

Excerpts and selected materials from poster presentation

**COLLABORATIVE LEARNING FOR CRITICAL THINKING:
Pedagogy, Learning Outcomes and Assessment**

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OVERVIEW

In Fall 2001 the College at Old Westbury adopted a new General Education program based on requirements mandated by the State University of New York (SUNY). That included two learning outcomes for the critical thinking competency.

- I. Students will identify, analyze, and evaluate arguments as they occur in their own and others' work.**
- II. Students will develop well reasoned arguments**

The Psychology of Adulthood and Aging, a general education course, was assessed for critical thinking in Fall 2004. Based on an article covered in class, "Welcome to the love lab" *, student essays were evaluated using the SUNY learning outcomes as follows.

Assessment of Critical Thinking in Student Essays

N=25	Learning Outcome I	Learning Outcome II
Exceeding Standards	32%	32%
Meeting Standards	36%	32%
Approaching Standards	28%	24%
Not Meeting Standards	4%	12%

The findings indicated that while the majority exceeded or met standards, approximately one third did not. The assessment data for this class as well as for the college as a whole suggested a need for further instruction in critical thinking.

In Spring 2005, I was appointed to a panel of SUNY faculty to develop a critical thinking rubric to be utilized system-wide as part of the new Strengthened Campus Based Assessment Initiative. I began to integrate the components of critical thinking delineated in the rubric into the curriculum of the Psychology of Adulthood and Aging. Over the next two years, I developed study and small group discussion questions for an expanded number of lessons. These materials guided students in analyzing the course material so that a greater proportion became actively engaged in acquiring these skills. I also developed procedures for forming small groups and motivating participation.

*Referenced in section on discussion questions.

SUNY PANEL'S CRITICAL THINKING RUBRIC

1. Students will identify, analyze, and evaluate arguments as they occur in their own and others' work.

Exceeding: The student's work

1. Identifies the target argument(s) and clearly distinguishes it from any extraneous elements such as expressions of opinion and descriptions of events.
2. Carefully articulates the argument's conclusion, clearly distinguishes it from its premises and identifies most relevant definitions and/or hidden assumptions.
3. Clearly and correctly assesses whether the argument's premises provide sufficient logical support for the conclusion, independently of whether the premises are true.
4. Clearly and correctly assesses the reasonableness of the premises, including the credibility of their sources (e.g., observation, testimony, measurement, experiment, etc.), independently of whether the premises support the conclusion.

Meeting: The student's work

1. Identifies the target argument(s).
2. Distinguishes the argument's conclusion from its premises and some effort is made to identify relevant definitions and/or hidden assumptions.
3. Correctly assesses whether the argument's premises provide sufficient logical support for the conclusion, independently of whether the premises are true.
4. Correctly assesses the reasonableness of the premises, including the credibility of their sources, independently of whether they support the conclusion.

Approaching: The student's work

1. Identifies the target argument(s) but includes extraneous elements such as expressions of opinion and descriptions of events.
2. Distinguishes the argument's conclusion from its premises, but little effort is made to identify relevant definitions and/or hidden assumptions.
3. Attempts to assess whether the argument's premises provide sufficient logical support for the conclusion, independently of whether the premises are true.
4. Attempts to assess the reasonableness of the argument's premises, but little effort is made to consider the credibility of the premises' sources.

Not Meeting: The student's work

1. Does not isolate the argument(s) from extraneous elements in the text.
2. Does not identify the argument's conclusion or distinguish it sufficiently from the premises and little or no effort is made to identify relevant definitions or hidden assumptions.
3. Does not address whether the argument's premises provide sufficient logical support for the conclusion, independently of the truth of the conclusion.
4. Does not consider whether the premises are reasonable to believe, independently of whether they support the conclusion or else no effort is made to evaluate the credibility of the premises' sources.

2. Students will develop well-reasoned arguments.

Exceeding: the student's work

1. Develops a clearly articulated argument, using evidence and/or systematic logical reasoning in support of a conclusion or point of view.
2. Identifies relevant qualifications or objections or alternative points of view and prioritizes evidence and/or reasons in support of the conclusion.
3. Describes the broader relevance, significance or context of the issue and/or applies the reasoning to a novel problem.

Meeting: the student's work

1. Presents an argument using evidence and /or logical reasoning in support of a point of view.
2. Identifies some qualifications or objections or alternative points of view.
3. Describes the broader relevance, significance of context and/or applies the reasoning to a novel problem.

Approaching: the student's work

1. States a conclusion or point of view but does not organize the evidence or reasons in a logically adequate way.
2. Does not clearly identify or respond to relevant objections or alternative points of view.
3. Does not adequately describe the broader relevance or significance or apply the reasoning to a novel problem.

Does not meet: the student's work

1. Does not clearly state a conclusion or point of view or else little or no supporting reasoning or evidence is presented.
2. Makes no attempt to recognize or respond to objections or alternative points of view.
3. Makes no attempt to describe the broader relevance or significance or to apply the reasoning to a novel problem.

STUDY AND SMALL GROUP DISCUSSION QUESTIONS

1. Jung's Theory of Adulthood

Identify, analyze, evaluate

- Define and explain the following concepts: individuation, centeredness, wholeness, balance, anima/animas, introversion/extroversion, and image of after-life.
- What were Jung's sources of evidence?

Develop

- Does Jung's theory predict and apply to midlife changes for people in contemporary society? Give some examples.
- How do Jung's ideas about anima/animas both challenge and reinforce gender role stereotypes?
- Compare Erikson's and Jung's theories.

Based on chapter

Crain, W. (1985). Jung's theory of adulthood. In *Theories of development, concepts, and applications: 2nd edition*. New Jersey Prentice Hall

2. Research Methodology

Identify, analyze, evaluate

- Define and explain the following: longitudinal and time lag designs, cohort, external and internal validity
- What are the findings of the research of Helson and associates on **Jung's** theory that women become more androgynous at midlife?

Develop

- What do the different findings from the longitudinal and time lag studies suggest about cohort effects and age in midlife change?

Based on text

Papalia, D. Sterns, H., Camp, C. (2007). *Adult development and aging: 3rd edition*. NY: McGraw Hill.

3. "Welcome to the love lab."

Identify, analyze, evaluate

- What is hypothesis of research and data analyzed in article?
- Explain the following: the three patterns of communication, love maps, the four horsemen of the apocalypse, impact of a new infant on a marriage, perpetual problems, and the marital paradox.

Develop

- What are examples from your own relationships where these patterns and concepts might apply?
- What are the limitations of this approach in solving relationship problems?

Based on article

Gottman, J. & Carrere, C. (2000) Welcome to the love lab. *Psychology Today*. Sept/Oct.

4. Demographics of Aging

Identify, analyze, evaluate

- Explain and support with statistical data: increases in older population and life expectancy, gender and racial differences, socio-economic status, labor force participation and sources of income, elderly in community and institutions, health status.

Based on text

Papalia, D., Sterns, H., Camp, C. (2007) *Adult development and aging: 3rd edition*. NY: McGraw Hill

5. “Age of wisdom: elderly black women in family and church.”

Identify, analyze, evaluate

- How do women achieve the “age of wisdom”?
- What are the relationships between wise women, children and parents?
- What is the role of the religion in the women’s lives?

Develop

- What are the positive and negative aspects of these relationships for children?
- How might the relationships described be relevant to people from other cultural backgrounds?

Based on article

Peterson, J. (1990). Age of wisdom: elderly black women in family and church. In J. Sokalovsky (Ed.) *The cultural context of aging*. NY: Greenwood

6. Living Arrangements

Identify, analyze, evaluate

- Summarize main points of sections on living in the community, with adult children and in institutions.

Develop

- What are the reasons for living in, the benefits and difficulties of varying arrangements?

Based on text

Papalia, D., Sterns, H., Camp, C. (2007). *Adult development and aging: 3rd edition*. NY: McGraw Hill

CREATING A SUCCESSFUL GROUP PROCESS

- Packet of study and group discussion questions handed out at beginning of course
- Instructor forms small groups for each of 6 lessons, taking into account diversity and leadership
- In some lessons different groups responsible for different questions, in other lessons all groups answer the same questions
- Group chooses a “scribe”
- Instructor available as “consultant”
- Scribe writes summary of group answer
- Students reconvene into full class discussion and small group members are asked to report on their answers
- Instructor gives up to 5 points extra credit to group summaries based on answering all questions, basic understanding and participation in full class discussion
- All students in group receive same credit
- Students informed that questions and content of small group and full class discussion would be reflected in exams.

