

# What is Critical Thinking

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DEFINITIONS

# Activity 1

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Write a statement defining Critical thinking:

# Definition

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- It is intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and or evaluating information gathered from or generated by observation, experience, reflection, reasoning or communication, as a guide to belief and action, and it is based on universal intellectual values: clarity, accuracy, precision, consistence, relevance and sound evidence, good reason, depth. Breadth, and fairness.

- How this definition match yours?
- How does it differ from yours?

- Discuss with your partner, what are the main characteristics of critical thinking process

# Characteristics of critical thinking

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- Metacognition : It is thinking about one's own thinking. It emphasizes one's thinking as one
- perform specific tasks and then using this awareness
- to control what one is doing.

- **Argument:** Critical thinking involves identifying, evaluating, and constructing arguments.
- **Reasoning:** The ability to infer a conclusion from one or multiple premises. This requires examining logical relationships among statements or data.
- **Point of view:** how a person views things, which shapes his/her construction of meaning. Critical thinkers view phenomena from different points of view.
- **Procedures for applying criteria:** critical thinkers use many procedures which include asking questions, making judgment, and identifying assumptions

# Angelo, 1995, p.6

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- “Most formal definitions characterize critical thinking as the intentional application of rational, higher order thinking skills, such as analysis, synthesis, problem recognition and problem solving, inference and evaluation.



- “Critical thinking is thinking that assesses itself”. (Center for Critical thinking, 1996b).
- “Critical thinking is the ability to think about one’s thinking in such a way as 1. To recognize its strengths and weaknesses, and, as a result, 2. To recast the thinking in improved form ( Center for critical thinking, 1996c).
- Beyer (1995 defined critical thinking as “making reasoned judgments” (p.8).

- What does critical thinking involve?

# Components of Critical thinking

- According to Wade 1995, Critical thinking has 8 characteristics : it involves asking questions, defining a problem, examining evidence, analyzing assumptions and biases, avoiding oversimplification, considering other interpretations, and tolerating ambiguity.
- Strohm & Boukus (1995) see that dealing with ambiguity is also essential part of critical thinking. Ambiguity and doubt are the function of critical thinking and are necessary and even productive part of the process.

# Beyer's essential aspects of

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- **Disposition:** critical thinkers is skeptical, open minded, value fair-mindedness, respect evidence and reasoning, respect clarity and precision, look at different point of view, and will change positions when reasons leads them to do so.
- **Criteria:** to think critically, must apply criteria. Need to have conditions that must be met for something to be judged as believable. Standards apply to all subjects. It must be relevant, accurate facts, based on credible sources, precise, unbiased , logically consistant and strongly reasoned.

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# The importance of teaching critical thinking

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- Students need to develop and effectively apply critical thinking skills to their academic studies, to the complex problem they will face and to the critical choices they will be forced to make as a result of the information explosion and other rapid technological changes.
- Critical thinking involves questioning, therefore it is important to teach students how to ask good questions, to think critically, in order to continue the advancement of the very fields we are teaching. Every field stays alive only if good questions are generated.

- Why Critical thinking should be implemented in teaching?

- Beyer not only see critical thinking is good for students , but for every member in any nation. To live successfully in democracy, people must be able to think critically in order to make good decisions about personal and civic affairs.



# Teaching strategies to help promote critical thinking

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- Classroom Assessment Techniques:

To monitor and facilitate student's critical thinking, there is a need for using ongoing classroom assessment.

Teacher might ask questions like “What was the most important thing you have learned in today's class? What question related to this session remains uppermost in your mind?”

The teacher selects of the papers and prepares responses for the next class meeting.

- Cooperative Learning Strategies:

Cooper (1995 ) argues that putting students in group learning situations is the best way to foster critical thinking. Students perform more of the active, critical thinking with continuous support and feedback from other students and the teacher.

- Case studies/Discussion method:
- McDobe (1995) describes this method as teacher presenting a case (or a story) to the class without a conclusion.
- By using prepared questions, the teacher leads students through a discussion, allowing students to construct a conclusion for the case.

- Using questions:
- King (1995) identifies ways of using questions in the classroom:
- Reciprocal/peer Questioning: Following a lecture, the teacher displays a list of question stems( such as what are the strengths and weaknesses of.. Students must write questions about the lecture material. In small groups , the students ask each other the question and then, the whole class discusses some of the questions from each small group

- **Reader's Questions:** students are required to write questions on assigned reading and turn them in at the beginning of class. Select a few questions the impetus for class discussion.
- **Written Dialogues:** students are given written dialogues to analyze. In small groups, students must identify different viewpoints. Students must look for biases, presence or exclusion of important evidence, alternative interpretations, misstatement of facts, and errors in reasoning.

- Each group must decide which view is the most reasonable. Then coming to a conclusion, each group acts out their dialogue and explains their analysis of it.
- Spontaneous Group Dialogue:
- One group of students are assigned roles to play in a discussion (such as leader, information giver, opinion seeker, and disagreeer). Four observer groups are formed and their function is to determine what roles are being played by whom, identifying biases and errors in thinking, evaluating reasoning skills, and examining ethical implications of the content.

# Conference Style Learning:

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- The teacher does not teach the class in the sense of lecturing.
- The teacher is a facilitator of conference.
- Students must thoroughly read all required material before class.
- Assigned readings should be in the zone of proximal development( readings should be able to be understood by students, but also challenging.
- The class consists of students asking questions of each other and discussing these questions.

- Teacher does not remain passive, but rather helps “direct and mold discussions by posting strategic questions and helping students build on each others’.(Underwood & Wald,1995,p.18).
- Use Writing Assignments: The use of written assignments according to Wade, is fundamental to developing critical thinking skills.
- With written assignments, the teacher can encourage the development of dialectic reasoning by requiring students to argue both(or more) sides of the issue.



# Reference:

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Karen I. Adsit, Ed. Teaching Critical Thinking Skills,  
Grayson H. Walker Teaching Resource Center.

# Applications for Critical Thinking:

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- Teaching points:
- Introduce and use the technical terms.
- Clearly state the goals of critical thinking instructions
- Do not go overboard
- Spend time describing and defining your definition of critical thinking.
- Explain that critical thinkers aren't necessarily jerks.
- Be mindful of opportunities to mention critical thinking.
- Study the skills list and emphasize them when and where appropriate.

• Thank you