Educational Psychology

• “Education is not the filling of a pail, but the lighting of a fire.”

William Butler Yeats

Purposes, Goals, and Objectives

• When pursuing a goal, you should define that goal as clearly as possible
• Not all goals are justified

Purposes, Goals, and Objectives

• What are the goals of educational psychology?
• Why is reasoning through problems important?
• Why is reasoning important outside the classroom?

Purposes, Goals, and Objectives

• Goals should be realistic
• Redirect yourself or your group (or the class) if you stray from goals

Purposes, Goals, and Objectives

• Choose fairminded goals
Purposes, Goals, and Objectives
• You should be able to clearly and precisely explain the goals of classroom activities, tests, and assignments

Writing Activity
• Why am I taking this course?

Overview of Course
• Critical thinking
• Cooperative learning
• Bloom’s taxonomy / grading rubrics
• Studying and learning techniques
• Distribution of course material
• Testing and feedback
• Ethics and diversity

What is Education
• “The function of education … is to teach one to think intensively and to think critically.”

What is Critical Thinking
• “The art of analyzing and evaluating thinking with a view to improving it.”

Martin Luther King, Jr., 1947
Paul & Elder, 2006
• “Intelligence plus character – that is the goal of true education.”

Martin Luther King, Jr., 1947

Critical Thinking Involves
• Raising essential questions
• Gathering relevant information
• Forming and testing answers
• Empathizing with alternative systems
• Communicating to solve complex problems

Aspects of Reasoning
• Purpose
• Question
• Information
• Interpretation
• Concepts
• Assumptions
• Implications
• Perspective

Purpose
• What am I trying to accomplish?

Question
• What question am I addressing?
• What is the scope of my problem?

Information
• What data do I have, relevant to my question?
• Have I sought out opposing data?
• Have I conducted a broad search?
Magnetic Therapy Bracelet
“Only $19.99”

Inferences and Conclusions
• How did I reach my conclusion?
• Can the information be interpreted another way?

Concepts
• Can I identify and explain the main ideas?

Assumptions
• What am I failing to consider?
• What am I taking for granted?

Implications and Consequences
• Are my implications based on evidence?
• If my position is accepted by others, where will this lead?
Perspective

• From what point of view am I examining this issue?
• Are there other points of view that need to be considered?

Aspects of Reasoning

• Purpose
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A Note About the Poster Presentation Assignment
Essential Intellectual Traits

- Intellectual humility
- Intellectual courage
- Intellectual empathy
- Intellectual autonomy
- Intellectual integrity
- Intellectual perseverance
- Confidence in reason
- Fairmindedness

Intellectual Humility

- Being conscious of the limits of one’s knowledge
- Being conscious of when egocentrism may lead to self-deception
- Sensitivity to the bias and limitation of one’s viewpoint

Intellectual Humility

- “After I started teaching, I realized that I had learned physics by rote and that I really did not understand all I knew about physics. My thinking students asked me questions for which I always had the standard textbook answers, but for the first time it made me start thinking for myself, and I realized that these canned answers were not justified by my own thinking and only confused my students who were showing some ability to think for themselves. To achieve my academic goals I had to memorize the thoughts of others, but I had never learned or been encouraged to learn to think for myself.”

http://www.criticalthinking.org/resources/articles/c5-moral-integrity.shtml

Intellectual Courage

- Being conscious of the need to face and fairly address ideas or viewpoints that cause strong negative emotions
- Recognizing that “dangerous” ideas are sometimes rationally justified
- Beliefs handed down to us are sometimes false or misleading

Intellectual Empathy

- The need to seriously consider a wide range of viewpoints
### Intellectual Empathy
- Imagining another’s intellectual position
- Intelligently and insightfully articulating another perspective
- Reasoning from external premises and assumptions
- Listening sympathetically to opposite points of view

### Why is Intellectual Empathy Important?
- Sometimes we’re wrong, but we feel we’re right
- By realizing we were wrong in the past, we are more likely to fully evaluate the present situation

### Practice Intellectual Empathy
- Divide into pairs
- Pick a topic on which you and your partner hold opposite views
- Discuss the topic from the opposite viewpoint you actually hold
- If you and your partner agree on everything, both should argue the opposite viewpoint you hold

### A Few Topic Ideas
- Abortion rights
- Assisted suicide
- Death penalty
- Gambling
- Genetic engineering
- Medical use of marijuana
- Nuclear power
- Same sex marriage

[http://www.sac.edu/students/library/nealley/websites/controversial.htm](http://www.sac.edu/students/library/nealley/websites/controversial.htm)

### Class Discussion
- What have you learned about intellectual empathy from this exercise?

### Egocentric Thinking
- “It’s true because I believe it.”
- “It’s true because we believe it.”
- “It’s true because I want to believe it.”
- “It’s true because I have always believed it.”
- “It’s true because it is in my selfish interest to believe it.”
Intellectual Autonomy

- Having rational control over one’s thought processes
- Commitment to analysing one’s beliefs based on reason and evidence

Intellectual Integrity

- Holding true to one’s thinking
- Applying intellectual standards consistently
- Holding oneself and one’s antagonists to the same intellectual standards
- Admitting discrepancies in one’s thoughts and actions

Intellectual Perseverence

- Trying to use intellectual insights in spite of difficulties and obstacles
- Adhering to rational principles in spite of others’ irrational opposition
- Struggling with unsettled questions, over time, to achieve deeper understanding

Confidence in Reason

- Confidence that humankind will be best served if individuals develop the ability to think rationally
- Faith that people can learn to think for themselves, coherently and logically

Fairmindedness

- Being conscious of the need to treat all viewpoints with the same respect, regardless of one’s feelings or vested interests, or the feelings and interests of one’s friends, community, or nation

United Nations Universal Declaration of Human Rights

- Article 26 (2) Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.

http://www.un.org/Overview/rights.html
A Broader Context

• Why did I choose to cover critical thinking in this course?