

CRITICAL THINKING (CT) MODEL PART 1 GENERAL CONCEPTS

In this first handout, I would like to simply give you the basic outlines of our critical thinking <CT> model that you will be using for the rest of your assignments. This analysis should be looked upon as a conceptual tool box for use in checking the organization and development of the argumentative papers you write using our PW model. It can also be used to evaluate the organization and development of essays written by those not using our model after their essays have been reformatted.

It may be difficult for you to keep the two models separate in your minds, since they have a number of concepts and terms in common. But you should think of PW as a guide to producing argumentative papers and the CT model as a set of tools for checking the arguments and examples presented in the paper generated by PW.

As you know, PW establishes a certain order for creating and writing or analyzing a paper. To create the arguments for a paper, you begin with your evidence and you build your arguments around them. On the other hand, to present your arguments in essay form or analyze/evaluate the arguments of others, you always begin with organization and then you move on to consider development.

Since it is easier to talk about checking an argumentative essay than it is to talk about the actual process of writing them, I am going to refer to these rules as checking rules. They are tools to analyze and evaluate the arguments in any essay, including those you have written.

So following the sequence outlined in PW, you would first use our CT rules to check the organization of a paper. And then you would go on to check the development. Remember that if the organization of an essay is weak, then the entire paper is weak. There is no such thing as an argument that has weak organization and good development. On the other hand, a good organizational plan may or may not be followed up with good development.

Here in CT 1, I will give you a general overview of our critical thinking model. Then in CT2, I will present a set of specific rules to be used for checking organization. Finally, in CT 3, I'll lay out another conceptual tool box for checking development and background.

A. ARGUMENTS

An argument is an attempt to demonstrate the truth or rationality of your beliefs or ideas to a specific audience. Its purpose is to persuade your audience to either accept or understand your point of view.

All arguments are directed towards a specific audience. What you argue and how you argue are both functions of your audience. It follows that to argue effectively you must know your audience. And knowing your audience means knowing what beliefs you have in common and what beliefs you do not have in common. This also includes the concept of what counts as a good argument.

Likewise, when evaluating an argument written by someone else, you always have to determine who it was written for.

B. THE UNCERTAINTY OF TRUTH

In a public university environment, we are supposed to share a common model for critical thinking and argumentation. In other words, we should all use the same rules for giving reasons and explanations; we should all use the same rules for deciding what counts as a good argument and what does not.

To help establish this common model, an emphasis on critical thinking as a subject area has been mandated by educators at all levels of instruction in all parts of the country and at all grade levels. Consequently, the acquisition of critical thinking skills is an objective of many GE courses throughout the CSU system as well as here at CSUS.

There are number of assumptions underlying this focus on critical thinking. But one of the most important is that what people refer to as “the truth” is something that emerges from open discussion and open debate.

The reason for this openness in the search for truth is the assumption that there is no one, single, “true-for-all-time” description of reality. We all live in a world that is uncertain and contingent, not so much because “reality” itself is changing. Rather, our concepts for understanding and interpreting the world are, for a complex of reasons, in a state of continual flux.

Now contrary to what some may want to believe, no one person, group or ideology has any special insight into a perfect and unchanging understanding of reality. One reason for this is that the world as we know and experience it involves the participation of many people who hold different belief systems. Of course, each group may believe it and it alone knows the “Truth,” but in order to communicate with others, they need to establish a common ground where those absolutes are, at least temporarily, suspended or put on hold.

So in a university environment, we assume that all “truths” are in a sense dependent upon the strength of the arguments that support them. In order for an idea or belief to be held as “true” or at least “reasonable,” it must meet the critical thinking criteria shared by members of the university community.

This shared model is not actually stated in any one specific place, but if you pick up any university textbook or listen to any university lecture, you will find a very similar set of underlying assumptions governing argumentation, problem solving and analysis.

For example, most texts and instructors would assume that before we decide whether a statement, P, about a particular subject, X, were true or reasonable, we would be obligated to listen to or consider the primary arguments for and against P before making up our minds. We can’t close out options and possibilities simply because they might not be consistent with our personal beliefs and opinions.

The point I have just made may seem self-evident. But in everyday life, many people seem to be “naturally inclined” to accept the truth of what they already believe and categorically ignore all other interpretations.

One of the primary arguments as to why a university education is valuable is that the discipline of the university environment forces each of us to take account of what we believe and why. Hence, here at CSUS, we live and work in a world where reasons and explanations are not only expected but demanded of everyone, students and teachers alike.

C. GE CRITICAL THINKING AND WRITING REQUIREMENTS

If you have read your course syllabus, you will know that I have already gone over the rationale for E20 as a sophomore level course that combines what you learned in your GE Area 3A critical thinking class with the writing skills that you learned in English 1A.

Just to refresh your memories, let me repeat the general goals of our critical thinking courses. Upon the completion of the GE 3A requirement, students should:

1. Be able to locate the argument in a passage.
2. Be able to detect any errors in the over-all argument and be able to explain why the reasoning is in error.
3. Be able to evaluate the evidence presented in support of an argument.
4. Be able to construct and defend an argument of one’s own.

I also mentioned our course goals as well. After completing the GE English 20 requirement, the student should:

- A. Be able to organize an argumentative essay on a complex theme or subject that defends a thesis that includes a logical evaluation of multiple points of view.

B. Be able to develop the organizational plan created in [A] using logically relevant examples and evidence.

The rest of this handout will discuss the CT model that you will be using, in conjunction with our PW model, to satisfy A and B.

D. AN ARGUMENTATIVE ESSAY

Even if you have not already taken a course specifically devoted to critical thinking, you have all learned how to construct an argument from your English 1A or an equivalent course. So here I will just review the basic structure of an argumentative essay.

Regardless of what textbook you used in English 1A, you were all probably taught to structure an essay in something like the following way.

1. You start with a thesis statement. It must be a proposition that can be proven to be true or false, reasonable or unreasonable, given a specific audience. The intended result is that after reading your essay this audience will agree that your thesis is true or that it is reasonable. Your 1A instructor probably told you to always be aware of your audience when constructing your arguments. That is excellent advice, since the selection of your audience is the most critical single choice a writer makes.
2. The body of your paper consists of a series of supporting arguments, each of which is supported by specific examples and other evidence. The relationship between your thesis and your supporting arguments should be such that if your audience accepts your supporting arguments because they accept your supporting evidence, then they must also accept your thesis. The relationship between your evidence and a specific argument should be such that if your audience accepts your evidence for an argument then they must accept the argument.

D. SOME RULES OF LOGIC

OK, now I want to talk about some of the rules of logic and critical thinking. One of the most important concepts that you will use in most of your university courses is the principle of consistency. Very simply, it says that a good argument should not generate contradictions, where a contradiction is defined as the assertion that a specific statement is both true and not-true.

Consistency or the lack of it can be seen in a number of different areas. For example, you may be inconsistent in your use of definitions or you present arguments that flat-out contradict themselves. You might also fail to present key facts and other information or ignore issues that are logically necessary to your case. These omissions may lead to contradictory implications or inferences.

Remember that you are not only responsible for what you assert but what you imply or assume as well. Often, the most damaging inconsistencies are generated by what an argument implies or assumes is true.

Of course, the idea of consistency rests upon the basic rules of inference. These rules limit what conclusions can be drawn from what kinds of evidence. For example, the familiar syllogism offers what is probably the most common example of a valid inference schema.

Premise:	All Xs are Y.	All men are mortal.
Fact:	P is an X.	Socrates is a man.
Conclusion:	Therefore, P is a Y.	So Socrates is mortal.

If the premise is true and the fact-statement is true, then the conclusion has to be true. Of course, the premise and fact-statement might be false in the real world, but that would not change the validity of the conclusion.

On the other hand, here are other deductions that are not permitted by the rules of inference or are considered to be faulty in other ways. Some examples are:

Premise:	All Xs are Y.	All apples are fruits.
Fact:	P is a Y	This pear is a fruit.
Conclusion:	Therefore, P is an X.	So this pear is an apple.

Fact:	Michael Jordan is a great basketball player.
Fact:	Michael Jordan wears Nikes.
Conclusion:	So if you wear Nikes, you will be a great basketball player.

Fact:	Sally is 22 and unmarried.
Conclusion:	So Sally must be looking for a husband.

Fact:	Ron Kline is a doctor.
Fact:	Ron Kline uses Tylenol.
Conclusion:	All doctors use Tylenol.

Fact:	I like Barbie dolls.
Conclusion:	So all real woman like Barbie dolls.

Fact:	Ice-T wrote a song about killing cops.
Conclusion:	So Ice-T wants to kill cops.

Of course, logicians have names for the errors in these arguments. But all you need to see here is that:

- 1) These arguments are not well-formed (for one reason or another).
- 2) These kinds of arguments are very common in every day life, especially advertising and pop media.

It goes without saying that in constructing this brief overview, I have made some sweeping generalizations and taken great liberties with some very complex issues. But the important thing here is not to get bogged down in terminology. I feel that most of you have already internalized the basic procedures for good critical thinking, so you can intuitively sense when an argument is good or bad or when, as is often the case, something important is missing. Hence, my advice is two-fold:

- 1) Learn to trust your instincts as to what counts as a good or bad argument. Let them guide you. They will be right more than they will be wrong.
- 2) Learn how to analyze arguments. Analysis involves taking something apart and putting it back together again in order to explain/understand it.

Often a combination of basic analysis and good old-fashioned common sense is enough to help you to see the strengths and weaknesses of an argument