## Critical Thinking Reinforcement Skills and Terminology

**Argument: "**A reason or set of reasons given with the aim of persuading others that an action or idea is right or wrong" (OED). "2a. a reason given in proof or rebuttal; 2b. discourse intended to persuade; 3b. a coherent series of statements leading from a premise to a conclusion" (Webster).

**Argument Analysis:** To **analyze** an argument is to **identify and distinguish between its different parts**, i.e. the conclusion and premise(s). The claim that is being supported in an argument is the conclusion, and the evidence provided to support the conclusion is the premise(s).

**Argument Evaluation:** To **evaluate** an argument is to determine whether the conclusion is **adequately supported by the premises**. This involves two steps: (1) determining whether the premises provide sufficient logical support for the conclusion, independently of whether the premises are true, and (2) determining whether the premises are true, which entails considering the credibility of sources, independently of whether they support the conclusion.

**Argument Construction:** To **construct** an argument is to provide a conclusion supported by premises. A well-constructed argument will use **credible evidence** and **relevant reasoning** to support its conclusion.

## Critical Thinking Across Disciplines

Disciplines may use different terms to refer to the main parts of an argument:

**Conclusion:** The conclusion, thesis statement, claim, main point, or point of view is the key point the author is trying to establish or prove in their argument. This is the first part of the argument to identify when analyzing an argument.

**Premises:** The premises are claims given in support of the conclusion; they are supporting evidence, (sometimes) argument, or reasoning that is presented by the author to make the case for or prove their thesis statement, or conclusion.

Constructing arguments across disciplines may take on various forms:

- Designing an experiment to test a hypothesis: making the case that a certain method is the best one to yield the expected results.
- Deciding how best to measure some phenomena: proving that a certain model is the most appropriate one to study given phenomena.
- Defending a view about the nature of free will: giving reasons against the possibility of free will deduced from the nature of causality.
- Explaining the causes of some historical event: providing supporting evidence to show the likelihood of certain historical phenomena.
- Predicting the outcome of some physical process: reasoning from general principles to assert the necessity of a certain outcome.
- Evaluating a performance or work of art: using aesthetic and historical principles to critique the value of a certain artwork.
- Balancing the costs and benefits of some public policy: making the case that a policy should or should not be adopted based on cost and benefit analysis.

Finally, argument analysis, evaluation, and construction may be combined into a single assignment so long as it requires the student to both critique an argument and construct an argument. For example, the student may be asked both to critique some specific set of policy recommendations and to present an argument defending one of these recommendations over the others.

**Note:** This rubric is meant to be a foundational and skeletal rubric to be modified with discipline specific terminology or other changes according to the needs of the instructor. Also, this rubric could be used piecemeal. For example, if your assignment asks for an argument analysis, you may isolate and itemize the part that pertains to argument analysis: 1- carefully articulates the argument's conclusion, 2- states the premises for the argument, 3- identifies relevant definitions or implicit assumptions at work in the reasoning.

**Critical Thinking Reinforcement Rubric**[1]

| | Exceeds Expectations | Meets Expectations | Approaching Expectations | Below Expectations |
|---|---|---|---|---|
| **Argument Analysis** | Carefully articulates the **argument's conclusion**, clearly distinguishes it from its premises, and identifies most **relevant definitions and/or hidden assumptions**. | Distinguishes the argument's conclusion from its premises and some effort is made to identify relevant definitions and/or hidden assumptions. | Distinguishes the argument's conclusion from its premises, but little effort is made to identify relevant definitions and/or hidden assumptions. | Does not identify the argument's conclusion or distinguish it sufficiently from the premises and no effort is made to identify relevant definitions or hidden assumptions. |
| **Argument Evaluation** | Clearly and correctly judges whether the premises provide **sufficient logical support** for the conclusion and whether the premises are **reasonable to believe**, including whether their sources are credible. | Correctly judges whether the premises provide sufficient logical support for the conclusion and whether the premises are reasonable to believe. | Attempts to judge whether the premises provide logical support for the conclusion and whether the premises are reasonable, but does so poorly. | Does not address whether the premises provide sufficient logical support for the conclusion or whether the premises are reasonable to believe. |
| **Argument Construction** | Develops a clearly articulated argument, using **evidence and/or systematic logical reasoning** in support of a conclusion or point of view, and identifies **relevant qualifications or objections** or alternative points of view and prioritizes evidence and/or reasons in support of the conclusion. | Presents an argument using evidence and /or logical reasoning in support of a point of view, and identifies some qualifications or objections or alternative points of view. | States a conclusion or point of view but does not organize the evidence or reasons in a logically adequate way, and does not clearly identify or respond to relevant objections or alternative points of view. | Does not clearly state a conclusion or point of view or else little or no supporting reasoning or evidence is presented, and makes no attempt to recognize or respond to objections or alternative points of view. |

[1] This rubric has been adapted from the SUNY Critical Thinking Rubric found at http://www.cortland.edu/gear/CTRubric.final.pdf.