



Teaching Tips

A Forum for discussion and tips for
advancing teaching and learning at Mona

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Teaching to Develop Critical Thinking Dispositions and Skills

The development of critical thinking has been a continuing concern of educators in higher education for many years. The Instructional Development Unit has noted that faculty consistently lists the development of critical thinking skills as one of their most challenging tasks as university teachers at the University of the West Indies, Mona Campus.

There are various definitions for critical thinking ranging from the very narrow—a well-reasoned evaluative judgment (King & Kitchener, 1994), to the very broad—thinking that involves more than the mere acquisition and recall of factual information (Greeno, 1989). Others suggest that critical thinking comprises all “deeper” thought processes over and above mere memorization and factual recall and involves reflecting, evaluating, analyzing, and interpreting the information received. The above definition is more than asserting that critical thinking is being critical and this is a common misconception. Critical thinking is also more than engaging in the cognitive process of evaluation or critique; in fact evaluation is just one aspect or form of critical thinking.

The California Critical Thinking Dispositional Inventory (Facione, 1994) provides a list of seven core attitudes for the development of critical thinking. These core attitudes are helpful in our quest to teach in ways that will empower our students to think critically. These dispositions are: truthseeking, open-mindedness, systematicity, self confidence, analyticity, inquisitiveness and cognitive maturity.

References

- Cuseo, J. (n.d.) Questions that promote deeper thinking. Retrieved April 10, 2011 from: www.oncoursework.com/Learning030.htm
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- Greeno, J. (1989). A perspective on thinking. *American Psychologist*, 44 (2), 134-141.
- King, P. M., & Kitchener, K. S. (1994). *Developing reflective judgment: Understanding and promoting intellectual growth and critical thinking in adolescents and adults*. San Francisco: Jossey-Bass.

Special points of interest:

- The Teaching Tips Newsletter is a publication of the Instructional Development Unit (IDU) at the UWI, Mona.
- The Newsletter will be published once per month and will focus on tips for improving teaching and learning in higher education. The Newsletter will be available online as well as in the office of the IDU.
- If you have an area that you would like to explore using this medium, do not hesitate to contact us at the IDU.

How can we best help our
students develop good
critical thinking skills?
Here are some suggestions:



Consider the following steps in your course design to encourage students to engage in critical thinking:

- Step 1: Familiarize yourself with the principles of developing critical thinking dispositions and skills.
- Step 2: Incorporate critical thinking objectives into your course.
- Step 3: Identify strategies for students to carry out the critical thinking activities.
- Step 4: Develop writing activities that foster critical thinking.
- Step 5: Pinpoint supporting strategies to aid/coach students in critical thinking.

Developing Critical Thinking Dispositions & Skills

The following list (Cuseo, n.d.) of thinking skills is recommended as we seek to develop teaching strategies to promote critical thinking. Each skill is followed by a question. In order to elicit the skill in learners, teachers must engage in questions or other activities that focus on the development of that skill.

1. Comprehension (Understanding): to convert information into a form that is personally meaningful, i.e., that makes sense to the individual who is learning it.

*How would you put ____ into your own words?
(Paraphrasing)*

What would be an example of ____? (Illustrating)

2. Application: to apply abstract or theoretical principles to concrete, practical situations.

How can you make use of ____?

How could ____ be put into practice?

3. Analysis: to break down or dissect information into its component parts in order to detect the relationship among the parts, or the relationship between the parts and the whole.

What are the most important/significant ideas or elements of ____? (Prioritization)

What assumptions/biases underlie or are hidden within ____? (Deconstruction)

What parts of ____ would be similar to/different than ____? (Comparison-and-Contrast)

4. Synthesis: to build up or connect separate pieces of information to form a larger, more coherent pattern.

How can this idea be combined with ____ to create a more complete or comprehensive understanding of ____? (Integration)

How could these different ideas be grouped together into a more general category? (Classification)

5. Evaluation: to critically judge the validity (truth), morality (ethics), or aesthetic (artistic) value of ideas, data, or products using relevant assessment criteria.

How would you judge the accuracy or validity of ____?

How would you evaluate the ethical (moral) implications or consequences of ____?

6. Deduction: to draw conclusions about particular instances, or to derive from general principles and premises.

What specific conclusions can be drawn from this general ____?

What particular actions or practices would be consistent with this general ____?

7. Induction: to infer (derive or draw out) well-reasoned generalizations or principles from individual instances or specific examples. To extrapolate a concept learned in one context and transfer that learning to another context.

What patterns or themes emerge from ____?

What can be extrapolated or extended from this particular ____ that may have more general or universal value?

8. Balanced Thinking: to carefully consider arguments/evidence for and against a particular position or viewpoint.

What are the strengths/advantages and weaknesses/disadvantages of ____?

What evidence supports and contradicts ____?



9. Multiple Perspective-Taking: to view an issue from a variety of viewpoints, standpoints, or positions in order to gain a more comprehensive and holistic understanding.

How would people from different socioeconomic backgrounds be affected by ____?

How would people who differ in age or gender react to ____?

10. Causal Reasoning: to identify cause and effect relationships between different ideas or actions.

What is responsible for ____?

How would ____ affect or influence ____?

11. Ethical Reasoning: to identify what is morally right/wrong or good/bad about particular ideas, attitudes, or practices.

What does ____ say about a person's values?

What are the moral implications of ____?

12. Creative Thinking: to generate imaginative ideas, unique perspectives, innovative strategies, or novel (alternative) approaches to traditional practices.

What might be a metaphor or analogy for ____?

What might happen if ____? (hypothetical reasoning).

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