



WRITING ACROSS THE CURRICULUM

Writing an Abstract in the Sciences

DEFINITION

An abstract is a concise written description of a much larger work, usually one that is based on research written for the hard (i.e., biology, chemistry, etc.) and social sciences (i.e., psychology, education, etc.). An abstract briefly summarizes in approximately 150-250 words the context, purpose, methods, results, and implications of the research detailed in the longer text.

PURPOSE

The purpose of an abstract is to succinctly indicate the important details of your research in order for the reader to decide if the study is relevant to their topic and should be included as part of their research.

METHOD

Write the research study first. Because the abstract is a short but authoritative summary of a longer work, the longer work needs to be written to create the basis of the abstract. Look at the sections of the study (introduction, methods, results, conclusion and/or implications) and summarize the main points of each in one to three sentences as answers to the following questions:

- Introduction

What is the purpose of the research? What context has created the need for it?
What is the thesis/hypothesis?

- Methods

How did you conduct your research? What type of instruments did you use (interviews, surveys, tests, etc.)? What were the characteristics and number of participants?

- Results

What are the results of your research?

- Conclusion/Implications

What problems were there with the results or methods?
What are the implications for further research? How does your research add to what has been written about the topic?

SAMPLE ABSTRACT

As you can see from the following example, it is not necessary to duplicate the order of the sections faithfully. It is only necessary that the information that they contain is organized logically and clearly.

Abstract

The aim of the present study is to examine the relation between out-of-school digital gameplay and in-school L2 English vocabulary measures and grading outcomes. Data were originally collected from a sample of 80 teenage Swedish L2 English learners and comprise a questionnaire, language diaries, vocabulary tests, assessed essays, and grades. Using an observational post-hoc design, three Digital Game Groups (DGGs) were created based on frequency of gameplay: (1) non-gamers (0 h/week), (2) moderate gamers (<5 h/week), and (3) frequent gamers (≥5 h/week). Results show that DGG3 had the highest rated essays, used the most advanced vocabulary in the essays, and had the highest grades, closely followed by DGG1, while DGG2 trailed behind. For the vocabulary tests, DGG3 was followed by DGG2 and DGG1, indicating that gameplay aligns more directly with vocabulary test scores than vocabulary indicators drawn from essays. Due to the gender distribution of non-gamers (predominantly girls) and frequent gamers (exclusively boys), a subsidiary aim is to investigate how gameplay correlates with outcomes for boys and girls: significant correlations were found for gameplay–vocabulary tests/English grades for the boys.

Sample Annotated Abstract

Sundqvist, P. & Wikström, P. (2015) Out-of-school digital gameplay and in-school L2 English vocabulary outcomes. *System* 51 65-76.

<p><u>Introduction</u> →</p>	<p><u>The aim of the present study is to examine the relation between out-of-school digital gameplay and in-school L2 English vocabulary measures and grading outcomes.</u> <i>Data were originally collected from a sample of 80 teenage Swedish L2 English learners and comprise a questionnaire, language diaries, vocabulary tests, assessed essays, and grades. Using an observational post-hoc design, three Digital Game Groups (DGGs) were created based on frequency of gameplay: (1) non-gamers (0 h/week), (2) moderate gamers (<5 h/week), and (3) frequent gamers (≥5 h/week).</i> Results show that DGG3 had the highest rated essays, used the most advanced vocabulary in the essays, and had the highest grades, closely followed by DGG1, while DGG2 trailed behind. For the vocabulary tests, DGG3 was followed by DGG2 and DGG1, indicating that gameplay aligns more directly with vocabulary test scores than vocabulary indicators drawn from essays. DUE TO THE GENDER DISTRIBUTION OF NON-GAMERS (PREDOMINANTLY GIRLS) AND FREQUENT GAMERS (EXCLUSIVELY BOYS), A SUBSIDIARY AIM IS TO INVESTIGATE HOW GAMEPLAY CORRELATES WITH OUTCOMES FOR BOYS AND GIRLS: significant correlations were found for gameplay–vocabulary tests/English grades for the boys.</p>	<p><i>Methods</i> ←</p> <p>Results ←</p> <p>Results ←</p>
<p>CONCLUSION →</p>		