

GENERAL GUIDELINE ON WRITING A SCIENTIFIC ESSAY

Faculty of Education and Culture
September 2021

CONTENTS

1	INTRODUCTION	3
1.1	Writing an essay in education sciences.....	3
1.1.1	<i>The scientific essay as a text.....</i>	<i>4</i>
1.1.2	<i>Essay writing, structure, and format.....</i>	<i>5</i>
1.2	Scientific literature	7
1.2.1	<i>References</i>	<i>8</i>
1.3	The length of a scientific essay	8

1 INTRODUCTION

To write a scientific essay, use the [Faculty's thesis template](#), which you can download from the TUNI Intranet. Use the same template for a thesis and other written assignments during your studies at EDU. All the content in this guide will not be needed for writing all written assignments so use your own judgement when applying the guideline.

1.1 Writing an essay in education sciences

A scientific essay may be used to complete a course unit, either as an alternative or sole means of completion or alongside other assignments in the course. Here, the term 'scientific essay' is used to refer to a text based on literature that addresses a specific topic, problem, argument, or question, and reflects on this topic both critically and analytically. A critical and analytical approach means examining an issue or phenomenon in detail from several angles and comparing different research findings and interpretations.

The literature in the course unit must be directly incorporated into an essay either with an emphasis on some of the books or with equal emphasis on all of them. Always check with the teachers for any specific instructions they may have given for the assignment. A scientific essay is always written in accordance with good scientific practice (see tenk.fi/en). An essay text uses references to build the argument.

As a completion method of a course unit, a scientific essay can be written as a short paper or as a concise, reflective longer text. Use the scientific writing style, which includes adherence to the conventions of your discipline, a bibliography of sources and a linguistically functional layout.

A scientific essay should be written in a straightforward narrative. It is not sufficient to simply present and cite sources. In a scientific essay, authors should also present their own reflections and counter arguments on the subject matter,

which should be set in dialogue and comparison with scientific sources. The topic of a scientific essay should be addressed in a unique, personal, and concise manner and the text should be well argued.

However, presenting one's own views does not mean simply stating one's opinions. It is important that the topic is treated in an argued and reflective manner and that the presentation of issues is logically structured so that the text makes clear which ideas are one's own and which have already been presented in the source literature. Argumentation involves presenting one's own interpretation of the phenomenon under consideration, based on the source literature. In a scientific essay, students must master the content and key concepts of their topic.

1.1.1 The scientific essay as a text

An essay is coherent: the topic and text are aligned according to the given title or instructions.

- Write the title yourself and follow the logic of the question behind the title.
- Limit your essay to the central topic.

The essay is meaningful: authors demonstrate their ability to think critically and independently.

- Address the small part of the subject you have chosen in a reasoned and original way.
- Consider what is essential.

The essay is deeply insightful: the aim of writing is to construct knowledge in a formative, reflective and evaluative manner.

- Convey the information in your own words and give examples.
- Demonstrate your own thinking by discussing the key sources. Process the sources and compare them. Distinguish between the sources by looking at how they are similar and how they differ in relation to the topic of your essay.

The essay is structured: the author presents the logical flow of an idea within the essay.

- Organise the text in terms of relationships: hierarchy, causality, and context.

The essay is scientific: the writing style may be personal, but also objective.

- Argue credibly, i.e., be neutral and discriminating.
- Justify the arguments and views you put forward.
- In an analytical text the author summarises, reflects, explains, describes, narrates, and argues. At the basic level, a scientific essay summarises sources; the analytical level may be elevated by bringing the sources into a dialogue with each other and by participating in the discussion itself.

An essay is easy to grasp, and the author has followed linguistic conventions.

- Aim to be concise and comprehensible in general terms.
- Complete your essay carefully to make it easier for the reader to follow your train of thought.

1.1.2 Essay writing, structure, and format

As a rule, the essay must be written using the literature related to the course unit. Formulate the topic of the essay and the approach you take in accordance with the teacher's instructions. The source literature may also include other works than the literature or teaching materials in the course in question.

The essay begins with a brief introduction, which aims to draw the reader directly to the topic of the essay in a succinct and interesting way. The introduction sets out the reasons and background to the key question that the essay is responding to. The reader should also be given an outline of the plot of the essay, i.e., how the text will proceed and where it will end up.

The introduction is followed by a discussion section in which the topic is dealt with in a manner that is appropriate to the task of the essay (presentation of issues, definitions, analyses, comparisons, comments, critical reflections, interpretations, etc.). Logically proceeding discussion sections can be distinguished by headings, which should aptly describe the section under

discussion. Even in longer papers, unnecessary headings should be avoided because short chapters make the text disjointed. For the same reason, very short paragraphs should not be used in essays. Do not use lists with bullet points. References should be carefully noted in the text.

The conclusion of the essay consists of a summary, evaluation and conclusions based on all that has been presented in the essay so far. Everything presented before the conclusion should therefore be related to each other and justify the results presented.

In short essays, avoid repetition. It is good to present evaluations of the conclusions, and a sensible way to end is to use them to point out new questions for further reflection.

Solutions for structuring the contents of an essay:

- Chronological order: write about the past, present, and future. This can also be combined with other structures.
- Order based on location: write how things are in our country and how they are elsewhere, or examine things using the near-far perspective. This can also be combined with other structures.
- List structuring: used in writing from the general to the specific or in the order of importance. This can also be combined with other structures.
- Thematic structure: write about the same theme from multiple perspectives.
- From familiar to unfamiliar or from simple to complex: provide a general point of reference and go deeper from there.
- Dialectic order based on juxtapositions, contrasts, and comparison: the aim is to write about a tension or interesting comparison by referring to researchers or phenomena. You must be systematic when comparing or contrasting, in other words, proceed in a structured manner.
- Cause and effect or a phenomenon and its cause: write about an occurrence or phenomenon and its underlying factors or effects.
- Problems and solutions or questions and answers: identify and narrow down the problem. In your essay, seek to understand the problem, set

objectives, look for alternative solutions and evaluate the effects of various choices. Finally, plan how you will carry out your chosen solution.

The writing of a scientific essay is a process and based on the author's own style. You should always reserve enough time for writing your essays. When writing, you can use a mind map to structure your essay or write it in parts, alternating between parts and editing them. All writers proceed in their own style.

Always read through your essay before submitting it to the teacher for examination and assessment. If you read the text out loud, it is easier to spot problems in the text. You can quickly become blind to your text and writing methods, which is why it would be good for another person to read the essay before submission. An external reader can easily identify problems in the structure and a lack of clarity. Ask your peer group for feedback.

1.2 Scientific literature

Writing a scientific essay begins by studying relevant literature. The aim is to find a theme in the literature that challenges or supports your own argument or question. These arguments are used to present a set of reflections to which the essay is intended to respond. For example, the task may be to analyse a social problem, a theoretical point of view or to compare the findings of different researchers. Below are some guidelines for essays at different levels of study:

Basic studies

Literature cited in the course and, as other sources, articles in scientific journals and books (which have been peer-reviewed) or books researchers have written for the general public.

Intermediate studies

Literature cited in the course and, as other sources, scientific articles or books and reference books for professionals in the field of education.

Advanced studies

Literature cited in the course and peer-reviewed scientific articles or books.

1.2.1 References

The literature used in the essay is cited using direct and indirect quotations. The author may rephrase another person's thoughts or use a direct quote from that person's text. For the most part, try to summarise the perspectives of the sources in your own words and use direct quotations (= repeating a sentence or sentences verbatim) only judiciously and to a limited extent.

A quote used in the text must always be detailed in the bibliography and vice versa. Sources and citation practices are based on the requirement that all information must be grounded and argued. Writers must always indicate which parts of the information comprise their own thoughts and which parts are cited. A reference directs readers to the origin of the information via the bibliography, which provides readers with the opportunity to verify the appropriateness of a reference and its interpretation. The number of references also indicates which parts of the text comprise the writer's own input and which were originally produced by someone else. Sometimes, when browsing through literature, writers may also read texts that they will not refer to when writing their own text. Such works should not be included in the bibliography.

Authors from other disciplines or with varying backgrounds often apply a range of different citation practices. Note, however, that you should always apply the same format in your references and bibliography, i.e., be consistent in your writing.

1.3 *The length of a scientific essay*

The length of the two-credit essay is 5–8 text pages while a five-credit essay is 10–15 pages long. The bibliography, table of contents and cover page are not included in the length.