

Critical Thinking Workshop #1

Instructional Strategies for Teaching Critical Thinking

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Critical Thinking according to Bethel College

We have defined critical thinking as a process of successfully analyzing, assessing, and reconstructing information in an objective manner. It will involve the ability to view new information with an open mind, the ability to recognize external and internal biases, discerning both strengths and weaknesses of the information. Ultimately, the critical thinker will use information in an effective and ethical manner on a consistent basis.

Some Elements of Critical Thinking

- Metacognition: self-reflection about one's thinking processes
- Thinking for one's own ends
- Not accepting beliefs of others unreflectively
- Knowing how to connect evidence/data with arguments based on them
- Distinguishing good arguments from bad ones
- Recognizing bias (one's own and others')
- Creating arguments suited to context and audience
- Applying good critical thinking consistently in life

How is Critical Thinking Nurtured?

- Metacognition: self-reflection about one's thinking processes
 - Students need the opportunity to think their own thoughts.
- Not accepting beliefs of others unreflectively
 - Students must sort through multiple perspectives.
- Distinguishing good arguments from bad ones
 - Students must encounter problems that are not simply matters of opinion.
 - But there can't just be one right answer.
- In short, students must be actively engaged in their learning.
 - Memorization is not enough, either of facts or arguments or beliefs.

What Does a Critical Thinking Class Look Like?

- Students are talking and writing. This means:
 - Collaborative learning
 - Writing exercises (in class, homework, on exams, essays, etc.)
 - Presentations
- Students aren't always trying to get to someone else's answer.
 - There can be right and wrong answers.
 - But there can't be just one clearly right answer.
- The teacher isn't always the center of attention.
 - In student-centered learning, students are central and instructors facilitate learning.
- Courses are structured around assignments (occasions for learning) rather than content (coverage for its own sake).

- Look at the handout, middle of p. 1, for another version of this argument.
- Consider lists from Kurfiss and CAT Developers (pp. 1-2).

- Recall my presentation in August Workshop.
 - I tried to demonstrate good teaching practices.
 - What were they?

- Recall my presentation in August Workshop.
 - I tried to demonstrate good teaching practices.
 - What were they?
- In grad school, I was encouraged to follow learner-centered pedagogy, but I couldn't do it until I saw it.
 - The list of tips (one page handout) may prove useful.

Let's do some collaborative learning.

- Break into groups of two.
- Read the directions.
- Any questions about procedures before we begin?

- Then begin.
- You have 10 minutes.

Some Definitions

- “In **cooperative learning**, the use of groups supports and instructional system that maintains the traditional lines of classroom knowledge and authority. . . in cooperative learning, the teacher retains the traditional dual role of subject matter expert and authority in the classroom.” (Barkley, Cross, & Major)
- “**Collaborative learning** occurs when students and faculty work together to create knowledge . . . It is a pedagogy that has at its center the assumption that people make meaning together and that the process enriches and enlarges them.” (Matthews)
- **graded v. ungraded, high stakes v. low stakes**
- **formative assessments** (help students learn how they are doing) v. **summative** (graded)

Questions to Consider in Collaborative Learning

- How to divide students into groups?
- How large should groups be?
- How long should you give students to work?
- How often should you use group work?
- When should you use group work?
- How much preparation is required?