QEP assessment tools
Fall 2014

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Collegiate Learning Assessment (CLA):
Excerpt from the Council for Aid to Education website

“Performance-based assessments challenge students to demonstrate skills, rather than simply to recall information. CAE approaches performance-based learning by challenging students to address real-life issues presented in performance tasks. Performance tasks require students to use an integrated set of analytic reasoning, problem solving, and written communication skills to answer open-ended questions about hypothetical, but realistic situations. Students are presented with an engaging, real-world scenario and a set of accompanying documents, and are asked to either: choose among possible actions to address a problem; determine the most likely cause of a problem; or classify items based on their salient features. The set of accompanying documents, or “Document Library,” can include a range of different sources such as newspaper articles, blog posts, research abstracts, correspondence, or debate transcripts.

Students must:
- make a logical decision or conclusion supported by appropriate information from the Document Library,
- construct organized and logically cohesive arguments,
- strengthen their position by providing elaboration on facts or ideas, and
- demonstrate facility with the conventions of standard written English.

CLA+ relies on prompts that require students to perform. We stress the need for students to exhibit that they have the skills not just the knowledge to succeed.

When taking the CLA+ students complete both a Performance Task and a series of Selected-Response Questions.

The Performance Task presents a real-world situation in which an issue, problem, or conflict is identified. Students are asked to assume a relevant role to address the issue, suggest a solution, or recommend a course of action based on the information provided in a document library. A full CLA+ Performance Task contains four to nine documents in the library, and students have 60 minutes to complete the task. The Document Library contains a variety of reference sources such as technical reports, data tables, newspaper articles, office memoranda, or emails.

In the Selected-Response section, students respond to 25 questions: 10 assess scientific and quantitative reasoning; 10 assess critical reading and evaluation; and 5 assess the students’ ability to critique an argument. Students complete this section within 30 minutes. Much like the Performance Task, each set of questions requires that students draw information from accompanying documents.”
National Survey of Student Engagement (NSSE):
Excerpt from the QEP document, ASSESSMENT Section, on deep learning scale

Indirect Assessment of Student Learning

Two indirect assessments of students were also selected. The Deep Learning Scale and Subscales of the National Survey of Student Engagement (NSSE) will be used to examine indirect measures of students’ critical thinking skills. The NSSE is a survey that helps colleges and universities assess effective student learning on their campuses. The questions ask students to report on academic and co-curricular activities. For example, students are asked about how often they participated in class, wrote and rewrote papers, and attended campus events. Items used on the survey represent empirically confirmed "good practices" in undergraduate education. The NSSE is administered to freshmen and senior students every three years at UNC Asheville.

The Deep Learning Scale was created from 12 NSSE items by three researchers from the Indiana University Center for Postsecondary Research. In addition to identifying the 12 items which appeared to be related to deep learning, they performed an exploratory factor analysis in 2004 identifying three factors. In 2005 a confirmatory factor analysis established that the best fit was a Second Order Factor Model where the first order factors are Higher Order Learning, Integrative Learning and Reflective Learning. All three load highly onto the second order factor of Deep Learning. The Deep Learning Scale and Subscales show good internal consistency and good relationships with other measures of deep learning (Lard, Shoup, & Kuh, 2005).

The Deep Learning scale is comprised of the three subscales listed below: high order learning, integrative learning and reflective learning. NSSE items which comprise these scale are:

**Higher-Order Learning**
1. Analyzed the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components
2. Synthesized and organized ideas, information, or experiences into new, more complex interpretations and relationships
3. Made judgments about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions
4. Applied theories or concepts to practical problems or in new situations

**Integrative Learning**
1. Worked on a paper or project that required integrating ideas or information from various sources
2. Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments

3. Put together ideas or concepts from different courses when completing assignments or
during class discussions
4. Discussed ideas from your readings or classes with faculty members outside of class
5. Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)

Reflective Learning
1. Examined the strengths and weaknesses of your own views on a topic or issue
2. Tried to better understand someone else’s views by imagining how an issue looks from his or her perspective
3. Learned something that changed the way you understand an issue or concept
California Critical Thinking Dispositions Inventory (CCTDI):
Excerpt from the Insight Assessment website on CCTDI scales

“There are seven scales on the CCTDI: Truthseeking, Open-mindedness, Analyticity, Systematicity, Critical Thinking Self-Confidence, Inquisitiveness and Maturity of Judgment. Each scale score describes an aspect of the overall disposition toward using one's critical thinking to form judgments about what to believe or what to do. People may be positively, ambivalently, or negatively disposed on each of seven aspects of the overall disposition toward critical thinking. The CCTDI also provides a Total Score which gives equal weight to each of the seven.

Truthseeking Scale:
Truthseeking is the habit of always desiring the best possible understanding of any given situation; it is following reasons and evidence where ever they may lead, even if they lead one to question cherished beliefs. Truth-seekers ask hard, sometimes even frightening questions; they do not ignore relevant details; they strive not to let bias or preconception color their search for knowledge and truth. The opposite of truthseeking is bias which ignores good reasons and relevant evidence in order not to have to face difficult ideas.

Open-mindedness Scale:
Open-mindedness is the tendency to allow others to voice views with which one may not agree. Open-minded people act with tolerance toward the opinions of others, knowing that often we all hold beliefs which make sense only from our own perspectives. Open-mindedness, as used here, is important for harmony in a pluralistic and complex society where people approach issues from different religious, political, social, family, cultural, and personal backgrounds. The opposite of open-mindedness is closed-mindedness and intolerance for the ideas of others.

Analyticity Scale:
Analyticity is the tendency to be alert to what happens next. This is the habit of striving to anticipate both the good and the bad potential consequences or outcomes of situations, choices, proposals, and plans. The opposite of analyticity is being heedless of consequences, not attending to what happens next when one makes choices or accepts ideas uncritically.

Systematicity Scale:
Systematicity is the tendency or habit of striving to approach problems in a disciplined, orderly, and systematic way. The habit of being disorganized is the opposite characteristic to systematicity. The person who is strong in systematicity may or may not actually know or use a given strategy or any particular pattern in problem solving, but they have the mental desire and tendency to approach questions and issues in such an organized way.

Critical Thinking Self-Confidence Scale:
Critical Thinking Self-Confidence is the tendency to trust the use of reason and reflective thinking to solve problems. This habit can apply to individuals or to groups as can the other dispositional characteristics measured by the CCTDI. We as a family, team, office, community,
or society can have the habit of being trustful of reasoned judgment as the means of solving our problems and reaching our goals. The opposite is the tendency to be mistrustful of reason, to consistently devalue or be hostile to the use of careful reason and reflection as a means to solving problems or discovering what to do or what to believe.

**Inquisitiveness Scale:**
Inquisitiveness is intellectual curiosity. It is the tendency to want to know things, even if they are not immediately or obviously useful. It is being curious and eager to acquire new knowledge and to learn the explanations for things even when the applications of that new learning are not immediately apparent. The opposite of inquisitiveness is indifference.

**Maturity of Judgment Scale:**
Maturity of Judgment: cognitive maturity is the tendency to see problems as complex, rather than black and white. It is the habit of making a judgment in a timely way, not prematurely, and not with undue delay. It is the tendency of standing firm in one's judgment when there is reason to do so, but changing one's mind when that is the appropriate thing to do. It is prudence in making, suspending, or revising judgment. It is being aware that multiple solutions may be acceptable while appreciating the need to reach closure in certain circumstances even in the absence of complete knowledge. The opposite, cognitive immaturity, is characterized by being imprudent, black-and-white thinking, failing to come to closure in a timely way, stubbornly refusing to change one's mind when reasons and evidence would indicate one is mistaken, or foolishly revising one's opinions willy-nilly without substantial reason for doing so.”
Student Rating of Instruction: 
Items assessing perceived gains from instruction

On the Student Rating of Instruction form, students rate their “progress” on each of these seven attributes. Items 1, 2, 3 and 7 are most relevant to the QEP. Data on these items are compiled in aggregate for all Inquiry ARC courses each semester.

1. Gaining knowledge
2. Understanding ideas
3. Developing creative capacities
7. Learning to analyze and evaluate ideas, texts and arguments
Pre-/post-course Writing Assignment:
Assessing critical thinking through a course-based activity

1. We are using a basic pre-/post-writing assignment to examine students’ ability to
demonstrate critical thinking at the beginning and again at the end of the course.

2. The paradigm takes an embedded assessment approach meaning that responses will be used
both as part of students’ grades in their respective courses and as data for evaluation of the
Inquiry ARC program.
   a. Evaluation of responses for the purpose of providing feedback on the Inquiry ARC
      program will use the AACU Critical Thinking rubric either in its original form or in an
      approved form that includes descriptive language more consonant with the discipline
      offering the course.
   b. Evaluation of responses for the purpose of course grade may use the same process or
      another process more appropriate for the purpose of grading.

3. Instructors will submit their course-based assessment plans to the QEP assessment team for
approval no later than the day before the official start of the semester. Each plan will have
two components, an artifact to analyze and a set of questions or prompts used as the focus of
students’ written analyses.
   a. The instructor-selected artifact for analysis may be an excerpt from a text, an opinion
      piece, a report on research, etc. Visual objects such as works of art may be used if they
      are accompanied by some written text that presents an analysis or opinion on the
      work.
   b. The instructor may direct students to analyze the artifact using a single prompt or a set
      of prompts/brief questions as long as the design requires students to demonstrate at
      least 3 of the 5 dimensions of critical thinking evaluated in the AACU Value Rubric.

4. Student responses would be limited to a maximum of than 2 pages or 500 words.

5. Pre-writing samples would be obtained no later than the third week of class. Post-writing
samples would be obtained either during the last week of class or the final exam period.

6. For large classes instructors may submit evaluation results for a random sample of 20
students. For smaller classes we request the evaluation results for all students.

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1 The AACU Critical Thinking rubric has quickly become the “industry standard” for evaluating
critical thinking in American colleges and universities. Because some instructors have found the
language of the rubric difficult to apply to their course based assessments the QEP Assessment
Team is available to help departments edit the language in a manner that retains the basic
structure of the original rubric.
CRITICAL THINKING VALUE RUBRIC

for more information, please contact value@aacu.org

The VALUE rubrics were developed by teams of faculty experts representing colleges and universities across the United States through a process that examined many existing campus rubrics and related documents for each learning outcome and incorporated additional feedback from faculty. The rubrics articulate fundamental criteria for each learning outcome, with performance descriptors demonstrating progressively more sophisticated levels of attainment. The rubrics are intended for institutional-level use in evaluating and discussing student learning, not for grading. The core expectations articulated in all 15 of the VALUE rubrics can and should be translated into the language of individual campuses, disciplines, and even courses. The utility of the VALUE rubrics is to position learning at all undergraduate levels within a basic framework of expectations such that evidence of learning can by shared nationally through a common dialog and understanding of student success.

Definition: Critical thinking is a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.

Framing Language: This rubric is designed to be transdisciplinary, reflecting the recognition that success in all disciplines requires habits of inquiry and analysis that share common attributes. Further, research suggests that successful critical thinkers from all disciplines increasingly need to be able to apply those habits in various and changing situations encountered in all walks of life.

This rubric is designed for use with many different types of assignments and the suggestions here are not an exhaustive list of possibilities. Critical thinking can be demonstrated in assignments that require students to complete analyses of text, data, or issues. Assignments that cut across presentation mode might be especially useful in some fields. If insight into the process components of critical thinking (e.g., how information sources were evaluated regardless of whether they were included in the product) is important, assignments focused on student reflection might be especially illuminating.

Glossary: The definitions that follow were developed to clarify terms and concepts used in this rubric only.

- Ambiguity: Information that may be interpreted in more than one way.
- Assumptions: Ideas, conditions, or beliefs (often implicit or unstated) that are "taken for granted or accepted as true without proof." (quoted from www.dictionary.reference.com/browse/assumptions)
- Context: The historical, ethical, political, cultural, environmental, or circumstantial settings or conditions that influence and complicate the consideration of any issues, ideas, artifacts, and events.
- Literal meaning: Interpretation of information exactly as stated. For example, "she was green with envy" would be interpreted to mean that her skin was green.
- Metaphor: Information that is (intended to be) interpreted in a non-literal way. For example, "she was green with envy" is intended to convey an intensity of emotion, not a skin color.
CRITICAL THINKING VALUE RUBRIC
for more information, please contact
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**Explanation of issues**
Issue/problem to be considered critically is stated clearly and described comprehensively, delivering all relevant information necessary for full understanding.

**Evidence**
*Selecting and using information to investigate a point of view or conclusion*
Information is taken from source(s) with enough interpretation/evaluation to develop a comprehensive analysis or synthesis. Viewpoints of experts are questioned thoroughly.

**Influence of context and assumptions**
Thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position.

Issue/problem to be considered critically is stated, described, and clarified so that understanding is not seriously impeded by omissions.

Information is taken from source(s) with enough interpretation/evaluation to develop a coherent analysis or synthesis. Viewpoints of experts are subject to questioning.

Identifies own and others' assumptions and several relevant contexts when presenting a position.

Issue/problem to be considered critically is stated but description leaves some terms undefined, ambiguities unexplored, boundaries undetermined, and/or backgrounds unknown.

Information is taken from source(s) with some interpretation/evaluation, but not enough to develop a coherent analysis or synthesis. Viewpoints of experts are taken as mostly fact, with little questioning.

Questions some assumptions. Identifies several relevant contexts when presenting a position. May be more aware of others' assumptions than one's own (or vice versa).

Information is taken from source(s) without any interpretation/evaluation. Viewpoints of experts are taken as fact, without question.

Shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions). Begins to identify some contexts when presenting a position.
| Student’s position (perspective, thesis/hypothesis) | Specific position (perspective, thesis/hypothesis) is imaginative, taking into account the complexities of an issue. Limits of position (perspective, thesis/hypothesis) are acknowledged. Others’ points of view are synthesized within position (perspective, thesis/hypothesis). | Specific position (perspective, thesis/hypothesis) takes into account the complexities of an issue. Others’ points of view are acknowledged within position (perspective, thesis/hypothesis). | Specific position (perspective, thesis/hypothesis) acknowledges different sides of an issue. | Specific position (perspective, thesis/hypothesis) is stated, but is simplistic and obvious. |
| Conclusions and related outcomes (implications and consequences) | Conclusions and related outcomes (consequences and implications) are logical and reflect student’s informed evaluation and ability to place evidence and perspectives discussed in priority order. | Conclusion is logically tied to a range of information, including opposing viewpoints; related outcomes (consequences and implications) are identified clearly. | Conclusion is logically tied to information (because information is chosen to fit the desired conclusion); some related outcomes (consequences and implications) are identified clearly. | Conclusion is inconsistently tied to some of the information discussed; related outcomes (consequences and implications) are oversimplified. |
Faculty Materials Checklist:
Assessing implementation of Inquiry ARC pedagogy

In order to explore how faculty employ the Inquiry ARC pedagogy, and communicate with their students about critical thinking processes, faculty submit the following checklist at the end of the semester along with sample course materials as noted below.

Faculty Materials Checklist

Please attach a copy of related course materials, including a syllabus, handouts, rubrics, and/or assignment sheets to this reporting sheet.

In your attached materials, please mark the appropriate text to indicate WHERE and HOW you communicated the following information to your students.

- Identified the course as an Inquiry ARC class
- Defined the components of the Inquiry ARC approach
- Identified the Inquiry ARC student learning outcomes
- Defined critical thinking as it applies to your course
- Identified a critical thinking learning outcome
- Identified how students would demonstrate their critical thinking skills
- Indicated how the particular activities, assignments, projects aligned with Inquiry ARC components (Inquire, Apply, Reflect, Communicate)
- Provided resources and support information to students for critical thinking
- Provided feedback to students about their critical thinking performance

Please describe in a short paragraph what worked well and what was challenging about teaching this course as an Inquiry ARC course (pedagogy, assessment, etc.)