



# WRITING AN ABSTRACT



## What is an abstract??? Why is it important???

In this class, you will write two abstracts – one that could be sent out with your resume to show the kind of research you’re engaging in this year, and a second that condenses the synthesis paper and the results of your research and is positioned at the start of your paper. The abstract highlights the major points of research and your project. The final copy is written after the report is completed, although it is intended to be read first. Using key words in an abstract is vital because of technology. Titles and abstracts are filed electronically, and key words are put in electronic storage. When people search for information, they enter those key words to obtain an article, paper, or report so that someone else can retrieve information from it.

## An effective informative abstract has the following qualities:

- ✓ begins with headings to show the pieces of your research and your paper
- ✓ is then modified to use one or more well developed paragraphs: these are unified, coherent, concise, and able to stand alone (generally 150-300 total word count)
- ✓ follows strictly the chronology of the article, paper, or report and research study
- ✓ provides logical connections (or transitions) between the information included
- ✓ adds **no** new information, but simply summarizes the report and research study

## What do you need to do?

- ❖ **You will write 2 abstracts** in this course – one will be a “stand-alone” document that will follow the format in the attached example. The second will be the information from that “stand-alone” document written as one continuous paragraph – this will go at the beginning of your research paper that you submit in third quarter.
- ❖ **In the “stand-alone” abstract, include the opening paragraph describing the course, and all of the headings. Also include the areas for signatures.**
  - ❖ I have additional samples in my classroom, but they are from other teachers, and do not entirely resemble what I’ve asked you to complete.
- ❖ In the **first draft, due in second quarter**, you will indicate your expected product or outcome. In the **final draft, due in third quarter**, you will alter this to indicate your **actual product or outcome**.
- ❖ The abstract should be single-spaced in a readable font, as shown in the sample.
- ❖ The abstract that is due in January is the “stand-alone” abstract; the paragraph abstract should be the first page of your Synthesis paper, due in February.

## To best complete this assignment, ASK YOURSELF...

❖ **Motivation/Rationale:** *Why do we care about the problem and the results?*

If the problem isn't obviously "interesting" it might be better to put motivation first. This section should include the importance of your work, the difficulty of the area, and the impact it might have if successful.

❖ **Problem statement/Objectives:** *What problem are you trying to solve?*

What is the scope of your work (a generalized approach or for a specific situation)? Be careful not to use too much jargon. In some cases it is appropriate to put the problem statement before the motivation, but usually this only works if most readers already understand why the problem is important.

❖ **Approach/Methods:** *How did you go about solving or making progress on the problem?*

Did you use simulation, analytic models, prototype construction, or analysis of field data for an actual product? What important *variables* did you control, ignore, or measure?

❖ **Results:** *What's the answer?*

Avoid vague results. Be specific and concise. Do not provide numbers that can be easily misinterpreted, but remember you don't have pages to report your results.

❖ **Conclusions:** *What are the implications of your answer?*

Is it going to change the world (unlikely), be a significant "win", or simply serve as a road sign indicating that this path is a waste of time (all of the previous results are useful). Are your results *general* or specific to a particular case?

# A Sample “Stand-Alone” Abstract

Independent Research **or** Intern/Mentor  
Howard County Gifted and Talented Program  
**Product Abstract**

Each student in the Howard County Gifted and Talented Program must carry out an advanced research project or creative production for a real purpose and present this to a professional audience which is capable of evaluating the quality, authenticity, and novelty of the project. The following information gives an overview of the proposed project, as it is currently planned.

**Student:** Stephen Stoyer

**Date:** November 28, 2000

**Research Title:** The Evolution of Dinosaurs into Birds: An Investigations into the Opinions of Prominent Scientists on this Topic

**Rationale:** The evolution of dinosaurs is a highly debated subject and the game will provide the information necessary for the children to arrive at their won opinions on the topic and to practice using information to formulate hypotheses. Hopefully, my game will support their natural interest in dinosaurs and science.

**Objective:** This study will be conducted to help others and myself in determining a conclusion based on fact about the hypothesized evolution of dinosaurs into birds.

**Methods:**

- Research the writings of several prominent scientists in the area of paleontology to discover the reasoning behind their theories about dinosaur evolution.
- Use articles, books, textbooks, the internet, and human sources to produce an extensive research paper, detailing the theories and opinions of the scientists as well as advancing my own theories.
- Create an informative game for elementary school students based on my research findings. The game will provide information that will allow children to make their own conclusions on the subject.
- Field test the game on multiple second grade classes and revise the game for publication.

**Results, Product, or Outcome:**

- A research paper explaining the opinions and theories of paleontologists as well as my personal feelings on the topic.
- A display board summarizing my research, to be shown at the Howard County Student Learning Conference.
- A game for elementary school students that provides information on this topic and allows children to draw their own conclusions.

**Audience:** Elementary school students in Howard County who are interested in dinosaurs and what happened to them.

**Presentation:** I will create a game that will be given to several elementary school classes to be played under the supervision of their teacher.

**Conclusion:** *(This section will only be included in the final draft and will be a recap from the paper)*

**Teacher’s Signature:**

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**Mentor/Advisor’s Signature:**

\_\_\_\_\_

**Student’s Signature:**

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# A Sample Paper Abstract

*The Evolution of Dinosaurs into Birds: An Investigation into the Opinions of Prominent Scientists on this Topic*

The evolution of dinosaurs is a highly debated subject and without appropriate information, it can be difficult for children to arrive at their own opinions on the topic. It is also vital in science that students practice using information they learn to formulate hypotheses. **Briefly recap your thesis statement here.** Hopefully, this research, and ultimately the game created as a final product will support their natural interest in dinosaurs and science. This study was conducted to help others and myself in determining a conclusion based on fact about the hypothesized evolution of dinosaurs into birds. To accomplish this, I started by researching the writings of several prominent scientists in the area of paleontology to discover the reasoning behind their theories about dinosaur evolution. I used articles, books, textbooks, the internet, and human sources to produce an extensive research paper, detailing the theories and opinions of the scientists as well as advancing my own theories. I used this information to generate a research paper explaining the opinions and theories of paleontologists as well as my personal feelings on the topic. I presented my research through a display board and a series of school-based presentations. I then created an informative game for elementary school students based on my research findings. The game will provide information that will allow children to make their own conclusions on the subject. Finally, I field tested the game on multiple second grade classes in Howard County and revised the game for publication. **Briefly recap the conclusion paragraph from your paper here.**