WE ARE TEACHING FOR CRITICAL THINKING….AREN’T WE?

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PROFESSOR EMERITA
Session Outcomes

1. You will be more explicit about your definition of CT so that you are able to identify:
   - relevant expectations for students’ critical thinking
   - intellectual tools that will enable students’ to think critically
   - criteria for students’ critical thinking (what successful CT could look like) that will assist assessment
REALLY?? In 55 minutes??
I would be content if we began, all of us, by recognizing that discovering how to make something comprehensible (to our students) is only a continuation of making something comprehensible to ourselves in the first place.

*As quoted in Ramsden, 1992, p. 150
Why Critical Thinking?

- Everyone thinks; it is our nature to do so. But much of our thinking, left to itself, is biased, distorted, partial, uninformed or down-right prejudiced. Yet the quality of our life and that of what we produce, make, or build depends precisely on the quality of our thought. Shoddy thinking is costly, both in money and in quality of life. Excellence in thought, however, must be systematically cultivated.
“...critical thinking strategies are more likely to be internalised by students if those strategies are taught explicitly and systematically.” (p.355)*

Stephen Brookfield (1995) makes the following observations:

*Pinning down exactly what is meant by CT, describing the process for advancing it, and then setting criteria, seems reductionist and may appear to trivialize this important concept.*

*None-the-less, if a definition of CT is not made clear and criteria and standards for assessment are not evident, then how can you expect students to learn and value CT?*
Paul, Elder, and Bartell (1997)

- 140 faculty members in 38 public and 28 private colleges in California

- Written responses to open ended questions and individual interviews regarding teaching for CT
Paul, Elder, & Bartell (1997)

- 89% reported that CT was a primary objective in their courses
- 19% were able to give a clear and coherent description of CT
- 9% provided evidence that indicated that they specifically taught for CT
Paul, Elder, & Bartell (1997)

- 78% reported that their students were unable to demonstrate most intellectual standards

- 8% could identify the intellectual criteria and standards that they required and could give a clear explanation of those criteria and standards
Van Gyn and Ford, interviewed 16 UVic professors noted for their teaching excellence to solicit examples of the ways in which they taught for CT.

Despite assurances that they taught for CT, few of these professors could articulate a comprehensive definition or provide clear examples of assignments to support development of CT.

As well, the explanations of their assessment of CT were vague.
SO WHAT IS IMPLIED IN THESE FINDINGS?

- No implication that this sample of professors are unable to think critically.

- Professors, most likely, have developed and refined their CT to a very advanced level.

- It is difficult for them (us) to explicate a process so deeply imbedded in their academic repertoire and, indeed, a similar phenomenon occurs with artists and writers when they are asked to explain how they produced a painting or poem.
SO WHAT IS IMPLIED IN THESE FINDINGS?

If professors are unable to articulate their approach to the support and development of CT to interviewers, it is probable that they are unable to be explicit with students, and consequently to provide the effective and purposeful guidance necessary for the development of students’ CT.
WHAT IS YOUR WORKING DEFINITION OF CRITICAL THINKING?
NOW JOIN ONE OTHER PERSON OR TWO AND CHAT ABOUT YOUR DEFINITIONS IDENTIFYING SIMILARITIES AND DIFFERENCES
Sternberg (1985a)

- The mental processes, strategies, and representations that people use to solve problems, make decisions and learn new concepts
Critical thinking is the 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.
In its exemplary form, it is based on universal intellectual values that transcend subject matter divisions: clarity, accuracy, precision, consistency, relevance, sound evidence, good reasons, depth, breadth, and fairness.
A quality of thinking that is characterized by a reflexive disposition that guides the mindful application of intellectual habits and intellectual resources during deliberations towards an evaluative judgment on a challenge, situation or task
Intellectual Habits: characteristics of mind necessary for developing fair-minded critical thinkers, such as: intellectual perseverance, intellectual integrity, intellectual courage, intellectual empathy, intellectual autonomy. It is argued that such traits guard against the development of sophistic or self-deceptive thinking.

Knowledge of the problematics of thinking: including intrinsic tendencies such as egocentrism and sociocentrism, which trap the mind in oversimplified and biased stances
Definition

Parts/Qualities or Criteria

Standards
CRITERIA FOR CT

- Informs students as to what they should be attending in their discussions, writing, projects, design, etc. and to monitor the strength of their CT

- Used by instructor to guide instruction and as a basis for assessment and evaluation of CT
Example: Criteria for intellectual deliberations – the parts

1. Identify and reflect on/analyze the situation that requires an evaluative judgement to be reached
2. Gather and interpret background information
3. Select and apply cognitive (thinking) strategies appropriate to the task
4. Generate or select option
5. Select criteria to guide judgement among alternatives
6. Make an evaluative judgement among options based on criteria
7. Provide justification for judgement/conclusion
Example: Criteria for intellectual deliberations – Qualities of one of the intellectual deliberations

- Gather in interpret background information
  - Relevancy of information/knowledge to the task
  - Sufficient
    - a range of valid sources
    - a variety of points of view
  - Clearly represented
  - Plausible/accurate interpretation
Examples of Generic CT Qualities

- Clear
- Precise
- Accurate
- Plausible
- Relevant
- Comprehensiveness
- Sufficient

- Coherent
- Sustainable
- Just
- Acceptable
- Effective
- Valid
- Sound
## From Criteria to Standards

<table>
<thead>
<tr>
<th>STRONG LEVEL OF CT</th>
<th>DEVELOPING LEVEL OF CT</th>
<th>WEAK LEVEL OF CT</th>
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<tr>
<td>Consistently demonstrates:</td>
<td>Sometimes demonstrates</td>
<td>Seldom or does not demonstrate</td>
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<tr>
<td>1. Choice of relevant information for the task</td>
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<td>2. Uses sufficient information</td>
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<tr>
<td>1. Range of valid sources</td>
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<td>2. Variety of points of view</td>
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<td>3. Clearly represents the relevant information</td>
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<td>4. Plausible/accurate interpretation of the relevant information</td>
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With your partner(s) choose one part from your definitions of CT and describe the qualities associated with that part that would be evidence that students were demonstrating that part of CT successfully.
CT Definition Evolved

- Critical thinking is that mode of thinking - about any subject, content, or problem - in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them.

A well cultivated critical thinker raises vital questions and problems, formulating them clearly and precisely;

gathers and assesses relevant information, using abstract ideas to interpret it effectively comes to well-reasoned conclusions and solutions, testing them against relevant criteria and standards;

thinks open-mindedly within alternative systems of thought, recognizing and assessing, as need be, their assumptions, implications, and practical consequences; and

communicates effectively with others in figuring out solutions to complex problems.

And evolved again…

Critical thinking is, in short, self-directed, self-disciplined, self-monitored, and self-corrective thinking. It presupposes assent to rigorous standards of excellence and mindful command of their use. It entails effective communication and problem solving abilities and a commitment to overcome our native egocentrism and sociocentrism.

How to Think Like Shakespeare

http://www.chronicle.com/article/How-to-Think-Like-Shakespeare/237593/