

Critical Thinking

What is Critical Thinking?

Critical thinking is the capacity and ability to process information in creative and constructive ways. It involves utilizing **higher-order thinking skills** in order to analyze, synthesize, apply, compare, and/or evaluate information. Employing higher-order thinking allows one to understand the world in new ways, to construct original forms of knowledge, and to connect empirical details and abstract theories. Critical thinking embraces evidence and reflection as the bases for higher order thinking. Rather than accepting things at face value, critical thinkers look for evidence to support or refute propositions, and gain a deeper understanding of phenomena by reflecting on how and why things are as they are. It is the willingness to ask these questions and to challenge accepted forms of knowledge that leads to a truly critical understanding.

Aspects of Critical Thought

Critical thinkers creatively employ a variety of different thinking skills.

Analytical thinking involves breaking knowledge into its component parts, studying each component separately, and understanding the links between the components. Analytical skills help one distinguish relevant from extraneous material for particular purposes.

Synthetic thinking refers to the ability to combine ideas in meaningful ways. The ability to synthesize information allows one to find creative solutions to intractable problems.

Applied thinking means using existing knowledge in a new context to answer questions or solve problems. Applied thinking enables one to take abstract knowledge and use it to understand concrete reality.

Comparative thinking helps one to understand a particular phenomenon by viewing it in relation to other phenomena. In order to do so, it is necessary to develop a set of criteria as a basis for seeing how the phenomena differ and how they are the same.

Evaluative thinking involves studying the results of a particular phenomenon or project, and making a value judgment as to its effectiveness. Evaluation also requires a set of criteria in order to understand what is meant by effective.

Becoming A Critical Thinker

Developing critical thinking skills is an important, although infrequently acknowledged, mission of all university courses. Higher order forms of thinking require one to think more precisely, and they help one understand and negotiate complexity in the world. You can develop your ability to think critically by engaging actively in the learning process. This means asking a variety of different types of questions as you absorb the course material. You should feel free to ask questions of course instructors during lectures, to ask questions of your classmates during class discussions and activities, and to ask questions of the reading material, using *active reading strategies*. It is important to vary the *types* of questions you ask, so that you are able to view the material in different ways.

Types of Questions to Ask

Asking a variety of different types of questions will not only help you understand the course material in more depth and breadth, but will also allow you to develop a more critical approach to processing information. As you go through the course material, you may want to ask questions that probe basic factual information, that compare ideas or themes, that look for motives, that challenge assumptions, that examine conclusions or interpretations, that extend the topic into new areas, that seek causal relationships between phenomena, that require a conclusion, that motivate action, that pose hypotheses about facts or issues, or that summarize and synthesize material. The ability to think in terms of questions is the cornerstone to critical thought.

Sources

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