



SECTION B: WRITING AN ABSTRACT

ABSTRACTS FOR RESEARCH PAPERS

The abstract provides a brief overview of your entire research in no more than 2500 characters, including spaces, arranged in a single paragraph. The abstract briefly states the research problem or purpose of the research (Introduction), how the problem was studied (Methods), what was discovered (Results), and how the results might be interpreted (Discussion and Conclusions). Acronyms may be used in an abstract, however they should be spelled out the first time they are used. The abstract should stand alone and **NOT** include citations or references within the abstract itself. The names of the participant and the DOE mentor should be given in all capital letters. You may use either first or third person, but must be consistent.

While it is difficult to be both concise and descriptive, that is exactly what an abstract must do. The abstract should be written or updated after the participant's research is completed to ensure that it accurately and fully reflects the participant's work. If the abstract is not updated after the participant's experience is completed, the abstract score may not fully reflect the accomplished research.

Please see page 41 to view a sample research abstract.

RESEARCH ABSTRACT EVALUATION RUBRIC

The following rubric will be used to evaluate abstracts submitted by program participants.

Abstracts assigned 0 - 10 points based on:

- (2 pt) Proper spelling, grammar, complete sentences, readability
- (2 pt) Well written introduction
- (2 pt) Methods are discussed
- (2 pt) Results are summarized
- (2 pt) Conclusions are presented

GRADING RUBRIC FOR RESEARCH ABSTRACT	<u>2</u>	<u>1</u>	<u>0</u>
	Fully meets all requirements and expectations	Partially meets requirements	Does not meet minimum requirements
<p>Mechanics. The abstract contains proper spelling, grammar, complete sentences, syntax, diction, and is readable.</p>	<ul style="list-style-type: none"> • Contains no spelling, usage, grammar, or mechanics mistakes. • Defines all acronyms except the very common ones. 	<ul style="list-style-type: none"> • Contains two or fewer mistakes in grammar, usage, spelling, or mechanics. • Contains one or more undefined acronym or key terms. 	<ul style="list-style-type: none"> • Contains three or more mistakes • Contains numerous undefined terms.
<p>Introduction. The abstract briefly states the subject of investigation purpose of project and its context.</p>	<ul style="list-style-type: none"> • Gives concise, thorough introduction to provide context and background of project. • Includes statement of the problem being studied. 	<ul style="list-style-type: none"> • Does not define key terms or uses them incorrectly. • Does not give enough information or provides unclear context or background. 	<ul style="list-style-type: none"> • Contains no introduction. • Starts with either methods or results.
<p>Methods. The abstract identifies how the problem was studied and defines all jargon or acronyms.</p>	<ul style="list-style-type: none"> • Discusses what tests/ procedures were used in an organized, clear, and concise manner. 	<ul style="list-style-type: none"> • Discusses methods, but is disorganized, vague, or verbose, or uses lots of jargon. 	<ul style="list-style-type: none"> • Contains no discussion of the method or procedure.
<p>Results. The abstract has provided an explanation of what was discovered or produced using concise, and specific detail.</p>	<ul style="list-style-type: none"> • Refers and connects results to the methods. • Presents results independently of methods. • Gives a justification if no data/results are possible. 	<ul style="list-style-type: none"> • Merely states results [qualitatively]. • If no results are possible, then only says "No results." 	<ul style="list-style-type: none"> • Gives no results or doesn't even mention results.
<p>Conclusion. The abstract interprets the results, evaluates what the results mean to the project, and defines the context within the field.</p>	<ul style="list-style-type: none"> • Clearly interprets results and concisely reflects the purpose of the investigation. • Suggests further work (if applicable). • Provides meaning and context to work. 	<ul style="list-style-type: none"> • Reflects the purpose or only suggests further research without providing context. 	<ul style="list-style-type: none"> • Provides no conclusion.