

# **Inquiry Project Proposal**

# Inquiry Project : Using Writing Strategies to Promote Critical Thinking

**Project Title:** Using Writing Strategies to Promote Critical Thinking

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**Rationale:** Reading comprehension and proficient writing are perhaps the two most important lifelong skills we can teach our students, starting at a very early age. Using writing exercises to teach critical thinking is the next logical step in taking a student's life skills a step further. Critical thinking is a vital competence which does not come naturally to many students; therefore we as teachers must be adept at teaching children how to inquire and think in increasingly critical and complex ways. Writing strategies are one way of achieving this goal.

## Questions I Plan to Address in this Inquiry Project:

What is the definition of Critical Thinking? (*Knowledge/Comprehension*)

What is the definition of a Writing Strategy that promotes Critical Thinking?  
(*Knowledge/Comprehension*)

Describe two writing strategies and how I would use them in the library to promote critical thinking. (*Application*)

Describe how I envision my teacher/librarian role in implementing many writing strategies to promote critical thinking. (*Application*)

Categorize which writing strategies for critical thinking are appropriate for a large vs. small group or individual student. (*Analysis*)

Compare/Contrast writing strategies with other types of teaching activities that promote critical thinking. (*Analysis*)

Create a new writing activity that promotes critical thinking. (*Synthesis*)

Summarize one of the findings in the research about using writing to promote critical thinking. (*Synthesis*)

Explain if I am for or against using writing strategies to teach critical thinking skills. As a result of the research, I'll support my stance with a list of the pros and cons of using writing as a critical thinking education tool. (*Evaluation*)

What are some other implications of using writing strategies to promote critical thinking (student resistance to writing or less time for practice on standardized tests for example)? Discuss logical next steps in the student's critical thinking learning process (converting a persuasive essay to public speaking or a formal debate, for example) (*Evaluation*)

# **Inquiry Project:**

## **Using Writing Strategies to Promote Critical Thinking**



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ED521, Teacher in the Classroom  
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# Inquiry Project: Using Writing Strategies to Promote Critical Thinking

## RATIONALE

Reading comprehension and proficient writing are perhaps the two most important lifelong skills we can teach our students, starting at a very early age. Using writing exercises to teach critical thinking is the next logical step in taking a student's life skills a step further. Critical thinking is a vital competence which does not come naturally to many students; therefore we as teachers must be adept at teaching children how to inquire and think in increasingly critical and complex ways. Writing strategies are one way of achieving this goal.

## CRITICAL THINKING DEFINED (*Know/Comprehend*)

In Arcadia University's ED521 "Teacher in the Classroom" course, we are learning that critical thinking is measured by how one moves up the ladder of types of thinking according to Bloom's Taxonomy: the student begins by knowing/comprehending a new concept, then demonstrates mastery of this new idea by applying the new knowledge. The student then further demonstrates critical thinking skills when he/she can analyze, synthesize and finally evaluate the new knowledge. Critical thinking is "crucial for both academic and everyday life" (Keller, p. 11) and "a necessary life skill whereby the process of improving thinking is, in essence, creating the habit of reflection and questioning in every aspect of life (King, 1995; Scriven & Paul, 2005)". (Arend p. 2)

Moffet described critical thinking as the ability to remove our communication "from our immediate experience..." and to progress to the ability to communicate "ideas about events, or to theories or arguments that support other abstract ideas..." this is "moving up a ladder of mental operations that require increasingly higher forms of abstract thinking." (Hogue Smith p.669)

## DEFINITION OF A WRITING STRATEGY THAT PROMOTES CRITICAL THINKING (*Know/Comprehend*)

Any writing task that requires the student to go beyond merely recounting data from rote memorization is likely an activity that promotes critical thinking. "Writing is more than a way of reporting ideas; it is a way of working out and refining ideas." (Eberly & Trand, p. 10) Examples of writing assignments that promote critical thinking include the following prompts:

- Describe 3 ways you can use a new idea you just learned in your everyday life. (*Apply*)
- Analyze and describe what is wrong with the way a character in a story handled a problem. How would you handle that problem differently? (*Analyze*)
- Explain how you could rearrange the events in our story to create a different outcome. Why did you choose the order of events you describe? How has the outcome changed and why? (*Synthesize*)
- Evaluate your partner's essay on our lesson. Explain what you agree/disagree with, and make suggestions for how to write an improved essay. (*Evaluate*)

Another facet of critical thinking is metacognition; the student's ability to be aware of and analyze the way that he/she thinks; metacognition is quite simply thinking about thinking. Additionally, critical thinking "encompasses skills such as evaluating sources of information, challenging assumptions, understanding context, analyzing arguments..." (Cotter p.3) and "the ability to formulate and present a logical, coherent argument." (Cotter p.7) Writing exercises can be a very effective metacognition tool.

## WHAT ARE TWO WRITING STRATEGIES TO PROMOTE CRITICAL THINKING? (*Application*)

1. "Peer review with metacognitive revision." (Hogue Smith p. 673) This method is especially helpful for the reluctant writer or those who lack confidence in their writing ability. The student produces a draft 5 paragraph paper. The paper is then reviewed by a student partner who gives specific feedback for revision, such as "Move sentence 2 from your third paragraph to your introduction....Your introduction lacks focus: state specifically the problem and your thesis." The writer receives these suggestions, digests them, and decides which to incorporate and how. The writer then produces a revised draft, using Microsoft Word's "track changes" function to show any text that is moved, added or deleted. The writer

# Inquiry Project: Using Writing Strategies to Promote Critical Thinking

then provides numbered footnotes for each of these changes, describing why each change was made. This exercise requires the writer to think about ways in which his or her writing was unclear and how to remedy this lack of clarity.

2. *“Going to the wall.”* (Eberly & Trand, p. 14) Each student writes their topic at the top of a large, easel sheet of paper and tapes it to the wall. Students then advance around the room, writing questions or comments about each topic. The sheets then belong to the writer who digests the comments and questions and decides which to use in writing the first draft of his or her paper. This exercise requires critical thinking on the part of the commenting students, as well as each student in their writer role.

## WHAT IS MY ROLE IN IMPLEMENTING THESE WRITING STRATEGIES? *(Application)*

As I teach older students, grades 6 through 12, my role as a librarian is to 1) augment their language arts and literature classes, and 2) teach research and information literacy skills. Writing exercises to teach critical thinking apply to both of these roles; here are examples:

1. A library lesson can include reading a piece of literature and responding to this literature using “Peer review with metacognitive revision,”
2. The research process requires critical thinking; the “Going to the wall” exercise helps students refine their research question and hone their research project writing.

## WHICH STRATEGIES ARE APPROPRIATE FOR A LARGE VS. SMALL GROUP OR INDIVIDUAL STUDENT? *(Analysis)*

*(Analysis)*

<i>Type of writing strategy:</i>	Individual Student	Pairs or small groups	Large group
<b><i>Peer review with metacognitive revision</i></b>		4	4
<b><i>Going to the wall</i></b>			4
<b><i>Persuasive essay</i></b>	4	4	
<b><i>Literature circle</i></b>		4	4
<b><i>Journalistic interview</i></b>	4	4	
<b><i>Respond to prompt</i></b>	4		

## COMPARE/CONTRAST WRITING STRATEGIES WITH OTHER TYPES OF TEACHING ACTIVITIES THAT PROMOTE CRITICAL THINKING. *(Analysis)*

<i>Helps students learn to:</i>		know/comprehend	apply	analyze	synthesize	evaluate
<b>Teaching strategies:</b>	<b><i>Writing Activity</i></b>	4	4	4	4	4
	<b><i>Lecture</i></b>	4	?	?	?	?
	<b><i>Boalean Theatre</i></b>	4	4	4	4	4
	<b><i>Exam questions</i></b>	4	4	4	4	4
	<b><i>In-Class discussion/debate</i></b>	4	4	4	4	4
	<b><i>Reading Assignments</i></b>	4	?	?	?	?

? = indicates that the motivated student may reach these levels of Bloom’s Taxonomy thinking of their own volition. But unlike Boalean Theatre, a writing prompt, or an in-class debate, there is nothing inherent in this type of assignment that will virtually guarantee the student employs critical thinking. (Cotter p.3)

# Inquiry Project: Using Writing Strategies to Promote Critical Thinking

## CREATE A NEW WRITING ACTIVITY THAT PROMOTES CRITICAL THINKING. (Synthesis)

I devised the following writing prompt that I believe encompasses all levels of Bloom's Taxonomy, I call it "You fix the story":

1. What book did you hate that everyone else liked? (*Know/Comprehend*)
2. Explain why you think it was popular, why you hated it. (*Apply/Analyze*)
3. Create a passage, theme or plot device that would change your opinion about the book. (*Synthesize*)  
Example: at the end of "The Giver" by Lois Lowry, the reader is left hanging about the fate of the protagonist, Jonas. Does he live? Does the baby Gabriel survive? Many readers complained about this ambivalent ending. Write a few paragraphs summarizing how you would like to see this story resolved.
4. Explain why your work fixes the problems in the original text or why your idea is superior to those of the author's. (*Evaluate*)
5. Trade your paper with your partner. Write a 2 paragraph review on your partner's "You fix the story." Do you like their ideas? Does it fix the story for you? Do you like the original better and if so why? (*Evaluate*)

## SUMMARIZE ONE OF THE FINDINGS IN THE RESEARCH (Synthesis)

By far the most interesting research I read on the subject of using writing strategies to improve critical thinking was "Diving in deeper: Bringing basic writers' thinking to the surface" by Cheryl Hogue Smith. In her experience working with young, often underprepared college students enrolled in "Comp 101" and "Lit 101" type courses, she found that those who struggle with writing do so for two basic reasons: 1) they lack the cultural knowledge that many of their peers who attended better schools had access to via classic literature and higher quality instruction, and 2) related to this, they had developed "faulty thinking." As a result of this faulty thinking, their writing was often incomplete and disjointed.

Hogue Smith posits that using a tool such as "Peer review with metacognitive revision" does two things:

- Teaches the basic writing student the importance of revision because "It is during the revision process that students can analyze their writing, think about their thinking, and reflect on how that thinking is communicated" (Hogue Smith p.671) and "these students came to better understand when their thinking broke down for the reader." (Hogue Smith p.674)
- The peer review process fosters critical thinking by enabling the student to "show their metacognitive thinking as part of the assignment itself." This metacognitive exercise is a useful way to get students to develop and demonstrate higher level thinking. (Hogue Smith p. 672) This exercise benefits both the reviewer and the writer.

## AM I FOR OR AGAINST USING WRITING STRATEGIES TO TEACH CRITICAL THINKING? (Evaluation)

As a result of the research, I am a strong proponent of using writing exercises to strengthen critical thinking skills, along with a host of other strategies. Writing assignments designed to foster critical thinking help students to think in more complex and abstract ways including thinking about how they think. Through writing they learn to think about ideas, react to and analyze ideas, evaluate their value, and formulate their own new ideas.

# Inquiry Project: Using Writing Strategies to Promote Critical Thinking

## WHAT ARE SOME OTHER IMPLICATIONS OF USING THESE WRITING STRATEGIES? (Evaluation)

Positive implication	Negative implication
teaches metacognition (Hogue Smith p.674)	student resistance to writing
helps remedy faulty thinking (Hogue Smith p.674)	"...students can never outwrite their reading ability." (Hogue Smith p.670)
teaches writing-related planning skills and fluency	may require special training for teachers to implement
builds confidence toward becoming articulate	less time for practice on standardized tests
broadens students' world view	needs to be adapted for special needs students
helps students "interrelate ideas within and among the disciplines leading to increased academic rigor" (McCollister & Saylor p. 42)	may be time consuming for teachers to implement

### FINDINGS

Essentially, the thrust of fostering critical thinking is the belief that our job as educators is not merely to dump vast sums of data into our students' brains, it is to help them to "master the rhetorical, logical and interpretive skills that will enable them to read" and think introspectively, "...and to elaborate on ideas more forcefully" (Hogue Smith p.669) and to learn to use "abstract and ...hypothetico-deductive reasoning." (Cotter p.5)

"It is not enough to give students food for thought; they must be taught to 'cook'...Yet, to produce gourmet chefs—rather than mere cooks...education must do more than seek to insure that students are well versed in their specific areas of study; <they> must see that students are able to make intellectual connections and express and apply their knowledge in real-life situations and contexts." (Trand & Eberly, p. 10)

There are a myriad of creative and expository writing tools that offer avenues for students to explore "the different ways through literacy that people make meaning in the world." (McCrary p. 5)

### APPLICATIONS

There is much available literature on the rationale behind using writing strategies to teach critical thinking, including the precise types of tasks that can be used and step-by-step lesson plans, to deploy writing activities in the interest of critical thinking education. I aim to be vastly more than just the nice librarian who reads stories aloud and helps kids to pick out books. I want to be considered a guide and go-to person for information, research, and all kinds of knowledge quests. One facet of this role is to teach my students how to read critically, interpret literature, and to think in ways they may not be accustomed to. Using various writing strategies to enhance critical thinking is certainly in line with my goals.

I see many logical next steps in the students' critical thinking learning process. We can take students from a writing prompt or a persuasive essay, and have them convert these devices to a speech or presentation, or as an argument to be used in a formal debate, for instance. We can, for example, teach students how to use their critical thinking and writing abilities to become engaged citizens by making an impassioned argument, writing to their congressperson, or crafting an opinion piece for their newspaper.

It is not only important for our students to possess critical thinking skills in order to have successful lives; we must help them develop the motivation to do the hard work and strenuous thinking that *using* critical thinking skills entails. Critical thinking is like many other elusive qualities in life: we may not be able to describe exactly what it is, but know it when we see it in action, and we certainly know when we notice its absence! We all know people who seem to lack the ability to make inferences, analyze a problem, evaluate options, or independently come up with a logical solution to a dilemma. These individuals frequently lack metacognitive skills; they are unable to understand how and why they think the way they do (often in faulty ways), and are therefore unable to improve their critical thinking deficits. Our goal as educators is to make sure none of our students are so ill-equipped to tackle the challenges that life has to offer.

# Inquiry Project: Using Writing Strategies to Promote Critical Thinking

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# **Inquiry Project Class Activity**

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