Program Assessment Workshop
Gavilan College   January 27, 2009
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Program assessment is an <u>on-going</u> process designed to <u>monitor</u> and <u>improve</u> student learning. Faculty:
- develop explicit statements of what students should learn (SLOs).
- verify that the curriculum is designed to foster this learning (alignment).
- collect empirical evidence to assess student learning.
- assess the evidence and reach a conclusion (satisfied or disappointed with student learning)
- use these data to improve student learning (close the loop).

Articulating Program Learning Outcomes:

Knowledge	Skills	Attitudes/Values/Predispositions

Learning Outcomes at Different Levels

- **Course Level**: Students who complete this course can calculate and interpret a variety of descriptive and inferential statistics.
- **Program Level**: Students who complete the Psychology program can use statistical tools to analyze and interpret data from psychological studies.
- **Institutional Level**: Graduates from our campus can apply quantitative reasoning to real-world problems.

Examples of Gavilan PLOs

1. Graduates can "analyze and describe the historical and contemporary implications of art in terms of aesthetics, content and meaning" (Art, p. 73)
2. Graduates can "… explain the meaning of common medical terms" (Business Medical Office Option, p. 87).
3. Graduates can "install and test hardware and software necessary for network connectivity" (Computer Networking, p. 101).
4. Graduates can "create and produce time-based visual art and sound" (Digital Media, Digital Audio/Video Option, p. 110).
5. Graduates can "compare and contrast various mathematical models and then apply the appropriate model to real world problems" (Mathematics, p. 123).
6. Graduates can "… communicate clearly using written, oral, electronic, and graphical means" (Physical Science and Engineering, p. 130).

Some Issues to Consider When Reviewing Your Program Learning Outcomes

1. Use active verbs; avoid words such as "understand," "demonstrate understanding" or "demonstrate familiarity with" because they don't clarify what students can do to demonstrate their learning.

Students understand how the human body works.
vs.
Students can describe how structures of the human body function.

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2. Don't confuse a learning process or an assignment with a learning outcome.

Students will complete an internship.
vs.
Students can provide counseling services to a diverse community.

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3. Don't forget broad outcomes that are developed in the program, such as those dealing with communication, information literacy, collaboration, leadership, or critical thinking skills.

4. Outcomes should be consistent with the stated mission of the program in the catalog and the required curriculum. For example, if the curriculum requires students to take two science courses, I would expect to see a PLO dealing with science.

5. Outcomes should state what students can do, but passing a licensing exam does not specify the characteristics of your graduates, such as the ability to provide professional services, define professional terms, apply professional ethical standards, etc.

6. Verify that course-level outcomes align with the program-level outcomes as designated on the curriculum map. This will allow you to combine course-level assessment results to reach conclusions about program-level outcomes.

The Cohesive Curriculum

- Coherence
- Synthesizing Experiences
- Ongoing Practice of Learned Skills
- Systematically Created Opportunities to Develop Increasing Sophistication and Apply What Is Learned

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Alignment Matrix (Curriculum Map)

Course	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
100	I, D				I
101		I			D
102	D		D		D
103		I			D
200	D		D		
229		I			D
230			D, M		M
280					
290	M		D, M		M

I = Introduced, D = Developed & Practiced with Feedback, M = Demonstrated at the Mastery Level Appropriate for Graduation

Examples of Evidence You Might Collect to Assess a Program-Level Outcome

- Exams or parts of exams
- Homework assignments
- Group projects
- In-class activities and presentations
- Internship and fieldwork reports and supervisor's evaluations
- Lab reports
- Learning journals
- Portfolios
- Results from Course-Level Assessments—generally, we should emphasize summative assessment (indicated by *M* on the curriculum map)

Rubrics

Scoring rubrics are explicit schemes for classifying products or behaviors into categories that vary along a continuum. They can be used to classify virtually any product or behavior, such as essays, research reports, portfolios, works of art, recitals, oral presentations, performances, and group activities. Rubrics can be used to provide formative feedback to students, to grade students, to help students learn, and/ to assess learning outcomes.

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

- Writing Rubric (Johnson Community College)
- Writing Rubric (Roanoke College FIPSE Project)
- Information Competence (CA State University)
- Leadership (Bowling Green University)

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

Draft of Writing Rubric—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.

Rubrics for Assessing Information Competence in the California State University

ACRL Standard	Beginning	Proficient	Advanced
1. Determine the Extent of the Information Needed	Student is unable to effectively formulate a research question based on an information need.	Student can formulate a question that is focused and clear. Student identifies concepts related to the topic, and can find a sufficient number of information resources to meet the information need.	Question is focused, clear, and complete. Key concepts and terms are identified. Extensive information sources are identified in numerous potential formats.
2. Access the Needed Information Effectively and Efficiently	Student is unfocused and unclear about search strategy. Time is not used effectively and efficiently. Information gathered lacks relevance, quality, and balance.	Student executes an appropriate search strategy within a reasonable amount of time. Student can solve problems by finding a variety of relevant information resources, and can evaluate search effectiveness.	Student is aware and able to analyze search results, and evaluate the appropriateness of the variety of (or) multiple relevant sources of information that directly fulfill an information need for the particular discipline,
3. Evaluate Information and its Sources Critically	Student is unaware of criteria that might be used to judge information quality. Little effort is made to examine the information located	Student examines information using criteria such as authority, credibility, relevance, timeliness, and accuracy, and is able to make judgments about what to keep and what to discard.	Multiple and diverse sources and viewpoints of information are compared and evaluated according to specific criteria appropriate for the discipline. Student is able to match criteria to a specific information need, and can articulate how identified sources relate to the context of the discipline.
4. Use Information Effectively to Accomplish a Specific Purpose	Student is not aware of the information necessary to research a topic, and the types of data that would be useful in formulating a convincing argument. Information is incomplete and does not support the intended purpose.	Student uses appropriate information to solve a problem, answer a question, write a paper, or other purposes	Student is aware of the breadth and depth of research on a topic, and is able to reflect on search strategy, synthesize and integrate information from a variety of sources, draw appropriate conclusions, and is able to clearly communicate ideas to others
5. Understand the Economic, Legal, and Social Issues surrounding the Use of Information, and Access and Use Information Ethically and Legally	Student is unclear regarding proper citation format, and/or copies and paraphrases the information and ideas of others without giving credit to authors. Student does not know how to distinguish between information that is objective and biased, and does not know the role that free access to information plays in a democratic society.	Student gives credit for works used by quoting and listing references. Student is an ethical consumer and producer of information, and understands how free access to information, and free expression, contribute to a democratic society.	Student understands and recognizes the concept of intellectual property, can defend him/herself if challenged, and can properly incorporate the ideas/published works of others into their own work building upon them. Student can articulate the value of information to a free and democratic society, and can use specific criteria to discern objectivity/fact from bias/propaganda.

*Prepared by the CSU Information Competence Initiative, October 2002, based on the 2000 ACRL *Information Literacy Competency Standards For Higher Education.* For more information, see http://www.calstate.edu/LS/1_rubric.doc.

Levels of Leadership

"Leading" involves guiding a group to achieve its goal. It does not require formal authority or power, but is more a matter of influence, integrity, spirit, and respect. Leadership quality in this course will be evaluated using the features defining the four levels shown below.

Level 1 Leadership (Beginner)
- Gives an impression of reluctance or uncertainty about exercising leadership
- Focuses exclusively on the task to be accomplished without regard to the people, or focuses exclusively on the interpersonal relations and attitudes of people in the group without regard to the task
- Asks for ideas or suggestions without intending to consider them
- May show favoritism to one or more group members
- Takes the group off track

Level 2 Leadership (Novice)
- Shows occasional signs of insecurity about leading, or is overly confident about own leadership skills
- Gives too much attention to the task or to interpersonal relations in the group
- Asks for ideas and suggestions but neglects to consider them
- Lets the group ramble or stray off track too much, or keeps the group so rigidly on track that relevant issues or concerns are ignored
- Has an agenda and goals for the group

Level 3 Leadership (Proficient)
- Looks comfortable and confident in exercising leadership duties
- Circulates a prepared agenda in advance
- Balances the need for task accomplishment with the needs of individuals in the group
- Listens actively and shows understanding by paraphrasing or by acknowledging and building on others' ideas
- Shows respect to all group members
- Shares information openly
- Assigns tasks by seeking volunteers, delegating as needed
- Checks for agreement, acceptance, buy-in
- Gives recognition and encouragement

Level 4 Leadership (Advanced)
All of the positive features of proficient leadership, plus:
- Engages all group members
- Keeps the group on track by managing time, providing coaching or guidance, using humor, or resolving differences, as needed
- Intervenes when tasks are not moving toward goals
- Involves the group in setting challenging goals and planning for their accomplishment
- Helps others to provide leadership

Managing Group Readings

1. Two independent readers/document, perhaps with a third reader to resolve discrepancies
2. Paired readers

Before inviting colleagues to a group reading,
1. Develop and pilot test the rubric.
2. Select exemplars of weak, medium, and strong student work.

Inter-Rater Reliability

- Correlation Between Paired Readers
- Discrepancy Index

Scoring Rubric 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 the degree of agreement. This is often done on a blackboard, with each person in turn announcing his/her ratings as they are entered on the board. Alternatively, the facilitator could ask raters to raise their hands when their rating category is announced, making the extent of agreement very clear to everyone and making it very easy to identify raters who routinely give unusually high or low ratings.
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. You might allow the group to revise the rubric to clarify its use, but avoid allowing the group to drift away from the learning outcome being assessed.

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. What are the implications of the results for curriculum, pedagogy, or student or faculty support services?
   e. How might the assessment process, itself, be improved?

Assessment Standards: How Good Is Good Enough?

Examples:
1. We would be satisfied if at least 80% of the students are at level 3 or higher.
2. We would be satisfied if no more than 5% of students are at level 1 and at least 80% are at level 3.
3. We would be satisfied if at least 80% of the students are at level 3 and at least 10% are at level 4.

Closing the Loop

Sometimes results support the status quo. Celebrate!

If results suggest the need for change, you might consider these four types of change:
- Pedagogy—e.g., changing course assignments; providing better formative feedback to students; use of more active learning strategies to motivate and engage students
- Curriculum—e.g., adding a second required speech course, designating writing-intensive courses, changing prerequisites
- Student support—e.g., improving tutoring services; adding on-line, self-study materials; developing specialized support by library or writing center staff; improving advising to ensure the courses are better sequenced
- Faculty support—e.g., providing a writing-across-the-curriculum workshop; campus support for TAs or specialized tutors

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Some Friendly Suggestions for Assessment Planning

1. Focus on what is important.
2. Don't try to do too much at once.
3. Take samples.
4. Pilot test procedures.
5. Use rubrics.
6. Close the loop.
7. If you rely on adjunct faculty, include them in assessment.
8. Keep a written record.

References
Allen, M. J. (2004). *Assessing academic programs in higher education*. Bolton, MA: Anker.

Allen, M. J. (2006). *Assessing general education programs in higher education*. Bolton, MA: Anker.

Krueger, R. A., & Casey, M. A. (2000). Focus groups: A practical guide for applied research. (3rd ed.). Thousand Oaks, CA: Sage.

Time for Group Work

*   Work with colleagues who contribute to your program.

Steps:

1. Review the list of program-level outcomes to ensure that they are reasonable.
2. Develop the curriculum map and ask if any changes are necessary.
3. Verify that course-level outcomes are consistent with the curriculum map.
4. Identify how and when each program-level outcome will be assessed. Summarize this in a multi-year plan, such as this chart.

Program-Level Outcome	Assessment Year	Evidence to Be Assessed

Please email your completed assessment plan(s) to <u>Angie Oropeza</u> by <u>February 24</u>.