Improving Critical Thinking in the College Classroom

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Objectives

Participants will be able to:

• identify the impact on student learning of explicit, deliberate instruction of critical thinking in subject area courses;
• understand and integrate a cohesive critical thinking framework into instruction in their disciplines; and
• explore the relevance of critical thinking to creative practices.
Write for two minutes in response to the following prompt:

- In the classroom, the goal of teaching subject matter content should take a back seat to the goal of facilitating critical thinking.
Activity (part 2)

• Talk to a neighbor and compare notes on your response to the prompt
• Group discussion
• Our focus is not on the answer to this question but rather on the process of engaging students in a critical thinking activity.
Definition 1

“reasonable reflective thinking focused on deciding what to believe or do” (Ennis, 1997)

• Making these decisions leads to action:
  • These actions invoke change in the classroom and in other aspects of our lives.
  • These actions have an ethical component.
Definition 2

The basic process of critical thinking is about hunting assumptions (Brookfield, 2012). It includes:

• identifying the assumptions that frame our thinking and determine our actions;
• checking out the degree to which these assumptions are accurate and valid;
• looking at our ideas and decisions (intellectual, organizational, and personal) from several different perspectives; and
• on the basis of all this, taking informed actions.
The Elements of Thought

Model Link: [Elements of Thought](#)
Logic of the Workshop

- **Purpose**
  - Introduce an understanding of the practice of CT in the classroom
- **Concepts**
  - Critical Thinking Framework
- **Information**
  - Elements, Standards, Traits, Etc.
- **Question**
  - How do we effectively communicate this information?
Logic of the Workshop

• Assumptions
  • CT can be taught
  • This is interesting to you
• Point of View
  • Higher education
  • We have these skills and use them well already
• Implications & Consequences
  • Potential to change the way we teach
• Interpretation
  • Explicit rather than implicit
Consider A Course or Assignment of Your Own
Sample Course: Experimental Psychology

Requires that you use the following intellectual standards
- Be Clear
- Be Accurate
- Be Relevant
- Be Logical
- Be Fair
- Be Reasonable

Weekly Articles  
Quizzes  
Final Exam  
Research Project  
Class Discussions

Sample Syllabus  
Sample Questions:  
Sample Rubric:
Please write for two minutes in response to the following question:

• What is an important idea you’ve thought about or learned during this morning’s workshop to this point?
Explanation of questioning process

• I’ve been modeling techniques of Socratic questioning for last several minutes.
• The quality of our thinking is given in the quality of our questions.
The Elements of Thought

Intellectual Standards

- Clarity
- Accuracy
- Precision
- Relevance
- Depth
- Breadth
- Logic
- Significance
- Fairness

SEEI approach (state, elaborate, exemplify, illustrate)
SEE-I approach to clarity

• **State**: Could you state your basic point in one simple sentence?

• **Elaborate**: Could you elaborate your basic point more fully? (In other words…)

• **Exemplify**: Could you give me an example of your point from your experience?

• **Illustrate**: Could you give me a metaphor or an analogy (or draw a picture, diagram, etc.) to help me see what you mean?
Purpose of using SQ in teaching

• Deeply probe student thinking
• Help students begin to distinguish what they know or understand from what they don’t know or understand
• Teach students how to engage claims in a rigorous or systematic way
• Foster students’ abilities to ask Socratic questions, both in class and in their everyday lives
• All of which contribute to improvements in the skills and disposition of critical thinking.
10 Minute Break
Thinking about art in terms of critical thinking

Developing critical thinking skills is a way of developing creative thinking.

Critical thinking is self-reflective thinking; it is thinking about thinking.

Critical thinking requires that you ask "why am I doing this" as much as you ask "how will I do it?".

This does not mean art needs to illustrate an idea.

Art can (and should) suggest and imply. It can, (and often should) be a non-linear, experiential, emotional experience.
Some examples of critical thinking in creative practice
Jackson Pollock (1912-1956), Number 1, 1950 (Lavender Mist), 1950, Oil, enamel and aluminum on canvas, 87 x 118 inches
Purpose:
To create a painting that is considered for itself, not as a representation of something else.

Assumptions:
*Western history of monument:* Idealized Portrait Of Individual
Painting should reveal identifiable skill
Painting should have depth
Paintings should be deliberately composed

Point Of View:
Paint, and the act of painting, have inherent qualities that should be explored and exploited
Paintings should be *about* painting

Question:
How do you make a painting *about* painting?
What would that look like?

Implications:
Purely abstract painting creates a new category of object, and a new way of thinking about painting.
Do Ho Suh
"Public Figures", 2001
Glass fiber reinforced resin, bronze, steel structure.
2094 x 2748 x 2840 cm
Assumptions:

Point Of View:

Interpretation:

Purpose:

Question:
Fundamental And Powerful Concepts in Sculpture
Sculptors find and create meaning in the relationship between form, concept, and material.
Three fundamental sculptural concepts

- Concept
- Form
- Material
Great Sculpture

Concept

Form

Material
Starting From Material:

- Concept
- Form
- Material

Nails, nails, and more nails.
Starting From Material:

Concept

Form

Material

What forms do the nails take?

Nails, nails, and more nails.
Starting From Material:

What are the conceptual implications?

Low material (nails) transformed into high art (sculpture)

The possibilities contained within arbitrary limitations

Exploration of the formal possibilities of a common and visually unremarkable medium

What form do the nails take?

Nails, nails, and more nails.
What is the form?

Self portrait of the artist, Robert Arneson
Starting From Subject:

What is the form?
Self portrait of the artist, Robert Arneson

What is the point of view?
What is being communicated about the subject, or society's relationship to the subject?
Perception of California artists as empty-headed stoners
Artist as maverick / outsider
Contrasting a tradition of highly skilled, idealized rendering of subject and form (the traditional portrait bust) with roughly executed, non-idealized subject
Substitution of “cheap” material (ceramics) in place of traditionally high value context (busts).
What is the point of view? What is being communicated about the subject, or society's relationship to the subject?

California artists are perceived as empty-headed stoners

Artist as maverick / outsider

Contrasting a tradition of highly skilled, idealized rendering of subject and form (the bust) with roughly executed, non-idealized subject

Ceramic figure, referencing classical greek sculpture

What is the form?

Self portrait of the artist, Robert Arneson
Saddle
Janine Antoni
2000
Full Raw Hide; cast of artist's body
26 x 33 x 79 inches
Activity

Changing partners, respond to the original prompt, with a goal of eliciting a deeper, more nuanced conversation using the concepts and techniques described in this workshop (e.g., SEEI, Elements, Intellectual standards--see next slide)

- In the classroom, the goal of teaching subject matter content should take a back seat to the goal of facilitating critical thinking.
Paul / Elder Critical Thinking Model

Intellectual Standards
- Accuracy
- Clarity
- Relevance
- Logic
- Precision
- Depth
- Significance
- Fairness
- Breadth

are applied to...

Elements Of Thought
- Purposes
- Questions
- Points Of View
- Information
- Inferences
- Concepts
- Implications
- Assumptions

Intellectual Traits
- Humility
- Autonomy
- Fair-Mindedness
- Courage
- Perseverance
- Empathy
- Integrity
- Confidence in Reasoning

to develop...
Formative Assessment

• The Classroom Critical Incident Questionnaire (Brookfield)
• Last 5 - 10 minutes in the last class of each week.
• Please complete it as feedback to us, but consider using it as a way of checking in with your students.
• Available for download at stephenbrookfield.com/