Critical Thinking Student Learning Outcome Assessment
“Discovery” committee

Presented by: Mike Russell (December 2012)
Committee members

- Matt Arterburn (Biology)
- Karen Camarda (Physics)
- Dan Petersen (SAS)
- Shaun Schmidt (Chemistry)
- Mary Sundal (SO/AN)
- Kelly Watt (Art)
- myself

- Melanie Burdick (English)
- Russ Jacobs (Philosophy)
- Tom Prasch (History)
- Sharon Sullivan (Theater)
- Jennifer Wagner (Math)
- Roy Wohl (Kinesiology)
Task 1

- By the end of this semester, we must recommend one or more instruments that assess critical creative thinking.
  - Do *NOT* reinvent the wheel. No need.

- The instrument will be used to assess the Critical Thinking SLO for exiting/graduating students – the end product of a WU education.
  - i. Not every student will need to complete it.
  - ii. Only a % of our students will be sampled.
“Assessment instrument”

- It could be an assignment.
  - It could be an assignment given in a University requirement course (EN 300), or
  - given to a randomly selected group of students.
- It could be a standardized test.
We **MUST** recommend an assessment instrument that allows us to compare our results with those of other institutions and national norms. This is **MANDATORY**.

- Need to draw comparisons between ourselves and others.
- Peer institutions.
- National norms.
Best-case scenario

- Assessment instrument high in reliability and validity.
  - Reliability = consistency
  - Validity = truth
Your task

- The CCT SLO Assessment Discovery committee has recommended five (5) potential instruments.

- Your task is the same as theirs: Recommend one or more of the following assessment instruments that you believe we could use to assess CRITICAL THINKING.
  - No need to rank order.
  - Just a yes, no, or maybe.
Ennis-Weir Critical Thinking Essay Test

- Written essay exam: Student read an editorial letter and need to respond to all 8 paragraphs in that letter (was the thinking good or bad?) and have a 9th paragraph (overall evaluation of the letter).

- Time requirement: 50 minutes

- Judged by WU faculty (using criteria & scoring sheet).

- The test covers relevance, level of support, inconsistency, ignoring alternative explanations, equivocation, circularity, conditional inference, overgeneralization, and emotive language.

- Good reliability and interrater reliability (.80+).
Critical Thinking Assessment Battery (CTAB)

- 63 multiple choice Qs plus 3 written essays (applied reasoning & persuasive writing).
- Time requirement: 2.5 hours (150 minutes)
- Scored by ACT (at a cost $15 per test).
- Assesses skills in clarifying, analyzing, evaluating, and extending arguments, analyzing problems, generating logical and reasonable approaches to solve and implement solutions, reflecting consistent value orientations. Requires application of problem solving and communicating skills.
- Reliability & validity values: unknown.
Collegiate Learning Assessment (CLA)

- Written essay exam – completed online.
- Time requirement: 2 hrs, 45 mins (165 minutes)
- Scored by company (cost seems to vary $28 - $32.50).
- Presents realistic problems that require students to analyze complex materials and determine the relevance to the task and credibility. Students' written responses to the tasks are evaluated to assess their abilities to think critically, reason analytically, solve problems and communicate clearly and cogently.
- Provides national norms – 500+ institutions (ESU, WSU, PSU).
- Interrater reliability (.65 - .80)
AACU rubric

- Written essay exam – completed in course or not; exam designed by us.
- Time requirement: depends on assignment
- Scored by WU faculty.
- The VALUE rubrics were developed by teams of faculty experts representing colleges and universities across the United States. The rubrics articulate fundamental criteria for each learning outcome, with performance descriptors demonstrating progressively more sophisticated levels of attainment.
- Numerous institutions use it.
- Interrater reliability – varies but is in the acceptable range.
Critical Thinking Grid

- Written essay exam – completed in course or not; exam designed by us.
- Time requirement: depends on assignment
- Scored by WU faculty.
- 8 criteria used to assess student’s critical thinking (compared to 5 in AACU).
So what do you think?

- Pros and cons of each?
- Lets take a vote.
- Your recommendation(s) will be submitted to the VPAA.
“Thank you!!!!”

- Please let me know if you have any questions, comments, or concerns.
- Contact me via email (mike.russell@washburn.edu) or phone (X1566).