WSC Senior College and University Commission

EDUCATIONAL PROGRAMS

Assessment 101:

The Assessment Cycle, Clear and Simple

October 1, 2014

Kellogg West Conference Center, Pomona, CA

Resource Binder

WASC Senior College and University Commission | EDUCATIONAL PROGRAMS

2014-2015

WASC Senior College and University Commission is pleased to announce its educational programs for 2014-15. They cover topics of vital interest to all institutions but particularly to those in the WSCUC region. They have been developed by national and regional experts and are offered as a service to member institutions and others who wish to learn about good practices applicable to all institutions. They are entirely optional, but our hope is that member institutions will find them helpful. WSCUC staff will be present to answer questions related specifically to accreditation expectations.

- **Assessment 101: The Assessment Cycle, Clear and Simple**
  October 1, 2014. Kellogg West, Pomona, CA
  November 12, 2014. Kellogg West, Pomona, CA
  May 18, 2015. Chaminade University, Honolulu, HI

- **Retreat on Core Competencies: Quantitative Reasoning and Assessment in Majors**
  October 2-3, 2014. Kellogg West, Pomona, CA

- **Retreat on Core Competencies: Critical Thinking and Information Literacy**
  October 16-17, 2014. Hilton Oakland Airport, Oakland, CA

- **Retreat on Core Competencies: Written and Oral Communications**
  November 13-14, 2014. Kellogg West, Pomona, CA

- **President/Trustee Retreats**
  December 4, 2014. San José State University, San José, CA
  December 5, 2014. Woodbury University, Burbank, CA

- **Workshop on the Meaning, Quality, and Integrity of Degrees**
  January 30, 2015. Woodbury University, Burbank, CA

- **Assessment 201: Advanced Topics in Assessment**
  February 6, 2015. Mills College, Oakland, CA

- **The Big Five: Addressing Core Competencies**
  May 19-20, 2015. Chaminade University, Honolulu, Hawai'i

For more information on these programs, visit www.wascsenior.org/seminars. For specific questions, contact Julie Kotovsky, Educational Events Manager, at jkotovsky@wascsenior.org

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WSC Senior College and University Commission
EDUCATIONAL PROGRAMS

Assessment 101: The Assessment Cycle, Clear and Simple

October 1, 2014 Kellogg West Conference Center, Pomona, CA

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David Chase (dchase@afi.com)
Sharlene Sayegh (Sharlene.Sayegh@csulb.edu)

Time	Topic	Presenter(s)	Page Number
8:30	Welcome	Melanie Booth	
8:40	Introductions & Retreat Learning Outcomes	Laura Martin Sharlene Sayegh	
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9:05	Assessment Cycle & Vocabulary	Laura Martin Sharlene Sayegh	10
9:30	Learning Outcomes	Sharlene Sayegh	16
10:30	Break		
10:45	Curriculum Alignment	Sharlene Sayegh	33
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12:15	Lunch		
1:00	Direct Evidence of Student Learning	Sharlene Sayegh	68
1:45	Indirect Evidence of Student Learning	David Chase	79
2:30	Break		
2:45	Rubrics	David Chase	96
4:00	Multiyear Assessment Planning	Laura Martin	126
4:50	Wrap up	Laura Martin David Chase Sharlene Sayegh	

Retreat Learning Outcomes:

1. Describe the purpose of assessment.
2. Explain and use assessment vocabulary.
3. Develop clear and concise Learning Outcomes for the institution, program, and course levels.
4. Align curriculum, pedagogy, and student evidence with learning outcomes.
5. Design and use direct and indirect evidence of student learning.
6. Describe the purpose(s) and uses of rubrics, and evaluate rubrics for impact on a student learning.
7. Develop a basic multi-year assessment plan.

Assessment 101: The Assessment Cycle, Clear and Simple

October 1, 2014 Kellogg West Conference Center, Pomona, CA

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Facilitator Biographies

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Laura Martin is Coordinator for Institutional Assessment and Accreditation Liaison Officer at the University of California, Merced. In this capacity, she works with faculty, students, and staff across the institution to advance sustainable, meaningful assessment practices and processes in support of a culture of evidence that enhances undergraduate and graduate learning outcomes, student success and supporting administrative services. Previously, Laura was the Assistant Director of the Center for Research on Teaching Excellence where, as an assessment and accreditation coordinator, she coordinated UC Merced's Initial Accreditation and supported faculty development in teaching, learning, and assessment. Laura is a graduate of the Assessment Leadership Academy and has served on several WSCUC accreditation teams. Laura earned her PhD in Biology at the University of California, Los Angeles, and has worked as a researcher, university lecturer, outreach education specialist, and middle school science teacher.
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David Chase

David Chase is currently the Vice Dean, Academic Affairs at the American Film Institute Conservatory in Los Angeles, California. He works collaboratively with the faculty and its leadership to ensure that Conservatory programs are of the highest quality, and is responsible for leading the planning, development, evaluation, and execution of the Conservatory's academic administration. He serves as the Accreditation Liaison Officer to the Western Association of Schools and Colleges Senior College and University Commission, and oversees specialized accreditation with the National Association of Schools of Art and Design. David was previously the Senior Associate Director of Institutional Effectiveness at the University of the Pacific, where he also served as the Assistant Dean of the Conservatory of Music. He earned Bachelor of Music and Master of Arts in Music degrees from University of the Pacific's Conservatory, and his background includes performance and research as well as broadcasting and artist management. He has taught courses in the University of the Pacific's Conservatory's Music Management program and in the core seminars of the University's General Education program. He is a graduate of the Assessment Leadership Academy, and co-author of the recently published book Assessment in Creative Disciplines: Quantifying and Qualifying the Aesthetic.
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Sharlene Sayegh

Sharlene Sayegh is Director of Program Review and Assessment at California State University, Long Beach where she coordinates and evaluates annual assessment reports for all degree-granting and academic-support programs, works with departments to schedule external program reviews, and serves as a member of the university's Program Assessment Review Council. A graduate of the Assessment Leadership Academy, Sharlene works proactively with departments across the campus to hone assessment practices and enhance student learning, particularly in the areas of alignment of learning outcomes and the WSCUC Core Competencies. In 2014, she was invited to participate to NILOA's DQP Assignment Library Project to contribute assignments for the DQP Library. Sharlene received her Ph.D. in History and Critical Theory from the University of California, Irvine, and continues to teach in the History Department at Long Beach, coordinating the Core Curriculum group. She has just published a textbook entitled History and Theory and serves as a reader for the AP World History Examination.
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WSCUC Assessment 101
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October 1, 2014 Pomona, CA

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Why Assessment?

David Chase

Why Assessment?

Influencing Public Opinion

Right or wrong, statistics that have gotten traction

Grade Inflation: 1961- 2009

2006 NCES Study

2010 AAC&U Survey

Academically Adrift

45% of students completing the first two years of college in the study showed no statistically significant improvement over time in critical thinking, complex reasoning, and communication skills.

36% completing four years showed no statistically significant improvement.

Richard Arum and Josipa Roksa, *Academically Adrift: Limited Learning on College Campuses* Chicago: University of Chicago Press, 2011.

The Spellings Commission

The report of the Spellings Commission in 2006 was especially critical of accreditation, describing it as:

A Barrier to innovation

Ineffective in providing reliable information about institutional quality and too focused on inputs

The report called for a more standardized approach to examining comparative institutional performance by measuring student learning outcomes.

The Curious History of the Credit Hour

Andrew Carnegie's pension system for faculty was used to leverage high school reform – participation in the system was contingent on the use of the "standard unit" for admitting students to college.

The Formula: 1 hour of faculty-student contact time per week in a 15 week semester.

The credit hour, however, was never intended to be a proxy for student learning.

Familiar Thoughts…

"… the system of units and credits, which, useful as it was, is not good enough for American education today. … American higher education appears to be well on its way to another stage of development in which promotion, at least in college, will be based upon "the attainments of minds thoroughly stored and competent."

More Familiar Thoughts…

http://thecolbertreport.cc.com/videos/kiwt0s/bill-gates

From the Teacher to the Learner

The Instruction Paradigm

A shift to the Learning Paradigm

In assessment: using approaches at the course, program, and institutional levels focused on learning

Helpful background resources

Barr, R. B., & Tagg, J. (1995). From teaching to learning—A new paradigm for undergraduate education. *Change: The magazine of higher learning*, *27*(6), 12-26.

Ewell, P.T. (2008). U.S. accreditation and the future of quality assurance: A tenth anniversary report from the council for higher education accreditation. Washington, DC: Council for Higher Education Accreditation.

Assuring Academic Quality in the 21st Century: Self-Regulation in a New Era. A Report of the ACE National Task Force on Institutional Accreditation. http://www.acenet.edu/news-room/Pages/Assuring-Academic-Quality-in-the-21st-Century.aspx

Laitinen, A. (2012) Cracking the credit hour. New America Foundation and Education Sector. http://www.Newamerica.net

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Assessment Cycle & Vocabulary

Laura Martin
Sharlene Sayegh

Foundational Assessment Vocabulary[1,2]

- **<u>Assessment (of student learning)</u>** – gathering information about student learning and/or the learning experience in order to improve student learning

  Examples:

- **<u>Evaluation</u>** – making judgments about the quality of student learning on the basis of assessment evidence

  Examples:

- **<u>Learning Outcome (L.O.)</u>** – description of

  Learning expectations: what we *expect* students to know, do, and be when they leave a course, program or institution.

  - L.O.s "convey to the learner exactly what is to be accomplished," "identify specifically what should be learned." (AALL, 1994)

  Learning results: The knowledge, abilities, and/or attitudes students demonstrably possess at the conclusion of a learning experience.

- **<u>Evidence</u>** – student work that demonstrates what students have learned/are able to do and/or information describing the learning environment or student perceptions of their learning.

  Direct evidence of student learning – products produced by students for the purposes of learning and to demonstrate learning (e.g. papers, projects, presentations, posters, tests, theses, dissertations, etc.).

[1] Activity by Amy Driscoll, Mary Allen, and Bob Pacheco
[2] See also WASC's extensive glossary in the *2013 Handbook of Accreditation*, p. 43

Indirect evidence of student learning – Proxy indicators of learning

Students' perceptions of their learning - e.g. interviews, reflective writings, self-evaluations.

Descriptions of the learning environment – e.g. numbers of papers assigned, student perceptions of effective teaching strategies, etc.

- **Authentic Assessment** – assignments/assessments designed to replicate "real world" activities via relevant and meaningful questions, tasks, problems, and projects. Often they are powerful forms of learning, as well as productive sources of insight into student ability.

  Examples:

- **Triangulation** – using data from different sources to answer a question about student learning.

  Examples:

- **Criteria** – qualities we look for in student work

  Examples:

- **Standards** – describe levels of quality/performance/achievement in student work

  Examples:

- **Rubric** – a tool that integrates criteria and standards to support s*tudent learning* and *faculty assessment of student work* by communicating the qualities expected in students' work if they have met the learning outcome.

- **Alignment** – connections among components of a learning experience (e.g. curriculum, pedagogy, etc.) that support student achievement of an intended learning outcome.

- **Benchmark** – a standard of performance against which assessment results can be judged

  Examples:

- **"Closing the loop"** – the intentional process of responding to assessment results by implementing changes intended to improve student learning, or concluding change is unnecessary.

  Examples:

More Vocabulary: Some Assessment Choices

- **Value-added vs Absolute Learning Outcomes**

  Value-added outcomes propose to measure growth in student learning.

  E.g. Student composition skills will improve as a result of Writing 1.

  Absolute learning outcomes establish an expectation for student performance at the completion of a course or a degree program.

  E.g. Students will use composition skills to communicate with varied audiences.

- **Summative vs Formative Assessment**

  Formative assessment occurs during the learning experience, providing feedback to students and the teacher about student learning progress in relation to intended learning. It contributes to the "formation" of student learning along a learning path.

Summative assessment occurs at the conclusion of a learning experience (e.g. a course, a program), summarizing student knowledge or abilities to that point. It provides information to affirm student achievement and/or to inform subsequent offerings of that course or program.

Practice

1. A faculty member asks her students to develop a marketing plan for a new product. *What is this student work called?*

2. A faculty member includes the following description in her syllabus: At the conclusion of this semester, students will be able to use core principles in marketing and advertising to develop realistic marketing plans for new products. *What is this statement called?*

3. A faculty member reviews draft marking plans, provides feedback on the work, and reviews with the class the marketing principles that a number of groups misapplied. *What is this faculty member doing?*

4. A faculty member asks students to describe their contributions to the development of the marketing plan in relation to the teamwork learning outcome. *What kind of evidence is this*?

5. To assess student achievement of key management outcomes, the Management faculty gathers senior capstone marketing projects, students' self-ratings of their abilities and knowledge, and evaluations of student abilities from their capstone advisors, local retailers in the community. *What is this process called?*

6. Upon determining that students' programming skills need further development, the Applied Math faculty integrates additional programming

assignments throughout the curriculum and plans to re-assess student programming skills in two years. *What is this process called?*

7. The Accounting Department has determined that 95% of their graduates must achieve a “pass” or better on the national accounting exam. *What is this an example of?*

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Learning Outcomes

Sharlene Sayegh

Learning Outcomes

SHARLENE SAYEGH

Outcomes

At the end of this segment, you will be able to:

1. Define learning outcomes and place them in appropriate university context;
2. Articulate the difference between "outcomes" and "goals";
3. Distinguish between learning outcomes and non-learning outcomes;
4. Write a learning outcome for class or program levels.

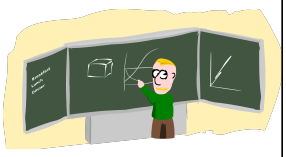
What is a learning outcome?

A learning outcome is defined as what you expect learners to be able to accomplish at the end of a given event.

What is a Learning Outcome?

Traditional course development
- What I am going to tell you

Outcomes-based course development
- What do I want students to be able to do at the end of the term?



Necessary Components of Outcomes

1. Outcomes need to be clear, represent a student action, and be measurable;
2. They should articulate expected skills and knowledge;
3. Outcomes should make sense and be connected to the course (Driscoll & Wood, 2007

Outcomes vs. Goals & Objectives

Learning Outcomes are learner centered
- Example: Students will analyze and explain the differences between historical approaches

Learning Goals are instructor centered
- Example: Students will learn about the different approaches to historical writing
- Learning goals are important for the creation of learning outcomes, but are not outcomes in and of themselves.

Goals and Objectives are necessary steps

So, we start with goals

Critical Thinking is a goal

But how do we measure it?

Students will be able to…

How do we get to those goals & outcomes?

Institutional Mission & Learning Outcomes

Program and Disciplinary goals
- Does the program have an accrediting agency?
- If not accredited, does the discipline have standards or goals?

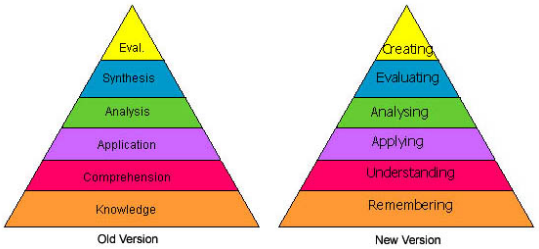
Indirect sources of information
- from alumni or employers, or community leaders for example
- What kinds of workers do they seek?

Outcomes should be active, not passive

Rather than language like
- Understand the different views of…

Use active language
- Analyze the different interpretations of…

Bloom's Taxonomy (next slide and handout)



Bloom's Taxonomy

Breakout Session

At your table (or in pairs if the table is large), examine the items in your notebook.

Which ones are learning outcomes?

Which ones are not learning outcomes?

- How did you make your determination?
- Can the items you noted as NOT being learning outcomes be made into learning outcomes?
  - Examples from the floor

Assessment 101
Learning Outcomes – Some Practice with Learning Outcomes and Language

In your groups, determine whether the following are examples or non-examples of learning outcomes. Explain why or why they are not LOs. Then, try to rewrite those you believe are non-learning outcomes.

1. Students learn to be critical thinkers.

Learning Outcome	Non Learning Outcome

Explanation:

2. Students assess the philosophy, theories, policies, practices, processes, and reforms of the major institutions of social control.

Learning Outcome	Non Learning Outcome

Explanation:

3. Students will have a broad understanding of scientific concepts.

Learning Outcome	Non Learning Outcome

Explanation:

4. Communication.

Learning Outcome	Non Learning Outcome

Explanation:

5. Students will employ a variety of proof techniques including direct proof, proof by contradiction and proof by induction.

Learning Outcome	Non Learning Outcome

Explanation:

6. Students develop an understanding of the central institutions of Western Civilization.

Learning Outcome	Non Learning Outcome

Explanation:

AAHE ASSESSMENT FORUM
9 Principles of Good Practice for Assessing Student Learning

1. **The assessment of student learning begins with educational values.** Assessment is not an end in itself but a vehicle for educational improvement. Its effective practice, then, begins with and enacts a vision of the kinds of learning we most value for students and strive to help them achieve. Educational values should drive not only *what* we choose to assess but also *how* we do so. Where questions about educational mission and values are skipped over, assessment threatens to be an exercise in measuring what's easy, rather than a process of improving what we really care about.
2. **Assessment is most effective when it reflects an understanding of learning as multidimensional, integrated, and revealed in performance over time.** Learning is a complex process. It entails not only what students know but what they can do with what they know; it involves not only knowledge and abilities but values, attitudes, and habits of mind that affect both academic success and performance beyond the classroom. Assessment should reflect these understandings by employing a diverse array of methods, including those that call for actual performance, using them over time so as to reveal change, growth, and increasing degrees of integration. Such an approach aims for a more complete and accurate picture of learning, and therefore firmer bases for improving our students' educational experience.
3. **Assessment works best when the programs it seeks to improve have clear, explicitly stated purposes.** Assessment is a goal-oriented process. It entails comparing educational performance with educational purposes and expectations -- those derived from the institution's mission, from faculty intentions in program and course design, and from knowledge of students' own goals. Where program purposes lack specificity or agreement, assessment as a process pushes a campus toward clarity about where to aim and what standards to apply; assessment also prompts attention to where and how program goals will be taught and learned. Clear, shared, implementable goals are the cornerstone for assessment that is focused and useful.
4. **Assessment requires attention to outcomes but also and equally to the experiences that lead to those outcomes.** Information about outcomes is of high importance; where students "end up" matters greatly. But to improve outcomes, we need to know about student experience along the way -- about the curricula, teaching, and kind of student effort that lead to particular outcomes. Assessment

can help us understand which students learn best under what conditions; with such knowledge comes the capacity to improve the whole of their learning.

5. **Assessment works best when it is ongoing not episodic.** Assessment is a process whose power is cumulative. Though isolated, "one-shot" assessment can be better than none, improvement is best fostered when assessment entails a linked series of activities undertaken over time. This may mean tracking the process of individual students, or of cohorts of students; it may mean collecting the same examples of student performance or using the same instrument semester after semester. The point is to monitor progress toward intended goals in a spirit of continous improvement. Along the way, the assessment process itself should be evaluated and refined in light of emerging insights.
6. **Assessment fosters wider improvement when representatives from across the educational community are involved.** Student learning is a campus-wide responsibility, and assessment is a way of enacting that responsibility. Thus, while assessment efforts may start small, the aim over time is to involve people from across the educational community. Faculty play an especially important role, but assessment's questions can't be fully addressed without participation by student-affairs educators, librarians, administrators, and students. Assessment may also involve individuals from beyond the campus (alumni/ae, trustees, employers) whose experience can enrich the sense of appropriate aims and standards for learning. Thus understood, assessment is not a task for small groups of experts but a collaborative activity; its aim is wider, better-informed attention to student learning by all parties with a stake in its improvement.
7. **Assessment makes a difference when it begins with issues of use and illuminates questions that people really care about.** Assessment recognizes the value of information in the process of improvement. But to be useful, information must be connected to issues or questions that people really care about. This implies assessment approaches that produce evidence that relevant parties will find credible, suggestive, and applicable to decisions that need to be made. It means thinking in advance about how the information will be used, and by whom. The point of assessment is not to gather data and return "results"; it is a process that starts with the questions of decision-makers, that involves them in the gathering and interpreting of data, and that informs and helps guide continous improvement.
8. **Assessment is most likely to lead to improvement when it is part of a larger set of conditions that promote change.** Assessment alone changes little. Its greatest contribution comes on campuses where the quality of teaching and learning is visibly valued and worked at. On such campuses, the push to improve educational performance is a visible and primary goal of leadership; improving the quality of undergraduate education is central to the institution's planning, budgeting, and personnel decisions. On such campuses, information about learning outcomes is seen as an integral part of decision making, and avidly sought.
9. **Through assessment, educators meet responsibilities to students and to the public.** There is a compelling public stake in education. As educators, we have a responsibility to the publics that support or depend on us to provide information

about the ways in which our students meet goals and expectations. But that responsibility goes beyond the reporting of such information; our deeper obligation -- to ourselves, our students, and society -- is to improve. Those to whom educators are accountable have a corresponding obligation to support such attempts at improvement.

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Bloom's Taxonomy Action Verbs

Definitions	Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
Bloom's Definition	Remember previously learned information.	Demonstrate an understanding of the facts.	Apply knowledge to actual situations.	Break down objects or ideas into simpler parts and find evidence to support generalizations.	Compile component ideas into a new whole or propose alternative solutions.	Make and defend judgments based on internal evidence or external criteria.
Verbs	• Arrange • Define • Describe • Duplicate • Identify • Label • List • Match • Memorize • Name • Order • Outline • Recognize • Relate • Recall • Repeat • Reproduce • Select • State	• Classify • Convert • Defend • Describe • Discuss • Distinguish • Estimate • Explain • Express • Extend • Generalized • Give example(s) • Identify • Indicate • Infer • Locate • Paraphrase • Predict • Recognize • Rewrite • Review • Select • Summarize • Translate	• Apply • Change • Choose • Compute • Demonstrate • Discover • Dramatize • Employ • Illustrate • Interpret • Manipulate • Modify • Operate • Practice • Predict • Prepare • Produce • Relate • Schedule • Show • Sketch • Solve • Use • Write	• Analyze • Appraise • Breakdown • Calculate • Categorize • Compare • Contrast • Criticize • Diagram • Differentiate • Discriminate • Distinguish • Examine • Experiment • Identify • Illustrate • Infer • Model • Outline • Point out • Question • Relate • Select • Separate • Subdivide • Test	• Arrange • Assemble • Categorize • Collect • Combine • Comply • Compose • Construct • Create • Design • Develop • Devise • Explain • Formulate • Generate • Plan • Prepare • Rearrange • Reconstruct • Relate • Reorganize • Revise • Rewrite • Set up • Summarize • Synthesize • Tell • Write	• Appraise • Argue • Assess • Attach • Choose • Compare • Conclude • Contrast • Defend • Describe • Discriminate • Estimate • Evaluate • Explain • Judge • Justify • Interpret • Relate • Predict • Rate • Select • Summarize • Support • Value

Clemson University
Office for Institutional Support
http://www.clemson.edu/assessment/
assessmentpractices/referencematerials/index.html

California State University, Long Beach
Department of Political Science Learning Objectives (9/2014)

1. Substantive knowledge: Students should have a basic knowledge of the political world, including the ideas, institutions, processes, and policies of the United States and selected other societies, as well as the history and organization of the international system.
   Political science majors should be able to:
   - Discuss the most important political theorists in the western tradition and the ideas associated with them.
   - Describe basic political and governmental structures, processes, and policies in the U.S. and in several other western and non-western countries.
   - Describe the history, structure and operation of the international system.
   - Describe the role and impact of the U.S. in the international system.
   - Identify the principal arguments for and against alternative forms of government

2. Analytical skills: Students should understand and be able to work with the approaches and theories used by political scientists to understand political phenomena.
   Political science majors should be able to:
   - Discriminate between normative and empirical theories.
   - Explain the role of political ideas, value conflicts, and ideology in human societies.
   - Evaluate alternative political ideas and ideologies.
   - Explain the structural context within which politics takes place, including the role of the economy, society, and culture, and conflicts over and within those domains.

3. Research skills: Students should have the research skills necessary to ask and answer basic political questions.
   Political science majors should be able to:
   - Conduct research into political questions using both traditional library, documentary, and interview sources and newer electronic modalities including the Internet and web sites.
   - Acquire information from class lectures, discussions, and readings.
   - Collect, describe, and interpret qualitative data.
   - Collect, describe, and interpret quantitative data.

4. Communication skills: Students should be able to present their ideas and the information that they've acquired, and the analyses they've developed in an appropriate format.
   Political science majors should be able to:
   - Write clearly and cogently about political questions, using appropriate language; developing a clear thesis, and supporting that thesis with evidence.
   - Take positions on, and argue (orally and in writing) for different political and issue positions.

Psychological & Brain Sciences
Graduate Student Learning Outcomes

Core Knowledge: Students will be able to

- Demonstrate general knowledge of psychological or brain research and theory consistent with that of a faculty member at a research institute.
- Demonstrate specialized knowledge of a sub-field of psychological or brain research and theory sufficient to carry out substantive independent research in the sub-field.

Research Methods and Analysis: Students will be able to:

- Identify and select the range of statistical and laboratory techniques typically used in psychological or brain research, understand their underlying epistemology, and critically read research that uses this range of methods.
- Design empirical research studies guided by theory and prior research.
- Design and implement studies using appropriate methods, measures, and techniques.
- Systematically analyze and critically evaluate data to produce appropriate findings and interpretations.
- Follow research ethics consistent with the discipline.

Independent Research: Students will be able to:

- Develop their own programs of theoretically and methodologically rigorous research
- Write articles, chapters, and reviews that are comparable in scope and format to articles that appear in leading peer reviewed journals in the field of psychological and brain sciences.
- Supervise research assistants effectively.

Scholarly Communication: Students will be able to:

- Review and cogently synthesize relevant literature.
- Write a journal article in the format of scholarly publications in the field .
- Write a proposal for a program of research
- Present their research, in short conference paper, poster, and longer colloquium formats

Pedagogy: Students will be able to:

- Communicate effectively to large and small groups in pedagogical settings in both lecture and discussion formats.
- Assess students effectively, including developing and using appropriate measures and rubrics.
- Be sensitive to diverse student needs

Professionalism: Students will be able to:

- Make effective contributions to research teams and laboratory groups.
- Prepare compelling job applications
- Select appropriate fellowship or grant opportunities and prepare competitive proposals for them
- Make effective contributions to university, community, and professional service.

Program Learning Outcomes
Graduate Program in Comparative Literature

The Comparative Literature Program offers 3 doctoral degrees:

1) Doctor of Philosophy in Comparative Literature;
2) Doctor of Philosophy in Comparative Literature with a German Literary Studies Specialization (CLG);
3) Doctor of Philosophy in Comparative Literature with a French and Francophone Studies Specialization (CLF).

Through the completion of advanced coursework and rigorous training in language, literary research, methodologies and pedagogy, the doctoral program in comparative literature prepares students to acquire skills and knowledge necessary to function as teachers and scholars of national language and culture departments as well as comparatists in comparative and/or world literature departments and/or English departments.

Outcomes are defined below according to the three doctoral degrees in Comparative Literature.

1. **Program Learning Outcomes for the Ph.D. in Comparative Literature**:

Core Knowledge (PLO1) –Graduates in comparative literature will be able to:

- Demonstrate broad knowledge in the interdisciplinary field of comparative and world literature;
- Demonstrate particular expertise in two or three literary traditions as defined by language, period, region, genre, theme, or movement;
- Evaluate theory and research in various subfields pertaining to two or more literary traditions in a comparative framework, which is to say across national, regional, and disciplinary boundaries;
- Demonstrate advanced written and oral fluency of a foreign language relevant to their major field; and the ability to read scholarly works in the foreign language(s) relevant to their second major field and/or minor field;
- Demonstrate an informed appreciation of cross-cultural interconnections and diversity of literatures and cultures across time and space.

Research Methods and Analysis (PLO2) –Graduates will be able to:

- Demonstrate advanced research and analytical skills;
- Show informed knowledge of the main trends in literary, aesthetic, and cultural theories and in methodologies;
- Choose the appropriate theoretical and methodological tools for their analyses;
- Determine appropriate, timely, and achievable research projects in their fields and subfields of comparative literature.

Pedagogy (PLO3) –Graduates will be able to:

- Teach at all levels techniques of close reading, literary analysis, and the interpretation of texts from different genres and humanistic disciplines with broad historical, cultural and linguistic understanding;
- Design courses in their fields and subfields of comparative literature, selecting and sequencing appropriate primary and secondary readings, and written and oral assignments;

- Foster in their students the ability to think critically and construct cogent arguments in their writing, in a foreign language as well as English;
- Communicate effectively to groups of undergraduate students;
- Generate appropriate assessment tools, including examinations and assignments.

Scholarly Communications (PLO4) –Graduates will be able to:

- Make original contributions to the fields of comparative literature and related fields;
- Promote a global and dynamic vision of literary and cultural phenomena;
- Demonstrate superior linguistic and cultural literacy across national and disciplinary boundaries so as to meet the standards of the journals in the interdisciplinary field of comparative literature and in related fields;
- Produce sophisticated oral and written argumentations on literary and cultural topics in comparative contexts;
- Communicate scholarly ideas to audiences beyond disciplinary contexts.

Professionalism (PLO5) –Graduates will be able to:

- Participate with confidence in the intellectual and professional exchanges of their chosen disciplines;
- React creatively and responsibly to feedback on their performance as scholar and teacher;
- Act responsibly and ethically in interactions with students and peers;
- Contribute creatively to the demands and operations of an academic department, through the design and/or implementation of college curricula and programs with an informed sense of the evolution of their field and awareness of evolving educational needs;
- Contribute to the development of comparative literature through their work within and beyond their home institution;
- Apply their knowledge and skills to a wide range of fields and vocations.

2. **Program Learning Outcomes for the Ph.D. in CLG**:

Core Knowledge (PLO1) –Graduates in Comparative Literature, with a German studies specialization, will be able to:

- Demonstrate general knowledge in the interdisciplinary field of comparative and world literature;
- Demonstrate particular expertise in two or more areas of German studies;
- Evaluate theory and research in various subfields pertaining to the study of two or more literary traditions, including German literature and thought, in a comparative framework, which is to say across national, regional, and disciplinary boundaries;
- Demonstrate a high degree of fluency in written and spoken German and the ability to read scholarly works in the foreign language relevant to their second major field;
- Demonstrate an informed appreciation of cross-cultural interconnections and of the diversity of cultures and literatures across time and space.

Research Methods and Analysis (PLO2) –Graduates will be able to:

- Demonstrate advanced research and analytical skills;
- Show informed knowledge of the main trends in literary, aesthetic, and cultural theories and in methodologies;

- Choose the appropriate theoretical and methodological tools for their analyses;
- Determine appropriate, timely, and achievable research projects in their fields and subfields of German and comparative literary studies.

Pedagogy (PLO3) –Graduates will be able to:

- Teach at all levels techniques of close reading, literary analysis, and the interpretation of texts from different genres and humanistic disciplines with broad historical, cultural and linguistic understanding, including texts from the German literary and intellectual traditions;
- Design courses in their fields and subfields of comparative literature, including German studies, selecting and sequencing appropriate primary and secondary readings, and written and oral assignments;
- Foster in their students the ability to think critically and construct cogent arguments in their writing, in German and English;
- Communicate effectively to groups of undergraduate students;
- Generate appropriate assessment tools, including examinations and assignments.

Scholarly Communications (PLO4) –Graduates will be able to:

- Make original contributions to the fields of German studies as well as comparative literature and related fields;
- Promote a global and dynamic vision of literary and cultural phenomena;
- Demonstrate superior linguistic and cultural literacy in German as well as across national and disciplinary boundaries so as to meet the standards of the journals in German studies and in the interdisciplinary field of comparative literature and in related fields;
- Produce sophisticated oral and written argumentations on literary and cultural topics in comparative contexts;
- Communicate scholarly ideas to audiences beyond disciplinary contexts.

Professionalism (PLO5) –Graduates will be able to:

- Participate with confidence in the intellectual and professional exchanges of their chosen disciplines;
- React creatively and responsibly to feedback on their performance as scholar and teacher;
- Act responsibly and ethically in interactions with students and peers;
- Contribute creatively to the demands and operations of an academic department, through the design and/or implementation of college curricula and programs with an informed sense of the evolution of their field and awareness of evolving educational needs;
- Contribute to the development of comparative literature and German studies through their work within and beyond their home institution;
- Apply their knowledge and skills to a wide range of fields and vocations.

3. **Program Learning Outcomes for the Ph.D. in CLF**:

Core Knowledge (PLO1) –Graduates in comparative literature, with a French and Francophone studies specialization, will be able to:

- Demonstrate general knowledge in the interdisciplinary field of comparative literature;

- Demonstrate particular expertise in two or more areas of French and Francophone studies;
- Evaluate theory and research in various subfields pertaining to the study of two or more literary traditions, including French literature and thought, in a comparative framework, which is to say across national, regional, and disciplinary boundaries;
- Demonstrate a high degree of fluency in written and spoken French and the ability to read scholarly works in the foreign language relevant to their second major field;
- Demonstrate an informed appreciation of cross-cultural interconnections and of the diversity of literatures and cultures across time and space.

Research Methods and Analysis (PLO2) –Graduates will be able to:

- Demonstrate advanced research and analytical skills;
- Show informed knowledge of the main trends in literary and cultural theories and methodologies;
- Choose the appropriate theoretical and methodological tools for their analyses;
- Determine appropriate, timely, and achievable research projects in their fields and subfields of French, Francophone and comparative literary studies.

Pedagogy (PLO3) –Graduates will be able to:

- Teach at all levels techniques of close reading, literary analysis, and the interpretation of texts from different genres and humanistic disciplines with broad historical, cultural and linguistic understanding, including texts from the French and Francophone literary and intellectual traditions;
- Design courses in their fields and subfields of comparative literature, including French and Francophone literature, selecting and sequencing appropriate primary and secondary readings, and written and oral assignments;
- Foster in their students the ability to think critically and construct cogent arguments in their writing, in French and English;
- Communicate effectively to groups of undergraduate students;
- Generate appropriate assessment tools, including examinations and assignments.

Scholarly Communications (PLO4) –Graduates will be able to:

- Make original contributions to the fields of French and Francophone literature as well as comparative literature and related fields;
- Promote a global and dynamic vision of literary and cultural phenomena;
- Demonstrate superior linguistic and cultural literacy in French as well as across national and disciplinary boundaries so as to meet the standards of the journals in French Studies, comparative literature, and related fields;
- Produce sophisticated oral and written argumentations on literary and cultural topics in comparative contexts.
- Communicate effectively with non-specialist audiences.

Professionalism (PLO5) –Graduates will be able to:

- Participate with confidence in the intellectual and professional exchanges of their chosen disciplines;
- React creatively and responsibly to feedback on their performance as scholar and teacher;
- Act responsibly and ethically in interactions with students and peers;

- Contribute creatively to the demands and operations of an academic department, through the design and/or implementation of college curricula and programs with an informed sense of the evolution of their field and awareness of evolving educational needs;
- Contribute to the development of comparative literature and French/Francophone studies through their work within and beyond their home institution;
- Apply their knowledge and skills to a wide range of fields and vocations.

University of California, Santa Barbara
Doctoral Programs in Comparative Literature
August 1, 2013

WSC Senior College and University Commission | EDUCATIONAL PROGRAMS

Curriculum Alignment

Sharlene Sayegh

Curriculum Alignment

Sharlene Sayegh

Outcomes for this Segment

By the end of this sequence, you will be able to:

1. Define Curriculum Alignment;
2. Discuss and explain the importance of aligning learning outcomes at the course level and up through the institutional level;
3. Align class learning outcomes vertically and horizontally

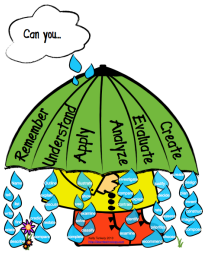
Alignment

connections among components of a learning experience (e.g. curriculum, pedagogy, etc.) that support student achievement of an intended learning outcome.

Reminders: Outcomes should be active, not passive

Rather than language like
- Understand the different views of…

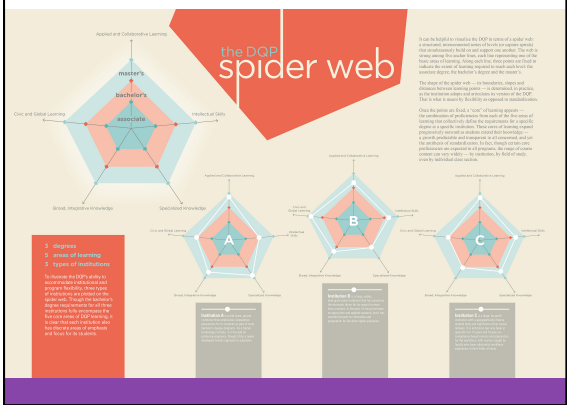
Use active language
- Analyze the different interpretations of…



The DQP

One way to align

The Degree Qualifications Profile (DQP)
- Focuses on a combination of Degree-level proficiencies and intellectual skills
- DQP is adopted by many campuses
- DQP provides support for faculty to determine where and how students practice skills
  - Emphasizes integrative learning (combination of skills)
  - Is specific for degree levels (associate, bachelor's, master's)
- Easily linked to institutional and WSCUC competencies



WSCUC

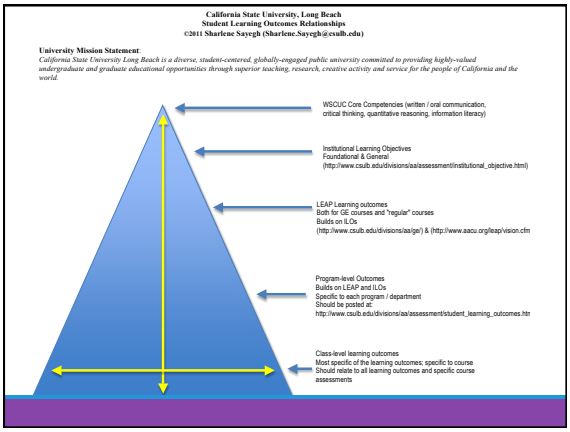
Core Competencies

Kind of like the Wonkavator!

The WSCUC Core Competencies can also help campuses think about alignment

- Written communication
- Oral communication
- Quantitative literacy
- Critical thinking
- Information literacy

All should be practiced at the program level and drill up and down and across the curriculum



What might alignment look like at the course level?

By the end of this course, you will be able to:

1. list the Rulers of England from 1399 – 1714 (Assessments A,B);
2. recognize and label the geography of England, Scotland, Wales and Ireland (Assessment A);
3. articulate and analyze the shift in interpretations about Britain by historians (Assessment A,B,D,E; also satisfies to ILO* on critical thinking and professional competency and department PLOs on methods of discipline);
4. detail the major political developments of the period (Assessment A,B);
5. articulate the socio-cultural aspects of Tudor-Stuart life (Assessments A-E);
6. read texts critically and carefully, for argument, evidence and narrative (Assessments B,C,D,E; satisfies ILO on critical thinking and department PLOs on analysis, methods, and mechanics);
7. present ideas—on paper and in group settings—in a cogent and articulate manner (Assessments A-E; satisfies ILOs on oral and written communication and department PLO on analysis, mechanics, and presentation).

an ILO is an institutional learning outcome, a PLO is a program learning outcome

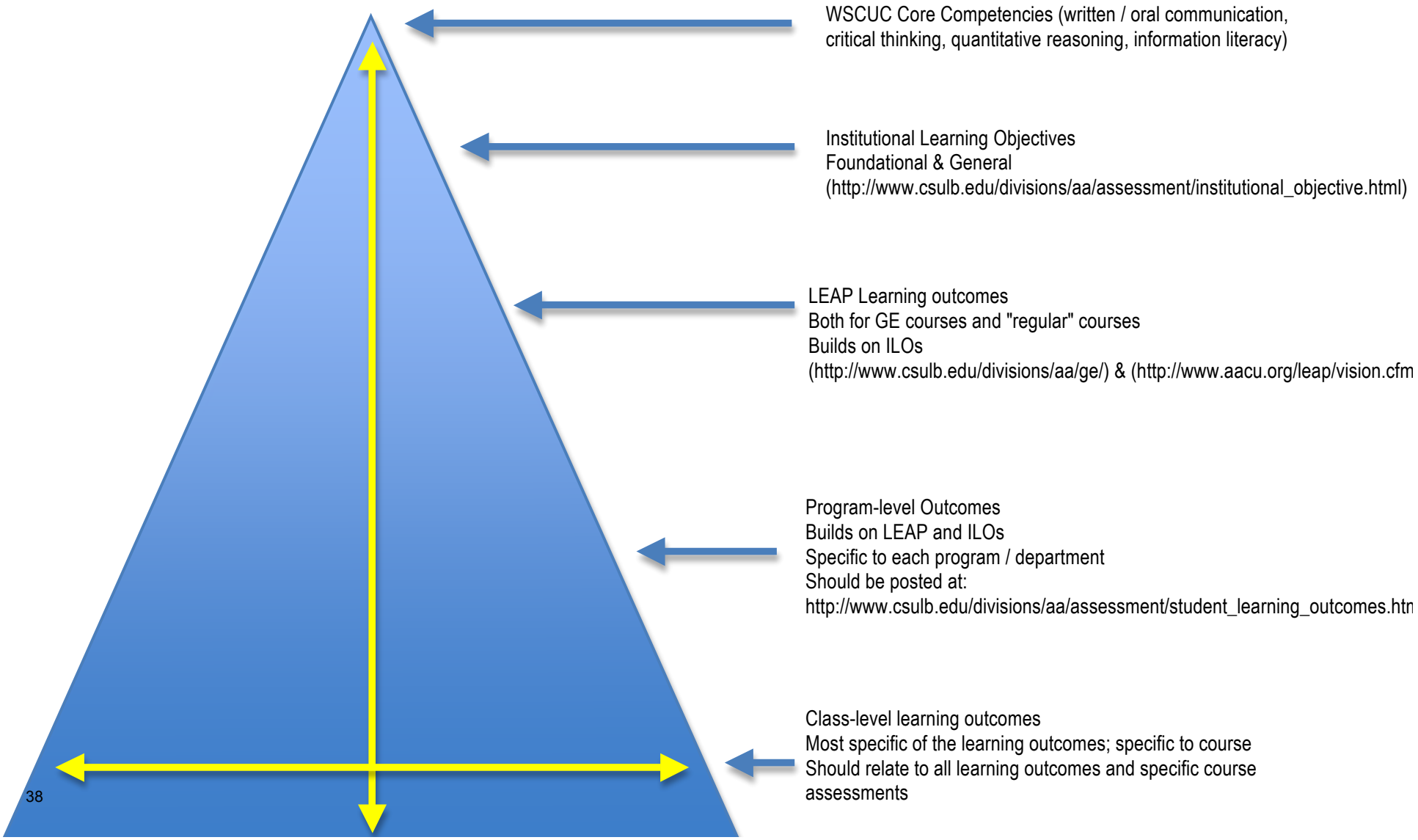
Steps to ensuring success

Outcome alignment remains key to start the conversation

- Becomes a cycle (to be discussed later)
  - Using curriculum maps for all departments
- How do we know students have achieved broader institutional (and now WSCUC core) goals?
  - Drive it into the curriculum from bottom up
- Alignment is about process—implementation over time
  - Creating a consciousness across the university
  - It doesn't happen overnight

California State University, Long Beach
Student Learning Outcomes Relationships
©2011 Sharlene Sayegh (Sharlene.Sayegh@csulb.edu)

University Mission Statement:
California State University Long Beach is a diverse, student-centered, globally-engaged public university committed to providing highly-valued undergraduate and graduate educational opportunities through superior teaching, research, creative activity and service for the people of California and the world.



Learning Outcomes Alignment Worksheet
CSULB 2014

1. Does your course have learning outcomes currently? If so, please list them below. If not, please go over your syllabus and think about the primary goals you have for your students. What do you want them to be able to do when the term ends?

2. What are your department's program learning outcomes? Do you know if the PLOs are listed online? You can check your department's PLOs at http://www.csulb.edu/divisions/aa/assessment/student_learning_outcomes.html. Mark any overlap with your own course outcomes:

3. Is this course a GE course? If so, how are course outcomes aligned with GE outcomes? Even if your course is not a GE course, you can align your curriculum with the essential skills (http://www.csulb.edu/divisions/aa/ge/faculty/skills/index.html) as adopted by CSULB:

3. Do you know that CSULB has institutional learning objectives (ILOs)? They are located at http://www.csulb.edu/divisions/aa/assessment/institutional_objective.html

4. Compare your course outcomes to the ILOs. Do you see any overlap? If so, mark the connections. (an example is included in the handouts provided at the beginning of the workshop).

5. Finally, WSCUC has adopted a new framework in its course design. In what ways do your CLOs, PLOs, and ILOs (now aligned) compare to the WSCUC redesign?

6. You are now ready to align your course outcomes with all outcomes on campus! (see sample syllabus)

Permission to adopt and adapt all or part of this worksheet is granted.
Please reference Sharlene Sayegh (Sharlene.Sayegh@csulb.edu), CSULB in your document
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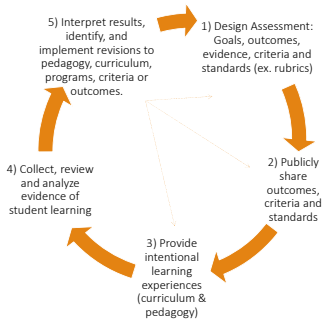
WSC Senior College and University Commission | EDUCATIONAL PROGRAMS

Curriculum Mapping

Laura Martin

Curriculum Maps: Visualizing, Analyzing, Communicating Alignment

Assessment Process



Based on Driscoll & Wood, 2007

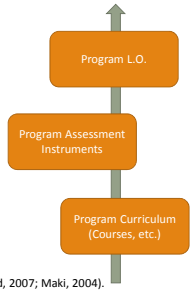
Outcomes

By the end of this segment, you will be able to

1. Describe some purposes/uses/benefits of curriculum maps
2. Describe some key elements of a useful curriculum map
3. Use a map to analyze curriculum coherence

What is curriculum mapping?

- A graphic method for depicting or investigating *curricular coherence*
- Explores the alignment between learning outcomes, curriculum, and assessment of learning in support of overarching goals and mission



(From Driscoll, citing Cuevas, Matveev, & Miller, 2010; Allen, 2004, 2006; Driscoll & Wood, 2007; Maki, 2004).

Maps: Typically depicted as table or matrix

- x = course curriculum designed to support development of program learning outcome

	Program Learning Outcomes (PLOs)				
Courses	**PLO #1**	**PLO #2**	**PLO #3**	**PLO #4**	**PLO #5**
100*		X	X	X	
110*	X			X	X
200		X			X
202*	X	X	X		X
300	X		X		
405*	X	X	X	X	X

* = Required course for the major

Maps: Typically depicted as table or matrix

Course curriculum designed to support development of program learning outcome as follows:

- I = Introduce
- D = Develop
- M = Mastery
- A = Assessed

	Program Learning Outcomes (PLOs)				
Courses	**PLO #1**	**PLO #2**	**PLO #3**	**PLO #4**	**PLO #5**
100*		I	I	I	
110*	I			D	I
200		D			D
202*	D	D	D		D
300	D		D		
405*	M, A	M, A	M, A	M, A	M, A

* = Required course for the major

Many Mapping Schemas

What is being communicated varies

- L.O. addressed – yes or no? (x)
- Level of student development of L.O. (I,D,M)
- Degree that program learning outcomes are emphasized in course.

Symbols vary

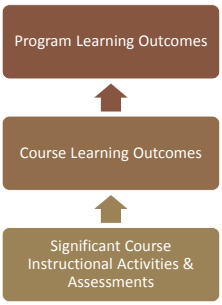
- Numeric
- Words

Diverse Relationships can be Mapped

- Courses other significant learning experiences to program learning outcomes
- Program learning outcomes to institutional and/or GE outcomes
- Required major courses to GE outcomes (e.g. Norfolk U)
- Course curriculum to course learning outcomes
- Core Competencies to program or institutional outcomes
- Co-curricular program outcomes to Divisional, GE or institutional outcomes

In program-level maps, what are we connecting?

✓ Course syllabus is a useful reference document



Questions Maps Can Help Address

- "Do faculty focus on experiences leading to outcomes as well as on the outcomes themselves?" (Huba & Freed, 2007, p. 160)
- "Is there a conceptual relationship among teaching, curriculum, learning, and assessment in my course, our program, and this institution?" (Driscoll & Wood, 2007, p. 172)
- "Do students have multiple opportunities to achieve our program goals and learning outcomes?"(Suskie, 2009, p. 101)

Use a Map to Analyze a Curriculum

1. What questions does the map raise about the organization of curriculum in support of intended student learning?
2. What recommendations, if any, might you make to the program's faculty?
3. What questions does this activity raise for you about curriculum maps and mapping?

Maps are Living Documents

They benefit from regular review and update. Strategic opportunities to review might include

- Each annual assessment cycle, review alignment for LO being studied
- Each program review, take a comprehensive look
- New instructor assumes responsibility for a course
- Other?

Group Brainstorm

- Who might benefit from having access to curriculum maps? *Why*?
- When and how might they be made available?

Some Benefits to Students

Provide information to empower stewardship of learning and education:

- See how courses work together in support of learning
- Offer information for use in planning educational/course choices
- Guide learning expectations
- Other?

Some Benefits to Faculty/Instructors

Provide information to support teaching in the context of a program:

- See how his/her course contributes to an entire program curriculum
- Guide for course planning
- Guide for anticipating and building on prior student learning
- Guide for creating assignments that support outcomes
- Resource to make connections for students
- Orient new faculty/instructors (adjuncts, TAs, peer tutors) to the program
- Other?

Mary Allen; University of Hawaii Assessment Office, Curriculum Map: An Elegant and Powerful Tool in your Assessment Toolbox, Dec 2011.

Some Benefits to Programs

Support student learning and program planning and assessment:

- Ensure students have sufficient opportunities to develop and master intended outcomes
- Ensure all requirements contribute to student learning and success
- Promote shared understandings among all instructors (adjuncts, TAs, peer tutors, etc.)
- Identify where evidence of student learning can be collected
- Indirect evidence for interpreting program assessment results
- Identify areas for closing the loop
- Other?

Mary Allen; University of Hawaii Assessment Office, Curriculum Map: An Elegant and Powerful Tool in your Assessment Toolbox, Dec 2011.

Alignment & Mapping

USING COURSE, PROGRAM, AND INSTITUTIONAL CURRICULAR MAPS FOR ALIGNMENT

By Amy Driscoll, re-arranged by Laura E. Martin

Alignment: Alignment can be defined simply as the degree of congruence between and among components. Wulff (1985, 2005) uses the term alignment to discuss teaching effectiveness. His research shows that effective teachers align their instructional goals with their curricular content, themselves, and students in specific instructional contexts. Maki urges alignment with the assurance that "the greater the alignment between components, the more successfully the desired outcomes can be achieved" (20006, p.92). For Maki, the important alignment is between the learning outcomes and proposed assessment methods (p. 90).

Mapping: "Mapping" is a method for depicting or investigating curricular coherence by exploring the alignment between learning outcomes, courses, programs, syllabi, curriculum, instructional activities (pedagogy), and assessment of learning (Cuevas, Matveev, & Miller, 2010; Allen, 2004, 2006; Driscoll & Wood, 2007; Maki, 2004). As a visual representation of alignment, maps also facilitate transparency and intentionality in program curriculum, general education competencies, institution-wide learning outcomes, and courses etc. Mapping tools are simple, straightforward, immediately engaging to faculty, and provide visual, easily interpreted and non- threatening data.

Mapping tools are flexible and can be adjusted to reflect a number of factors:

1. the conceptual framework of a program;
2. specific program review concerns/questions (Cuevas, Matveev & Miller, 2010),

Maps can also be used for various purposes:

1. Trace institutional goals and learning outcomes through the entire baccalaureate degree
2. Identify the strengths and gaps in a program or course
3. Promote aligned coursework and syllabi, programs
4. Ensure conditions are appropriate for student achievement of learning outcomes
5. Help build consensus about program content
6. Advance a climate of collegiality, flexibility, autonomy, and transparency in faculty design and review of programs
7. Reflect institutional and programmatic alignment with national professional goals (LEAP, etc.)

Bresciani recommends using mapping in both academic and co-curricular programs as an "overview of students' learning journeys—a place to locate where educational opportunities are specifically designed to address institution and program level expectations" (2006, p. 54).

"Curriculum Mapping" responds to important faculty questions:

1. "Do faculty focus on experiences leading to outcomes as well as on the outcomes themselves?" (Huba & Freed, 2007, p. 160).
2. "Is there a conceptual relationship among teaching, curriculum, learning, and assessment in my course, our program, and this institution?" (Driscoll & Wood, 2007, p. 172)
3. "Do students have multiple opportunities to achieve our program goals and learning outcomes?"(Suskie, 2009, p. 101)

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Scoring Schemas for Curriculum Mapping at the Program Level[1]

Scoring schemas conceptualize how the curriculum of a program addresses the intended learning outcomes. They do so by describing the opportunities students have to meet, develop (through practice with feedback), and demonstrate their learning at a level appropriate for a graduate or exit from a program.

Example scoring schemas follow. In all cases, levels of development are described with reference to the abilities a student should demonstrably possess upon successfully completing the program.

A. Mary Allen, emeritus, California State University Center for Teaching and Learning

Introduce (I)	Learning outcomes are introduced at a basic level.
Develop (D)	Students are given opportunities to deepen their knowledge of and practice the outcomes with feedback to increase their sophistication with intended skills and knowledge.
Mastery (M)	Students demonstrate knowledge and skills at a level appropriate for a degree holder/graduate.

This schema can be useful where didactic learning is separate from experiential learning.

Introduce (I)	Learning outcomes are introduced at a basic level.
Enhance (E)	Learning is increasingly advanced beyond the basic level using didactic methods.
Practice (P)	Practice with real or simulated clients; feedback given to develop practical skills.
Mastery (M)	Students demonstrate knowledge and skills at a level appropriate for a degree holder/graduate.

B. *University of Hawaii, Manoa, Assessment Office* < manoa.hawaii.edu/assessment/howto/mapping.htm>

Introduced (I)	Learning outcomes are introduced.
Reinforced (R)	Learning outcomes are reinforced with the opportunity to practice.
Mastery (M)	Mastery at the senior or exit level.
Assessed (A)	Assessment evidence collected.

Also from the University of Hawaii, a scoring schema that illustrates the degree of emphasis placed on an intended learning outcome in a course.

1	Some emphasis
2	Moderate emphasis
3	Significant emphasis

[1] Adapted from document by Fred Trapp, Cambridge West Partnership, LLC. Fredtrapp@gmail.com

C. Norfolk State University – as described in Cuevas, N.M., Matveev, A. G. and K.O. Miller. Mapping General Education Outcomes in the Major: Intentionality and Transparency. AACU Peer Review. Winter 2010. Pp. 10-15.

Introduced (I)	Students are not expected to be familiar with the content or skill at a collegiate level. Instruction and learning activities focus on basic knowledge, skills and/or competencies and entry level complexity. Only one (or a few) aspect of a complex program outcome is addressed in a given course.
Emphasize (E)	Students are expected to possess a basic level of knowledge and familiarity with the content or skills at the collegiate level. Instruction and learning activities concentrate on enhancing and strengthening knowledge, skills, and expanding complexity. Several aspects of the outcome are addressed in a given course, but these aspects are treated separately.
Reinforced (R)	Students are expected to possess a strong foundation in the knowledge, skill or competency at the collegiate level. Instruction and learning activities continue to build upon previous competencies with increased complexity. All components of the outcome are addressed in the integrative contexts.
Advanced (A)	Students are expected to possess an advanced level of knowledge, skill or competency at the collegiate level. Instruction and learning activities focus on the use of the content or skills in multiple contexts and at multiple levels of complexity.

D. Bellevue Community College, Washington

0	Course does not include instruction on the outcome
1	Includes some instruction or practice and assessment of the outcome
2	Addresses the outcome as a focus in 20% or more of the course.
3	Addresses the outcome as a focus in 33% or more of the course.

E. Maui Community College – A focus on what students do in relation to the outcome, as opposed to instruction.

0	No emphasis. The student does not address this learning outcome.
1	Minor emphasis. The student is provided an opportunity to use, reinforce and apply this learning outcome, but is not evaluated on this learning outcome.
2	Moderate emphasis. The student uses, reinforces, and applies this learning outcome, and is evaluated on this learning outcome, but it is not the focus of the class.
3	Major emphasis. The student is actively involved (uses, reinforces, applies and is evaluated) in the learning outcome. The learning outcome is the focus of the class.

D Program learning outcomes and curriculum maps

The Program Learning Outcomes (**PLOs**) for the Ph.D. degree plan and each of the M.S. degree plans are listed below.

- Upon graduating, students completing the **Ph.D. degree** are expected to be able to:
    1. Formulate well-posed mathematical problems and provide analytical insight for solving them.
    2. Design, implement, and validate potentially novel computational methods for solving mathematical problems.
    3. Give clear and organized written and verbal explanations of mathematical ideas to a variety of audiences including teaching undergraduate students.
    4. Model real-world problems mathematically and analyze those models using their mastery of the core concepts.
    5. Recognize ethical and responsible conduct and learn how to apply them to research.
    6. Make an original and significant contribution to the knowledge in a chosen research subfield of Applied Mathematics.
- Upon graduating, students completing the **M.S. degree, Plan I**, are expected to be able to:
    1. Solve advanced mathematical problems using analytical methods.
    2. Solve advanced mathematical problems using computational methods.
    3. Give clear and organized written and verbal explanations of mathematical ideas to a variety of audiences including teaching undergraduate students.
    4. Model real-world problems mathematically and analyze those models using their mastery of the core concepts.
    5. Recognize ethical and responsible conduct and learn how to apply them to research.
    6. Make an original contribution to the knowledge in a chosen research subfield of Applied Mathematics.
- Upon graduating, students completing the **M.S. degree, Plan II**, are expected to be able to:
    1. Solve advanced mathematical problems using analytical methods.
    2. Solve advanced mathematical problems using computational methods.
    3. Give clear and organized written and verbal explanations of mathematical ideas to a variety of audiences including teaching undergraduate students.
    4. Model real-world problems mathematically and analyze those models using their mastery of the core concepts.
    5. Recognize ethical and responsible conduct and learn how to apply them to research.
    6. Present a capstone project that extends well beyond the undergraduate curriculum.

The curriculum maps for the Ph.D. degree plan and each of the M.S. degree plans are listed below.

Curriculum Map (Ph.D. program)

(I = introductory graduate level, D = developed, M = mastery; where a range is given, higher levels of achievement are expected from more advanced students)

PLOs	1 Analysis	2 Computing	3 Communi-cation	4 Modeling M	5 Ethics I	6 New Research
Math 221*	M		I	M	I	
Math 222*	M		I	M	I	
Math 223*	M		I	M	I	
Math 231*		M	I	M	I	
Math 232*		M	I	M	I	
Math 233		M	I	M	I	
Math 291*	I-M	I-M	I	I-M	I	I-M
Math 292*	M	M	I		I	
Math 295	M	M	I-M	M	I-M	I-M
Math 298		D	I		D	
Math 299	M	M	I-M	M	I-M	I-M
Math 201*			D		D	
Math 399*			D		D	
Preliminary exams	I		I			
Qualifying exam	M	M	D	I	M	I
Technical seminar presentation	M	M	D	D-M		D-M
Teaching assistant			D-M			
Annual committee meeting	M	M	D-M	D-M	M	I-M
Dissertation and defense	M	M	M	M	M	M

* indicates required courses

Curriculum Map (M.S. Plan I)

(I = introductory graduate level, D = developed, M = mastery; where a range is given, higher levels of achievement are expected from more advanced students)

PLOs	1 Analysis	2 Computing	3 Communi-cation	4 Modeling	5 Ethics I	6 Original Contribution
Math 221*	M		I	M	I	
Math 222*	M		I	M	I	
Math 223*	M		I	M	I	
Math 231*		M	I	M	I	
Math 232*		M	I	M	I	
Math 233		M	I	M	I	
Math 291*	I-M	I-M	I	I-M	I	I-M
Math 292*	M	M	I		I	
Math 295	M	M	I-M	M	I-M	I-M
Math 298		D	I		D	
Math 299	M	M	I-M	M	I-M	I-M
Math 201*			D		D	
Math 399*			D		D	
Preliminary exams	I		I			
Teaching assistant			D-M			
Annual committee meeting	M	M	D-M	D-M	M	I-M
Dissertation and defense	M	M	M	M	M	M

* indicates required courses

Curriculum Map (M.S. Plan II)

(I = introductory graduate level, D = developed, M = mastery; where a range is given, higher levels of achievement are expected from more advanced students)

PLOs	1 Analysis	2 Computing	3 Communi-cation	4 Modeling	5 Ethics I	6 Capstone Research
Math 221*	M		I	M	I	
Math 222*	M		I	M	I	
Math 223*	M		I	M	I	
Math 231*		M	I	M	I	
Math 232*		M	I	M	I	
Math 233		M	I	M	I	
Math 291*	I-M	I-M	I	I-M	I	I-M
Math 292*	M	M	I		I	
Math 295	M	M	I-M	M	I-M	I-M
Math 298		D	I		D	
Math 299	M	M	I-M	M	I-M	I-M
Math 201*			D		D	
Math 399*			D		D	
Preliminary exams	I		I			
Teaching assistant			D-M			
Advisor meeting	M	M	M	M	M	D-M
Capstone project	M	M	M	M	M	M

* indicates required courses

Connection of
UNIVERSITY LEARNING REQUIREMENTS
With
MASTER OF EDUCATION PROGRAM LEARNING OUTCOMES

			UNIVERSITY LEARNING REQUIREMENTS (ULR)							
			Learning and Achievement		Community & World		Awake to New Possibilities		Values: Diverse, Open, & Challenging	
			A	B	C	D	E	F	G	H
PROGRAM LEARNING OUTCOMES (PLOs)	Academic Leadership	1.1	X		X		X	X		
		1.2	X		X		X	X		
		1.3	X		X		X	X		X
	School Leadership	2.1	X		X		X	X		
		2.2	X		X	X		X		X
		2.3	X		X	X		X	X	
		2.4		X	X	X	X			X
		2.5		X	X	X	X		X	
	Professional Inquiry	3.1	X	X	X		X	X	X	
		3.2	X		X		X	X		
		3.3	X	X	X		X	X	X	X
		3.4	X	X	X		X	X	X	

MASTERS OF EDUCATION
DEGREE PROGRAM LEARNING OUTCOMES (M.ED.-PLO's)

Graduates of the Masters of Education Program shall accomplish the following Program Learning Outcomes (M.ED.-PLO 's):

To demonstrate **Academic Leadership,** prior to graduation **Master of Education** students will:

1.1. Express a critical, questioning perspective (i.e. identify, describe, and discuss) vis-a-vis the theories of instruction and learning and apply said theories to the classroom and school.

1.2. Use expertise in student learning and pedagogy within the frame of Project- Based Learning principles and other "Learning by Doing" models.

1.3. Effectively communicate and use critical thinking skills to analyze different perspectives on a given educational topic and evaluate the merits of each.

To demonstrate **School Leadership,** prior to graduation **Master of Education** students will:

2.1. Develop a basic understanding of school level finance, law and business.

2.2. Understand and practice the principles of establishing and maintaining a school community, including mentoring, collaboration, and leadership.

2.3. Demonstrate a knowledge of, and ability to use, the most effective educational practices within diverse classrooms and schools

2.4. Communicate in a manner that is clear and commands professional attention.

2.5. Actively work to strengthen his/her professional educational practice and the practice of others through reflection and continuing professional and personal development

To demonstrate **Professional Inquiry**, prior to graduation **Master of Education** students will:

3.1. Conduct research at a basic level (action research) to inform instruction.

3.2. Search, navigate, and critically consume (read, analyze, and use) both quantitative and qualitative educational research.

3.3. Identify a focused problem related to education, and formally propose a reasonable research process for investigating and acting on that issue.

3.4. Design and carry out a research project at a basic level that includes all of the components of a formalized academic project and/or document.

Curriculum Map of
MASTER OF EDUCATION PROGRAM LEARNING OUTCOMES (PLOs)
&
MASTER OF EDUCATION COURSES

		PROGRAM LEARNING OUTCOMES (MED-PLO's)											
		Academic Leadership			School Leadership					Professional Inquiry			
		1.1	1.2	1.3	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	3.4
REQUIRED COURSES FOR MASTERS DEGREE	EDU 400 Writing for Graduate Students										X		
	EDU 500 Professional Learning Environment					X	X	X	X				
	EDU 505 Project-Based Instruction I		X										
	EDU 510 Philosophy & History of Education			X			X						
	EDU 515 Using Data, Authentic Assessment & Portfolios		X				X			X			
	EDU 520 Project-Based Instruction II		X										
	EDU 530 Research Methods and Beginning Statistics										X		
	EDU 535 Literacy in the 21" Century	X					X						
	EDU 540 Research I -Application of Design & Methods										X		
	EDU 550 Curriculum Foundations	X											
	EDU 555 Instructional Design & Technology				X	X	X						
	EDU 560 Introduction to Law & Policy				X								
	EDU 565 Equity & Diversity in Educational Instruction						X						
	EDU 570 Finance & Business				X								
	EDU 575 Seminar in Educational Technology			X		X	X						
	EDU 600 Mentoring, Coaching & Evaluating Instruction					X		X	X				
	EDU 605 Professional Productivity							X	X				X
	EDU 650 Research II – Application							X			X	X	
	EDU 660 Thesis							X			X	X	X
	The Master's Thesis serves as the Program Capstone and as the major evidence for the achievement of both ULRs and PLOs.												

MASTERS OF EDUCATION DEGREE
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To demonstrate **School Leadership,** prior to graduation **Master of Education** students will:

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2.3. Demonstrate a knowledge of, and ability to use, the most effective educational practices within diverse classrooms and schools

2.4. Communicate in a manner that is clear and commands professional attention.

2.5. Actively work to strengthen his/her professional educational practice and the practice of others through reflection and continuing professional and personal development

To demonstrate Professional Inquiry, prior to graduation Master of Education students will:

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3.2. Search, navigate, and critically consume (read, analyze, and use) both quantitative and qualitative educational research.

3.3. Identify a focused problem related to education, and formally propose a reasonable research process for investigating and acting on that issue.

3.4. Design and carry out a research project at a basic level that includes all of the components of a formalized academic project and/or document.

Major Degree Programs: Curriculum map depicting the alignment between Program Learning Outcomes (PLOs) for UC Merced major degree programs and Core 1 and 100[1] and the Eight Guiding Principles of General Education based on alignments reported by program faculty in Section III of Faculty Accreditation Reports[2]. Numbers or letters reference specific PLOs.

		Eight Guiding Principles							
	Major Program	Scientific Literacy	Decision Making	Communication	Self & Society	Ethics & Responsibility	Leadership & Teamwork	Aesthetic Understand-ing & Creativity	Development of Personal Potential
GE	Core 1	2	1,2, 4	1-5	3-5	4	1,3	2,5	1
	Core 100	1	1,2, 4	1-5	3-5	4	1,3	2,5	1
School of Engineering	Bioengineering	1,2,3,4	2,3,4	1,2,3,4	2,4,5	3,4,5	5	2,4	
	Computer Science & Engineering	a,b,c	a,b,c	c,f	d,e,f,g,h	d,e	c,d,e,g	d,e,i,j,k	a,b,c,h,i,j,k
	Environmental Engineering	1,2,3,4	1, 2,3, 4,5,6	1, 2,3, 4,5	3,4,5,6	3,4,5,6	3,4,5,6	3,4,6	4,6
	Materials Science & Engineering	1,2,3,4	1,3,4	1,2,3,4	3,5	3,5	3,5	3	
	Mechanical	a,b,d,e,k,l, m,o	a,b,c,d,e, k,l,o	a,b,g,o	c,e,f,h,j, m,o	c,d,f,o	a,c,d,e,i ,o	c,e,m,o	d,e,i,k,o
School of Natural Sciences	Applied Mathematics	1,2,3,5	1,2	4	3,4,5				
	Biology	1,2,4	2,3,5	4	1,5	5	3	2	2,3,4
	Chemistry	1,2	2,4	3	4	4	3	2,3	1,3,4
	Earth Systems Science	1,2,3	3	4	2	2	5		5
	Physics	1,2,3,5	1,2,3,5	4	4,5	5	4	1,2,5	1,2,3,4,5
School of Social Sciences, Humanities and Arts	Anthropology	1,2,4,5,6	1-6	1-6	1,2,3,4,5 ,6	1,3,5	1-6	1,2,4	1,2,3,4,5,6
	Cognitive Sciences	1,2,3	4	4	1,4,5	1,4	2,5	4	5
	Economics[2]	c	b,c,d,e	g	a	f			e
	History		1-5	1-5	1-5	1-5			1-5
	Literature & Cultures		3,4	1,2,3,4,5	1,2,3,5	3,4	3	1,2,4,5	1,2,3,4,5
	Management[2]	1	2	4	2	5	3		1,2,3,4,5
	Political Science	2,3	1,2,5	4	1,5	1			
	Psychology	1,2,3	2,3,4	1-4	1	1	1,5	1,5	1
	Sociology	1,3,5	1,2,3,5	2,3,4,5	1,2,5	1,2	2,4,5		1-5

[1] Institutional General Education program. Writing 101, 116, 117, 118 and 119 are approved substitutes for Core 100.

[2] Faculty did not directly relate PLOs to the Eight Guiding Principles. In these cases, an alignment was proposed by staff.

FIGURE 1. INTERDISCIPLINARY STUDIES PROGRAM MAP

Semester	Fall 2009	SELECTED GENERAL EDUCATION CORE COMPETENCIES																	
College	Liberal Arts	**1. WRITTEN COMMUNICATION** Student is able to produce texts appropriate for their purposes and audiences as reflected in: (a) Form; (b) Organization; (c) Content development; (d) Language usage and style (syntax, vocabulary, grammar, and mechanics).			**2. INFORMATION TECHNOLOGY LITERACY** Student is able to: (1) Use and apply computers, software applications, and other resources to achieve a wide variety of academic, professional, and personal goals; (2) Use a set of abilities to solve problems, collect data, manage information, communicate with others, create effective presentations, and use information to make informed decisions.			**3. SCIENTIFIC REASONING** Student is able to: (1) Propose relationships between observed phenomena; (2) Design experiments which test hypotheses concerning proposed relationships; (3) Predict logical consequences of observed phenomena and determine possible alternative outcomes; (4) Judge the degree to which a particular conclusion is justified based on the empirical evidence related to observed phenomena.			**4. QUANTITATIVE REASONING** Student is able to solve problems within: (1) Numeric or arithmetic contexts; (2) Conceptual contexts; (3) Geometric contexts; (4) Data representation and chance element contexts.			**5. CRITICAL THINKING** Student is able to consistently and systematically: (1) Identify main ideas and/or themes; (2) Make comparative judgments from data; (3) Determine the validity/ credibility and implication of a supposition; (4) Identify limitations and contradictions in an event; (5) Analyze and evaluate arguments and issues; (6) Demonstrate creative problem solving skills; (7) Implement and evaluate a plan to work towards a goal or conclusion.			**6. ORAL COMMUNICATION** Student is able to express him or herself in a structured, meaningful, and productive manner. The student must also be able to convey his/her intentions or ideas in messages crafted to introduce, inform, or persuade the listener.		
Department	Interdisiplinary Studies																		
Degree	Bachelor of Science																		
CORE/REQUIRED PROGRAM COURSES		[i] Outcome Statement (X, M)	[ii] Level (I, E, R, A)	[iii] Feedback (F)	[i] Outcome Statement (X, M)	[ii] Level (I, E, R, A)	[iii] Feedback (F)	[i] Outcome Statement (X, M)	[ii] Level (I, E, R, A)	[iii] Feedback (F)	[i] Outcome Statement (X, M)	[ii] Level (I, E, R, A)	[iii] Feedback (F)	[i] Outcome Statement (X, M)	[ii] Level (I, E, R, A)	[iii] Feedback (F)	[i] Outcome Statement (X, M)	[ii] Level (I, E, R, A)	[iii] Feedback (F)
INT 308: Introduction to Interdisciplinary Studies		X	I	F	X	E	F	M	I	F				X	R	F	M	E	F
INT 322: Critical Approaches to Analysis		X	I	F	X	R	F	X	E	F				X	R	F	M	E	F
PSY 210: Introduction to Psychology		X	I	F	X	E	F							X	E	F	M	E	F
INT 360: Foundations of Research in Interdisciplinary Studies		X	E	F	X	R	F	X	R	F				X	R	F	M	E	F
INT 375: Language and Society		X	E	F	X	R	F	M	R	F				X	R	F	X	R	F
CSC 200: Advanced Computer Concepts		M	E	F	X	A	F	X	E	F				X	A	F	M		
INT 411: Ideas and their Influences		M	R	F	X	R	F	M	R	F				X	R	F	M	R	F
INT 412: Contemporary Globalization		M	R	F	X	R	F	M	R	F				X	R	F	M	R	F
INT 470: Senior Seminar		M	A	F	X	A	F	X	R	F				X	A	F	M	A	F
INT 477: Senior Thesis		M	A	F	X	A	F	X	A	F	M	E	F	X	A	F	M	A	F

LEGEND

[I] OUTCOME STATEMENT: The program outcome is x) EXPLICITLY or (m) IMPLICITLY reflected in the course syllabus as being one of the learning outcomes for this course.

[II] LEVEL OF CONTENT DELIVERY: (I) INTRODUCED - Students are not expected to be familiar with the content or skill at the collegiate level. Instruction and learning activities focus on basic knowledge, basic level of knowledge and familiarity with the content or skills at the collegiate level. Instruction and learning activities concentrate on enhancing and strengthening knowledge, skills, and expanding the knowledge, skill, or competency at the collegiate level. Instructional and learning activities continue to build upon previous competencies with increased complexity. Components of the outcome are focus on the use of the content or skills in multiple contexts and at multiple levels of complexity. skills, and/or competencies and entry-level complexity. Only one (or a few) aspect of a complex program outcome is addressed in the given course. (E) EMPHASIZED - Students are expected to possess a complexity. Several aspects of the outcome are addressed in the given course, but these aspects are treated separately. (R) REINFORCED - Students are expected to possess a strong foundation in addressed in the integrative contexts. (A) ADVANCED - Students are expected to possess an advanced level of knowledge, skill, or competency at the collegiate level. Instructional and learning activities

[III] FEEDBACK ON STUDENT PERFORMANCE / ASSESSMENT: (F) Students demonstrate their learning on the outcome through homework, projects, tests, etc. and are provided formal Feedback.

From: Cuevas, N.M., Matveev, A. G. and K.O. Miller. Mapping General Education Outcomes in the Major: Intentionality and Transparency. AACU Peer Review, Winter 2010. Pp. 10-15.

Illustrating Relationship of WASC Core Competencies to Program Learning Outcomes - UC Merced

E = Competency is explicity named in the PLO, I = Compentency is implicit; implied by the language of the PLO

Undergraduate Major	Program Learning Outcomes	Oral Communication	Written Communication	Quantitative Skills/Reasoning	Information Literacy	Critical Thinking
Applied Mathematics	Solve mathematical problems using analytical methods.			I		I
	Solve mathematical problems using computational methods.			I		I
	Recognize the relationships between different areas of mathematics and the connections between mathematics and other disciplines.			I		I
	Give clear and organized written and verbal explanations of mathematical ideas to a variety of audiences.	E	E			
	Model real-world problems mathematically and analyze those models using their mastery of the core concepts.					I
Biological Sciences	An understanding of the tenets of modern biology and an understanding of how cellular functions are integrated from the molecular level to the cellular level, through to the level of organism, populations, and functioning ecosystems.	I	I			
	An ability to develop and critique hypotheses and to design experiments, models, and/or calculations to address these hypotheses.	I	I	I		I
	The ability to use appropriate instrumentation and computational tools to collect, analyze and interpret data.			I		I
	The ability to read, evaluate, interpret, and apply numerical and general scientific information.	I	I	I	I	I
	A familiarity with, and application of safety in good laboratory and field practices.					I
Chemical Sciences	*Fundamental knowledge and skills.* Students are able to describe the major concepts and theoretical principles in chemistry. They can identify the central ideas underlying the principal subfields of chemistry-- analytical, inorganic, organic, and physical chemistry--as well as the broader interdisciplinary subfields of biological, environmental and materials chemistry. Students are able to operate modern chemical instrumentation, perform chemical syntheses and carry out other essential chemical experiments with strict adherence to sound laboratory techniques as well as good safety and hygiene practices. They know how to use modern web-based methods to effectively search the scientific literature.				I	
	Scientific methodology. Students have developed the ability to integrate the aforementioned fundamental knowledge and skills into scientific inquiries. They can formulate well-defined and quantitative questions, develop testable hypotheses, design and execute experiments, analyze and interpret the results and reach appropriate conclusions. They are also able to critically analyze the work of other scientists and assess its correctness, importance, and relevance.			E		I
	Communication and teamwork skills. Students are able to write organized and concise reports and present technical information using electronic media, posters and oral presentations. They have developed the communication and teamwork skills that allow them to work effectively both as leaders and as team members in a group.	E	E			

Undergraduate Major	Program Learning Outcomes	Oral Communication	Written Communication	Quantitative Skills/Reasoning	Information Literacy	Critical Thinking
	Citizenship, ethics, role of chemistry in society. Students have an appreciation for the role of chemistry in the global society as well as the central role chemistry plays in other scientific disciplines such as biology, medicine, environmental science, and engineering sciences. They conduct themselves ethically and responsibly in science-related professions.					I
Earth Systems Science	Foundational knowledge of physics, chemistry, biology, and mathematics related to Earth systems that supports a working knowledge of basic research methodologies, data analysis, and interpretation for a variety of Earth-related data.			I		
	Knowledge of major concepts, theoretical principles, experimental findings, and areas of study related to Earth systems science, and comprehension of the interactions between natural Earth systems and human economic, political, and social systems.					I
	An ability to employ critical thinking, quantitative and numerical analyses, and hypothesis-driven methods of scientific inquiry in the formulation of research questions, experimental design, application and use of laboratory and field instrumentation, and analysis and interpretation of data related to Earth systems.			I		E
	Effective written and oral communication skills, especially the ability to transmit complex technical information.	E	E			
	An ability to work effectively individually and in teams in classroom, laboratory, and field settings.	I				
Physics	Physical Principles. Students will be able to apply basic physical principles--including classical mechanics, electricity and magnetism, quantum mechanics, and statistical mechanics---to explain, analyze, and predict a variety of natural phenomena.					I
	Mathematical Expertise. Students will be able to translate physical concepts into mathematical language. Furthermore students will be able to apply advanced mathematical techniques (e.g., calculus, linear algebra, probability, and statistics) in their explanations, analyses, and redictions of physical phenomena.	I	I	I		I
	Experimental Techniques. Students will be able to take physical measurements in an experimental laboratory setting and analyze these results to draw conclusions about the physical system under investigation, including whether their data supports or refutes a given physical model.			I		I
	Communication and Teamwork Skills. Students will be able to clearly explain their mathematical and physical reasoning, both orally and in writing, and will be able to communicate and work effectively in groups on a common project.	E	E			
	Research Proficiency. Students will be able to formulate personal research questions that expand their knowledge of physics. Students will be able to apply sound scientific research methods to address these questions, either by researching the current literature or developing independent results.				I	I

Course Alignment Grids

Figures 8.2, 8.3, and 8.4 from Driscoll, A. & Wood, S. (2007). Developing Outcomes Based Assessment for Learner-centered Education: A Faculty Introduction. Stylus, Sterling. p. 163-167.

Summary that follows from Amy Driscoll, Assessment Leadership Academy, 2010.

Purposes:

- For individual faculty to reflect on alignment of course elements with course learning outcomes.
- Preparation or preface to program alignment
- A focus for scholarship of teaching
- Pair with student feedback on course alignment to check course alignment

Advantages:

- Easy and fast
- Provides visual presentation of course priorities, use of time, and alignment of course elements in support of intended learning outcomes
- Quickly identify strengths, gaps, and redundancy
- Evidence to help interpret and explain student learning assessment results, and in support of closing the loop
- Provides direction for course revision
- Identify opportunities for integration across course elements
- Easily translated into a syllabus for students
- Potential to support program review

FIGURE 8.2
Sample Course Alignment Grid A

Course Information:
Professor:

	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5	Outcome 6
Class 1	X					
Class 2	X					
Class 3	X	X	X			
Class 5		X	X			
Class 10		X				
Class 11		X				
Class 12	X	X				
Class 20				X		
Class 21				X		
Class 22	X			X	X	
Class 23	X			X	X	
Class 28				X	X	X
Class 29	X					X
Class 30	X	X	X	X	X	X
Reading A	X	X				
Reading B		X	X			
Reading C						X
Reading D						X
Assignment 1	X	X				
Assignment 2	X	X				
Assignment 3						X
Assignment 4						
Assignment 5						
Assessment 1	X	X				
Assessment 2	X	X			X	
Assessment 3						
Assessment 4				X	X	

From Driscoll, A. & Wood, S. (2007). Developing Outcomes Based Assessment for Learner-centered Education: A Faculty Introduction. Stylus, Sterling. p. 163.

FIGURE 8.3
Sample Course Alignment Grid B

Course Information:
Professor:

	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5	Outcome 6
Class 1	X	X				
Class 2	X	X				
Class 3	X	X				
Class 5	X		X			
Class 10		X	X		X	
Class 11		X	X	X	X	
Class 12		X	X	X	X	
Class 20				X		
Class 21		X				X
Class 22		X				X
Class 23		X				X
Class 28	X			X		X
Class 29		X	X	X		X
Class 30	X	X	X	X		X
Reading A		X				
Reading B		X				
Reading C		X	X			X
Reading D			X	X		X
Text Selections	X	X	X	X	X	X
Assignment 1	X	X				
Assignment 2	X	X				
Assignment 3		X		X	X	
Assignment 4		X	X	X		X
Assignment 5		X	X			X
Assessment 1	X					
Assessment 2	X	X				
Assessment 3		X	X	X	X	X
Assessment 4			X			X

From Driscoll, A. & Wood, S. (2007). Developing Outcomes Based Assessment for Learner-centered Education: A Faculty Introduction. Stylus, Sterling. p. 164.

FIGURE 8.4
Sample Course Alignment Grid C

Course Information:
Professor:

	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5	Outcome 6
Class 1	X					
Class 2	X			X		
Class 3	X			X		
Class 5		X				
Class 10	X			X		
Class 11	X			X		
Class 12			X		X	X
Class 20			X		X	X
Class 21	X		X	X	X	X
Class 22	X			X		
Class 23			X		X	X
Class 28			X		X	X
Class 29	X	X	X	X	X	X
Class 30	X	X	X	X	X	X
Reading A	X			X		
Reading B			X		X	X
Reading C		X				
Panel	X	X		X		
Comm. Visit	X	X	X	X	X	X
Assignment 1	X			X		
Assignment 2	X			X		
Assignment 3		X	X		X	X
Assignment 4			X		X	X
Assignment 5	X	X	X	X	X	X
Assessment 1	X			X		
Assessment 2			X		X	X
Assessment 3	X	X		X		
Assessment 4	X	X	X	X	X	X

From Driscoll, A. & Wood, S. (2007). Developing Outcomes Based Assessment for Learner-centered Education: A Faculty Introduction. Stylus, Sterling. p. 167.

WSC Senior College and University Commission | EDUCATIONAL PROGRAMS

Direct Evidence of Student Learning

Sharlene Sayegh

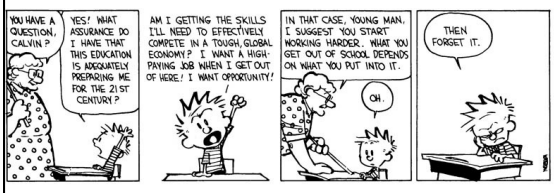
Direct Evidence of Student Learning

SHARLENE SAYEGH

Outcomes

By the end of this segment, you will be able to:

1. Define direct evidence of learning (direct assessment);
2. Provide relevant examples of direct evidence of learning;
3. Explain different forms of assessment using direct evidence;



Is Calvin voicing a concern many have with curriculum? "What does this assignment have to do with anything?" (gets us back to learning outcomes and alignment!)

What is Assessment?

Assessment is nothing new (as we learned earlier)

Quite simply defined: it is the process in which programs and institutions articulate what students should learn, how students demonstrate that learning, think critically about the effectiveness of methods to student learning, and make action plans based on the results of these functions.

Why is it important? Why should we bother?

What is Direct Evidence?

products produced by students for the purposes of learning and to demonstrate learning (e.g. papers, projects, presentations, posters, tests, theses, dissertations, etc.)

This means that we are always already engaged in some form of direct assessment

What are some forms of direct evidence of student learning?

- PAPERS!
- Tests and examinations
- Use / development of technology (movies, prezis, etc.)
- Class projects and presentations
- Research papers and essays

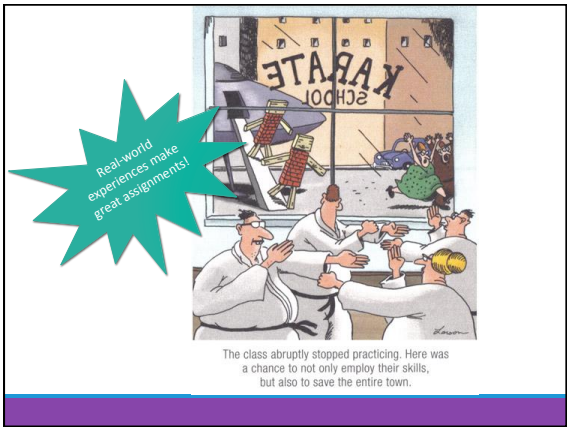
What is a "signature assignment"?

a generic task, problem, case or project that can be tailored or contextualized in different disciplines

- Signature assignments can be used within departments – multi-section courses
- Or they can be used between departments – assessing a particular GE learning outcome across the campus
  - In both cases, signature assignments can be used to assess student learning, but also assess the degree of alignment of learning outcomes across the curriculum

Then what is "authentic assessment"?

assignments/assessments designed to replicate "real world" activities via relevant and meaningful questions, tasks, problems, and projects. Often they are powerful forms of learning, as well as productive sources of insight into student ability.



The class abruptly stopped practicing. Here was a chance to not only employ their skills, but also to save the entire town.

Capstones

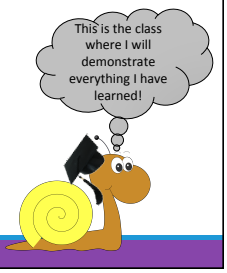
Capstones represent a culminating experience;

Provide a venue for the demonstration of integrative learning;

Students work collaboratively or individually;

Students present their findings / projects to peers;

Capstones provide an opportunity for summative assessment



Summative Assessment

Summative assessment occurs at the conclusion of a learning experience (e.g. a course, a program), summarizing student knowledge or abilities to that point. It provides information to affirm student achievement and/or to inform subsequent offerings of that course or program.

Summative Assessments & GE

General Education Curriculum provides a number of capstone experiences;

Student learning at the GE level can be assessed just as at the course and program level (example: UH Hilo)

Types of GE Capstones

- Integrative Learning
- Writing Intensive
- Service Learning

Example of a Direct Assessment Study, UH Hilo

Example of General Education Assessment
(Using Imbedded Questions Across Multiple Sections and Courses)

Spring 2011 Math GE Assessment (UHH)

Per request from the Assessment Support Committee, Dr. Mitchell Anderson took the lead to test-pilot the new GE Rubric for Quantitative and Scientific Reasoning. He worked with two of the Math Department's key instructors—Zorana Lazarevic and Diana Webb—who teach variations of Math 104.

Math 104F

MATH 104F Precal I: Functions (3) MATH 104F is the first course in a year-long sequence intended to prepare students for first year calculus. Topics include general properties of functions, polynomial and rational functions, and exponential and logarithmic functions. Pre: C or better in MATH 103 or an appropriate recommendation on the Math Placement Test. (GenEd/IntReq: GN, GQ)

In Math 104F, they assessed three problems that were imbedded on the last page of the final exams of all sections of 104F—problem 1 targeted calculation (column 2 of the GE rubric), problem 2 targeted analysis and visual representations of information (columns 1 & 3), and problem 3 targeted a slightly higher level of calculations (column 2).

- Problem 1 (Calculations):

  Consider the fuctions: $f(x) = x^2 + 3x + 1$ and $g(x) = 2x - 5$. Find and simplify each expression.
  (a) $f(x + h)$
  (b) $f(g(x))$

  Evaluation Rubric:

(a)	+1	understands function notation ($f(x + h) = (x + h)^2 + 3(x + h) + 1$)
	+1	correct simplification
(b)	+1	understands function composition ($f(g(x)) = (2x - 5)^2 + 3(2x - 5) + 1$)

- Problem 2 (Analysis and Visual):

  Consider the polynomial $y = (2x - 1)^2 (x + 4)^3$.
  (a) Describe end behavior.
  (b) Find the x-intercepts

(c) Sketch an approximate graph using parts (a) and (b).

Evaluation Rubric:

(a)	+1	understands end behavior of polynomials
(b)	+1	understands x-intercepts
(c)	+1	behavior at x-intercepts (based on answer to part (b))
	+1	correct graph (based on parts (a) and (b), note y-intercept not necessary)

- Problem 3 (Calculations):

  Solve for x: $\log_8(x-1) - \log_8(x-2) = \frac{1}{3}$

  Evaluation Rubric:

+1	attempt to use log rules
+1	correct use of log rules
+1	understands definition of log (correct based on result of step 1)
+1	correct solution (based on result of step 2)

Math 104G

MATH 104G Precal II: Trig & Geom (3) MATH 104G is the second course in a year-long sequence intended to prepare students for first year calculus. Topics include Trigonometric functions and their properties, analytic trigonometry, an introduction to polar coordinates, parametric functions, and complex numbers. Pre: C or better in MATH 104F, or an appropriate recommendation on the Math Placement Test. (GenEd/IntReq: GN, GQ)

In Math 104G, two shared problems were likewise used in the final exam in multiple sections—problem 1 targeted calculations and visual representations of data (columns 1 & 3) and problem 2 targeted all three areas of competencies.

- Problem 1 (Calculations and Visual):

  A 30-foot cable is attached to the top of the pole and point on the ground. The cable makes a 50° angle with the ground. Find the height of the pole.

  Evaluation Rubric:

+1	correctly interprets problem (e.g. with a picture)
+1	sets up a correct equation using a trig function and height of pole
+1	correctly solves for height of pole

- Problem 2 (Calculations, Visual and Analysis):

  Find all x such that $2\sin(2x) - \sqrt{3} = 0$

Evaluation Rubric:

+1 correctly solves for sin ($2x$)
+1 identifies angles that satisfy equation (solves for $2x$)
+1 correctly solves for x
+1 proper usage of $+k\pi$ to express all solutions

	Analysis*	Calculations*	Visual Representations of Data and Information	• Scientific Methodology
4 (Advanced)	• Demonstrates advanced reasoning based on quantifiable information; judgments and conclusions are exceptionally insightful	• Accurately completes calculations for the assignment and presents results clearly and concisely • Chooses appropriate formulas or symbolic models to solve problems and justify choices	• Produces highly effective visual representations of data (e.g. tables) or concepts (e.g. graphs)	• Skillfully and precisely engages in the 6 steps needed in undertaking a science-based approach to gathering and interpreting evidence 1. Indentify problem 2. Formulate a hypothesis 3. Design a project to test hypothesis 4. Collect data 5. Analyze data 6. Draw conclusions based on data • Exhibits highly accurate and exhaustive analysis of data • Produces work that contributes to the field
3 (Competent)	• Demonstrates competent reasoning based on quantifiable information; judgments and conclusions are adequate and reasonable	• Calculations are completed and largely successful • Chooses appropriate formulas or symbolic models to solve problems and justify choices	• Produces competent visual representations of data	• Engages in all 6 steps needed in undertaking a science-based approach to gathering and interpreting data • Produces an analysis of data • Produces work that meets the requirements of the assignments/course
2 (Emerging)	• Demonstrates emerging reasoning based on quantifiable information as exhibited by difficulty in formulating judgments or drawing conclusions	• Calculations contain multiple errors • May not choose the most appropriate or effective formula • May exhibit some problems justifying choices	• Visual representations may reflect minor flaws or inaccuracies	• Engages in the 6 steps but may exhibit problems with a few • Analysis of data may reflect minor inaccuracies of observation • Work may not fully satisfy the requirements of the assignment/course
1 (Beginning)	• Demonstrates beginning reasoning based on quantifiable information as exhibited by difficulty understanding what constitutes quantifiable information, inability to formulate reasonable judgments and/or drawing reasonable conclusions.	• Calculations may be unsuccessful or incomplete • Does not appear to understand the parameters of the appropriate formula • Is unable to select the right formula for the problem (decision-making unclear)	• The method for visually presenting information or concepts is highly inaccurate or imprecise	• Exhibits problems in many if not most of the steps required for the scientific process • Analysis of data is incomplete, inaccurate, or absent • Work does not satisfy the requirements of the assignment/course

* These columns are used to simultaneously assess critical thinking

The team decided to modify the GE rubric to give them more reliable data to gauge actual mathematical skills and to identify areas students may need more assistance.

Dr. Anderson gives the following breakdown of mean scores based on the modified evaluation rubric per each question:

	Math 104F 70 exams			Math 104G 51 Exams	
	Q1	Q2	Q3	Q1	Q2
Average	2.71	3.38	2.81	2.39	1.92
	Calculations	Analysis & Visual	Calculations	Calculations & Visual	All competencies

The table shows scaffolding of skills that is appropriate given the sequencing of these courses together. The use of multiple competencies in question 2 for the Math 104G final is very strategic as it allows faculty to benchmark skills prior to entry into Calculus.

The data led one instructor to note "students could use a little more instruction on the second Math 104G problem." Dr. Anderson reported that assessment in this context is the most meaningful to teachers—it provides them with the opportunity to see where improvement is needed. More importantly, the interactive work these three faculty members undertook facilitated a collaborative teaching environment that is idealized by assessment experts like Driscoll and Wood (2007) who cite the enormous pedagogical benefits of" moving assessment from a private to a collaborative focus" (p. 38).

Apart from validating the efficacy of the rubric, the math assessment project also validated the success of the department in teaching the competencies identified by the rubric. For example, a review of the scoring of the Math 104F exams reveals that 55% of 70 students met or exceeded basic competency (scoring 3 or higher) in their calculations for problem 1; 81% met competency for question 2; and 64% were competent or higher in calculations for question 3. In Math 104G, 70% of 51 students scored 3 or higher on problem 1; 38% exhibited competency or higher on question 2.

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Indirect Evidence of Student Learning

David Chase

Indirect Assessment

Outcomes

By the end of this segment, you will be able to

1. Identify indirect evidence of student learning and distinguish it from direct evidence
2. Understand the primary types of indirect data collection
3. Recognize useful application of indirect data in learning assessment

Indirect Assessment – What is it and Why Do We Need it?

Direct assessment: requires the student to demonstrate the extent of their learning by doing something, such as responding to a test question or completing a homework assignment.

Indirect assessment: involves a report about learning rather than a direct demonstration of learning.

Why do we need this kind of information?

Forms of Indirect Assessment

- Surveys
  - Checklist
  - Linear Rating Scale
  - Likert Scale
  - Open-ended Response
  - Partially Close-ended Response
  - Ranking
- Interviews
  - Structured
  - Unstructured
- Focus Groups
  - Traditional Focus Groups
  - Structured Group Interviews

Before you begin…

Choose a method

Define the purpose of the study

Develop research questions

Create a timeline

Surveys

Point-of-contact surveys

Online, emailed, registration, or graduation check surveys

Keep it simple!

Surveys

Item Formats

Strengths and Weaknesses

Interviews

Formats

Tips for Effective Interviewing

Strengths and Weaknesses

Focus Groups

Traditional Focus Groups vs. Structured Group Interviews

Sample Questions

Strengths and Weaknesses

Nationally Administered Surveys

NSSE
National Survey of Student Engagement

FSSE
Faculty Survey of Student Engagement

BCSSE
Beginning College Survey of Student Engagement

NSSE Institute
For Effective Educational Practice

HERI HIGHER EDUCATION RESEARCH INSTITUTE home of COOPERATIVE INSTITUTIONAL RESEARCH PROGRAM

National Survey of Student Engagement – University of Indiana Center for Postsecondary Research:

http://nsse.iub.edu/

Cooperative Institutional Research Program – University of California Los Angeles:

http://www.heri.ucla.edu/

Application

Which indirect or direct assessment technique might be most useful to explore the following questions, and how might the data collection be structured?

1. Are students satisfied with the quality of the instruction in specific courses?
2. Can advised students describe General Education requirements accurately?
3. What suggestions do students have for improving the quality of the curriculum?
4. What types of community service experiences are new majors most interested in?
5. What are students learning about professionalism in their internships?
6. Do students in on-line courses learn as much as students in face-to-face courses?

Collecting Evidence: Lessons from Application

How can the findings from our work create lasting change for our students and ourselves?

What impact are we having on student learning? How do we improve?

What data do we already collect that help us make better decisions?

What new evidence can we gather?

How can we talk?

How do the data tell a compelling story?

Collecting Evidence: Lessons from Application

Creative collaborative dialogue

Fostering common purpose about key challenges and opportunities

Linking ideas to action

Encourage thoughtful experimentation

Develop a better appreciation for evidence in our decisions

Useful Resources

Allen, M. J. (2004). *Assessing academic programs in higher education*. San Francisco, CA: Anker.

Howard, R. D., McLaughlin, G. W., & Knight, W. E. (2012). *The handbook of institutional research*. San Francisco, CA: John Wiley & Sons.

Strategies for Indirect Assessment of Student Learning
Surveys, Interviews, and Focus Groups

Surveys

- Point-of-contact surveys
- Online, emailed, registration, or graduation check surveys
- Keep it simple!

Common Survey Formats

Type of Item	Example
Checklist	Please indicate which of the activities you feel competent to perform. __ Develop an investment plan __ Interpret a financial report ___ Provide feedback about an employee's performance __ Write a case study
Linear Rating Scale	Ability to compose paragraphs in standard, written English. Unsatisfactory ____ | ____ | ____ | ____ | ____ | ____ | _____ Excellent
Likert Scale	I am able to write a research paper using MLA standards. Strongly Disagree Disagree Neutral Agree Strongly Agree
Open-ended	Please describe the most important concepts you learned in the program.
Partially close-ended	Please check the most important factor that led you to major in engineering. ___ Experience in a specific course ___ Work experience in this or a related field ___ Advice from a career planning office or consultant ___ Advice from family member or friend ___ Personal interest ___ Other: please explain
Ranking	Please indicate your ranking of the importance of the following learning outcomes by assigning ranks from "1" to "4," where a "1" is most important and "4" is least important. ___ Computing ___ Critical thinking ___ Speaking ___ Writing

Survey Strengths and Weaknesses	
Potential Strengths	**Potential Weaknesses**
• Format flexibility; questions about many issues can be included. • Responses from large groups of respondents are possible. • Easily assess the views of various stakeholders. • Usually has face validity—the questions generally have a clear relationship to the outcomes being assessed. • Tend to be inexpensive to administer. • Can be conducted relatively quickly. • Responses to close-ended questions are easy to tabulate and to report in tables or graphs. • Open-ended questions allow faculty to uncover unanticipated results. • Can be used to track opinions across time to explore trends. • Are amenable to different formats, such as paper-and-pencil or online formats. • Can be used to collect opinions from respondents at distant sites.	• Provides indirect evidence about student learning. • Validity depends on the quality of the questions and response options. • Conclusions can be inaccurate if biased samples are obtained. • Results might not include the full array of opinions if the sample is small. • What people say they do or know may be inconsistent with what they actually do or know. • Open-ended responses can be difficult and time consuming to analyze.

Interviews

- Interviews can be conducted one-on-one, in small groups, or over the phone.
- Interviews can be structured (with specified questions) or unstructured (a more open process).
- Questions can be close-ended (e.g., multiple-choice style) or open-ended (respondents construct a response).
- Interviews can reach a wide range of potential respondents: continuing students, graduating students, alumni, employers, community members, faculty, etc.
- Exit interviews or pre-post interviews can be conducted.
- Interviews can focus on student experiences, concerns, or attitudes related to the program being assessed.
- Interviews should generally should be conducted by neutral parties to avoid bias and conflict of interest.

Tips for Effective Interviewing

- Conduct the interview in an environment that allows the interaction to be confidential and uninterrupted.
- Demonstrate respect for the respondents as participants in the assessment process rather than as subjects. Explain the purpose of the project, how the data will be used, how the respondent's anonymity or confidentiality will be maintained, and the respondents' rights as participants. Ask if they have any questions.
- Put the respondents at ease. Do more listening than talking. Allow respondents to finish their statements without interruption.
- Match follow-up questions to the project's objectives. For example, if the objective is to obtain student feedback about student advising, don't spend time pursuing other topics.
- Do not argue with the respondent's point of view, even if you are convinced that the viewpoint is incorrect. Your role is to obtain the respondents' opinions, not to convert them to your perspective.
- Allow respondents time to process the question. They may not have thought about the issue before, and they may require time to develop a thoughtful response.

Tips for Effective Interviewing (continued)

- Paraphrase to verify that you have understood the respondent's comments. Respondents will sometimes realize that what they said isn't what they meant, or you may have misunderstood them. Paraphrasing provides an opportunity to improve the accuracy of the data.

- Make sure you know how to record the data and include a backup system. You may be using a tape recorder—if so, consider supplementing the tape with written notes in case the recorder fails or the tape is faulty.

Interview Strengths and Weaknesses

Potential Strengths	Potential Weaknesses
• Flexible in format and can include questions about many issues. • Can assess the views of various stakeholders. • Usually has face validity—the questions generally have a clear relationship to the outcomes being assessed. • Can provide insights into the reasons for participants' beliefs, attitudes, and experiences. • Interviewers can prompt respondents to provide more detailed responses. • Interviewers can respond to questions and clarify misunderstandings. • Telephone interviews can be used to reach distant respondents. • Can provide a sense of immediacy and personal attention for respondents. • Open-ended questions allow faculty to uncover unanticipated results.	• Generally provides indirect evidence about student learning. • Their validity depends on the quality of the questions. • Poor interviewer skills can generate limited or useless information. • Can be difficult to obtain a representative sample of respondents. • What people say they do or know may be inconsistent with what they actually do or know. • Can be relatively time-consuming and expensive to conduct. • The process can intimidate some respondents, especially if asked about sensitive information and their identity is known to the interviewer. • Results can be difficult and time-consuming to analyze. • Transcriptions of interviews can be time consuming and costly.

Focus Groups

Traditional focus groups are free-flowing discussions among small, homogeneous groups (typically from 6 to 10 participants), guided by a skilled facilitator who subtly directs the discussion in accordance with pre-determined objectives. This process leads to in-depth responses to questions, generally with full participation from all group members. The facilitator departs from the script to follow promising leads that arise during the interaction.

Structured group interviews are less interactive than traditional focus groups and can be facilitated by people with less training in group dynamics and traditional focus group methodology. The group interview is highly structured, and the report generally provides a few core findings, rather than an in-depth analysis.

Sample Focus Group Questions	
Purpose of Question	Examples
Warm-up	I'd like everyone to start out with a word or phrase that best describes your view of the program.
Issue 1: Career Preparation	Please tell us what career you are interested in pursuing after graduation. How has the program helped you prepare for your career or future activities?
Issue 2: Advising	We are interested in your advising experiences in the program. Could you tell us about your first advising experience in the department? What did you find most useful in your interactions with your advisor? What would you like our advisors to do differently?
Issue 3: Curriculum	Thinking about the curriculum and the required courses, how well do you think they prepared you for upper-division work? What should be changed about the curriculum to better prepare you for your career or for graduate school?
Closing	We've covered a lot of ground today, but we know you might still have other input about the program. Is there anything you would like to say about the program that hasn't been discussed already?

Focus Group Strengths and Weaknesses	
Potential Strengths	Potential Weaknesses
• Flexibility in format can include questions about many issues. • Can provide in-depth exploration of issues. • Usually has face validity—the questions generally have a clear relationship to the outcomes being assessed. • Can be combined with other techniques, such as surveys. • The process allows faculty to uncover unanticipated results. • Can provide insights into the reasons for participants' beliefs, attitudes, and experiences. • Can be conducted within courses. • Participants have the opportunity to react to each other's ideas, providing an opportunity to uncover the degree of consensus on ideas that emerge during the discussion.	• Generally provides indirect evidence about student learning. • Requires a skilled, unbiased facilitator. • Their validity depends on the quality of the questions. • Results might not include the full array of opinions if only one focus group is conducted. • What people say they do or know may be inconsistent with what they actually do or know. • Recruiting and scheduling the groups can be difficult. • Time-consuming to collect and analyze data.

Application

Which indirect or direct assessment technique might be most useful to explore the following questions, and how might the data collection be structured? For example, if you decide that a focus group would be best, what question(s) would you ask, and who would you invite to participate?

1. Are students satisfied with the quality of the instruction in specific courses?
2. Can advised students describe General Education requirements accurately?
3. What suggestions do students have for improving the quality of the curriculum?
4. What types of community service experiences are new majors most interested in?
5. What are students learning about professionalism in their internships?
6. Do students in on-line courses learn as much as students in face-to-face courses?

Indirect Assessment Study Example: UH, Hilo

Student Writing Survey

1. What was your experience in terms of writing in High School?

2. What did writing allow you to learn?

3. How did writing help you to think?

4. In your opinion, what was the purpose of writing in any of your High School classes?

5. What are your goals for writing in college or after college?

6. If you are not a first-time freshman, briefly discuss your experience in writing in college.

7. Demographic Information:

Are you a graduate of Hilo High School or Waiākea High School? If so, please indicate which school.

Are you a graduate of a public high school in the state of Hawai‘i? If so, please indicate which school.

Are you a graduate of a private institution (including Kamehameha Schools)? If so, please indicate which school/campus.

If you are a graduate from another state, territory or country, please indicate your origins.

If you are a transfer student, please indicate which institution you previously attended.

Are you a Pell Grant Recipient?

Please indicate your ethnic background…

Pacific Islander (Tongan, Samoan, Micronesian, etc.)
Native Hawaiian (full and part)
Asian (including Filipino)
Caucasian
Hispanic
African American
Native American

iDEA Institutional Decision-support Evaluation & Analysis

IDEA Report Series
Volume 11, No. 3, January 2011

"An idea that is developed and put into action is more important than an idea that exists only as an idea."
–Siddhartha Gautama

One-Year Leadership Outcomes

Leadership as an academic goal at Pacific has been widely vetted and strongly embraced by faculty and staff for many years. Leadership is included in Pacific's mission statement formulated in 1996: *to provide a superior, student-centered learning experience integrating liberal arts and professional education and preparing individuals for lasting achievement and responsible leadership in their careers and communities*. Leadership is expressly included in the core values and strategic plans of Pacific Rising 2008-2015 and included in one of the seven university-wide educational learning objectives.

Following a six-month drafting and dialogue process that included contributions from students through ASUOP, staff through the Staff Advisory Council and other groups, faculty through their School/College, the Council of Deans, Academic Council, and the President's Cabinet, a definition and guiding statements for leadership development at Pacific have been formally approved to guide our educational efforts with students.

This report offers initial feedback from new undergraduate students regarding Pacific's leadership definition and development after their first year in college. The information also aids discussions regarding leadership at Pacific and university-wide educational learning objectives. In addition, responses to surveys allow for further understanding of what leadership expectations students bring with them on the first day of class and new students' perceptions of their own leadership potential.

New Freshmen Leadership Education at Pacific

Leadership education at Pacific is a set of competencies that include, but are not limited to, self-insight, self-management, social awareness, interpersonal skills, and relationship management.

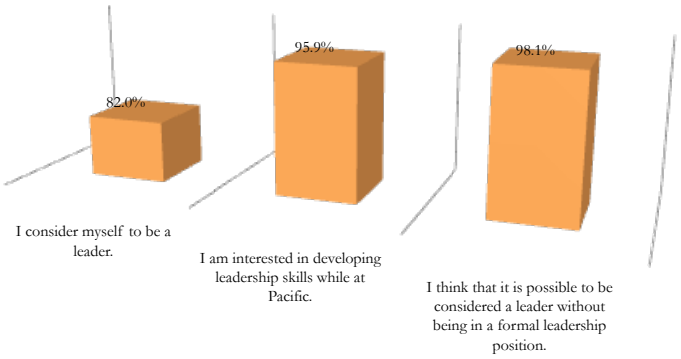
- designed using assessment, practice, observation, feedback, and reflection
- acquired in part through active faculty and staff mentoring of students that demonstrates our commitment to personalized whole person development
- values-driven process and practice guided by program, school, and university codes of ethics, professional standards, and value statements
- integrates curricular, co-curricular, and post-curricular opportunities and learning
- at the core of Pacific's focus on personal and social responsibility. The University envisions all students enabled and empowered to have positive, sustainable impact in their careers and communities

Responsible leadership at Pacific is an ethical act of inspiring others toward effecting positive change through the accomplishment of a common goal.

- leadership can be developed
- leadership occurs inclusively among diverse members of groups
- leaders are most effective when a core set of competencies is mastered

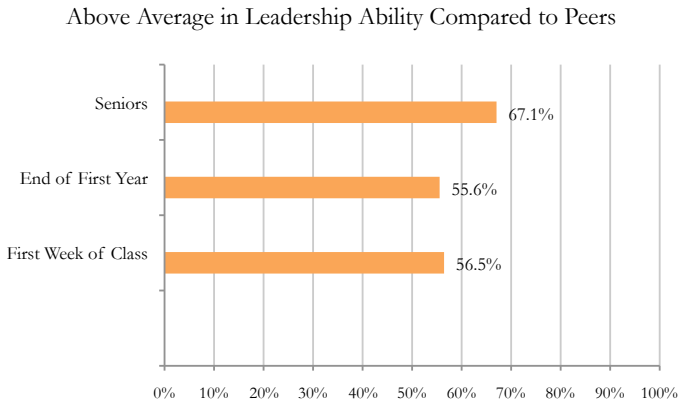
Student Voices Entering Pacific

Understanding Pacific students' unique perspective on leadership development is critical to constructing effective educational programs. While a majority of students consider themselves leaders prior to enrolling at Pacific many are still interested in developing their leadership skills. Almost all new freshmen are open to the idea that leadership does not necessarily involve a formal leadership position but could include mastering skills such as controlling personal impulses or taking an interest in what others have to say.



Pacific Students' Self-Ratings

Longitudinal research is conducted with Cooperative Institutional Research Program (CIRP) surveys, allowing student self-ratings to be tracked from the first day of class through graduation. Some Pacific students (56%) at the end of their first year of college rated themselves above average on Leadership Ability compared to other peers their age. The same students' Leadership Ability ratings increased by their senior year suggesting some improvement after the first year of college. Still nearly 33% of students graduating from Pacific rated themselves average or below average on Leadership Ability compared to their peers. More research is needed to assess students' self-rated leadership ability as compared to peers.



Leadership Outcomes at the End of the First Year of College

Questions were developed using Pacific's definition of leadership. The questions were added to the end of the CIRP *Your First College Year* (YFCY) survey administered in April through Pacific Seminar II. Students were asked to rate their agreement that "responsible leadership involves or includes the following". A majority of students (90% or more) agreed with the below questions about Pacific's definition of leadership. While agreement was given to group or team processes, agreement was also given for balance between school, work, and personal life. This could reflect student feedback on an orientation survey where 98% reported that you can be considered a leader without being in a formal leadership position. At the same time less agreement (74%) was given for volunteering for charitable organizations and only 55% of first year students indicated that they had performed volunteer work since they entered college. More research should be conducted on the gap in actual volunteer behavior and perceptions of leadership.

Leadership questions added to the CIRP YFCY Survey:

A balance between school, work, and personal life	Keeping skills, knowledge, and expertise current
Taking an active interest in what others have to say	Considering the feelings of others before taking action
Communicating ideas so that others are able to understand and participate	Understanding your own emotions/feelings and how they impact a situation
Controlling personal impulses that could be harmful to the group process	Seeking input from individuals with different backgrounds and experiences
Encouraging active participation from all team members	Understanding how values guide group decision making
Setting a clear direction for one's team by defining priorities and goals	Generating original ideas and creative solutions

Leadership Identity Development

Leadership identify development (LID) involves engaging with learning opportunities in one's environment over time to build one's capacity or efficacy to engage in leadership (Komives, et al., 2005). LID provides the theoretical underpinning to Pacific's approach to responsible leadership education in both the curricular and co-curricular environments.

It is helpful to remember that prior to college, students trust external sources/authorities to decide what to believe, follow others' visions and success formulas. In most cases, external voices drown out the development of a reliable internal voice (Magolda, 2009). Pre-college students generally view leadership from a positional perspective that involves a formal dance between a leader and his/her followers. As a result of external influences and a wide variety of high school experiences, students develop an identity that reinforces the following view of leadership (Komives et al., 2005):

- leadership is something that other people do
- leaders are either appointed or elected to formal positions
- leaders have the vision and followers do the work
- leaders inspire and compel others to act
- leaders get things done

It is generally believed that most undergraduate students enter college at a key transition point somewhere between LID stages three and four. For first year students, this transition typically involves moving away from a hierarchical, leader-centric view to one that embraces leadership as a collaborative, interdependent process. Most curricular and co-curricular college experiences range throughout the various LID stages. These experiences provide the necessary opportunities for students to develop their leadership identities during college.

Planning for Development

Richard Boyatzis and Annie McKee (2006) highlighted the value of utilizing a deliberate, systematic intentional change process in which to facilitate leadership development by indicating that, "part of the challenge of creating and sustaining excellent leadership is to recognize, manage, and even direct one's own process of learning and change." They go on to assert that, "people who manage their own development intentionally are poised to make good choices about what they need to do to be more effective and more satisfied with their lives." (p. 49). Through the lens of intentional change it is possible to consider the conditions and supports that currently exist, or that can be created by faculty and staff, to assist students develop leadership identity throughout their college experiences.

"Leadership is not a gene and it's not an inheritance. Leadership is an identifiable set of skills and abilities that are available to all of us. The 'great person'—woman or man—theory of leadership is just plain wrong. Or, we should say, the theory that there are only a few great men and women who can lead others to greatness is just plain wrong."

(Kouzes and Posner, 2007, p. 22)

Next Steps

Over the past several decades, noted researchers such as Komives, Kouzes, and Posner have worked to debunk the myth that leadership is only reserved for a few charismatic men and women. Rather, leadership is everyone's opportunity. This is a hopeful place in which to study how responsible leadership lives in students at the University of the Pacific. Hope, because each of our students can participate in the leadership development process. Hope, because there's a generation's worth of difficult problems that will need our students help to solve.

At Pacific, student leadership development is becoming an institutional priority in both the curricular and co-curricular learning environments. In an effort to help inform and focus this work, several major research studies have been initiated that will explore leadership development among Pacific students on the Stockton campus:

Upcoming Research Study: Pacific to Participate in the Multi-Institutional Study of Leadership (MSL)

The purpose of participating in the MSL is to contribute to the understanding of college student leadership development—with special attention to better understanding and identifying the role of Pacific's curricular and co-curricular programs in fostering leadership capacities. The study will address individual institutional considerations while contributing to a national understanding of:

- Student needs and outcomes
- Effective institutional practices
- The extent of environmental influence in leadership development

Upcoming Research Study: Study of Leadership Identity Development Among First Year Students

The purpose of this study is to better understand the functional leadership identities of first year traditional-age undergraduate student at Pacific. In the fall of 2010, all entering students that participated in the MOVE program (common outdoor experience affiliated with new student orientation) were asked to write a reflection regarding their current definition of leadership. Combined, these definitions form a valuable source of data for analyzing the functional leadership identity among first year students entering the University of the Pacific.

These two studies along with continued use of the CIRP and other survey results will give Pacific a baseline of undergraduate students' leadership development as well as their experiences, needs, expectations, and satisfaction from their first day of class to the end of their first year up to graduation. In addition, the role of Pacific's environment and practices in developing leadership among students will also be assessed.

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WSC Senior College and University Commission | EDUCATIONAL PROGRAMS

Rubrics

David Chase

Rubrics

Outcomes

By the end of this segment, you will be able to:

1. Describe the purposes and uses of rubrics
2. Evaluate rubrics for impact on student learning
3. Understand reliable application of rubrics in assessment

Rubrics – What are they and why use them?

A rubric is a scoring guide: a list or chart that describes criteria used to evaluate or grade student work.

There is no single way to write or format rubrics – they can be created and adapted for the circumstances and situations of your courses and programs.

Rubric Strengths

Complex products or behaviors can be examined efficiently and effectively.

Developing a rubric helps to precisely define faculty expectations.

Student appreciate clarity in expectations for their work and/or behaviors.

Rubrics can serve a variety of purposes:
- Provide formative feedback to students
- Grade student work
- Conduct assessment at the program level.

Rubrics are criterion-referenced rather than norm-referenced.

Types of Rubrics

Holistic
- Describe how one global, holistic judgment is made; provides one score for a product or behavior

Analytic
- Involves a series of judgments, each assessing a characteristic of the product being evaluated; provides separate, holistic scoring of specified characteristics of a product or behavior

Example: Holistic Rubric for Assessing Student Essays

Inadequate	The essay has at least one serious weakness. It may unfocused, underdeveloped, or rambling. Problems with the use of language seriously interfere with the reader's ability to understand what is being communicated
Developing competence	The essay may be somewhat unfocused, underdeveloped, or rambling, but it does have some coherence. Problems with the use of language occasionally interfere with the reader's ability to understand what is being communicated.
Acceptable	The essay is generally focused and contains some development of idea, but the discussion may be simplistic or repetitive. The language lacks syntactic complexity and may contain occasional grammatical errors, but the reader is able to understand what is being communicated.
Sophisticated	The essay is focused and clearly organized, and it shows depth of development. The language is precise and shows syntactic variety, and ideas are clearly communicated to the reader.

Allen, M. J. (2004). Assessing Academic Programs in Higher Education. San Francisco, CA: Anker. Page 139

Example: Analytic Rubric for Peer Assessment of Team Project Members

	Below Expectation	Good	Exceptional
Project Contributions	Made few substantive contributions to the team's final product	Contributed a "fair share" of substance to the team's final product	Contributed considerable substance to the team's final product
Leadership	Rarely or never exercised leadership	Accepted a "fair share" of leadership responsibilities	Routinely provided excellent leadership
Collaboration	Undermined group discussions or often failed to participate	Respected others' opinions and contributed to the group's discussion	Respected others' opinions and made major contributions to the group's discussion

Allen, M. J. (2004). Assessing Academic Programs in Higher Education. San Francisco, CA: Anker. Page 139

Typical Four-Point Rubric Levels

1. Below Expectations
2. Needs Improvement
3. Meets Expectations
4. Exceeds Expectations

Reliability in the Use of Rubrics

Inter-Rater Reliability

Correlation Between Paired Readers

Discrepancy Index

Preparing for Assessment with Rubrics

Collect a range of samples of student work for use in assessment and remove identifying information

Develop and pilot test the rubric

Select exemplars of weak, acceptable, and strong student work

Rubric Examples

Examples in the Binder

AAC&U VALUE Rubrics:
- http://www.aacu.org/value/rubrics/

Others?

Application

Select one of the rubrics in the Assessment 101 binder materials that you could adapt for use in your program. Keep the following questions in mind for a group discussion:

What kind of evidence would you apply it to?

How would you change the rubric to make it more useful to you and your colleagues?

Rubrics have many strengths:

- Complex products or behaviors can be examined efficiently and effectively.
- Developing a rubric helps to precisely define faculty expectations.
- Rubrics are criterion-referenced, rather than norm-referenced. Raters ask, "Did the student meet the criteria for level 5 of the rubric?" rather than "How well did this student do compared to other students?" This is essential when using rubrics for assessment because you want to learn how well students have met your standards.

Typical Four-Point Rubric Levels

1. Below Expectations. Student's demonstrated level of understanding clearly does not meet our expectations. Major components may be missing, inaccurate, or irrelevant to the task.
2. Needs Improvement. Student needs to demonstrate a deeper understanding to meet our expectations, but does show some understanding; student may not fully develop ideas or may use concepts incorrectly.
3. Meets Expectations. Student meets our expectations, performs at a level acceptable for graduation, demonstrates good understanding, etc.
4. Exceeds Expectations. Student exceeds our expectations, performs at a sophisticated level, identifies subtle nuances, develops fresh insights, integrates ideas in creative ways, etc.

Before inviting colleagues to a group reading,

1. Collect the assessment evidence and remove identifying information.
2. Develop and pilot test the rubric.
3. Select exemplars of weak, medium, and strong student work.

Inter-Rater Reliability

- Correlation Between Paired Readers
- Discrepancy Index

Group Orientation and Calibration

1. Describe the purpose for the review, stressing how it fits into program assessment plans. Explain that the purpose is to assess the program, not individual students or faculty, and describe ethical guidelines, including respect for confidentiality and privacy.
2. Describe the nature of the products that will be reviewed, briefly summarizing how they were obtained.
3. Describe the scoring rubric and its categories. Explain how it was developed.
4. Explain that readers should rate each dimension of an analytic rubric separately, and they should apply the criteria without concern for how often each category is used.

5. Give each reviewer a copy of several student products that are exemplars of different levels of performance. Ask each volunteer to independently apply the rubric to each of these products, and show them how to record their ratings.
6. Once everyone is done, collect everyone's ratings and display them so everyone can see all the judgments.
7. Guide the group in a discussion of their ratings. There will be differences, and this discussion is important to establish standards. Attempt to reach consensus on the most appropriate rating for each of the products being examined by inviting people who gave different ratings to explain their judgments. Usually consensus is possible, but sometimes a split decision is developed, e.g., the group may agree that a product is a "3-4" split because it has elements of both categories.
8. Once the group is comfortable with the recording form and the rubric, distribute the products and begin the data collection.
9. If you accumulate data as they come in and can easily present a summary to the group at the end of the reading, you might end the meeting with a discussion of five questions:
   a. Are results sufficiently reliable?
   b. What do the results mean? Are we satisfied with the extent of student learning?
   c. Who needs to know the results?
   d. If we're disappointed with the results, how might we close the loop?
   e. How might the assessment process, itself, be improved?

Assessment Standards: How Good Is Good Enough?

Typical Standard:

We would be satisfied if at least 80% of the students are at level 3 or higher.

Rubric Exercise

Select one of the rubrics in this handout that you could adapt for your own use. What kind of evidence would you apply it to? How would you change the rubric to make it more useful to you and your colleagues?

Developing and Applying Rubrics

Rubrics provide the criteria for assessing students' work. They can be used to assess virtually any product or behavior, such as essays, research reports, portfolios, works of art, recitals, oral presentations, performances, and group activities. Judgments can be self-assessments by students; or judgments can be made by others, such as faculty, other students, fieldwork supervisors, and external reviewers. Rubrics can be used to provide formative feedback to students, to grade students, and/or to assess courses and programs. Rubrics are a powerful teaching tool.

There are two major types of scoring rubrics:

- Holistic scoring — one global, holistic score for a product or behavior
- Analytic rubrics — separate, holistic scoring of specified characteristics of a product or behavior

Rubric Examples

- Juried Performance Rubric, University of the Pacific Conservatory of Music
- Writing Rubric, Johnson Community College
- Writing Rubric, Roanoke
- Writing VALUE Rubric, AAC&U
- Critical Thinking Rubric, Facione & Facione
- Critical Thinking Rubric, Northeastern Illinois University
- Critical Thinking VALUE Rubric, AAC&U
- Dance Rubric, University of Wisconsin
- Case Analysis Rubric, University of Scranton
- Group Participation Rubric, Marilyn Lombardi
- Ethical Reasoning VALUE Rubric, AAC&U
- Rubrics from UH, Hilo
  Communication
  Cultural Diversity
  Information Literacy
  Math and Science
- Rubrics from Kapi'olani CC
  Exploring Health Careers
  New Student Orientation
  Personal Counseling

Music Jury Performance Assessment Rubric **Developed by Nicolasa Kuster, University of the Pacific Conservatory of Music**

Major: MusPERF / MusED MusTHER / MusMGMT / other_____

Student Name:_____ Instrument Level: Freshman / Sophomore / Junior / Senior / other _____

Optional Adjudicator Note	*Outstanding*	*Above Average*	*Average*	*Below Average*	*Not Acceptable*	
Tone/Sound quality	5	4	3	2	1	Score
	Proper tone production is evident is all ranges and dynamic levels	Tone production is affected in some ranges and dynamic levels	Tone production is inconsistent	Elements of proper tone production are seldom present	Proper tone production is rarely evident	
Intonation	5	4	3	2	1	
	Pitch is consistenly well centered	Minor problems exist in some ranges &/or dynamic levels	Intonation problems evident	Numerous intonation problems evident	Undeveloped intonation	
Interpretation	5	4	3	2	1	
	Musical, sensitive, artistic use of style, tempo, phrasing, dynamics, and articulation	Consistent use of expressive elements	Inconsistent use of expressive elements	Lacks meaningful expression much of the time	Notes are performed with little meaningful expression	
Technique	5	4	3	2	1	
	Technique elements are consistent throughout the performance	Strong use of technique with some occasional inconsistencies	Inconsistent technique that obviously detracts from the performance	Minimal evidence of technical proficiency	Technique is clearly inadequate for this performace	
Rhythm/Notes	5	4	3	2	1	
	Rhythms and/or notes are performed correctly	Most rhythms &/or notes are performed correctly	Inconsistent rythmic &/or note accuracy	Many rhythms &/or notes are performed incorrectly	Rhythm &/or note accuracy is clearly inadequate	
Level of Material	5	4	3	2	1	
	Level of material exceeds expectations	Level of material somewhat exceeds expectations	Level of material is adequate	Level of material is slightly below expectations	Level of material does not meet expectations	
Scales	5	4	3	2	1	
	Fluid and musical with no mistakes. Clearly this student practices scales daily	Fluid and musical with only a few mistakes. Clearly this student practices scales daily	No mistakes, but not fluid or musical. This student does not practice scales daily	Some mistakes. It is apparent that this student does not practice scales daily	Scales are not learned.	
Stage Presence/Professionalism	5	4	3	2	1	
	Very professional attire and attitude		Somewhat professional attire and attitude		Unproffesional attire &/or attitude	
					TOTAL SCORE	

Writing Rubric

Johnson Community College, downloaded 12/22/04 from
http://www.jccc.net/home/depts/6111/site/assmnt/cogout/comwrite

6 = Essay demonstrates excellent composition skills including a clear and thought-provoking thesis, appropriate and effective organization, lively and convincing supporting materials, effective diction and sentence skills, and perfect or near perfect mechanics including spelling and punctuation. The writing perfectly accomplishes the objectives of the assignment.

5 = Essay contains strong composition skills including a clear and thought-provoking thesis, although development, diction, and sentence style may suffer minor flaws. Shows careful and acceptable use of mechanics. The writing effectively accomplishes the goals of the assignment.

4 = Essay contains above average composition skills, including a clear, insightful thesis, although development may be insufficient in one area and diction and style may not be consistently clear and effective. Shows competence in the use of mechanics. Accomplishes the goals of the assignment with an overall effective approach.

3 = Essay demonstrates competent composition skills including adequate development and organization, although the development of ideas may be trite, assumptions may be unsupported in more than one area, the thesis may not be original, and the diction and syntax may not be clear and effective. Minimally accomplishes the goals of the assignment.

2 = Composition skills may be flawed in either the clarity of the thesis, the development, or organization. Diction, syntax, and mechanics may seriously affect clarity. Minimally accomplishes the majority of the goals of the assignment.

1 = Composition skills may be flawed in two or more areas. Diction, syntax, and mechanics are excessively flawed. Fails to accomplish the goals of the assignment.

Revised October 2003

Writing Rubric (Roanoke) Retrieved August 28, 2008 from http://web.roanoke.edu/Documents/Writing%20Rubrics.July%2007.doc

	Below Basic	Basic	Proficient	Advanced
Ideas	Shows minimal engagement with the topic, failing to recognize multiple dimensions/ perspectives; lacking even basic observations	Shows some engagement with the topic without elaboration; offers basic observations but rarely original insight	Demonstrates engagement with the topic, recognizing multiple dimensions and/or perspectives; offers some insight	Demonstrates engagement with the topic, recognizing multiple dimensions and/or perspectives with elaboration and depth; offers considerable insight
Focus and Thesis	Paper lacks focus and/or a discernible thesis.	Some intelligible ideas, but thesis is weak, unclear, or too broad.	Identifiable thesis representing adequate understanding of the assigned topic; minimal irrelevant material	Clear, narrow thesis representing full understanding of the assignment; every word counts
Evidence	Little to no evidence	Some evidence but not enough to develop argument in unified way. Evidence may be inaccurate, irrelevant, or inappropriate for the purpose of the essay	Evidence accurate, well documented, and relevant, but not complete, well integrated, and/or appropriate for the purpose of the essay	Evidence is relevant, accurate, complete, well integrated, well documented, and appropriate for the purpose of the essay.
Organization	Organization is missing both overall and within paragraphs. Introduction and conclusion may be lacking or illogical.	Organization, overall and/or within paragraphs, is formulaic or occasionally lacking in coherence; few evident transitions. Introduction and conclusion may lack logic.	Few organizational problems on any of the 3 levels (overall, paragraph, transitions). Introduction and conclusion are effectively related to the whole.	Organization is logical and appropriate to assignment; paragraphs are well-developed and appropriately divided; ideas linked with smooth and effective transitions. Introduction and conclusion are effectively related to the whole.
Style and Mechanics	Multiple and serious errors of sentence structure; frequent errors in spelling and capitalization; intrusive and/or inaccurate punctuation such that communication is hindered. Proofreading not evident.	Sentences show errors of structure and little or no variety; many errors of punctuation, spelling and/or capitalization. Errors interfere with meaning in places. Careful proofreading not evident.	Effective and varied sentences; some errors in sentence construction; only occasional punctuation, spelling and/or capitalization errors.	Each sentence structured effectively, powerfully; rich, well-chosen variety of sentence styles and length; virtually free of punctuation, spelling, capitalization errors.

WRITTEN COMMUNICATION VALUE RUBRIC *for more information, please contact value@aacu.org*

Definition Written communication is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	**Milestones** 3	2	**Benchmark** 1
Context of and purpose for writing *Includes considerations of audience, purpose, and the circumstances surrounding the writing task(s).*	Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.	Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).	Demonstrates awareness of context, audience, purpose, and to the assigned tasks(s) (e.g., begins to show awareness of audience's perceptions and assumptions).	Demonstrates minimal attention to context, audience, purpose, and to the assigned tasks(s) (e.g., expectation of instructor or self as audience).
Content Development	Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work.	Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work	Uses appropriate and relevant content to develop and explore ideas through most of the work.	Uses appropriate and relevant content to develop simple ideas in some parts of the work.
Genre and disciplinary conventions *Formal and informal rules inherent in the expectations for writing in particular forms and/or academic fields (please see glossary).*	Demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task (s) including organization, content, presentation, formatting, and stylistic choices	Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices	Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation	Attempts to use a consistent system for basic organization and presentation
Sources and evidence	Demonstrates skillful use of high quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing	Demonstrates consistent use of credible, relevant sources to support ideas that are situated within the discipline and genre of the writing.	Demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for the discipline and genre of the writing.	Demonstrates an attempt to use sources to support ideas in the writing.
Control of syntax and mechanics	Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.	Uses straightforward language that generally conveys meaning to readers. The language in the portfolio has few errors.	Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.	Uses language that sometimes impedes meaning because of errors in usage

Holistic Critical Thinking Scoring Rubric
Facione and Facione

4	Consistently does all or almost all of the following: Accurately interprets evidence, statements, graphics, questions, etc. Identifies the salient arguments (reasons and claims) pro and con. Thoughtfully analyzes and evaluates major alternative points of view. Draws warranted, judicious, non-fallacious conclusions. Justifies key results and procedures, explains assumptions and reasons. Fair-mindedly follows where evidence and reasons lead.
3	Does most or many of the following: Accurately interprets evidence, statements, graphics, questions, etc. Identifies relevant arguments (reasons and claims) pro and con. Offers analyses and evaluations of obvious alternative points of view. Draws warranted, non-fallacious conclusions. Justifies some results or procedures, explains reasons. Fair-mindedly follows where evidence and reasons lead.
2	Does most or many of the following: Misinterprets evidence, statements, graphics, questions, etc. Fails to identify strong, relevant counter-arguments. Ignores or superficially evaluates obvious alternative points of view. Draws unwarranted or fallacious conclusions. Justifies few results or procedures, seldom explains reasons. Regardless of the evidence or reasons, maintains or defends views based on self-interest or preconceptions.
1	Consistently does all or almost all of the following: Offers biased interpretations of evidence, statements, graphics, questions, information, or the points of view of others. Fails to identify or hastily dismisses strong, relevant counter-arguments. Ignores or superficially evaluates obvious alternative points of view. Argues using fallacious or irrelevant reasons, and unwarranted claims. Does not justify results or procedures, nor explain reasons. Regardless of the evidence or reasons, maintains or defends views based on self-interest or preconceptions. Exhibits close-mindedness or hostility to reason.

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Retrieved September 2, 2005 from http://www.insightassessment.com/pdf_files/rubric.pdf

Northeastern Illinois University General Education Critical Thinking Rubric

Downloaded 3/2/05 from http://www.neiu.edu/~neassess/gened.htm#rubric

Quality **Macro Criteria**	**No/Limited Proficiency** (D&E)	**Some Proficiency** (C)	**Proficiency** (B)	**High Proficiency** (A)
1. Identifies & Explains Issues	Fails to identify, summarize, or explain the main problem or question. Represents the issues inaccurately or inappropriately.	Identifies main issues but does not summarize or explain them clearly or sufficiently	Successfully identifies and summarizes the main issues, but does not explain why/how they are problems or create questions	Clearly identifies and summarizes main issues and successfully explains why/how they are problems or questions; and identifies embedded or implicit issues, addressing their relationships to each other.
2. Distinguishes Types of Claims	Fails to label correctly any of the factual, conceptual and value dimensions of the problems and proposed solutions.	Successfully identifies some, but not all of the factual, conceptual, and value aspects of the questions and answers.	Successfully separates and labels all the factual, conceptual, and value claims	Clearly and accurately labels not only all the factual, conceptual, and value, but also those implicit in the assumptions and the implications of positions and arguments.
3. Recognizes Stakeholders and Contexts	Fails accurately to identify and explain any empirical or theoretical contexts for the issues. Presents problems as having no connections to other conditions or contexts.	Shows some general understanding of the influences of empirical and theoretical contexts on stakeholders, but does not identify many specific ones relevant to situation at hand.	Correctly identifies all the empirical and most of theoretical contexts relevant to all the main stakeholders in the situation.	Not only correctly identifies all the empirical and theoretical contexts relevant to all the main stakeholders, but also finds minor stakeholders and contexts and shows the tension or conflicts of interests among them.
4. Considers Methodology	Fails to explain how/why/which specific methods of research are relevant to the kind of issue at hand.	Identifies some but not all methods required for dealing with the issue; does not explain why they are relevant or effective.	Successfully explains how/why/which methods are most relevant to the problem.	In addition to explaining how/why/which methods are typically used, also describes embedded methods and possible alternative methods of working on the problem.
5. Frames Personal Responses and Acknowledges Other Perspectives	Fails to formulate and clearly express own point of view, (or) fails to anticipate objections to his/her point of view, (or) fails to consider other perspectives and position.	Formulates a vague and indecisive point of view, or anticipates minor but not major objections to his/her point of view, or considers weak but not strong alternative positions.	Formulates a clear and precise personal point of view concerning the issue, and seriously discusses its weaknesses as well as its strengths.	Not only formulates a clear and precise personal point of view, but also acknowledges objections and rival positions and provides convincing replies to these.

CREATIVE THINKING VALUE RUBRIC

for more information, please contact value@aacu.org

Definition

Creative thinking is both the capacity to combine or synthesize existing ideas, images, or expertise in original ways and the experience of thinking, reacting, and working in an imaginative way characterized by a high degree of innovation, divergent thinking, and risk taking.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	**Milestones** 3	2	**Benchmark** 1
Acquiring competencies *This step refers to acquiring strategies and skills within a particular domain.*	Reflect: Evaluates creative process and product using domain-appropriate criteria.	Create: Creates an entirely new object, solution or idea that is appropriate to the domain.	Adapt: Successfully adapts an appropriate exemplar to his/her own specifications.	Model: Successfully reproduces an appropriate exemplar.
Taking risks *May include personal risk (fear of embarrassment or rejection) or risk of failure in successfully completing assignment, i.e. going beyond original parameters of assignment, introducing new materials and forms, tackling controversial topics, advocating unpopular ideas or solutions.*	Actively seeks out and follows through on untested and potentially risky directions or approaches to the assignment in the final product.	Incorporates new directions or approaches to the assignment in the final product.	Considers new directions or approaches without going beyond the guidelines of the assignment.	Stays strictly within the guidelines of the assignment.
Solving Problems	Not only develops a logical, consistent plan to solve problem, but recognizes consequences of solution and can articulate reason for choosing solution.	Having selected from among alternatives, develops a logical, consistent plan to solve the problem.	Considers and rejects less acceptable approaches to solving problem.	Only a single approach is considered and is used to solve the problem.

Embracing Contradictions	Integrates alternate, divergent or contradictory perspectives or ideas fully.	Incorporates alternate, divergent or contradictory perspectives or ideas in a exploratory way.	Includes (recognizes the value of) alternate, divergent or contradictory perspectives or ideas in a small way.	Acknowledges (mentions in passing) alternate, divergent, or contradictory perspectives or ideas.
Innovative Thinking *Novelty or Uniqueness (of Idea, Claim, Question, Form, etc.)*	Extends a novel or unique idea, question, format, or product to create new knowledge or knowledge that crosses boundaries.	Creates a novel or unique idea, question, format, or product.	Experiments with creating a novel or unique idea, question, format, or product.	Reformulates a collection of available ideas.
Connecting, Synthesizing, Transforming	Transforms ideas or solutions into entirely new forms.	Synthesizes ideas or solutions into a coherent whole.	Connects ideas or solutions in novel ways.	Recognizes existing connections among ideas or solutions.

GENERIC DANCE RUBRIC ASSESSING SKILL DEVELOPMENT*

Use of Performance Skills

Novice

When performing basic locomotor and axial movement dancers show:

- undefined placement within spatial design
- limited response to rhythmic structure & tempo changes
- minimal range of dynamics and movement qualities
- sporadic concentration

Apprentice

When performing basic locomotor and axial movement dancers show:

- clear response to rhythmic structure & tempo changes
- moderate range of dynamics and movement qualities
- concentration & focus

Proficient

When performing moderately challenging movement, dancers show:

- Same as Apprentice

Advanced

When performing moderately challenging movement, dancers show:

- complexity and variety of spatial elements
- clear response to a variety of rhythmic structures & tempo changes
- broad range of dynamics and movement
- projected concentration & focus

Distinguished

When performing technically challenging movement, dancers amplify the composition by showing:

- projected artistic expression
- clarity of purpose
- sensitive stylistic nuance and phrasing

Use of Compositional Elements

Novice

In choreographing phrases, dancers show:

- minimal demonstration of the principles of space, time, and energy
- limited body movement

Apprentice

In choreographing phrases or pieces, dancers show:

- changes in use of space, time, and energy
- basic form of beg, mid, end

Proficient

In choreographing pieces, dancers show:

- purposeful approach to space, time, and energy
- forms such as ABA, rondo, canon, theme and variation
- personal expression & full body involvement

Advanced

In choreographing pieces, dancers show:

- complexity and variety of spatial elements
- forms integral to the expression of the piece
- full body movement that clearly expresses the choreographic intent

Distinguished

In choreographing pieces, dancers demonstrate sophisticated compositional awareness by showing:

- aesthetically effective use of space, time, energy, and form
- facility in use of abstract as well as literal expressions of a theme
- powerful, clear personal expression

*Rubric shared by Connie M. Schroeder, University of Wisconsin-Milwaukee on the POD listserv, April 14, 2008.

The University of Scranton Business Case Analysis Rubric
Retrieved January 3, 2007 from http://academic.scranton.edu/department/assessment/ksom/Case-Analysis-Rubric.doc

Date: _____

Rater:_____ **Course:** _____ **Student:** _____

TRAIT	Unacceptable	Acceptable	Exemplary	Score
Issues	Does not recognize a problem or mentions problems that are not based on facts of the case	Recognizes one or more key problems in the case.	Recognizes multiple problems in the case. Indicates some issues are more important than others and explains why	
Perspectives	Does not recognize the perspectives of any characters in the case	Considers the perspectives of individuals who are related to the problems	Clearly describes the unique perspectives of multiple key characters.	
Knowledge	Simply repeats facts listed in case and does not discuss the relevance of these facts	Considers facts from the case and cites related knowledge from theoretical or empirical research	Discusses facts of the case in relation to empirical and theoretical research and add knowledge from personal experience	
Actions	No action proposed or proposes infeasible action(s)	More than one reasonable action proposed.	Proposed actions seem to deal with the most important issues	
Consequences	No positive and negative consequences are identified	Positive and negative consequences for each action are discussed	Consequences are tied to the issues deemed most important.	

Group Participation Rubric

Retrieved February 12, 2008 from *Making the Grade: The Role of Assessment in Authentic Learning* by Marilyn M. Lombardi, http://www.educause.edu/ir/library/pdf/ELI3019.pdf

Criteria	Distinguished	Proficient	Basic	Unacceptable
Workload	Did a full share of the work—or more; knows what needs to be done and does it; volunteers to help others.	Did an equal share of the work; does work when asked; works hard most of the time.	Did almost as much work as others; seldom asks for help.	Did less work than others; doesn't get caught up after absence; doesn't ask for help.
Getting Organized	Took the initiative proposing meeting times and getting group organized.	Worked agreeably with partner(s) concerning times and places to meet.	Could be coaxed into meeting with other partner(s).	Did not meet partner(s) at agreed times and places.
Participation in Discussions	Provided many good ideas for the unit development; inspired others; clearly communicated desires, ideas, personal needs, and feelings.	Participated in discussions; shared feelings and thoughts.	Listened mainly; on some occasions, made suggestions.	Seemed bored with conversations about the unit; rarely spoke up, and ideas were off the mark.
Meeting Deadlines	Completed assigned work ahead of time.	Completed assigned work on time.	Needed some reminding; work was late but it didn't impact grade.	Needed much reminding; work was late and it did impact quality of work or grade.
Showing up for Meetings Score	Showed up for meetings punctually, sometimes ahead of time.	Showed up for meetings on time.	Showed up late, but it wasn't a big problem for completing work.	No show or extremely late; feeble or no excuse offered.
Providing Feedback Score	Habitually provides dignified, clear, and respectful feedback.	Gave feedback that did not offend.	Provided some feedback; sometimes hurt feelings of others with feedback or made irrelevant comments.	Was openly rude when giving feedback.
Receiving Feedback Score	Graciously accepted feedback.	Accepted feedback.	Reluctantly accepted feedback.	Refused to listen to feedback.

ETHICAL REASONING VALUE RUBRIC

for more information, please contact value@aacu.org

Definition

Ethical Reasoning is reasoning about right and wrong human conduct. It requires students to be able to assess their own ethical values and the social context of problems, recognize ethical issues in a variety of settings, think about how different ethical perspectives might be applied to ethical dilemmas and consider the ramifications of alternative actions. Students' ethical self identity evolves as they practice ethical decision-making skills and learn how to describe and analyze positions on ethical issues.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	**Milestones** 3	2	**Benchmark** 1
Ethical Self Awareness	Student discusses in detail/analyzes both core beliefs and the origins of the core beliefs and discussion has greater depth and clarity.	Student discusses in detail/analyzes both core beliefs and the origins of the core beliefs.	Student states both core beliefs and the origins of the core beliefs.	Student states either their core beliefs or articulates the origins of the core beliefs but not both.
Understanding Different Ethical Perspectives/Concepts	Student names the theory or theories, can present the gist of said theory or theories, and accurately explains the details of the theory or theories used.	Student can name the major theory or theories she/he uses, can present the gist of said theory or theories, and attempts to explain the details of the theory or theories used, but has some inaccuracies.	Student can name the major theory she/he uses, and is only able to present the gist of the named theory.	Student only names the major theory she/he uses.
Ethical Issue Recognition	Student can recognize ethical issues when presented in a complex, multi-layered (grey) context AND can recognize cross-relationships among the issues.	Student can recognize ethical issues when issues are presented in a complex, multilayered (grey) context OR can grasp cross-relationships among the issues.	Student can recognize basic and obvious ethical issues and grasp (incompletely) the complexities or inter-relationships among the issues.	Student can recognize basic and obvious ethical issues but fails to grasp complexity or inter-relationships.
Application of Ethical Perspectives/Concepts	Student can independently apply ethical perspectives/concepts to an ethical question, accurately, and is able to consider full implications of the application.	Student can independently (to a new example) apply ethical perspectives/concepts to an ethical question, accurately, but does not consider the specific implications of the application.	Student can apply ethical perspectives/concepts to an ethical question, independently (to a new example) and the application is inaccurate.	Student can apply ethical perspectives/concepts to an ethical question with support (using examples, in a class, in a group, or a fixed-choice setting) but is unable to apply ethical perspectives/concepts independently (to a new example.).

Evaluation of Different Ethical Perspectives/Concepts	Student states a position and can state the objections to, assumptions and implications of and can reasonably defend against the objections to, assumptions and implications of different ethical perspectives/concepts and the student's defense is adequate and effective.	Student states a position and can state the objections to, assumptions and implications and respond to the objections to, assumptions and implications of different ethical perspectives/concepts but the student's response is inadequate.	Student states a position and can state the objections to, assumptions and implications of different ethical perspectives/concepts but does not respond to them (and ultimately objections, assumptions and implications are compartmentalized by student and do not affect student's position.)	Student states a position but cannot state the objections to and assumptions and limitations of the different perspectives/concepts.

Rubric for Communication, UH Hilo

	Line of Reasoning	Organization and Structure	Content	Technique	Style & Voice
4 (Advanced)	Well-defined thesis that is supported by coherent and relevant arguments Ideas and main points are based on logical and rational deductions	Organization is logical, well-planned, and organized; structure enhances the message or argument Paragraphs are well-developed, and paragraph breaks enhance the main points	Exhibits original insight into the content Content illuminates the argument and/or message	Highly effective use or integration of language (grammar, sentence structure), literary (genre, rhyme scheme) or artistic techniques Choice of techniques produces a highly original text (e.g. essay, poem, painting) or performance (e,g. speech or dance)	The medium (e.g. language, body movement, composition, tone) enhances the intended message or purpose The project exhibits sophisticated and originality Presentation or text (e.g. essay, short story, speech, painting) makes an impact on the intended audience
3 (Competent)	Identifiable thesis with some gaps or inconsistencies in reasoning Some ideas or main points may not be fully integrated into the presentation and essay	Some organizational problems evident Paragraphs are developed but exhibit a few inappropriate breaks, or transitions between paragraphs are awkward	Content is adequately addressed Content supports main argument but may not be comprehensive	Recognizable use or integration of language, literary or artistic techniques Choice of techniques produces a satisfactory text or performance	The medium is adequate for its intended message or purpose The project is appropriate for assignment but is predictable Presentation or text is well-received by the intended audience
2 (Emerging)	Thesis is weak, unclear or too broad for assignment, but has some relevance to the body of essay or presentation Ideas or main points are based on unsubstantiated reasons or speculations	Some attempt at organization but essay or presentation suffers from gaps in logic Paragraphs are underdeveloped and/or transitions are highly problematic	Content is only superficially addressed or limited in breadth Content does not fully support main argument	Use or integration of technique is awkward or incorrect Choice of techniques does not appear to enhance the text or performance	The medium chosen may not fit well with the message intended The project does not fully address the assignment and/or mimics what has already been done Presentation or text may not be understood or engaging to the intended audience
1 (Beginning)	No discernable thesis Ideas or main points of the presentation or essay are unclear, unsubstantiated, or unrelated	Lack of organization (line of reasoning is absent) Transitions between paragraphs are non-existent	Content is not appropriate to the assignment or minimally used Content does not relate to the argument being made	Poor or little use/ integration of the techniques covered in or required by class Choice of techniques appears random and/or without much thought	The medium chosen seems inappropriate for the message or may even lack a message or intent The project is highly unorganized and/or lacks any originality Presentation or text alienates the audience

Rubric for Cultural Diversity, UH Hilo

	Sense of Place (Engagement) *Honua Hawai'i*	Sense of Humanitiy (Respect) *Kākou*	Sense of Others (Empathy) *'Oukou/Lākou*	Sense of Self (Humility) *Au/Mākou*
4 ***Hua*** (Advanced —the ripening of the full fruit)	• Demonstrates *kuleana* (responsibility) for and *'ike kū hohonu* (sophisticated understanding) of Hawai'i's uniqueness as the home of indigenous people, immigrants and immigrant descendants. EX: "*The Pāpa'ikou Mill Beach represents an opportunity for dialogue over the complex convergence of private property rights and public access"* or *"The telescopes on Mauna Kea present a quandary for various stakeholders, including scientists and indigenous activists."*	• Expresses a multicultural approach to describing or interacting with others EX: *"I am not a Muslim but I respect a culture's choice in limiting certain types of garments."*	• Demonstrates sophisticated understanding of social and cultural complexities in and/or among different groups. EX: *"I am straight and I see marriage as a union between man and woman, but I can respect the desire by members of the gay community to undertake such a commitment."*	• Critically analyzes how s/he is shaped by diverse cultural and social experiences. EX: "*I may be white, but I am a mixture of different backgrounds (my mother was Irish, my father was English)—and these heritages were often at odds with one another over who could rightfully immigrate to America"* or *"I am a Native Hawaiian who recognizes multiple heritages within my own family, and for this reason, issues of sovereignty are very complicated."*
3 ***Kumu*** (Competent —the forming of the tree)	• Demonstrates *mahalo* (appreciation) for and *'ike pono* (clear understanding) of Hawai'i's uniqueness as the home of indigenous people, immigrants and immigrant descendants. EX: "*Hawai'i's beaches need to be protected from greedy foreign developers"* or *"Given the ancient laws, anyone should have access to any beach at any time they want."*	• Acknowledges diversity but still exhibits some bias. EX: *"Muslims have a right to follow their religious principles, but they need to respect women's rights."*	• Meaningfully expresses social and cultural complexities in and /or among different groups. EX: *"Gays and lesbians have recently indicated a desire to engage in straight practices such as marriage."*	• Meaningfully expresses how s/he is shaped by diverse cultural and social experiences. EX: "*I may be white, but I really am a mixture of different backgrounds (my mother was Irish, my father was English)."* or *"Being Native Hawaiian means recognizing all of my* kupuna*, some of whom are Japanese and Anglo-American."*
2 ***Mole***	• Exhibits *hoihoi* (interest) in and *'ike kumu* (basic understanding)	• Limited recognition of one's own biases when describing	• Identifies (without judgment) differences in and/or among	• Identifies differing views on his/her own cultural and social

(Emerging—roots emerge)	of Hawai‘i’s uniqueness. EX: “*Hawai‘i’s beaches are among the finest in the world but owning one is hard.”*	or interacting with others. EX: “*I think women need to be liberated from the veil in Iran.”*	cultures and social groups. EX: *“Why New York would allow gays to marry is beyond me.”*	backgrounds. EX: “*Being white in Hawai‘i has its challenges because many people see me as just that—a white person.”*
1 ***Kupu*** (Beginning—the budding of the plant)	• Exhibits *manakā* (disinterest), *‘ike ihi* (suprtficial understanding) or *‘ike hemahema* (faulty understanding) of Hawai‘i’s people, history and/or landscape. EX: “*If I owned a beach in Hawai‘i, I should be able to kick everyone off. It’s my private property.”*	• Expresses a cultural self-centered approach to describing or interacting with others. EX: “*Muslims obviously hate women for making them wear veils.”*	• Descriptions of different cultures and/or social behaviors may reflect some judgmental bias or stereotyping. EX: “*Allowing gays to marry would be a disaster for this nation.*	• Has a limited understanding oh his/her own cultural and social background. EX: “*I am just an American, why can’t we all just* get *along?” or other uncritiqued expressions of self.*

The use of these Hawaiian terms comes from the story of Nī‘auepo‘o, as documented by Kawena Pukui. It describes the stages of the growth of the niu (coconut) tree that is found in a mele oli (chant) from that story.

Rubric for Information Literacy, UH Hilo

	Documentation Conventions	Appropriateness of Sources	Evaluating Sources	Integrating Sources
4 (Advanced)	• No errors with regard to citation format (in-text and bibliography) • Properly documents citations and sources	• All sources are relevant and appropriate to the assignment and course • Utilizes a variety of appropriate sources, including peer-reviewed material	• Student demonstrates in-depth examination of information and/or material which coincide with specific needs and goals in the paper • Examination of information shows a clear understanding of the material's criteria for inclusion (i.e. authority, credibility, relevance, timeliness, and accuracy)	• Student synthesizes information with a clear sense of direction/purpose in the assignment • Student draws exceptional conclusions or insights based on the information cited • Use of information leads to highly developed arguments, follow-ups, ideas, appeals, proposals, etc.
3 (Competent)	• In-text citations match bibliography and vice versa. • Minor errors with citation format.	• Most sources are relevant and appropriate to the assignment and course • A majority of the sources are relevant but may not show variety or breadth	• Student demonstrates adequate examination of the material • There may be minor problems with the articulation of appropriateness of material to the assignment	• Student adequately synthesizes information • Student demonstrates some insight but conclusions or interpretations may seem obvious
2 (Emerging)	• Incorrect use of required citation format • May include a bibliography but entries may not correlate to sources used in the paper	• Uses mostly online (non-scholarly) sites • Sources do not appear to be peer-reviewed or from reputable (government or professional organizations) sites	• Student may exhibit some attempt to examine the information using academic criteria • Information and/or sources are questionable	• Student includes information but exhibits problems in synthesizing it into the assignment • Follow-up discussion of material may be minimal, unsubstantiated, and/or unoriginal
1 (Beginning)	• No citations and/or bibliography • Copies or paraphrases without documentation	• No relevant sources • Paper is mainly speculative on the part of the writer	• No effort to examine the information • Little awareness of the quality of the information	• No synthesis of material into the assignment • Student may plagiarize or paraphrase information without citing sources

Rubric for Quantitative and Scientific Reasoning, UH Hilo

	Analysis	Calculations	Visual Representations of Data & Information	Scientific Methodology
4 (Advanced)	• Demonstrates advanced reasoning based on quantifiable information; judgments and conclusions are exceptionally insightful	• Accurately completes calculations for the assignment and presents results clearly and concisely • Chooses appropriate formulas or symbolic models to solve problems and justify choices	• Produces highly effective visual representations of data (e.g. tables) or concepts (e.g. graphs)	• Skillfully and precisely engages in the 6 steps needed in undertaking a science-based approach to gathering and interpreting evidence 1. Indentify problem 2. Formulate a hypothesis 3. Design a project to test hypothesis 4. Collect data 5. Analyze data 6. Draw conclusions based on data • Exhibits highly accurate and exhaustive analysis of data • Produces work that contributes to the field
3 (Competent)	• Demonstrates competent reasoning based on quantifiable information; judgments and conclusions are adequate and reasonable	• Calculations are completed and largely successful • Chooses appropriate formulas or symbolic models to solve problems and justify choices	• Produces competent visual representations of data	• Engages in all 6 steps needed in undertaking a science-based approach to gathering and interpreting data • Produces an analysis of data • Produces work that meets the requirements of the assignments/course
2 (Emerging)	• Demonstrates emerging reasoning based on quantifiable information as exhibited by difficulty in formulating judgments or drawing conclusions	• Calculations contain multiple errors • May not choose the most appropriate or effective formula • May exhibit some problems justifying choices	• Visual representations may reflect minor flaws or inaccuracies	• Engages in the 6 steps but may exhibit problems with a few • Analysis of data may reflect minor inaccuracies of observation • Work may not fully satisfy the requirements of the assignment/course
1 (Beginning)	• Demonstrates beginning reasoning based on quantifiable information as exhibited by difficulty understanding what constitutes quantifiable information, inability to formulate reasonable judgments and/or drawing reasonable conclusions.	• Calculations may be unsuccessful or incomplete • Does not appear to understand the parameters of the appropriate formula • Is unable to select the right formula for the problem (decision-making unclear)	• The method for visually presenting information or concepts is highly inaccurate or imprecise	• Exhibits problems in many if not most of the steps required for the scientific process • Analysis of data is incomplete, inaccurate, or absent • Work does not satisfy the requirements of the assignment/course

Kap'iolani CC
HEALTH Counseling
Learning Intervention / Activity:

Exploring Health Careers Information Session

SWiBAT evaluate themselves in light of a career pathway.

4 – Advanced	Student is able to use the RIASEC to choose 2 career pathways and identify 2 KCC programs of interest (a primary & a back up). Student can identify 3 or more resources for further exploration.
3 – Competent	Student completed the RIASEC, and used the Code to choose a career pathway, and 3 Health Career programs. Student has not narrowed his/her choices down to two (a primary and a back up). Student can identify at least 2 resources for further exploration.
2 – Basic	Student completed the RIASEC, choose a career pathway, but was unable to identify specific careers for exploration. Student could only identify one resource to use for further exploration.
1 - Poor	Student was unable or unwilling to complete the RIASEC inventory and other career exploration activities.

Kapi'olani CC
HEALTH Counseling
Learning Intervention / Activity:
New Student Orientation (NSO)

SWiBAT synthesize information and make an informed decision toward a specific career pathway.

4 – Advanced	Student registered for the upcoming semester, made a plan for the subsequent semester, and can articulate program requirements. .
3 – Competent	Student registered for the upcoming semester but doesn't have a plan for the subsequent semester. Student can demonstrate where to find the course requirements for their primary program of interest.
2 – Basic	Student did not register for the upcoming semester. Student can demonstrate how to access the schedule of classes and how to use the My UH Portal.
1 - Poor	Student did not register for the upcoming semester and may or may not be able to demonstrate how to use the My UH Portal or access the schedule of classes.

Kapi'olani CC
HEALTH Counseling
Learning Intervention / Activity:
Personal Counseling

SWiBAT integrate knowledge learned in the counseling session.

4 – Advanced	Student accepts personal responsibility for the issue(s) and has identified appropriate strategies to implement and has a plan for implementation.
3 – Competent	Student accepts personal responsibility for the issue(s) and has identified one or more strategies (solutions) but still needs to identify how to implement the strategies.
2 – Basic	Student is aware of the issue(s) but has no strategy to implement.
1 - Poor	Student has no awareness of the issue(s).

WSC Senior College and University Commission | EDUCATIONAL PROGRAMS

Multiyear Assessment Planning

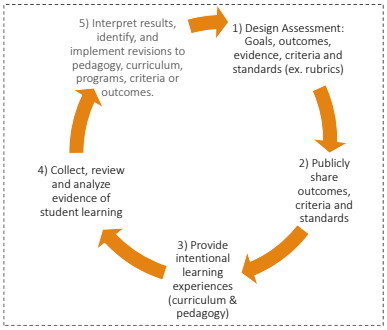
Laura Martin

Sustainable, Multi-year Assessment Planning

PULLING IT ALL TOGETHER

Assessment is program planning

F A C I L I T A T E



Hybrid of Suskie (2009) , the CIRTL Teaching-as-Research (TAR) framework, and Backward Design (McTighe &Williams, 1998)

Outcomes

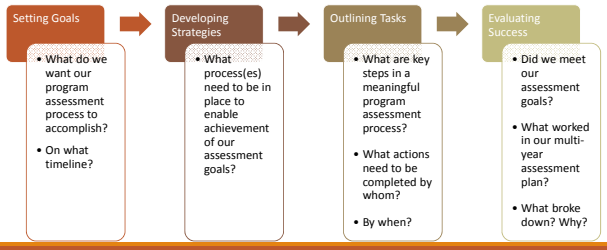
By the end of this segment, you will be able to

1. List some key elements of a sustainable, meaningful program assessment plan.
2. Connect assessment processes to critical institutional planning cycles.
3. Develop an effective program assessment plan.

Some key question for assessment *planning*

1. ***How do we make sure***
   - Our program or department regularly completes an assessment cycle?
   - The process yields representative, actionable results describing student learning?
   - We close the loop, responding to results with actions, and a plan to reassess?
   - The assessment process is inclusive?
2. ***How do we establish the habit of regular assessment as a department or a program?***

Some key elements of *planning*



Analyze a Multi-year Assessment Plan

1. What would you add to this plan? Why?
2. What would you remove? Why?

Some key elements of a sustainable multi-year, program assessment plan

1. Plan identifies year(s) the program learning outcome will be reviewed (assessed)

How often is it feasible or important for the program to revisit the learning outcome?

Some key elements of a sustainable multi-year, program assessment plan

2. Based on pre-identified criteria, the plan identifies
   - the evidence of student learning to be gathered,
   - from *where*,
   - *when, including how often*
   - and by *whom*.

Critical in small programs to ensure sufficient representative samples for valid and reliable results.

Ex. Direct
- Final research paper in Bio 299
- Each time the course is offered
- By Jack in collaboration with the Bio 299 instructor

Ex. Indirect
- Student reflection in Bio 299
- Each time the course is offered
- By Jack in collaboration with the Bio 299 instructor

Some key elements of a sustainable multi-year, program assessment plan

3. Identifies who reviews the evidence of student learning and how.
   - Assessment committee
   - All faculty
   - Assessed as part of grading, with review of sample work by faculty as whole

Some key elements of a sustainable multi-year, program assessment plan

4. Identifies, as possible, the performance targets – what percentage of students at what levels at graduation?

Ex. 95% of graduating students at or better than *Accomplished*.

	Beginning	Developing	Accomplished	Exemplary
Criterion 1	0%	10%	70%	20%

What are essential elements of a sustainable multi-year, program assessment plan?

5. May identify actions anticipated in response to findings.
6. May identify an annual timeline for completing the assessment work over the course of the year.
7. Anything else?

Other Considerations: Capacity to Gather Evidence/Data

- **Gathering evidence/data is the most critical and most time consuming and challenging aspect of program assessment.**

Some needs:

- Support for rubric development, assessment planning, etc.
- Capacity to collect indirect evidence – program and institution
- Evidence/data storage – e.g. student work samples to be assessed; assessment data gathered as part of grading.
- Communicating and storing results, actions, and supporting data.

Reflect

Take a minute to jot down questions or notes you may have related to capacity to support assessment and assessment planning.

Other Considerations: Connecting to Institutional Planning Processes

- ✓ *Budget and/or Reporting Cycles*
  - Will conclusions and actions be generated in time to support a budget request, as relevant?
- ✓ *Periodic Program Review Cycle*
  - Will each program outcome be assessed at least once before program review?
  - How many times can each program outcome be assessed in the interval between program reviews? Is this doable? Sustainable?

Group Brainstorm

- ❖ Who would you involve in developing an assessment plan? *Why*?
- ❖ Who would benefit from access to the assessment plan? Why?

Lines of Evidence for Assessing Political Science Ph.D. Program Learning Outcomes				
	Lines of Evidence		*Program Goals*	
Program Learning Outcome	*Direct*	*Indirect*	*Timeline*	*Performance Targets/Expectations*[2] *(For Direct Evidence)*
1. Core Knowledge Major Field	a. Qualifying Exam b. Doctoral Dissertation Proposal c. Doctoral Dissertation	a. Annual progress review b. Group interview	Data analyzed in 2016-2017	a. 100% of students pass the Qual Exam with a score of "Good" or better on "Knowledge" and "Command" criteria for major field essays b. 100% of candidates pass the proposal with a score of "Advanced" or better on the first "Core Knowledge" criterion c. 100% of candidates pass the dissertation with a score of "Mastery" on the first "Core Knowledge" criterion
2. Core Knowledge Minor Field	a. Qualifying Exam	a. Annual progress review b. Group interview	Data analyzed in 2015-2016	a. 100% of students pass the Qual Exam with a score of "Good" or better on "Knowledge" and "Command" criteria for minor field essay
3. Methods	a. Doctoral Dissertation Proposal b. Doctoral Dissertation	a. Annual progress review b. Group interview	Data analyzed in 2014-2015	a. 100% of candidates pass the proposal with a score of "Advanced" or better on the "Methods" criterion b. 100% of candidates pass the dissertation with a score of "Mastery" on the "Methods" criterion
4.Communication	a. First Year Exam b. Doctoral Dissertation Proposal c. Doctoral Dissertation	a. Annual progress review b. Group interview c. TA evaluations	Data analyzed in 2013-2014	a. 80% of students score "Good" or better on the "Communication" criterion of the First Year Exam b. 100% of candidates pass the proposal with a score of "Advanced" or better on the "Communication" criterion c. 100% of candidates pass the dissertation with a score of "Advanced" on the "Communication" criterion
5. Independent Research	a. Doctoral Dissertation Proposal b. Doctoral Dissertation	a. Annual progress review b. Group interview	Data analyzed in 2018-2019	a. 100% of candidates pass the proposal with a score of "Advanced" or better on the "Research" criterion b. 100% of candidates pass the dissertation with a score of "Mastery" on the "Research" criterion
6. Professionalism	a. Political Science Conferences b. Doctoral Dissertation Proposal Defense c. Doctoral Dissertation Defense	a. Annual progress review b. Group interview c. TA evaluations	Data analyzed in 2017-2018	a. 100% of students have participated in a political science conference by completion of the degree b. 100% of students pass the proposal with a score of "Advanced" or better on the "Professionalism" criterion. c. 100% of students pass the dissertation with a score of "Advanced" or better on the "Professionalism" criterion.

[2] See Appendix E for associated assessment rubrics

Template for a Multi-Year Assessment Plan. The Annual Report will address what the program found, if it met its benchmarks/performance criteria the actions it will take to improve student learning and/or the assessment process, and any adjustments to the timetable for reassessment.

Part I:

PLO	Forms of Evidence	From where is the evidence collected?[1] Who collects it?	How often the evidence is collected (not analyzed)?[2]	Who reviews and evaluates the evidence?[3]	Performance Target/Criteria for Success	Years Assessed	
						Year 1st Assessed	How frequently reviewed?[4] Year next assessed/reviewed
PLO 1	Direct: : *Senior thesis*	*Hist 400; J. Jones*	*Every offering*	*Program Assessment Committee*	*95% of seniors at or better than proficient*	*2014-15*	*Every three years; 2017-18*
	Direct:						
	Indirect: *Graduate exit survey*	*Program lead from IR Office*	*Annually*		*95% of seniors report at or better than proficient*		
PLO 2	Direct:						
	Direct:						
	Indirect:						
PLO 3	Direct:						
	Direct:						
	Indirect:						
PLO 4	Direct:						
	Direct:						
	Indirect:						
PLO 5	Direct:						
	Direct:						
	Indirect:						

[1] Ex. The course from which the assignment is collected, the office that manages institutional surveys, etc.
[2] Ex. Every time class is offered? At the end of every academic year (ex. exit survey)? For small programs this is particularly important as a sufficient sample size requires gathering evidence from every student.
[3] A faculty assessment committee? The faculty as a whole?
[4] Ex. Every third year? Consider factors like the interval between periodic academic program reviews and the ability of the faculty to manage to work in a meaningful way. Subject to change in response to assessment findings.

Part II: Annual process for completing assessment cycle in relation to annual report submission date.

_____ Annual date by which assessment data analyzed and summarized

_____ Annual date findings discussed by unit and responding actions identified

_____ Annual date by which actions are implemented

_____ Annual date by which report is submitted to Dean for review

Graduate Program Assessment Plan: [Insert title of your program]

ASSESSMENT PLAN – MASTERS AND/OR PhD

Program Learning Outcomes (PLOs), Evidence, Timeline, and Process: For each PLO* indicate what kind of direct (student work) and indirect evidence (ex. surveys, focus groups) will be gathered and examined to assess student achievement of the PLO. Indicate the year the PLO will be assessed (ex. AY2010-2011). Who will participate? How will assessment be conducted, results shared, and the findings used to improve student learning? What are the desired targets (or benchmarks) for student performance/learning and other metrics?

PLO #1
Direct Evidence:
Indirect Evidence:
Year to be Assessed:
Participants:
Process:

PLO #2
Direct Evidence:
Indirect Evidence:
Year to be Assessed:
Participants:
Process:

PLO #3
Direct Evidence:
Indirect Evidence:
Year to be Assessed:
Participants:
Process:

PLO #4
Direct Evidence:
Indirect Evidence:
Year to be Assessed:
Participants:
Process:

PLO #5
Direct Evidence:
Indirect Evidence:
Year to be Assessed:
Participants:
Process:

[Programs can have more than five program learning outcomes; it is recommended that you assess one PLO per year. It is helpful to keep in mind that there is a seven-year program review cycle, with the review taking nearly two years, leaving approximately 5 years between review periods. For more information, see the Program Review Policy and Schedule <http://senate.ucmerced.edu/program-review>.]

CURRICULUM MAP– MASTERS AND/OR PhD

Create a chart summarizing how the course learning outcomes align with/support achievement of the PLOs. The outcomes listed in course syllabi should reflect the PLOs indicated in the map. Include ALL curriculum -- the dissertation or culminating experience, directed research, individual directed readings, lab meetings, journal clubs, etc. Within the map, it is helpful to distinguish required from elective courses. (Include an abbreviated description of each PLO in the heading, as in the sample below.)

Example:

	PLO#1 Oral and written communication	PLO# 2 Research skills	PLO# 3 Critical analysis	PLO#4 Use of primary and secondary sources	PLO #5 Content knowledge
HST 201	[Indicate level of mastery]	I	D	D	I
HST 202	D	D	D	M	D
HST 203	D	M	M	M	D
HST 204	M	M	M	M	D

[I= introductory (for graduate level); D= developed; M= mastery]

Masters Degree: If your program offers a Master's Degree, please describe the program learning outcomes for this degree and how you will separately assess student learning annually for this degree. Provide PLOS, evidence, a timeline, and a curriculum map for the masters degree.

* For resources on how to develop PLOs, see Graduate CLO and PLO Guidelines.

Planning to Assess WASC's Five Competencies through the Majors

Overview

This document is intended to help your major integrate assessment of WASC's Five Core Competencies – *written communication, oral communication, information literacy, quantitative reasoning, and critical thinking* - into its annual PLO assessment activities.

Because the competencies constitute a core set of abilities that are essential to, but not sufficient for, the high quality, intellectual work expected of a bachelor's degree graduate from the University of California, it is anticipated that many, if not all, of competencies are already being developed through the curriculum that supports your Program Learning Outcomes.[1] Similarly, it is anticipated that students may already be engaged in work that can be used to assess these outcomes (or that they easily could be).[2]

The steps outlined below, together with the supporting materials on the following pages, are intended to help your program (1) identify the Program Learning Outcome(s) that each competency supports (is embedded within) and (2) to put in place a plan to assess each competency as part of the normal work of assessing the PLO in coming years.

Step I: Align competencies to existing PLOs.

1. To align each competency to at least one PLO please complete the table on p. 2. This step will help identify which competencies are already addressed or could easily be addressed under the umbrella of an existing PLO. Appendix A provides faculty-developed, broadly accepted definitions of each competency. Additional details are available through the hyperlinks associated the each's competency's name.
2. Identify any questions or concerns that emerge from this process.

Step II: Plan to assess the competencies as part of the assessment of the aligned PLO. To do so, please

1. Identify at least one substantive source of direct evidence[3] *for each competency* to be *collected at or near graduation*, recognizing that a rich source of evidence could support more than one PLO and competency.
2. Identify how student work will be archived for future use, with archiving initiated in AY2014-15.
3. identify the year each competency (and corresponding PLO) will be assessed, with the expectation that all five competencies must be assessed by spring 2018 for programs with a March PLO Report date (with four of the five completed by spring 2017), and fall 2018 for programs with an October PLO Report date (with four of the five completed by fall 2017).
4. Identify any questions or concerns that emerge from this process.

Step III: Identify an annual timeline for competing assessment work.

This part of the plan is intended to help your program establish an annual rhythm for completing its annual assessment work.

[1] See Table 1 in the proposal for addressing the competencies submitted to the Academic Senate in November 2013.

[2] An exception may be quantitative reasoning in humanities majors. This could be the focus of a separate working group of humanities faculty.

[3] Ex. a major research paper, lab report, presentation, design project, etc.

Step I: PLO and Competency Alignment

Determine which competencies are already addressed or could easily be addressed under the umbrella of an existing PLO. To do this, review each PLO in relation to each Competency, placing a "X" in the Competency's cell, if

a. Student development of the skills and knowledge outlined by the PLO involves the skills identified as a Competency, and/or
b. Students do or could employ (or demonstrate) the Competency as part of the work generated to assess achievement of the PLO.

It is likely that a Competency may be integral to student achievement and/or demonstration of more than one PLO. *Please indicate all such relationships*.

Appendix A provides faculty-developed, broadly accepted definitions of each Competency. Use the associated hyperlinks to access a more detailed description of each Competency.

PLO	Written Communication	Oral Communication	QR	Info Literacy	Critical Thinking
EXAMPLE: Students will be able to take physical measurements in an experimental laboratory setting and analyze these results to draw conclusions about the physical system under investigation, including whether their data supports or refutes a given physical model.	X		X		X
1.					
2.					
3.					
4.					
5.					

Please note any concerns, questions, or challenges that emerged from this process.

Part II: Develop/Refine Program Assessment Plan

The Competencies will be assessed and reported as part of the assessment of the related Program Learning Outcome. In this light, the table that appears on the next page is a tool to support and/or to summarize PLO (and related Competency) assessment planning. As the program completes its plan, please keep in mind

1. **Evidence of student learning needs to be collected from students who are at or near to graduation**. WASC's intention is to confirm that students demonstrably possess the skills and knowledge the program intends at the time they leave the university. This expectation recognizes that abilities atrophy without ongoing reinforcement and/or development, such that graduating seniors may perform more poorly than freshmen and sophomores. Evidence can be collected earlier in the curriculum if a program would like to examine student development of the abilities outlined by a PLO, but evidence of what students are able to do as they leave with their degrees is a priority. Toward this end, programs are encouraged to look to classes that enroll seniors (students with senior standing) as places for gathering evidence.

2. **Evidence should be an assignment (or a type of assignment) that all students in the major are asked to complete (even if only a sample is reviewed for the purpose of program assessment).** In this way, the learning results will be representative of all students in the major (not just a subset who took a particular course). For majors without a capstone course or activity, evidence could be collected from more than one required course in the major, for example, using a common prompt.

3. **A rich source of evidence can often be used to assess more than one program learning outcome and Competency.** For example, a senior thesis, a substantial research paper, a culminating lab report, etc. could be used to assess one or more PLOs with the written communication, information literacy, and critical thinking competencies reflected in the program rubric(s).

4. **Really useful sources of evidence provide students with the time and incentives to do their best work.** For example, an effective assignment might provide students with the time to plan and revise their work, and have a point value commensurate with the effort expected of students.

5. **Programs with March 1 annual reporting dates, should have assessed four of the five competencies by March 1, 2017, with the 5th completed by March 1, 2018. Programs with October 1 annual reporting dates, should have assessed four of the five competencies by October 1, 2017, with the 5th completed by October 1, 2018. Please confirm this in the assessment plan below.** These timelines are designed to meet expectations established by WASC. Programs should anticipate assessing at least one Competency as part of the next annual cycle. For programs with March 1 due dates, this work would appear in the report due March 1, 2015. For programs with an October 1 due date, this work would be reported on in October 1, 2015.

Please indicate your program's annual report submission date:___ October 1 ___ March 1

As you develop your plan, please keep in mind that programs with March 1 annual reporting dates, should have assessed four of the five competencies by March 1, 2017, with the 5th completed by March 1, 2018. Programs with October 1 annual reporting dates, should have assessed four of the five competencies by October 1, 2017, with the 5th completed by October 1, 2018. The small table below is intended to help track this.

PLO	List the WASC Competency(ies) Addressed	Evidence of Student Learning to be Collected At or Near Graduation.[4]	From which course(s) will the direct evidence be gathered? What are the sources of indirect evidence?[5]	Who will collect it?	How often is the evidence collected (not analyzed)?[6]	Year Data Analyzed / Month & Year Summary Report Submitted
Example PLO from Previous Table	*Quantitative Literacy Critical Thinking Written Communication*	Direct: *Final technical report*	*Physics 175 – required course*	*J. Johnson*	*Every course offering starting spring 2014*	*Analysis: Fall 2015 Report: March 2016*
		Indirect: *Focus Group Data and Graduating Senior Survey*	*IPA SATAL*	*Faculty lead, School Coordinator*	*Survey – annually Focus group – 1st time (spring 2015)*	
PLO 1		Direct:				
		Indirect:				
PLO 2		Direct:				
		Indirect:				
PLO 3		Direct:				
		Indirect:				
PLO 4		Direct:				
		Indirect:				
PLO 5		Direct:				
		Indirect:				

Competency	Year Submit PLO Report
Written Communication	
Oral Communication	
Quantitative Reasoning	
Information Literacy	
Critical Thinking	

Please note any concerns, questions, or challenges that emerged from this process.

[4] Preferably students with senior standing. See explanation, Part II, bullet 1.

[5] Ex. The course from which the assignment is collected, the campus office that supplies relevant information, etc.

[6] Ex. Every time class is offered? At the end of every academic year (ex. exit survey)? For evidence gathered through course assignments, programs should consider collecting evidence every time the class is offered. This step is intended to support collection of student work only. It is separate from analysis, which takes place once a five year cycle.

Part III: Timeline for completing annual PLO assessment culminating in submission of PLO Report.

_____ Annual date by which faculty lead confirms that evidence has/is being collected.

_____ Annual date by which assessment data analyzed and summarized.

_____ Annual date by which findings discussed by program faculty and responding actions identified. The intention is that actions are identified so that they can be included in the PLO Report for record keeping purposes. Consider specifying what and where changes will be made and, as appropriate by whom, again for record keeping purposes.

_____ Annual date by which report is submitted to Dean for review

Appendix 1: Definitions of the Five Competencies, from the AAC&U VALUE Rubrics[7,8] or other Resources

Please click on the hyperlinked name for additional details for each Competency.

1. **Written communication** - is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images.

2. **Oral communication** - is a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors.

3. **Quantitative reasoning** - also known as Numeracy or Quantitative Literacy (QL) – is a "habit of mind," competency, and comfort in working with numerical data. Individuals with strong QL skills possess the ability to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations. They understand and can create sophisticated arguments supported by quantitative evidence and they can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate).

4. **Information literacy** - The ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively and responsibly use and share that information for the problem at hand. (VALUE Rubric, American Library Association, 1989[9])

5. **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.

[7] http://www.aacu.org/VALUE/rubrics/index_p.cfm?CFID=41742223&CFTOKEN=91633483
[8] *Note that each VALUE Rubric states the following:* 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.
[9] http://www.ala.org/acrl/standards/informationliteracycompetency#ildef

WSC Senior College and University Commission | EDUCATIONAL PROGRAMS

RESOURCES

FROM DEPARTMENTAL TO DISCIPLINARY ASSESSMENT:

Deepening Faculty Engagement

By Pat Hutchings

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In the late 1980s, as student outcomes assessment was first taking hold in higher education, I interviewed a number of faculty members who had been pulled into the movement's orbit. One still sticks with me: a professor of art history at a large research university who recounted the experience of having to sit down with her department colleagues—for the first time ever—to hash out their collective goals for majors. It was a difficult conversation, she told me, surfacing serious disagreements but eventually yielding a more shared vision of what students in the program should know and be able to do.

Clarifying goals is, admittedly, only the first step in the assessment process. Nevertheless, the experience recounted by that faculty member twenty-some years ago says a lot about the power of assessment at the departmental and disciplinary level to engage the professoriate in substantive ways.

That said, most of assessment's attention over the last two decades has been aimed at cross-cutting outcomes—critical and analytical thinking, problem solving, quantitative literacy, and communication—that are typically identified with general education. Just about everyone agrees that abilities like these are essential markers of higher learning; critical thinking typically tops the list of faculty priorities for student learning, regardless of field or institutional type. They're also the outcomes that have caught the attention of employers and policymakers (as well as test makers)—who are not, for the most part, asking how well students understand art history, sociology, or criminal justice (though they *are* asking about math and science preparation). And of course they are outcomes that overlap with those of the disciplines.

In short, assessment's focus on cross-cutting outcomes makes perfect sense, but it has also meant that the assessment of students' knowledge and abilities *within* particular fields, focused on what is *distinctive* to the field, has received less attention. And that's too bad.

It's too bad because we do, after all, value what our students know and can do in their major area of concentration and because students themselves typically care most about achievement in their chosen field of study. But it's also too bad because anchoring assessment more firmly in the disciplines may be a route to addressing its most vexing and enduring challenge: engaging faculty in ways that lead to real improvement in teaching and learning.

This is not a new argument (see for example Banta, 1993; Wright, 2005; and, most recently, Heiland and Rosenthal, whose volume on assessment in literary studies is reviewed by Mary Taylor Huber this issue), but it is one worth renewing. My purpose in what follows, then, is to review the current state of affairs in departmental and

disciplinary assessment, but especially to point to emerging developments that can help to deepen faculty engagement with questions about how and how well students achieve the learning we value within and across our diverse fields.

Taking Stock

Even though disciplinary and departmental assessment has played second fiddle to the assessment of more cross-cutting outcomes, a recent survey of program-level assessment practices released by the National Institute for Learning Outcomes Assessment (Ewell, Paulson, & Kinzie, 2011) reveals that there has been significant action in this arena. Often the first on campus to seriously engage with assessment, and among the most active going forward, are fields with specialized accreditation, including teacher education, pharmacy, nursing, social work, business, and engineering (see Palomba & Banta, 2001).

But good examples are plentiful in other fields as well, with levels of activity rising as all programs and departments respond to regional accreditation requirements. Indeed, the NILOA survey report concludes that "there is more assessment activity 'down and in' [academic programs and departments] than may be apparent by looking at only institutional measures" (p. 9), and it points not only to accreditation but to the desire to improve as major drivers for such work.

An earlier (2009) NILOA survey found that locally designed approaches are more prevalent at the department and program level than in the assessment of cross-cutting, general education outcomes, which are more likely to use standardized, externally designed instruments and national surveys. The 2011 report fills in the details: 68 percent of programs use capstone assessments; more than half use performance assessments or final projects; and alumni surveys, comprehensive exams, and portfolios all come in at about 30 percent.

What's also clear, although unsurprising, is that methods vary significantly from one field to another. For example, 84 percent of education departments report that all or most of their students take standardized examinations, while only 13 percent in the arts and humanities employ such instruments. Indeed, one reason to encourage greater attention to discipline-based assessment is because it's likely to encourage further methodological creativity and invention, reflecting the fuller range of evidence and methods valued in different fields and raising the chances that what is learned through assessment will be taken seriously and acted upon by faculty.

There are other promising developments. The NILOA survey suggests that assessment is making a difference in ways that affect the experience of students, with many respondents saying that they use results "very much" or "quite a bit" for instructional improvement (67 percent), improving the curriculum (59 percent), and informing program planning (57 percent). And in contrast to provosts—who, on the 2009 NILOA survey emphasized the need for greater faculty involvement in assessment—60 percent of program-level survey respondents indicate that "all or most of their faculty are already involved" (p. 11).

The Character of Faculty Engagement

Since I am one of scores of people who have worried and written about the need for greater faculty engagement in assessment, this last finding got my attention. Perhaps the widespread perception of low faculty engagement is just plain wrong or at least outdated. Or perhaps, for whatever reasons, programs are over-reporting participation. In any case, NILOA's findings are significant in suggesting the need for further thinking not only about the *proportion* of faculty engagement but about its *character and depth*.

A situation that appears to be common in one form or another in many institutions was captured by a campus leader I spoke with recently, who opined that departmental engagement can often translate to a kind of "checklist mentality" in which assessment means telling the provost's office which two or three methods from a proposed menu of possibilities—a survey, portfolios, an ETS field test, and so on—the department will employ. With deadlines looming ("our accreditation self-study is due in four months!"), this kind of mentality is understandable, especially in a context where faculty expertise is limited and time even more so. In such circumstances it's easy to get caught up in questions of lists, methods, and instruments—important matters that can sometimes prompt deeper deliberations about program goals and purposes.

But it is, after all, the deeper thinking about how and how well students acquire the field's knowledge, practices, values, and habits of mind—and how to improve learning in all of those areas—that assessment (at its best) is after. Without such considerations, one might say that assessment is "departmental" but not necessarily "disciplinary"—that it is situated in the relevant administrative unit but may not entail significant deliberation about what it means to know the field deeply, why that matters, and how to ensure that all students in the program achieve its signature outcomes at high levels.

> **One reason to encourage greater attention to discipline-based assessment is because it's likely to encourage further methodological creativity and invention.**

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Of course disproportionate (and hurried) attention to methods is just one of the impediments to faculty engagement. Few faculty have any explicit training in documenting or measuring student learning; other pressing agendas compete for time; such work is rarely rewarded in promotion and tenure; and on some campuses, even those seriously committed to teaching and learning, there's a sense that assessment adds no real value (see Hutchings, 2010) and may, even worse, take a divisive turn that erodes collegiality.

Additionally, some have proposed that assessment's focus on broad generic outcomes has worked against deeper kinds of faculty involvement. In the introduction to their edited collection about assessment in literary studies, Donna Heiland and Laura Rosenthal argue that one of the reasons English (and presumably other) departments have been less than fully engaged with assessment is that "the best known assessment efforts have targeted overall institutional performance and general-education outcomes rather than the concerns and outcomes of specific disciplines" (2011, p. 11).

On the one hand, this argument may seem counterintuitive, since these cross-cutting outcomes are so highly valued by faculty across fields. In this sense, critical thinking (for example) would seem to be an entry point for faculty to think about assessment in their own fields. Certainly it has served that purpose in many settings, spurred on, for example, by an initiative on "Engaging Departments" led by the Association of American Colleges and Universities.

On the other hand, critical thinking looks very different from one field to another, and it often employs different language as well. Consider, for example, Rosenthal's own account (in the University of Maryland teaching center newsletter, April & May 2011) of how assessment helped her design a better way to teach upper-level students to make arguments that are recognizable as literary criticism.

> **Rosenthal's [account] illustrates what assessment can look like when it is not only located in the academic department but driven by and deeply engaged with the field's distinctive ways of thinking, acting, and valuing.**

The intellectual practices she wants English majors to develop are arguably a subset of the broad category of "critical thinking." But her story starts not there but with a careful analysis of how her students *actually* respond to literary works (that is, it starts with assessment). Building on that foundation, she develops a five-stage model to guide learners toward "what my discipline generally understands as criticism" (p. 10), moving from understanding the literal meaning of the text to more nuanced arguments about its structure and historical context.

The NILOA survey finds that programs are eager to have more examples of thoughtful assessment, and it's easy to see why Rosenthal's work would be especially useful. In contrast to many accounts of program-level approaches—which typically focus on methods for gathering data—Rosenthal's illustrates what assessment can look like when it is not only *located* in the academic department but driven by and deeply engaged with the field's distinctive ways of thinking, acting, and valuing. Enlarging the supply (and increasing the visibility) of such examples would help move assessment more fully into the kind of disciplinary territory in which faculty live and work.

Engagement by Disciplinary and Professional Societies

The disciplinary and professional societies to which faculty belong can play a powerful role here, sending signals about what matters and what's worth doing. Historically, support and advocacy for the research role of the professoriate has held pride of place in virtually all of these organizations, but over the last two decades many of them have given greater emphasis to teaching and learning. In the process, in various ways and to varying degrees, the topic of assessment has also been taken up, as these organizations have created task forces on the topic, issued special reports, crafted guidelines for departments, made recommendations, collected case studies, and sponsored special initiatives and projects.

Their responses are not, of course, an even weave; how and how fully they have engaged with assessment depends on the history and culture of the field, how it thinks about itself in the educational landscape, and its signature habits of mind. For example, assessment has been a hard sell in the American Philosophical Association. According to Donna Engelmann, a faculty member at Alverno College who has been active in the organization, "there has been little official activity on the part of the APA in regard to assessment in philosophy."

And yet, she notes, there are signs of progress. An earlier and "explicitly hostile" statement on assessment was revised in 2008 in ways that reflect greater openness. And the APA and the American Association of Philosophy Teachers (a separate organization) now co-sponsor a seminar on teaching for graduate students in which assessment is an important strand.

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In other fields, assessment may be seen as important but in ways that have not easily connected with the language and imperatives of the larger assessment movement. In physics, for instance, one finds a robust, long-standing tradition of education research and an impressive collection of research-based instruments and tools (many readers will know of the Force Concept Inventory) for assessing student understanding of key concepts in the field (see for instance www.ncsu.edu/per/TestInfo.html and www.flaguide.org/resource/websites.php). And a search for "assessment" on the website of the American Physical Society (in June 2011) turned up all manner of resources—about assessment at the K-12 level, the impact of undergraduate research, research-based teaching, course design, and so forth—all of which speak to an interest in evidence about student learning.

But what one does not find are materials about the kind of program-level assessment of student learning outcomes that departments today are being called upon to conduct. In short, the field has a robust tradition of studying student learning, but that work has not been framed by its flagship scholarly society in ways that converge with the assessment movement.

As in philosophy, however, there are signs of movement. The APS will soon release guidelines for department review which—according to Noah Finkelstein, chair of the organization's Committee on Education and a faculty member in the department of physics at the University of Colorado—will include attention to educational goals and "assessment metrics that attend to those learning goals" (email, June 8, 2011).

The work of the Mathematical Association of America (MAA) offers a different example, one that has engaged scores of departments. In a useful overview of his field's response to assessment, Bernard Madison begins with the establishment in the late 1980s of a twelve-member subcommittee on assessment (he was its chair) of the Committee on the Undergraduate Program in Mathematics.

Charged with advising MAA members about how to respond to assessment, the subcommittee issued a first report in 1992 entitled *Heeding the Call for Change*. This was followed, in 1995, by a set of guidelines to assist departments in designing and implementing assessment strategies. The subcommittee also collected case studies of departmental assessment and published 72 of them in a 1999 volume.

Drawing, then, on a decade of work, the MAA secured funding from the National Science Foundation for a three-year project, Supporting Assessment in Undergraduate Mathematics (SAUM). Launched in 2002, SAUM held workshops for teams of faculty from 66 colleges and universities. Along the way, the project also shared its insights and findings with the wider field through panels at national and regional meetings, special forums at MAA

"[Physics] has a robust tradition of studying student learning, but that work has not been framed by its flagship scholarly society in ways that converge with the assessment movement.

section meetings, and an expanded and updated set of case studies. The SAUM website includes a bibliography, a communication center for SAUM workshops, links to other relevant sites and resources, FAQs, case studies and papers published earlier, new case studies, an online assessment workshop, and a downloadable copy of the project's culminating volume, *Supporting Assessment in Undergraduate Mathematics* (2006).

This is not to say that assessment has gone smoothly in mathematics or that everyone is deeply engaged. Madison points to a number of "tensions and tethers" that have hindered meaningful assessment efforts in undergraduate mathematics, and his analysis would resonate in most fields.

But the work goes on. In 2006, Madison drew on the activities of SAUM to edit a collection of ten longer case studies entitled *Assessment of Learning in College Mathematics*—the second volume in the Association for Institutional Research's series on assessment in the disciplines. After SAUM ended in 2007, the MAA created a new Committee on Assessment in early 2008, which continues to disseminate information about assessment activities at regional and national meetings of the MAA.

A final "middle-ground" example (more extensive than what some fields have done, less than others) is my own field, English Studies, as represented by the Modern Language Association (MLA). Encompassing rhetoric and composition (where there's a long history of assessment research and practice) as well as the study of literature, language, and culture (where there is not), the field was once described by a prominent department chair as "not a neat, discrete discipline but a congeries of subject matters" (quoted in the essay by Feal, Laurence, & Olsen, 2011, p. 62). Like philosophy and other humanities, it is one in which assessment was not likely to find a happy reception. And yet, like the MAA, the MLA has stepped into the breach.

In 1992 (fairly early on in the assessment movement, that is), the MLA's Association of Departments of English (ADE)

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"The scholarly and professional societies have a critical role to play in promoting this kind of disciplinary view of assessment. . . . But their most important contribution, as well as their biggest challenge, lies in building disciplinary communities of inquiry around good questions about student learning.

organized an ad hoc committee on assessment to consider "what advice the ADE can usefully offer to departments and chairs engaged with the problem of developing assessment initiatives" (1996, p. 2). As grist for its work, the committee surveyed department chairs, from whom they heard stories of "hope, challenge, and frustration" and, perhaps predictably, a sense from some that "nothing need be said yet at all about this still tender and conflicted topic" (p. 2).

Accordingly, the report was cautious and open-eyed about what could go wrong as departments struggled to document their students' learning, but (full disclosure: I was a member of the task force) it also offered smart advice, still relevant today, about the most constructive ways to think about assessment. Among other advice was this caution: "Don't blow it off."

Subsequently, assessment has been a thread running through various ADE and MLA activities. It is, for instance, a theme in the 2003 *Report of the ADE Ad Hoc Committee on the English Major*. A paper prepared several years later as part of MLA's participation in a Teagle Foundation initiative on the relationship between the undergraduate major and the goals of liberal education (2006-2008) includes as its fourth and final recommendation "the adoption of outcomes measurements" (although, in truth, the report is skimpy on this point). The Winter 2008 *ADE Bulletin* includes a special section on "Assessment Pro and Con." (According to MLA officials, "a search on the category 'assessment of student learning' returns a list of 135 articles in the *ADE Bulletin* archive.") And in a 2010 survey of department chairs, 86 percent reported that their unit had implemented an assessment process, and 90 percent said that assessment had the potential to improve student learning in their department's programs (developments reported in this paragraph are from the chapter by Feal, Laurence, & Olson in the Heiland & Rosenthal volume).

Recently, leaders in the field of literary study have come together to push for further progress. In their collection of essays enticingly entitled *Literary Study, Measurement, and the Sublime: Disciplinary Assessment*, Donna Heiland and Laura Rosenthal argue for a deeper level of engagement by colleagues in the fields of English and modern languages:

> While most departments . . . are conducting assessment projects, and while many faculty members currently participate in those projects, *and* while many instructors have strong opinions about assessment, few of the questions raised by assessment have attracted the kind of sustained thought that we give to other aspects of professional life. (pp. 9–10)

The volume, developed with support from the Teagle Foundation (which has funded a good deal of discipline-based work on teaching, learning, and assessment) is not an official publication of the MLA, but it features big names in the field—including recent past president Gerald Graff—and builds on statements and materials generated under the organization's auspices. Predictably, the essays do not speak in a single voice, ranging from alarm to energetic advocacy, from theory to concrete departmental practice. But what they share is a view that assessment should be firmly grounded in the discipline and shaped by the knowledge practices and values that define it, its place in the academic and cultural landscape, and a sharper sense of the learning goals that can make students' experience with literature matter more—to them, to higher education, and to society.

Clearly, the scholarly and professional societies have a critical role to play in promoting this kind of disciplinary view of assessment. Indeed, several writers in the Heiland and Rosenthal volume (and also respondents to the NILOA survey of program-level practices) urge these organizations to step up to the assessment plate. Their efforts can be especially useful in navigating the movement's politics—the place where many of them start—by establishing committees, issuing statements, and the like. But their most important contribution, as well as their biggest challenge, lies in building disciplinary communities of inquiry around good questions about student learning.

Building Bridges to the Scholarship of Teaching and Learning

One of the most vexing realities in higher education is the existence of silos that keep good ideas and practices from

traveling across the academic landscape in useful ways. Assessment has certainly been plagued by its tendency to operate as "a train on its own track" (to invoke a much-quoted image employed by Peter Ewell in assessment's early days), disconnected from other work, functions, and initiatives to which it should, in theory, be intimately related and which would open opportunities for deeper faculty engagement and greater impact.

Most campuses today are aware of this problem and have tried, with varying degrees of success, to connect assessment more firmly to curriculum reform and pedagogical innovation. But I want to urge an additional point of connection, as well—to the scholarship of teaching and learning. In this work, faculty bring their skills and values *as scholars in their field* to their work as educators, posing questions about their students' learning; gathering and analyzing evidence about those questions; making improvements based on what they discover; tracking the results; and sharing the insights that emerge in ways that can reviewed, critiqued, and built on by others.

As this definition suggests, the scholarship of teaching and learning and student outcomes assessment inhabit some common ground. Both ask questions about what, how, and how well students are learning. Both bring a systematic, evidence-based approach to questions of educational quality and improvement. And both go public about the learning that happens (or does not) in college and university classrooms. In these ways, the scholarship of teaching and learning and student outcomes assessment are, if you will, members of the same extended family, both aimed at building communities of inquiry and improvement.

But the two movements have mostly proceeded on separate tracks. From its early days in higher education, assessment was "consciously separated from what went on in the classroom," Peter Ewell explains (2009, p. 19), while the *sine qua non* of the scholarship of teaching and learning is faculty inquiry into the learning of their own students. In turn, the emerging scholarship of teaching and learning community sought to distance *its* approach and language from those of assessment, concerned that getting too cozy with an institutional or administrative agenda could put at risk the grass-roots, intellectual impulse behind the movement. Indeed, many faculty who have taken up the scholarship of teaching and learning have looked with mixed feelings, and even alarm, at signs of buy-in from the provost or president, fearing that such work could become yet another requirement or be co-opted to advance someone else's agenda.

> **"The scholarship of teaching and learning and student outcomes assessment are, if you will, members of the same extended family, both aimed at building communities of inquiry and improvement.**

Today, however, there are signs of convergence. In a 2009 survey of campuses participating in the Carnegie Academy for the Scholarship of Teaching and Learning (the CASTL program, which ran from 1998-2009), many respondents noted connections with assessment. Asked about an array of "wider institutional agendas" to which the scholarship of teaching and learning had contributed, for instance, they ranked assessment fourth.

And attitudes toward assessment have been affected as well. Because of the climate created by the scholarship of teaching and learning, one campus reported, "assessment is no longer a 4-letter word"; faculty have begun to understand "that it can be done 'from the inside' according to their curiosities and remaining within their control." Another noted, "Assessment conversations have connected to the scholarship of teaching and learning to generate more meaningful assessments." A third reported looking for ways to "build bridges" between the two movements. It seems, in short, that the principles and practices of the scholarship of teaching and learning may have something to offer the work of assessment, and this is particularly so around the challenges of faculty engagement (see Hutchings, Huber, & Ciccone, 2011).

For starters, while a focus on the academic department emerged as a kind of second-level issue in assessment (with attention to cross-cutting outcomes in the first position), the scholarship of teaching and learning has been framed from the beginning as disciplinary work. CASTL, for instance, began its program for campuses by offering up a "sacrificial definition" which pointed explicitly to the importance of "methods appropriate to disciplinary epistemologies" (Cambridge, 2004, p. 2). In this same spirit, CASTL's fellowship program for individual scholars was organized in disciplinary cohorts, so historians could work with other historians, chemists with chemists, and so forth (though the final cohort was selected around the cross-disciplinary theme of integrative learning).

Along the way, Mary Taylor Huber and Sherwyn Morreale edited a volume on *Disciplinary Styles in the Scholarship of Teaching and Learning* (2002), exploring the quite different contexts for such work in a broad array of fields. More recently, disciplinary communities have begun to organize themselves as special-interest groups (in history, sociology,

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geography, biology, and the humanities) under the umbrella of the International Society for the Scholarship of Teaching and Learning.

The point of this disciplinary orientation is not to deny the value of working across disciplines; some of the most powerful experiences in the CASTL program, for instance, came as a result of connections and borrowing across fields. The point is that the scholarship of teaching and learning is *practitioner* research; as such, it focuses not on learning in general or even learning across the campus (how well do this institution's students solve problems or write?) but asks (as one CASTL participant from English did) "what does it mean for me to teach *this* text with *this* approach to *this* population of students at *this* time in *this* classroom?" (Salvatori, 2002, p. 298).

This is a formulation that assessment has largely eschewed, and in so doing it has missed the opportunity to tap into a tremendous well of faculty energy. Building bridges with the scholarship of teaching and learning might help move assessment down into the discipline and the classroom, where real change happens.

The scholarship of teaching and learning has also cultivated a wide variety of methods, reflecting the range of approaches characteristic of different fields. As Huber and Morreale point out in the introduction to their volume on disciplinary styles, scholars of teaching and learning bring their fields' "intellectual history, agreements, disputes about subject matter and methods" to the scholarship of teaching and learning (Huber and Morreale, 2002, p. 2). Thus, while there are interesting instances of methodological borrowing (a microbiologist employing think-alouds that she learned about from a historian, for instance), scholars of teaching and learning have mostly relied on methods from their own fields.

In this spirit, we see English faculty investigating their students' learning through the use of "close reading," management professors using focus groups, and psychologists looking for ways to establish comparison groups. In fairness, much of the literature on assessment and many of its most exciting developments reinforce this notion of disciplinary styles. But in moving from departmental to more deeply disciplinary work, greater emphasis on the field's signature methods and conceptions of evidence and argument might well catalyze a next stage of work.

Finally, assessment could take a page from what might be called the scholarship of teaching and learning's "theory of action." Assessment proceeds on the assumption that data will prompt people to make changes: You assess, you get results, and you make improvements based on the results. As it turns out, the process is balkier than this formulation suggests. As Charles Blaich and Trudy Banta argue in a January/February 2011 *Change* article, the biggest challenge facing assessment is not getting good data but prompting action.

In fairness, the scholarship of teaching and learning has also placed significant hopes on the power of data and evidence to drive improvement. And it has faced its own challenges in this regard; translating highly contextualized findings from a scholarship of teaching and learning project into terms that can be used by those in other settings isn't easy. But the theory of action that distinguishes such work from assessment is best captured in its invocation of and identity as "scholarship."

That is, the Project (with a capital P) of the scholarship of teaching and learning is not simply aimed at local improvement. Rather, the faculty engaged in this work see themselves as part of a larger knowledge-building enterprise, studying and adding to what is understood about how students learn history or sociology or (for that matter) the integrative skills to think across fields.

This aspiration is part of what has given the work its appeal: It's local but it's not *only* local. As such, it must be captured in ways that others can review, draw from, and build on. This is what we mean when we call something scholarship. And in the culture of academic life, the scholarship of teaching and learning's larger, knowledge-building aspiration has been an engine for faculty engagement that assessment might well tap into.

Modest Steps Toward Shared Goals

I'm not arguing that assessment should take on the mantle of the scholarship of teaching and learning or that the scholarship of teaching and learning should become "the new assessment." There are good reasons that the two movements have kept their separate identities, and they should continue to do so. Blurring the lines between them too much could put at risk the intellectual impulse that lies behind the scholarship of teaching and learning and might not serve assessment's imperatives well either. But thinking of the two movements as not-so-distant cousins can open the door to useful exchange and cross-fertilization.

Imagine, for instance, a campus center for teaching that brings the two groups together, or an occasional lunch hosted by the provost's office. What questions about students' learning are the two communities investigating? Are there any overlaps? What projects does each have underway or in mind for the future, and how might they collaborate or inform one another's efforts?

Imagine the assessment office commissioning groups of faculty to undertake scholarship of teaching and learning projects that more deeply explore (within their respective academic programs) findings from, say, the National Survey of Student Engagement or the Collegiate Learning Assessment. Or imagine those working on assessment documenting their efforts in ways that could be peer reviewed and put in a dossier for promotion and tenure, under the heading of the scholarship of teaching and learning.

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Although my focus in this piece is on the benefits that might come to assessment through the scholarship of teaching and learning, both movements would benefit from a bi-directional exchange. Drawing on the principles of the scholarship of teaching and learning can help assessment solve the movement's most enduring challenge: engaging faculty and making a difference in the classroom. Meanwhile, a closer connection with assessment may help embed the scholarship of teaching and learning more deeply in institutional life, raising its chances for long-term viability. But not only do the two movements stand to gain from a closer connection—higher education needs their combined strengths in making student learning a site for serious faculty inquiry, meaning making, and improvement. C

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Within the NILOA site, also note links related to assessment resources by field: www.learningoutcomesassessment.org/CollegesUniversityPrograms.html#Art

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Literature and Online Resources
Learning and Assessment in Higher Education

Useful Online Resources

National Institute for Learning Outcomes Assessment (NILOA)

- Resource Library - http://www.learningoutcomeassessment.org/publications.html
- Occasional Papers - http://www.learningoutcomeassessment.org/occasionalpapers.htm (See also select papers below)
- Reports - http://www.learningoutcomeassessment.org/NILOAReports.htm

NC State's *Internet Resources for Higher Education Outcomes Assessment*
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- **Amy Driscoll**, Former Director of Teaching, Learning, and Assessment, CSU Monterey Bay

Guest Faculty Have Included:

- **Trudy Banta**, Senior Advisor to the Chancellor for Academic Planning and Evaluation, IUPUI
- **Marilee Bresciani**, Professor of Postsecondary Education Leadership, San Diego State University
- **Peter Ewell**, Vice President, National Center for Higher Education Management Systems
- **Adrianna Kezar**, Associate Professor for Higher Education, University of Southern California
- **Jillian Kinzie**, Associate Director, Center for Postsecondary Research & NSSE Institute
- **Kathleen Yancey**, Kellogg W. Hunt Professor of English, Florida State University

Learning Goals

Participants who complete Academy requirements will acquire foundational knowledge of the history, theory, and concepts of assessment; they will also develop expertise in training and consultation, campus leadership for assessment, and the scholarship of assessment.

Application Process and Deadline

Each year about 30 professionals are admitted. Participants are selected through an online application process. Applications for the 2015-16 class will be accepted from November 15, 2014 until February 15, 2015.

More Information

For more information and application materials, please see **Assessment Leadership Academy** on the WSCUC website http://www.wascsenior.org/ala/overview

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WSC Senior College and University Commission

ARC 2015

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