and sums up the major points that shaped the thesis.

## **Quotations**

Use quotations judiciously and integrate them smoothly into the text of the essay. They are frequently used to excess and parachuted into the essay as space fillers.

## **Structure**

Organization enhances the clarity of your thesis. Plan the structure of your essay carefully and ensure that your paragraphs reflect your plan.

## **Style**

Write your essay in a style that is clear and smooth and in a tone that is formal and scholarly. Precise, articulate expression has persuasive power.

## **Subheadings/chapters**

Longer essays in certain subjects, like the sciences, might require section headings. However, headings can fragment the flow of the argument. Effective paragraphing will often eliminate the need for subheadings and chapters.

## **Documentation**

Whether you are citing a quotation, an idea, an illustration or Internet information, you **must** document the source. Ensure that you use a major documentation style that is pertinent to the subject from which you topic is drawn.

## **Length**

The most successful essays are in the 3,200 – 3,800 word range. Prune and cut your rough draft as you revise and edit so that your final copy is a crisp, clear, and cogent piece of writing. Remember that words should be weighed, not counted.

## **Formal presentation**

Proofread your essay meticulously from the title page to bibliography. Use computer technology to enhance the layout. An error-free and attractively laid out essay will have a positive impact on the examiner.

## **Appendix**

All material placed in the appendix must be directly relevant to your thesis. This material must be cross-referenced to the development of the thesis.

## **Technology**

The computer is simply a tool and its effectiveness as a tool is determined by how you use it. Evaluate and filter Internet information with caution. Mindlessly downloading data and pasting it into essay format does not constitute critical thinking and may be plagiarism.

# TFSS English Extended Essay

If you have chosen English as the subject area for your extended essay you will be writing a detailed literary analysis on a topic related to one or two major works of literature. The essay will be a piece of formal writing and formatted using the MLA style Guide.

Your extended essay must be text specific. Lapsing into discussion of social issues arising from the text(s) is unacceptable. An analysis of Shakespeare's treatment of anti-Semitism in the Merchant of Venice would be an acceptable topic but a discussion of the treatment of Jews in the 16<sup>th</sup> century using the play as an example would not.

Please Note:

- The choice of text(s) must be approved by your teacher-mentor.
- Your thesis will be generated by you after discussion with your mentor.
- It is the role of the mentor to guide you through the Extended Essay process, not do your work for you.
- Your mentor will not edit your essay. That is your job.
- Students without strong analytical skills are unlikely to be successful.



# IB EE Guide -- Treatment of the topic – English A1

Literary works often address, for example, philosophical, political or social questions. However, the major focus of the essay should be the literary treatment of such questions. The literary works should not be a pretext for interdisciplinary study and should not be treated simply as documentary evidence in a discussion of philosophical, political or social issues. Students should always consider how the texts work as literature, dealing with aspects such as the effects they achieve, the devices they use and the way they are written.

Students should not use the extended essay solely as a vehicle for their own thoughts but, after providing careful analysis of the author's ideas, should present their personal views on the way the author has treated the subject. There should be a compromise between building on the wisdom of more experienced critics and introducing new personal elements. The mere reiteration of the views of established literary critics will not result in a successful extended essay.

When writing the essay, students must bear in mind that any narrative and/or descriptive material included should be directly relevant to the critical analysis. A précis of the student's reading is not sufficient.

## Interpreting the assessment criteria

### **Criterion A: research question**

Although the aim of the essay can best be defined in the form of a question, it may also be presented as a statement or proposition for discussion. A research question that is too narrow or too obvious will normally be deemed to be one that does not lend itself to systematic investigation in an extended essay.

### **Criterion B: introduction**

The context should be established succinctly and should not be an excuse for padding out an essay with a lengthy account of the historical or biographical context of a literary text. Instead, the introduction should focus on the research question and the student's reasons for choosing it. In some cases, students may be able to say how it relates to existing knowledge on the topic but, since they cannot be expected to know the whole range of secondary writing on major texts, it is sufficient for them to state briefly why they have chosen their particular research question and what they think it has to offer.

### **Criterion C: investigation**

The range of resources includes, in the first place, the primary texts being studied (and, possibly, other writings by the author(s) in question, such as essays, journals and letters) and, less importantly, secondary sources such as published criticism on those texts. The proper planning of an essay should involve interrogating secondary sources in light of the research question, so that the views of critics are used to support the student's own argument, and not as a substitute for that argument. It may thus be helpful for a student to challenge a statement by a critic instead of simply agreeing with it. In a literary context, the data gathered is principally the evidence the student finds in the primary text(s) to support the argument of the essay. If students make use of Internet-based sources, they should do so critically and circumspectly in full awareness of their potential unreliability.

### **Criterion D: knowledge and understanding of the topic studied**

The topic studied here is principally the primary text(s) that is/are the focus of the essay. The quality of the student's understanding of the primary text(s) is the main concern. The use of secondary sources is



not an essential requirement: this may be helpful in the case of classic texts, enabling discussion to start at a higher level, but it should not replace the student's personal engagement with the primary text(s).

### **Criterion E: reasoned argument**

Students should be aware of the need to give their essays the backbone of a developing argument. Personal views should not simply be stated but need to be supported by reasoned argument to persuade the reader of their validity. Straightforward description of a literary text through plot summary or narration of the action does not usually advance an argument and should generally be avoided (although, where a little-known text is under discussion, a brief description may be appropriate).

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

Appropriate application of analytical and evaluative skills here is the use of persuasive analysis and argument to support a personal interpretation. Second-hand interpretations that are derived solely from secondary sources will lose marks under this criterion, as will purely descriptive essays that list examples of literary motifs but fail to analyse them.

### **Criterion G: use of language appropriate to the subject**

There is no single acceptable style for essays, which may be well-written in different ways—with, for example, different degrees of personal emphasis, some writers using the first person and others preferring a more impersonal mode of expression. Clarity and precision of communication in a group 1 essay includes the correct use of language.

### **Criterion H: conclusion**

“Consistent” is the key word here: the conclusion should develop out of the argument and not introduce new or extraneous matter. It should not repeat the material of the introduction; rather, it should present a new synthesis in light of the discussion.

### **Criterion I: formal presentation**

This criterion refers 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 do not give references/citations 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 the three required elements, not on the quality of the research question itself, nor on the quality of the argument or the conclusions.

### **Criterion K: holistic judgment**

This criterion allows examiners to reward work that shows initiative, creativity and insight, even if the essay does not achieve the highest standard overall. Routine essays on well-worn topics will not score highly under this criterion.

# English A1 Examiner Report May 2010

## The range and suitability of the work submitted

Examiners were again generally impressed by the range and variety of the topics attempted (from Chaucer to Bob Dylan, as one examiner put it), with many stronger candidates looking beyond the classical canon to find challenging texts and productive research questions. There were excellent essays on Kerouac's *On the Road* and on Rushdie's *The Satanic Verses*; on 'Explorations of identity and authority in three stories by Angela Carter' and on a comparison of Pynchon's *The Crying of Lot 49* and Murakami's 'The Elephant Vanishes'; and on 'Obsession in Jean Rhys's *The Wide Sargasso Sea*' and 'Don DeLillo's *White Noise* as postmodernism's memento mori'. Working within the canon, one candidate produced a brilliant essay on the depiction of French women in three Shakespeare plays, while another presented a careful and thoughtful analysis of the treatment of reason and passion in *Hamlet* and Sidney's *Old Arcadia*. In many of the best essays the research question was firmly focused on literary technique, with titles such as: 'Exploring the unreliable narrative voice and the problem of memory in Kazuo Ishiguro's *When we were Orphans*', or 'Food imagery in Amy Tan's *Joy Luck Club* and *The Kitchen God's Wife*'. Framing the investigation in this way prevents candidates from lapsing into simply re-telling the story, which is the common failing of weaker essays.

At the other end of the scale there were many essays on popular teenage fiction which rarely rose above enthusiastic but uncritical exposition of theme and character. Such texts proved insufficiently challenging for a satisfactory literary essay, though some candidates managed to lift their work a little above the mediocre by pairing the contemporary vampire story with a novel such as *Dracula*. There were, as always, a number of essays on well-worn topics such as a comparison of *Nineteen Eighty-Four* with other dystopian novels, and on Jane Austen's novels. Where candidates tread these familiar paths only an imaginative research question—a recent example being the role of conversation in two Austen novels—is likely to raise the essay above the satisfactory level. As usual, a common pitfall for those interested in the socio-historical or political dimension of fictional works was to treat them simply as documentary evidence rather than examining how they work as literary texts.

There were, as always, some essays that were unsuitable because they dealt exclusively with translated texts and thus lost a minimum of eight marks no matter how accomplished and interesting they may have been. It is imperative for schools to note that at least one of the primary texts discussed in an English A1 Essay must have originally been written in English.

## Candidate performance against each criterion

### A: research question

Apart from the kinds of failings outlined above, most essays satisfactorily defined a research question, although in some cases that question was better formulated in the Abstract than in the Introduction. Clearly, satisfying this criterion is an essential prerequisite of a successful essay. Students should always integrate the question into their introduction even though it may be clearly stated in their title, otherwise they risk losing marks.

**B: introduction**

This proved to be a problem in many essays in that the introduction made little or no attempt to provide a context for the research question and to make a case for its significance. Candidates need to ask themselves why their research question is worth investigating and to give their reasons in the introduction.

**C: investigation**

Some essays consulted no sources other than the primary texts. While this was legitimate with recent texts where there is no body of published criticism, essays on well-known texts were usually better where some sources were consulted (as long as they were not just SparkNotes, Wikipedia or internet material of dubious value).

**D: knowledge and understanding of the topic studied**

Most essays showed a good, or at least adequate, knowledge and understanding of the topic, although only the best were able to situate it in an academic context.

**E: reasoned argument**

A common weakness here was to dwell on descriptive accounts of texts or plot summaries rather than developing an argument. Producing a well-organized and persuasive argument in relation to research findings is a difficult skill and it requires considerable practice before embarking on a final draft of the essay.

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

This was where the better students distinguished themselves from the more ordinary by presenting personal and illuminating analysis of the primary texts. Weaker essays failed to move on from descriptive comment to analysis, or relied on citing secondary sources for their analysis rather than engaging personally with the texts. There was a tendency for candidates who wrote about poetry to discuss individual words or very brief phrases without referring to their context. Even if the comments were valid, this led to fragmentation and a failure to address the meaning of the poem as a whole.

**G: use of language appropriate to the subject**

Most essays scored 2 or 3 here, though there were many fluent and eloquent essays at one end of the scale and stumbling and garbled ones at the other end. Some essays were over-ornate in their style, which tends not to impress examiners. Many could have been easily improved by careful proof-reading before submission.

**H: conclusion**

Most essays made a fair attempt at a conclusion, though many simply restated the material of the introduction, thus forfeiting one mark.

**I: formal presentation**

A small number of essays lost marks quite unnecessarily by omitting a contents page or page numbers etc. Another problem was failure to follow a standard method of documentation for the citation of sources and the composition of a bibliography. Too often footnotes repeated the full title of a primary text every time it was cited, rather than giving the full reference for the first citation and thereafter giving page references in parentheses. However, many essays were very well presented, and that number should increase with careful supervision.

**J: abstract**

Supervisors should note how the three required elements of the Abstract are defined in the new criteria, since one common failing was to present a summary of the argument rather than an account of how the investigation was conducted. There were also many examples of Abstracts that were inappropriate because they were written as a form of introduction, setting out in the future tense what the essay would do. Some omitted, or did not state clearly enough, the conclusions.

**K: holistic judgment**

There were few very low marks under this criterion for most essays showed some intellectual initiative and understanding, and the best were impressive pieces of individual research.

**Recommendations for the supervision of future candidates**

It is important, as most supervisors already know, to ensure that one of the principal texts for the essay was originally written in English, and to instruct students in a standard method of documentation for citing sources and compiling a bibliography. Page references to the primary texts are best given in parentheses, and long strings of footnotes or endnotes referring in full to the same text are best avoided. Students should be urged to proof-read their essays carefully before submission. Where essays focus on a reading of a number of poems, an appendix containing the texts of those poems is most helpful, as most supervisors seem to be aware.

Helping define a fruitful and manageable research question is the main challenge for supervisors. They are advised to steer candidates away from biographical topics (e.g. examining a writer's works as reflections of his or her life), as these almost inevitably result in essays that are merely speculative, un-analytical and second-hand. It may help to choose literary texts that are less well-known but of clear literary value. With classic texts it is advisable to find a topic and an approach that will prevent the candidate from having to go over too much well-trodden ground. With such texts judicious use of secondary sources may enable the argument to begin at a higher level, and it is important for supervisors to guide candidates towards finding a balance between offering their own reading in ignorance of all secondary sources and relying so much on them that that all personal response is smothered. Students should be encouraged to look, and think, beyond basic study guides and to treat Wikipedia and internet sites with caution. Supervisors should bear in mind that it is the student's own research into the text that is most important.

With the new criteria, the introduction may require particular attention from supervisors. Candidates should be encouraged to define what they are researching and to integrate their research question into the introduction even though it may be clearly set out in the title. They also need to be urged to provide a context for their research question and to state why it is worth investigating. Supervisors should face them with the simple question: why have you chosen this research question?

# TFSS History Extended Essays

## Summary

- First ask yourself: ‘What is the question actually asking?’
- Take relevant notes as you read. Remember to note the necessary bibliographical information from each text. Try to take notes mainly in your own words. Taking quotes should be done sparingly and **MUST** be accurate – **beware of plagiarism.**
- Plan your essay’s argument – give your essay a logical structure that develops the points you wish to make.
- Write a draft and take time to improve the final product.
- Your essay should have a proper structure. This includes an introduction, a main body and a conclusion made up of sensible sentences and paragraphs. Please avoid using personal pronouns (I, me, my etc.) in your essay.
- Hand your work in on time.
- It is recommendable to read your essay aloud to ensure it makes sense.
- Footnotes are used to show your use of evidence. You should footnote quotes, figures and statistics, and when summarising factual material or another author’s opinion or argument.
- Your bibliography lists all the relevant sources you have read to construct your essay.
- Your essay should be double spaced, with a 1 inch (2.5 cm) wide margins, paragraphs indented or spaced, each page numbered (top right) and with your name on it (use headers or footers).

## Planning your essay

***Make an outline plan.*** After you have done your investigation it is a good idea make a rough plan for how you intend to proceed. This may change as you develop each point, but it helps to keep your essay coherent and focused.

***Introduction.*** An introduction is a clear statement of your essay’s argument and any conclusions you have come to regarding the question. After reading your introduction the marker should have a clear idea of how you intend to argue your points.

Oftentimes, the introduction is written **after** you have written the main body of your essay, and often after you have written the conclusion. This ensures that your introduction covers what you actually argue, not what you originally *intended* to argue!

***The Main Body.*** The body of your essay provides the in-depth argument and analysis of your essay. Ensure you write in complete sentences and paragraphs. Each paragraph should relate to one major idea or a group of lesser related ideas.

If you think of a paragraph as a mini-essay this can help with your structure. The first sentence states the topic (like an introduction), then further sentences develop that argument and support it with evidence. The final sentence brings closure to the idea (like a conclusion). The ending sentence of each paragraph should connect in some way with the introductory sentence of the next paragraph so that the essay feels like a coherent piece of writing, not a cluster of separate ideas.

In practice this arrangement of sentences in a paragraph is much more flexible, and rigidly following such a structure could make your essay somewhat dull, but the key elements are important to keep in mind.

**Conclusion.** Your conclusion should be one of the last things you write. It is a summary of your argument and is closely related to your introduction, however should not be the same. A useful question to ask when considering your conclusion is ‘**So What?**’ You have just spent an essay developing an argument - what you have achieved? Can your essay be a starting point for future research? What do your findings say about the current world? Try to make your conclusion mean something more than your introduction.

## Essay style

- Do not use contractions: use *cannot* or *do not* rather than *can't* and *don't*
- Do not use abbreviations or symbols: write *example* rather than *e.g.* or *percent* rather than *%*
- Do not use pronouns in your essay: it is better to use neutral phrases such as “it is clear” or “it follows” rather than “I think” or “in my opinion”. As you wrote the essay it is obviously what you think, so this does not need to be made obvious by using personal pronouns.
- Apostrophes: are only used to indicate possession and contractions (*not* to make a word plural). As indicated above, contractions are not used in formal essays therefore you should only use apostrophes if you are indicating possession.

For example:

*The dress of the girl becomes The girl's dress*

Please note: All of these words DO NOT have apostrophes:

*his hers theirs ours yours its* (*it's* is a contraction of *it is* or *it has*)

- Parentheses, also known as brackets: should be used sparingly. If you are considering using parentheses decide whether the information is important enough to include. If so, try to rephrase so that you do not need to use parentheses. If not, then delete it.
- Foreign words: do not translate well known terms such as *raison d'être*, *coup d'état*, *Realpolitik*. Foreign words should be put in italics.
- Avoid colloquial expressions.
- Quotations: use these sparingly. Quotations must be accurate. Reproduce the words, spelling, capitalisation and punctuation of your source **exactly**. It is assumed all quotes are reproduced accurately, but if you want to stress that any mistake or error is not yours you can place the word ‘sic’ in square brackets immediately after the incorrect item. Note that as ‘sic’ is a Latin word (meaning ‘thus’) it must be italicised.

For example: “The dynamic relationship between leadership and society [*sic*] can be seen in the attitude of the elected leader towards the citizenry.”

Occasionally you may need to add your own words or letters to a quotation in order to make it fit within your essay. This should also be done sparingly (try to change your sentence to make it fit naturally without amendments if possible), but when needed you can add in your own words within square brackets.

For example: “[After World War One] it was assumed that the world would never again be involved in conflict of that magnitude.”

It is important that when you add words you do not alter the meaning of the quote. For example: in the above quote it would be unacceptable to say “[After World War Two] it was assumed that the world would never again be involved in conflict of that magnitude.”

Quotations should be put within quotation marks. Remember to open and close them. Punctuation usually goes outside the quotation marks. If you use a long quotation (which is not usually advisable) then you should indent the quotation, make the font slightly smaller, and omit the quotation marks.

- Stay within the word limit. Remember that sometimes less is more, since it forces you to be concise and to the point. Extended Essay Word limit is 4000 words. *You should try to keep your EE length to be no shorter than 3200 words and no more than 3800.*

## Footnotes and Bibliography

Footnotes are numbered references that point from a particular sentence (or sentences) of your essay to the location of the sources of your direct quotations, figures and statistics, factual material, and ideas or arguments that you have taken from other authors.

Footnotes are important to master as they represent expertise, rigour and accuracy in your use of evidence.

Your footnote number will go at the end of a sentence (using an MSWord document you can do this automatically by going to 'Insert', 'Reference', 'Footnote'. I'm sure there is a similar function on Macs). That number will refer to another number listed at the bottom of the page. Next to this number you will include the details of your source for the information. There is a specific format for doing this, and you will probably see a few variations of this. Choose the format that is most logical to you but make sure that it is **clear** and **consistent** throughout your whole essay.

### The History Format is taken from The Chicago manual of Style:

<sup>1</sup>Gary Kates, *The French Revolution: Recent Debates and New Controversies* (London and New York: Routledge, 1998), 2.

### In other words:

<sup>1</sup>Firstname Surname, *Title of book* (Place of publication: Publishing company, Year of publication), Page number.

The bibliography is a list at the end of your essay (usually on a separate page) that lists all the books you used in your research. The major difference between how a bibliography is structured and how a footnote is structured is that the author's name is listed surname first in the bibliography. The bibliography is then listed in alphabetical order by surname.

### For example:

Kates, Gary, *The French Revolution: Recent Debates and New Controversies* (London and New York: Routledge, 1998).

Kelly, Alfred H., 'American Political Leadership: The Optimistic Ethical World View and the Jeffersonian Synthesis', in *Leadership in the American Revolution* (Washington: Library of Congress, 1974).



# IB EE Guide -- Treatment of the topic – History

## Choice of topic

The topic chosen must focus on the human past, be worthy of study, and lend itself to systematic investigation in line with the published assessment criteria. Essays that focus on events of the last 10 years are not acceptable, as these are regarded as current affairs, not history.

It is not a requirement for the topic to be chosen from the Diploma Programme history course, but it must be acceptable to the supervisor. It should provide an opportunity for critical analysis of source material, and not depend on summarizing general secondary sources (such as textbooks and encyclopaedias), as this approach is likely to lead to an essay that is essentially narrative or descriptive.

The topic chosen must be suitable for effective treatment within the 4,000-word limit, so those that cover many aspects of history, and/or a long time period, are unlikely to produce successful essays. Narrowing the scope of the essay will help to ensure a clear focus, and will also allow students to demonstrate detailed and specific historical knowledge, understanding and critical analysis.

The following examples of titles for history extended essays are intended as guidance only. The pairings illustrate that focused topics (indicated by the first title) should be encouraged rather than broad topics (indicated by the second title). Note that it is not necessary to have a separate title for an extended essay in history, as the research question or hypothesis can be used on the cover as well as in the abstract and essay. It is usually better if this is the case, because it avoids confusion and helps the student to obtain a clear focus. However, most students start by thinking in terms of a wider topic and the following “Treatment of the topic” section gives guidance on defining and narrowing it.

- “Causes of the collapse of the Mayan civilization” **is better than** “The Mayan civilization”.
- “Varying interpretations of the Salem witch trials” **is better than** “Witch trials in North America”.
- “Use of the visual arts in fascist propaganda” **is better than** “Fascist propaganda”.
- “Stalin’s use of the party machine and terror” **is better than** “The Soviet Union under Stalin”.
- “The role of the Pan-African movement in the downfall of Kwame Nkrumah in 1966” **is better than** “Kwame Nkrumah”.

## Treatment of the topic

It is important that the topic, as stated in the research question, is appropriate for a history extended essay. Where topics could be approached from different viewpoints, such as economics or geography, the treatment of material must meet the subject requirements of history.

Students must choose a research question that is not of a trivial nature. Research questions that do not lead to systematic investigation, critical analysis and detailed understanding are unlikely to be suitable.

Social history does include areas such as music and sport, but these are only acceptable for a history extended essay if they are tackled from a historical perspective. Adequate available sources are essential.

If it is clear at an early stage in the research that they are not, a change of topic or focus should be made. Research requires the use of sources. Ideally, primary sources will be included but an essay that uses only secondary sources will not be disqualified. Many different approaches to the research question can be appropriate, for instance:



- using primary and secondary sources in order to establish and appraise varying interpretations
- analysing sources in order to explain changing views over time of particular happenings or developments
- using source material for a case study or local history project, perhaps leading to a comparison of local and national developments
- collecting and analysing oral and written data from family and other contacts to help explain past happenings, perhaps leading to a comparison of local and national developments
- using all available sources to answer the question posed.

Some examples of titles, research questions and approaches chosen in the past include the following.

### **Title**

Varying interpretations of the Salem witch trials

### **Research question**

Which theory best explains the Salem witch trials?

### **Approach**

Background reading is undertaken to enable identification and explanation of two dominant theories as to why the trials took place. The merits of the two theories are appraised using data obtained about the accused and the accusers.

### **Title**

The influence of National Socialist ideology on the German school system in the late 1930s: a case study

### **Research question**

To what extent were Hitler's educational aims fulfilled in the Uhland Gymnasium, 1937–1939?

### **Approach**

Reading is undertaken to enable a summarization of National Socialist ideology and curriculum proposals. Primary sources (teachers' records) are used to establish how far the proposed changes were put into practice in one school during 1937–1939.

### **Title**

Changing views of the 1962 Cuban missile crisis

### **Research question**

How and why have explanations of the Cuban missile crisis changed since 1962?

### **Approach**

General reading is undertaken for a historical introduction and note taking. The views of a number of historians are summarized in order to understand, categorize and evaluate selected explanations of the 1962 missile crisis in the 1960s, 1970s and 1980s.

The value and reliability of sources should not be accepted uncritically in history extended essays, especially when the authenticity of some of the sources is questionable. Students can show awareness of the value and limitations of the main sources used in their investigation through analysing their origin and purpose. (Who were the authors? What were their intentions? Is it likely that any of the sources have

been altered?) Relevant outcomes of this analysis should be integrated into the student's argument (or at least considered in footnotes).

Students should aim to produce an argument that consistently shows good historical understanding in setting the research question into context, and addressing it fully and effectively. The argument should also be well substantiated, based on relevant specific evidence produced with added analytical comments.

Good critical analysis and historical judgment can be demonstrated through a sound assessment of source material and differing explanations and interpretations. Opportunities for reporting and assessing differing interpretations will vary with the topic chosen; students will gain credit for explaining why a historian reached the interpretation, not just for stating it.

An extended essay in history is a formal essay that is marked according to the assessment criteria. An essay may appear to be satisfactory but it will not score well if the criteria are ignored.

## **Interpreting the assessment criteria**

### **Criterion A: research question**

The research question must be appropriate to the particular subject in which the essay is submitted. In history, this means that it must focus on the human past and not be of a trivial nature. The research question must be clearly and exactly focused, and stated in both the abstract and the introduction of the essay.

### **Criterion B: introduction**

The introduction should explain succinctly the significance and context of the topic, why it is worthy of investigation and, where appropriate, how the research question relates to existing knowledge. It should not be used for lengthy, irrelevant background material.

### **Criterion C: investigation**

The range of resources available will be influenced by various factors, but above all by the topic. Students should aim to make use of both primary and secondary sources but this may not always be possible. The data gathered should be the evidence found in the sources to establish the context and to support the argument and conclusion of the essay. Proper planning of an essay should involve integrating source material, both factual and historians' views, in light of the research question. The latter should be used to support the student's own argument and not as a substitute for it. A statement by a historian should be challenged where there is evidence to do so.

All material used from sources must be acknowledged in references. If students make use of Internet-based sources, they should do so critically and circumspectly in full awareness of their potential unreliability.

### **Criterion D: knowledge and understanding of the topic studied**

The essay should have a solid foundation of specific relevant knowledge, whose meaning is understood by the student. This knowledge can then be analysed and, on the basis of this analysis, an argument can be formed and a conclusion to the research question reached.

**Criterion E: reasoned argument**

Students should be aware of the need to give their essays the backbone of a developing argument. Personal views should not simply be stated but need to be supported by reasoned argument based on specific details, to persuade the reader of their validity. Straightforward descriptive or narrative accounts that lack analysis do not usually advance an argument and should be avoided.

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

Analysis is a very important historical skill. Students should analyse (that is, consider the meaning and importance of) the relevant factual evidence/data produced by their research, to argue a case and reach a conclusion. Sources used in the research process should be evaluated and their reliability assessed.

**Criterion G: use of language appropriate to the subject**

Students writing extended essays in history need to take three factors into consideration for this criterion: the language must be clear and unambiguous, historical terminology should be used, and statements should be specific and precise, avoiding sweeping generalizations and unsupported assertions. This criterion is not meant to disadvantage students who are not writing in their first language—as long as the meaning is clear; the historical content will be rewarded.

**Criterion H: conclusion**

The most important aspect of the conclusion of a history essay is that it must reflect the evidence and argument presented in the body of the essay. It should also answer the research question asked, and if the data and analysis failed to do so, the conclusion must state this as well as any other problems encountered.

**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).

Careful recording of the relevant details of all evidence significant to the research question is necessary so that complete references can be provided in the essay, including page numbers. Any accepted form of referencing can be used. Full details of the author, title of publication, publisher and date of publication must be provided in the bibliography, which should list all the sources used in the essay in alphabetical order (by author's family name). Tables and charts should appear in the body of the essay, as close as possible to their first reference. Any material that is not original must be acknowledged. If an appendix is included, it should be cross-referenced with the essay, otherwise it has little value.

**Criterion J: abstract**

The abstract must consist of three elements: the research question (or hypothesis), the scope of the essay (that is, what was investigated and how it was investigated) and the conclusion. An abstract is not a précis of the topic.

**Criterion K: holistic judgment**

Qualities that are rewarded under this criterion include the following.

- Intellectual initiative: Ways of demonstrating this in history essays include the choice of topic and research question, locating and using sources that have been little used previously or generated for the

study (for instance, transcripts of oral interviews), and new approaches to popular topics (possibly achieved through evaluation of varying historical explanations).

· Insight and depth of understanding: These are most likely to be demonstrated as a consequence of detailed research, reflection that is thorough and well informed, and reasoned argument that consistently and effectively addresses the research question.

## History Examiner Report May 2010

### General comments

The following comments pertain to **candidate performance** and **areas where supervisors could aid candidates** in effectively meeting the requirements of the various criteria for the History Extended Essay.

Comments regarding the specific sections (**A-K**) and areas of **strengths** and **weaknesses** are followed by more specific comments regarding the writing of the essay.

### Candidate performance against each criterion

#### A: research question

The great majority of essays were appropriate to the study of **History** in terms of chronology (i.e. should not focus on events in the last 10 years) and suitability (i.e. dealt with issues which focused on the **human** past and avoided triviality)

There were still cases where candidates needed to **clearly articulate** the research question and to follow the instructions in EE Guide where it states quite clearly that the place for a clearly articulated question is **‘in the introduction’**. While putting the research question on the cover sheet is obvious, the placement of the question in the introduction does not only satisfy the requirements of the criterion but also allows for a natural (and hopefully smooth) transition to the demands of criterion **B** where the specified question can be commented upon in terms of indicating context and worthiness of the topic/focus of investigation.

#### B: introduction

There appeared to be a tendency for candidates to focus on *either* ‘context’ (sometimes with too much background) *or* ‘worthiness’ - but it is important to cover both for full marks here.

#### C: investigation

While many of the essays seen did show evidence of an appropriate number and range of sources and well structured work, there were still cases where school textbooks and internet sites of dubious value were being used as the basis for the work. If the candidate has managed successfully to identify relevant **areas of investigation** at the outset, it is often helpful to then use these areas to produce sub-topic or chapter divisions in the main body of the essay. This indicates not only evidence of planning but presents a ‘path’ for the argument to develop along for the candidate.

#### D: knowledge and understanding of the topic studied

Performance here obviously varied widely. In the better essays there was an attempt to move beyond the general and to provide evidence of examination of a relevant and sophisticated knowledge base - and then in terms of development of argument, to show clear understanding of the nature and importance of the selected knowledge.

Where the evidence base was weak, or sources inadequate in terms of number or quality, the candidates necessarily had much difficulty in reaching the upper levels of the marks available for criterion D.

### **E: reasoned argument**

The majority of candidates were able to construct a reasoned argument in terms of a logical and coherent structure but for the argument to be convincing- especially in the case of essays which used a ‘To what extent...?’ approach ‘other factors’ and contrasting opinions need to be identified and dealt with. Essays that relied on descriptive/narrative treatments of the selected topics fared poorly in terms of this particular criterion.

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

The analytical and evaluative skills that form the basis of awards here are amongst the most problematic areas for students. Obviously the better essays revealed a high level of attainment in these areas as candidates made critical commentary, based upon solid historical evidence **and** were able to evaluate evidence/sources being used **in an integrated manner within the essay!**

**A worrying development** in terms of **evaluation** is the fact that individual supervisors and entire centres have instructed candidates that it is appropriate to adopt an Internal Assessment approach here to evaluation. This led to candidates writing discrete sections, labelled ‘Evaluation’ and then proceeding to evaluate (usually) two sources for origins, purpose, value and limitations. This is not an Internal Assessment investigation and evaluative skills should be integrated within the main body and not dealt with in this way – **or in the form of an annotated bibliography.** (See below for more on this latter point.)

### **G: use of language appropriate to the subject**

On the whole there seemed few problems in relation to clear communication of the information. Sweeping generalisations abounded only in the very weak essays and candidates for the most part appeared aware of the need to support claims being made and to use vocabulary and subject specific terminology in keeping with the nature of an History Extended Essay.

### **H: conclusion**

Virtually all essays were provided with a conclusion but please remind candidates that the judgements reached and pronounced upon here must be consistent with what has gone before. Introducing new material here is not appropriate.

### **I: formal presentation**

Formal presentation on the whole has shown signs of improvement but it is still the case that marks are lost needlessly by candidates who are not well versed and practised in the use of an appropriate bibliographical and referencing system. There are 4 marks available for this section and it is quite rare to see the award of the four marks. This should be an area in which all candidates should be able to pick up a decent award –if they are sufficiently prepared and then conscientious in applying what they have been taught in relation to the presentation of references, bibliographies etc..

### **J: abstract**

The Abstract is done last by candidates and perhaps candidate fatigue may explain the failure of so many to achieve the full marks here. Three areas need to be present and clearly stated (within a 300 word limit). The scope is usually the element which is most poorly done. Candidates are **not** required to give a précis of the essay but have to explain what themes or areas of investigation are to be undertaken in order to allow them to reach a balanced judgement on the question they have chosen and hopefully identified at the beginning of the Abstract.

## **K: holistic judgment**

Please, as supervisors, provide comments on the cover sheet. It can prove useful for examiners in the allocation of marks for this ‘holistic judgement’ criterion.

## **Recommendations for the supervision of future candidates**

The foregoing coverage of sections A-K should indicated areas in which supervisors can aid in the preparation of future candidates. Below is a summary of main points already alluded to as well as some comments on practices which should either be discouraged -or which centres should be aware gain candidates no advantage.

- Candidates need training in presentation skills. They need to be acquainted and comfortable with the use of an accepted bibliographical and referencing convention.
- These skills are skills that should form part of the general educational programme of students long before undertaking and EE and arguably could be introduced at a pre- IB level so that students are familiar with requirements.
- The Extended Essay in History is **not** the Internal Assessment component and the treatment of evaluation as recommended in the IA (in a discrete section) is **not** what is expected in the Extended Essay where comments should be integrated into the essay.
- Some centres encourage candidates to provide an **annotated bibliography**. Please be aware that since the **bibliography does not form part of the word count**, any **evaluation of sources** by candidates in this section is irrelevant and **cannot be considered for purposes of awards in relation to ‘evaluation’**.
- In the **Abstract** avoid a précis and provide the themes/areas for investigation for ‘scope’.
- The research question belongs in the introduction- as indicated in the EE Guide. Even if it has been written on a title page, it should be **integrated into the introduction** where it allows for a smooth transition to identification of ‘context’ and ‘worthiness’ (as required by criterion B)
- It stands to reason that essays which are 3,000 words or less are unlikely to achieve satisfactory levels of attainment in many of the criteria.

# TFSS Science Extended Essay

*Revised October 22, 2009*

If you have chosen to do an extended essay in the experimental science (Group 4), it is likely that you are planning to study science at university. Doing your EE in biology, chemistry, or physics will help you when it comes to writing lab reports for demanding university TA's, who are generally graduate students working on a thesis of some kind.

Your EE in a Group 4 subject should look like a very long lab report or submission to a scientific journal. ***Your investigation must include analysis of data:***

- data collected in an experiment you perform, either at school or at home
- data collected and published by a scientist at a university or elsewhere, that you *examine in a different way* (i.e. you are not just reporting on someone else's results)
- data collected from an online database such as ALFRED (<http://alfred.med.yale.edu/>), PubMed (<http://www.ncbi.nlm.nih.gov/pubmed/>) or OMIM (<http://www.ncbi.nlm.nih.gov/sites/entrez?db=OMIM>)

A relatively simple experiment could give you a higher end result than a more complex literature-based essay, where you would be using data collected by persons other than yourself. Experiments with commonly known results or that you did in class are unacceptable for an extended essay investigation. If you choose to do a literature-based essay, you will be required to present and discuss data and put it into a new context or interpretation. It is not sufficient to do a summary essay based on what you have read – there **must** be analysis and interpretation that is yours and yours alone.

When choosing your topic, please ensure that it fits specifically within Biology, Chemistry or Physics. Many students start out with topics that are in-between subject areas (such as Biochemistry or Medicine) and are inappropriate for an EE in Science. Check the current EE guide to be sure.

In addition to the data you will be analysing, you will require relevant background information, for which you will need to consult scientific journals – the information in your textbook is not always sufficient for depth of information. Examples include:

- Journal of Applied Polymer Science
- Journal of Cell Biology
- American Journal of Physics

Note – many journals have their abstracts available online, but to access the whole article, you need to pay a fee or be a member. University libraries will have many scientific journals available, and you may copy entire articles to take home with you. Please note, an article on a science topic that appears in Time, Maclean's or another magazine is usually insufficient in its depth of treatment of the topic – it is written by a science reporter using information from journals or interviews with scientists.

## General Guidance

When writing, consider your audience. Academic writing such as an extended essay requires more formal English than a letter, email, or creative piece. Avoid colloquialisms and contractions and don't add words just to increase your word count. The best extended essays are between 3000 and 3500 words in length.

It is a good idea to read your essay out loud: if it sounds like the way you would normally talk to your friends, it is probably too informal. There are several good style guides to help you with grammar and sentence structure. (Strunk's Elements of Style is an excellent reference, available at <http://www.bartleby.com/141/> . )



## The following headings should be used to organize your essay:

**1. Introduction** – this should be the last section of your essay that gets written. It must include the following sub-headings:

a) Research Question should very early in the introduction. Your extended essay mentor can help you design a good research question.

b) Hypothesis and Explanation of Hypothesis which detail both your prediction about the outcome of your experiment and an explanation, based on theory (citations are a must here), which supports your hypothesis.

c) Variables, which should be identified as follows:

- Dependent – what you measured in your experiment(s)
- Controlled
- Independent – what you manipulated, or controlled over a range of values
- Fixed – what you kept constant
- Uncontrolled – not always discussed, but if there were factors beyond your control that had an effect on your results, list them here

In addition, your introduction must include relevant background information. Keep in mind that the examiners are IB teachers from your chosen subject area, so it is not necessary to be overly simplistic here.

**2. Materials and Methods** – this should be written in paragraph form. If you feel the need to include the minute details of your experiment (i.e. if you refer to specific steps in your error analysis, for example) it may be included as an appendix. This section is written in past tense, since you have already completed your experiment when you are writing your essay.

**3. Data Collection** – includes your observations in words, tables and graphs.

a) Relevant qualitative observations

b) Summary data tables (again, raw data could be included in an appendix if necessary) which include some descriptive statistics such as means and standard deviations.

c) Graphs are often a good way to show trends in your data, and are most useful included within the body of your essay.

**4. Analysis of Data** – includes calculations such as rate of reaction, and analytical statistics such as a T-test or ANOVA.

- Check out Merlin, an add-in for MS-Excel which not only expands the range of graphs you can make, but can tell you what type of statistical test you should do for the type of data you collected, and has built-in functions that will do the statistical test for you. It is available at <http://www.heckgrammar.kirklees.sch.uk/index.php?p=10310>. (FREE!)

**5. Discussion** – this is where you discuss whether or not your experiment has answered your research question. Error analysis, extensions to the investigation and unanswered questions are also included in this section.

**6. Conclusion** – in one to two paragraphs, conclude your essay with what was learned during the investigation. It should refer back directly to the research question, and whether or not the hypothesis was correct. Sources of error may be reiterated here (briefly).

**7. Appendices** – if necessary, this is where you include the details of your experimental protocol and raw data. This is only necessary if you specifically refer to them in your essay (i.e. in the discussion). Keep in mind that examiners are not required to look at your appendices, so if you really need them to see something (like a graph) it is probably best to include it within the body of your essay.

**8. Works Cited** – this is not a “Bibliography” of all the books, journals and websites you consulted while writing your EE. Only list those works you specifically cited in your essay. Follow the CSE format. (See <http://library.osu.edu/sites/guides/cse/d.php> for details.)



# IB EE Guide -- Treatment of the topic – Biology

## Choice of topic

It is important that the extended essay has a clear biological emphasis and is not more closely related to another subject. Biology is the science that deals with living organisms and life processes. A biology extended essay should, therefore, incorporate biological theory and emphasize the essential nature of this subject.

Although similar assessment criteria apply to all extended essays in the experimental sciences, for a biology extended essay, the topic chosen must allow an approach that distinctly relates to biology. Where a topic can be approached from different viewpoints, the treatment of the material must be clearly biological. For example, an extended essay in an interdisciplinary area such as biochemistry will, if registered as a biology extended essay, be judged on its biological content, not its chemical content.

Essays that deal with human diseases represent a particular case in point, as these can often be dealt with from a number of perspectives (such as biological, medical, social or economic). In particular, such essays should avoid an overly medical treatment and should focus on biological aspects of the disease rather than on diagnosis and treatment.

Some topics are unsuitable for investigation because of ethical issues. Investigations that are based on experiments likely to inflict pain on, or cause unnecessary stress to, living organisms are not appropriate for submission. Investigations that are likely to have a harmful effect on health (for example, culturing micro-organisms at or near body temperature), or those which may involve access to, or publication of, confidential medical information, are also not appropriate.

Some topics may be unsuitable for investigation because of safety issues. Experiments in which the student uses toxic or dangerous chemicals, carcinogenic substances or radioactive materials should be avoided unless adequate safety apparatus and qualified supervision are available. Other topics may be unsuitable because the outcome is already well known and documented in standard textbooks.

The following examples of titles for biology extended essays are intended as guidance only. The pairings illustrate that focused topics (indicated by the first title) should be encouraged rather than broad topics (indicated by the second title).

- “The effect of detergent toxicity on soil bacteria” **is better than** “Detergents in the environment”.
- “A study of malnourished children in Indonesia and the extent of their recovery after a period of supervised improved nutrition” **is better than** “Malnutrition in children”.
- “A study of the effect of differing pH levels on the growth of *Phaseolus vulgaris*” **is better than** “The effect of acidity on plant growth”.
- “The competitive and evolutionary nature of the symbiotic relationship in *Paramecium bursaria*” **is better than** “Symbiosis in animals”.
- “The effect of banana peel on seed germination” **is better than** “Factors that affect the germination of seeds”.
- “Gel electrophoresis: The construction of an apparatus and the separation of proteins in heat-treated cow's milk” **is better than** “Uses of the gel electrophoresis technique”.

The topic chosen for study should be presented in the form of a research question, followed by a statement of intent outlining the research approach 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.

### **Topic The distribution and growth of lichens on urban pavements**

Research question

How are the distribution and growth of lichens affected by sulfur dioxide and ozone levels in the atmosphere?

Approach

Thalus diameter and population density data is collected from selected sites in different parts of the city. This data is then correlated with published data on the levels of SO<sub>2</sub> and O<sub>3</sub>.

### **Topic The effectiveness of commercial antibacterial cleaning agents**

Research question

Are commercially available antibacterial cleaning agents effective at controlling the growth of *E. coli* on nutrient agar under laboratory conditions?

Approach

Pure strain *E. coli* are grown on nutrient agar plates under controlled conditions. Filter paper discs soaked in samples of the antibacterial agents are placed on the agar plates and the zone of exclusion is measured and compared.

### **Topic Altitude and physical fitness**

Research question

Can a programme of training at high altitude have an impact on the fitness of an athlete?

Approach

Using a digital heart-rate monitor, pre- and post-exercise heart rates and recovery times are measured for four athletes. These athletes then carry out a programme of training at 2,500 metres above sea level, after which heart-rate and recovery time data is once again collected. The pre- and post-training data is analysed and compared to published data.

### **Topic Urease from soy beans**

Research question

Which method of extraction and which temperature conditions give the best levels of urease activity?

Approach

The enzyme is extracted from dried soy beans using three different methods, and the activity of the extract is measured and compared to a standard. Urease activity is measured by noting the time taken for a standard urea solution, with phenolphthaline indicator, to turn pink in the presence of the enzyme extract.

## **Treatment of the topic**

Students should point out early in the essay how the research question was arrived at and, if appropriate, how it was narrowed down, by briefly outlining related aspects that are not being considered in the

essay. Students should be encouraged to formulate one or more hypotheses based on the research question. A single well-formulated question may give rise to a small number of precise hypotheses.

Essays in biology may be based on data collected by the student through experimentation, survey, microscopic observations, biological drawing, fieldwork or some other appropriate biological approach.

Alternatively, essays may be based on data or information obtained from literature, ideally from primary sources, and manipulated or analysed in an original way by the student. Essays that simply restate facts or data taken directly from the sources are of little value. Whichever approach is chosen, the student must ensure that sufficient resources, in the form of data and information, can be obtained in order to allow the topic to be effectively researched.

Essays that involve practical work carried out in the laboratory, or fieldwork, should include a clear and concise description of the experimental procedure. Students should attempt to specify how the research approach and methodology were decided, and show any approaches that were considered and rejected.

Ideally, students should carry out the research for the essay solely under the direction of a school supervisor. Some of the best essays have been written by students investigating relatively simple phenomena using standard school apparatus, and this approach is to be encouraged. Regardless of where, or under what circumstances, the research is carried out, students must provide evidence in the essay of their personal contribution to the research approach and to the selection of the methods used.

Essays based on research carried out by the student at a research institute or university, under the guidance of an external supervisor, must be accompanied by a covering letter outlining the nature of the supervision and the level of guidance provided.

Generating and presenting data should not be an end in itself; analysis using appropriate scientific techniques is essential. The main body of the essay should consist of an argument or evaluation based on the data or information presented. Here, the student should point out the significance of any graphs, tables or diagrams. Since this is often the longest single section of the essay, it is essential that it is well structured and has an obvious logical progression. A clear structure can be imposed on this section by dividing it into numbered and headed paragraphs. This evaluation should show an understanding of the results and an appreciation of their significance in light of the literature that has been consulted.

Students should provide some explanation of anomalies or unexpected outcomes but this should not form a major part of the discussion. If necessary, modifications to hypotheses presented earlier in the essay should be proposed and a research approach for testing these should be suggested. Some assessment of the outcomes of the research in a future or wider context should be made.

Students must be encouraged to undertake a critical evaluation of the work they have done. In this analysis, the student should describe and explain the limitations imposed on the research by factors such as the suitability and reliability of the sources accessed, accuracy and precision of measuring equipment, sample size, validity and reliability of statistics. Biological limitations should be considered, such as those arising from the problem of repeatability and control when using living material, as well as the difficulties of generalizing from research based on a single type of organism or environment.

# Interpreting the assessment criteria

## **Criterion A: research question**

In a biology extended essay, the research question is best stated in the form of a question. The research question should not be understood as a statement of the topic but rather as a precisely formulated question that the research will attempt to answer. For example, a statement of the topic of an essay might be “Factors that affect bacterial growth in agar plate cultures”; the research question based on this topic could be “How are the growth rates of three strains of *E. coli* affected by temperature?” The research question can then be used to formulate a hypothesis, or hypotheses, which can be tested. The research question should be identified clearly and set out prominently in the introduction. A broad statement of the topic of the essay or a statement of the hypothesis is **not sufficient** on its own to meet the requirement for a research question in a biology extended essay.

## **Criterion B: introduction**

The purpose of the introduction is to set the research question into context. It is usually appropriate to include the general background biological theory required to understand how the research question has arisen. Students are not expected to explain basic biology forming part of the Diploma Programme biology course, but they are expected to be able to show that they fully understand it and can apply it correctly. Some research questions may require background from other disciplines. This should be kept to a minimum, as the essay will be judged on its biological content.

## **Criterion C: investigation**

The way in which the investigation is written will depend very much on whether or not the essay is based on experimental work performed by the student. For essays that are based on data taken from written sources, the student should explain clearly how the data has been selected and should comment on its reliability. For experimental work, sufficient information on the methodology should be provided to allow the work to be repeated. Students should demonstrate that they understand the theory behind any techniques or apparatus used. They are also expected to show an awareness of any limitations or uncertainties inherent in their techniques and apparatus.

## **Criterion D: knowledge and understanding of the topic studied**

A biology extended essay should be based on specific, relevant and clearly defined aspects of the biological study of living organisms. The information and ideas should be presented in a way that provides evidence that these have been understood and applied correctly. Material extracted from the sources should be referenced and incorporated into the main body of the essay in a way that demonstrates the student’s understanding.

## **Criterion E: reasoned argument**

Because of the nature of the subject, students writing a biology extended essay must make a special effort to maintain a reasoned, logical argument that focuses on the research question. Essays that attempt to deal with a large number of variables are unlikely to be focused and coherent. A clear and logical argument can be achieved by making repeated reference to the research question and to the hypotheses derived from it. An assessment of the extent to which the hypotheses are supported, or the question is answered, by the data or information accessed should form part of the argument.

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

The stated conclusion(s) must be based on the data, information and/or evidence presented in the essay. The data must be analysed and presented in such a way that the argument leading to the conclusion is

supported and clarified. Tables of raw data will generally not achieve this on their own. Raw data must be analysed, processed and presented in a way that relates clearly and directly to the central argument of the essay. Where appropriate, this analysis should allow for an assessment of the validity of the hypothesis. Errors and uncertainties arising from the methodology, instruments and/or techniques should be analysed and critically evaluated.

### **Criterion G: use of language appropriate to the subject**

Students writing in biology need to show a mastery of, and fluency in, the use of appropriate terminology. At the same time, students need to avoid excessive use of jargon. Any technical terms that are used should be explained and the student must demonstrate an understanding of these terms by using them appropriately within the text. The student must try to maintain a consistent linguistic style throughout the essay.

### **Criterion H: conclusion**

The conclusion should relate directly to the research question and should point out the main findings of the research. Biological research often reveals unexpected outcomes and these should be pointed out, even if they were not part of the original plan. The original research question may not be fully answered by the investigation. In these cases, the student should point out unresolved issues and make suggestions as to how these might be further investigated.

### **Criterion I: formal presentation**

Biological investigations often require the support of referenced material, not only in the form of text or data, but also as diagrams or drawings. Care must be taken to supply references for illustrations taken from sources. Students must avoid the temptation to supply illustrations for their own sake. Illustrative material should only be included if it enhances the argument or supplies information that cannot be easily provided in another way. Original photographs, photocopies or downloaded images that are not labelled or put into the context of the investigation are unlikely to enhance the essay.

Biological investigations often result in large quantities of raw data. Large tables of raw data are best included in an appendix. Processed data that is central to the argument of the essay should be included in the body of the essay, as close as possible to its first reference.

### **Criterion J: abstract**

For a biological investigation, the abstract must include the research question and a conclusion that directly relates to the research question. In addition, the description of how the research was conducted must include a description of the methodology and the scope of the study.

### **Criterion K: holistic judgment**

Qualities that are rewarded under this criterion include the following.

- Intellectual initiative: Ways of demonstrating this in biology essays include the choice of topic and research question, and the use of novel or innovative approaches to address the research question.
- Insight and depth of understanding: These are most likely to be demonstrated as a consequence of detailed research and thorough reflection, and by well-informed and reasoned argument that consistently and effectively addresses the research question.
- Originality and creativity: These will be apparent by clear evidence of a personal approach backed up by solid research and reasoning.

# Biology Examiner Report May 2009

## General comments

This is the first report on the performance of candidates using the current *Extended Essay Guide* (first examinations 2009). Extended essays in all subjects are assessed against the same eleven criteria which are interpreted on the basis of subject guidelines (the subject specific guidelines for biology can be found in the current *Extended essay guide* on pages 46 to 51). Marking in the May 2009 session was preceded by a series of online training sessions for examiners aimed at ensuring consistency in marking and in the interpretation of the guide.

It is rewarding and encouraging to see that the extended essay in biology continues to be a popular choice (despite the challenges it poses for candidates as well as for the supervisors). It is also rewarding to see that, in most cases, candidates are being encouraged to adopt a practical approach to their research, using a combination experimentation and/or field work. The work submitted for this session revealed a high level of enthusiasm for biology as well as ample evidence of independence and insight on the part of the candidates. The new guide is more explicit in terms of the roles of the school and the supervisor and it is clear that the majority of schools and supervisors are meeting these demands and that schools are providing an appropriately structured and safe environment for candidates to conduct their research.

The remainder of this report will deal primarily with those areas where candidates are in need of guidance and supervision and where the attention of both candidates and supervisors needs to be more clearly focused on the new criteria. There can be no doubt that the quality, and to a lesser extent the quantity, of supervision received by a candidate can play a significant role in the success of an extended essay. Consequently there is a strong need for supervisors to familiarize themselves with the current guide and to assist the candidates in interpreting the requirements.

## The range and suitability of the work submitted

Examiners reported a wide range of appropriate topics and research styles in this session. Successful topics included essays on plant growth and physiology (rates of transpiration and photosynthesis), microbiology (in particular antibacterial action of commercial and natural products), factors affecting germination and growth of seedlings, experiments with genetically modified plants, biochemical investigations (especially activity of enzymes and molecular genetics), behavioural studies in invertebrates and fish, a variety of human biology topics (including behaviour, exercise physiology, perception of stimuli, and nutrition) and ecological studies based on particular local phenomena or environmental issues.

Less successful topics tend to come from areas such as health (focusing on the symptoms and treatment of particular diseases or the effects of specific drugs), soil properties, comparisons of western and eastern medicine, ethical issues in genetics and the teaching of evolution, the behaviour of the family pet(s) and surveys of student (or community) attitudes to biological issues. As in previous sessions, the most successful essays had a small number of a clearly defined and easily manipulated independent variables and a quantifiable and easily measured dependent variable. Successful essays often relied on



the use of basic equipment of the type that can be normally found in a school, and were carried out in the school laboratory or in the local environment.

It is very important that essays entered under biology contain a significant biological component. While the assessment of the extended essay no longer uses subject specific criteria (criteria are common to all subjects), candidates and their supervisors need to be aware that the subject specific guidance is considered in conjunction with the assessment criteria. This means that the topic and research approach must be firmly biological. This is particularly significant for those criteria that carry specific reference to the “subject” in which the essay is registered. These include criterion C, (methods employed to collect the data as well as the sources accessed), criterion D (the levels of knowledge and understanding demonstrated), criterion F (the analytical and evaluative skills that are applied to the data/information) and criterion G (the language used). An essay with a strong biological element will have the potential to perform well against these criteria while one that is only marginally biological may not reach the top levels.

The top level of criterion C refers to "appropriate" sources and data as well as "relevant" material. Examiners interpret this to mean relevant and appropriate within the biological context. In addition, a "well planned investigation" will use a recognizable biological methodology. For criterion D, the top level requires that the essay locates the investigation clearly and precisely in an "academic" context, in other words it must have a clear "biological" context. In addition the knowledge and understanding demonstrated should be biological. As far as criterion F is concerned, "appropriate analytical and evaluative skills" are those that are typically biological, such as the use of deductive reasoning, graphical analysis and statistical approaches.

Criterion G has presented a new challenge to candidates, supervisors and examiners alike. More is said about this under Section B below. In principle examiners read "terminology appropriate to the subject" to mean biological terminology.

Essays based on practical work carried out at a university or other research institution, have become less common. However some schools continue to use this approach although it is not always clear that this is happening within the spirit of the extended essay requirement. The new guide makes it very clear (p 48) that essays of this type must be accompanied by a covering letter from a qualified person at the external institution. Examiners report that in the vast majority of cases, this requirement was not met. The experience of this session has shown that in some cases such essays have not been able to reach the top levels for certain criteria. This applies for example to criterion C where the assessment statement “the investigation has been well planned” is interpreted to mean well planned by the candidate. Often these essays have highly technical introductions and extensive protocols about one or other complex procedures. It is often evident that the terminology and description of the method is beyond the student's understanding but it is nonetheless described and is a major part of the EE. This is inappropriate. When work of this type is submitted, clear evidence must be provided (in the form of a covering letter), that the candidate has had a sufficient level of input into decisions about the research approach and selection of methodology and sources. The candidate should justify these decisions within the text of the essay. The person(s) responsible at the outside institution should be appraised of the assessment criteria and be asked to ensure that the candidate will have ample opportunity to plan and work independently. Above all the supervisor at the school must take full responsibility for steering the candidate through the essay-writing process and for authenticating the essay.

Essays which are essentially “reports” (of the type “find out everything you can about a topic and write it down”) rather than investigations (in the sense of a research paper that is aimed at answering a research question), continue to be submitted. While examiners search for qualities in these essays that show some merit, and try to reward these, it is often difficult for work of this type to perform well against the assessment criteria (particularly D, E and F).

## **Candidate performance against each criterion**

### **A: research question**

Few candidates experienced difficulty in expressing their research question. Many essays report the research question in the title or as a separate item before the introduction. The research question must also appear in the abstract and in the introduction and may be repeated in the later part of the essay or in the conclusion. While it is not essential that these all be identically worded, candidates should ensure that there is consistency between the different statements of the research question. When new aspects are introduced or elaborated this should be explained and justified.

### **B: introduction**

The requirement for an introduction, in which the context of the research is clearly outlined, is a new aspect of assessment and, as such, was not always adequately addressed in this session. It would be helpful to both the candidate and the examiner if the introduction were clearly identified as a subsection of the essay with a chapter heading. There are three aspects to this criterion: the context, the significance and the worthiness of investigation. In order to reach the top level, all three aspects must be adequately dealt with. Demonstrating the context and significance of the essay requires the candidate to refer to the sources that have been accessed and this section needs to be carefully referenced. In many cases candidates tended to deal only with “worthiness of investigation” and in doing so tended to refer to personal motivation rather than what the results of the study might reveal about the question being investigated.

### **C: investigation**

This criterion covers both data collected from printed sources as well as data collected by the candidate (through experimentation or field work). The way in which this criterion is applied will depend on the style of the essay to some extent (literature based, practically based or a combination of both). Examiners make a judgement about the range and appropriateness of data gathered by the candidate as well as the methods used to gather the data. In addition there must be clear evidence that the investigation has been planned by the candidate. Candidates can achieve this by explaining how information obtained from the sources helped to guide their decisions about which approach to follow. In any case candidates need to justify the approach and not simply report a method. Achieving level 4 (an imaginative range) proved to be difficult for candidates using standard techniques.

### **D: knowledge and understanding of the topic studied**

In order to reach the top level for this criterion, candidates are expected to show that they understand the topic they are investigating. They can do this for example by providing explanations and justifications for their decisions about the research direction (why was something included, why was something else omitted). Essays that consist mainly of tracts of text taken directly from the sources will fail to convince the examiners that there is in fact an appropriate level of understanding. This also applies to highly technical texts that provide no explanation for terminology. Candidates also need to show that they understand how their own investigation fits into the existing academic framework. They can do this by referring to texts they have read and showing how they have used the information from these sources to guide their own research.



**E: reasoned argument**

Many candidates struggle to sustain a line of argument throughout the essay. In order to achieve a more fluent and coherent argument, candidates need to be explicit about their reasoning. In many cases candidates tend to leave it up to the reader to see the significance of the information they are providing or to make the connections between the research question and the conclusions reached. Key elements of the argument include answers to the following questions: “What am I trying to find out?”; “How am I going about finding out?”; “What did I find out?” and “What does this new information tell me?” These need to be linked clearly throughout the text of the essay. A clear line of argument can be picked up when there is regular reference to the research question throughout the essay and where findings and discussion points are presented in the context of the overall aims of the research.

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

The most appropriate approach to analysis depends on the type of data/information collected and presented by the candidate. The challenge for the candidate is to carry out the analysis in such a way as to address the research question. While candidates should be encouraged to use statistical analysis where appropriate they must also be selective about the techniques used and should be encouraged to explain and justify their approach. Supervisors should note that there is no requirement to include statistical analysis and that the top level can be reached (depending on the type of data/information presented) without the use of statistical tests. It is often helpful, if there is a large body of raw data, for this to be included in an appendix and for summary charts and tables to be in the main body of the essay.

Essays that are essentially “reports” rather than “investigations”, often fail to address this criterion well. The exceptions include cases where the candidate analyses published data or attempts to re-evaluate information from a range of sources.

**G: use of language appropriate to the subject**

While this is a new aspect of assessment of the extended essay it is one that is central to producing a coherent and intelligible piece of writing. There are in fact two aspects to this criterion: the use of clear and precise language on the one hand and the use of terminology appropriate to the topic on the other. Candidates need to adopt and sustain a clear and precise style and show an understanding of and fluency with the main technical terms associated with the topic. Note that there is no requirement to write in the passive voice. Writing in the first person singular, active voice may be clearer and may in fact be easier to sustain (especially for non-native speakers of the target language). In order to reach the higher levels for this criterion the candidate must show an understanding of, and an ability to accurately use, the key terms in the research question as well as many if not most of the associated terms.

Essentially, examiners are looking at the level of sophistication of the language used especially in terms of scientific, and in particular biological, language. The weakest essays display a complete lack of sophistication with no fluency in the language of the topic. Problems arise with very technical investigations where an essay consists largely of descriptions of detailed experimental protocols with little or no attempt to explain the technical language. Such essays often suffer from the fact that the candidate is unable to sustain a consistent linguistic style throughout.

**H: conclusion**

Many candidates struggle to write an effective conclusion and/or highlight unresolved questions. Candidates should try to express the conclusions carefully and not overstate their findings. Where possible the conclusions should be verified by reference to the literature.

## **I: formal presentation**

Some weaknesses in presentation skills that were noted in previous sessions are still apparent and these will probably need to be highlighted in every session. As such it will be helpful if candidates receive regular guidance on these points:

All of the sources accessed must be included in the bibliography. For the majority of the items in the bibliography there should be some in-text reference. The candidate should make clear how other more general sources were used. Care needs to be taken to provide appropriate and complete bibliographic entries for online sources – simply providing the URL is not sufficient. There are a number of publications available on how to do this.

Some essays have no obvious structure. This is often reflected in a less than helpful table of contents along the lines of: “introduction”, “body”, “conclusion”. Headings used in the table of contents should appear in the text of the essay and candidates should carefully check the page numbers for chapters. Candidates tend to use the heading “conclusion” for the section in which they interpret and discuss their data. Often only the final paragraph of this section is the conclusion proper.

Candidates need to be selective about the use of supporting illustrative material. Diagrams copied directly from the sources need to be accompanied by a commentary or an explanation that highlights their significance. Digital images should only be included if they enhance the quality of the work. Candidates need to be selective about whether to include in an appendix as the essay should make sense without any reference to the appendix. Important information such as the results of statistical analysis should be in the body of the essay. The details of calculations associated with this can be in an appendix (if it is a lot of material). Large tables of raw data can also be presented in an appendix but should be referred to in the text of the essay. If the candidate reports the results of statistical analysis in an appendix but makes no reference to these in the text then the statistics will not be taken into consideration when assessing the essay (since the appendix is not part of the essay).

## **J: abstract**

Writing the abstract is a technical part of the essay that even good candidates find difficult to do. In some cases there are what might be called “careless omissions” (no research question, no conclusion). In other cases that candidate fails to deal adequately with the scope of the essay: in other words does not explain how the research was conducted (what methods were used, what type and quantity of data were collected, how test and control groups were selected or established).

## **K: holistic judgment**

Supervisors should be aware that the comments they write on the extended essay cover sheet (on the circumstances surrounding the research and level of personal involvement of the candidate) can be of considerable assistance to the examiners in assessing criterion K.

Note that an essay does not have to show evidence of all of the qualities mentioned in the descriptor and/or guidance notes in order to reach the highest level. The qualities referred to in the stem of criterion K are examples of the type of quality that can be rewarded.

## Recommendations for the supervision of future candidates

Although section B above focuses on problems and weaknesses, it is obvious from the quality of the work submitted in the session as a whole that the majority of candidates enjoyed and benefitted from the experience. It is also obvious that the majority of supervisors had worked hard in guiding and encouraging their students. Biology is one of the most popular subject choices for the extended essay and supervisors in many schools may be stretched to meet the needs of their students. However effective supervision is a crucial part of the learning process involved in writing the extended essay and the role of the supervisor is detailed in the current guide. Without effective ongoing supervision the process becomes a chore for the candidate and a fruitless exercise in the end.

Poor essays are produced when there has not been early intervention by a supervisor. Candidates can be encouraged to engage more fully with the writing process and to communicate more with the supervisor by agreeing on a detailed timetable with internal deadlines for various stages of the research process. This will also help to avoid time being wasted on unsuitable or overambitious investigations.

It is disappointing to see that a significant number of supervisors still made no comment on the cover sheet, and in some cases candidates had clearly not been adequately guided on how to address the criteria. Other points from previous reports remain valid. Candidates continue to be in need of guidance on the following:

- establishing, refining and using the research question
- providing a clear academic context for the research
- sustaining an effective argument
- displaying a command of the language of the topic
- bibliographic entries and in-text references
- structuring the essay (headings and sub headings)
- incorporating and integrating diagrams and illustrations
- selecting material for inclusion in an appendix.
- writing an abstract

Finally it must be emphasised that candidates submitting work which has been conducted in collaboration with a research team at a university or research institute must ensure that they have a sufficient level of input into the research approach and selection of methodology and sources. Above all it is essential that each candidate has a supervisor at the school who will take ultimate responsibility for the supervision process.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.