Today's Agenda

1) Introductions
2) Example #1: Biology
3) Example #2: Economics
4) Program Assessment Status: Checklist
5) Activity: Your Turn
6) Resources
7) Wrap Up

Workshop Outcomes

At the end of the workshops, participants can

1. List the steps in an assessment cycle
2. Name at least one myth associated with assessment
3. Name where assessment resources are located
Example #1: Biology

Goal: Effective writing skills
Outcome: Write in the primary genres of their chosen field.

Goal #2: Sufficient foundation to enter graduate school or a biology-related profession
Outcome #5: Communicate research findings
Outcome: Write a report of experimental research
Learning Processes

- **Learning Processes** = activities, courses, assignments
- **Curriculum map**
  - Visually maps where students are exposed to outcomes
  - Appears as a table: outcomes across the top and requirements down the side (or vice versa)
- **Indicate "I," "E," and "M"**
  - Learning requires multiple learning trials
- **Include all requirements: courses; out-of-class activities (e.g., exit interview, research symposium); national exams**

Assessment Process

- **Basic process:** ask a question; collect data; evaluate data; interpret results & report
- **Ask a meaningful question**
- **Create a feasible time line**
- **Collect data that will**
  - help answer the question
  - shed light on the outcome
- **Large programs:** Collect data from a representative sample of students

Assessment Results

- **BEFORE collecting data/evidence:**
  - Discuss “criteria for success”
  - Consider possible ways results could be used
- **AFTER getting results, involve the department**
  - Assessment is faculty driven, faculty supervised
  - Faculty members are in the best position to use results
- **Involve students, administrators, community members whenever possible**
Action Plan for Change

- We assess so that we can document success and improve when needed.
- Create an action plan when results fall short.
- Use results. Areas where actions may be needed:
  - How a course is taught; what is taught; when it's taught.
  - Prerequisites; frequency of course offerings.
  - Benchmarks/standards (students may not be aware of).
  - Goals or student learning outcomes (revise).
  - Assessment process (modify).

Example #2: Economics

Learning Outcomes

- Describe what students learn, rather than what faculty will do or “cover”.
- Important to the program and discipline.
- Observable to you and others.
- Rely on verbs.
- 3-6 outcomes are ideal.
Learning Processes (Curriculum Map)

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Key: i = introduced; E = emphasized; M = mastered at senior level; A = assessed

Assessment Process

- Start where you are
- Consider the size of the program and available resources
- Pre-determine the criteria for success
- Tailor the results report to the audience

Assessment Results

- Celebrate and share good news
- Discuss and reflect on
  - positive results
  - disappointing results
- Ask how/where improvements can be made
Action Plan for Change

- Agree on the needed changes
- Document the action plan
- Consider how the changes will be assessed in the next assessment cycle
- Share the action plan
- Put the action plan in motion

Where is Your Program?

Program Assessment Status: ✓ list
- School/college goals & outcomes published
- Program goals & outcomes published
- Course outcomes published
- Long-range assessment plan drafted
- Assessment cycle completed
- Assessment results used

Publication options:
- Catalog
- Program website
- Brochure
- Program sheet
- Annual report
- Syllabi

Your Turn . . .

1. Complete the checklist
2. Circle 1 or 2 areas that need attention
3. List the actions you and/or your colleagues could take
4. Share in small groups
5. After discussion, write down what you recommend your program do next
Resources

- Assessment Office
  - Workshops each semester
  - Poster session: Nov 10, 3:30-5:30, Sinclair Library
  - Webpage: http://manoa.hawaii.edu/assessment
  - Lending Library in HAW 107
  - “Resources” section of website lists available books
- Assessment Coordinators (college- & program-level)
- Google

Wrap Up

- Questions?
- Were the workshop outcomes achieved?
  - Can you:
    1. List the steps in an assessment cycle?
    2. Name at least one myth associated with assessment?
    3. Name where assessment resources are located?
- Workshop evaluation: please turn it in

Thank You!

Assessment Office
http://manoa.hawaii.edu/assessment

Marlene Lowe, 956-4283
mplowe@hawaii.edu

Monica Stitt-Bergh, 956-6669
bergh@hawaii.edu
**Program Goals.** Graduates have
1. knowledge of biological concepts, processes, systems, and techniques;
2. a sufficient foundation to enter graduate school or a biology-related profession.

Students can
1. describe fundamental biological processes and systems;
2. demonstrate proper laboratory practice, proper use of equipment and the ability to use basic and advanced techniques in several areas of biology;
3. perform appropriate analysis of data and draw valid conclusions from their analysis;
4. locate and use scientific literature; critically evaluate journal articles from the primary literature;
5. communicate findings of research in appropriate formats (e.g., scientific journal article; poster or conference presentation).

**Outcome 1.** The faculty decided to add an inquiry-based learning method (e.g., concept maps; blogs) in 105, 205, 215, 325, and 435 to reinforce content learning. In addition, faculty members will emphasize in lectures how content connects across courses.

**Outcome 2.** The faculty decided that in subsequent assessments, the data-collection method should be expanded to additional courses so students have the opportunity to fully demonstrate their capability. The Assessment Coordinator will revise the assessment plan to reflect this change.

The Department Chair convened a meeting in February and the Assessment Coordinator reported on the results for Outcomes 1 & 2.

**Outcome 1.** 78% of students answered all questions correctly; 15% missed 1 or 2 questions; 7% missed 3 or more questions. Results did not meet pre-established criteria for success, which was 90% of students correctly answer all questions.

**Outcome 2.** 93% of students were rated as “met expectations” or “exceeded expectations” on the Lab Observation Checklist. 6% were rated “developing” and 1% were rated “did not meet expectations.” Raters reported that students who were “developing” or “did not meet expectations” demonstrated ability in only one area. Results met pre-established criteria for success, which was 90% of students meet or exceed expectations.

**OVERVIEW**
- **Timeline.** Outcomes 1 & 2 in 2006-07; Outcomes 3, 4, & 5 in 2009-10. Repeat cycle in 2010-11.
- **Assessment research question.** Do seniors meet our standards (benchmarks) for the program outcomes?
- **Data-collection method.** Outcome #1: course exams. #2: observations. #3, #4, & #5: research project.
- **Sampling:** 30%, randomly selected.
- **Evaluation of data:** designated exam questions evaluated by course instructor and reported to assessment coordinator; lab assistants complete observation checklist; faculty team applies rubric to written research report and to oral presentation of results.
- **Report results:** Assessment coordinator summarizes results for department discussion and action.
Program Assessment Example: Economics

Program Goals. Graduates
1. understand the framework economists use to analyze social and economic issues;
2. recognize how economic behavior and policies can affect both the aggregate level of prosperity and differentials in prosperity across members of society.

Students can
1. apply the economic perspective to assess the validity, significance, and consequences of real-world statements and situations they encounter;
2. make reasonable predictions regarding how scarcity affects choices and how people respond to incentives;
3. distinguish between efficiency and equity, and determine the social gains and losses/winners and losers that result from particular instances of economic behavior and policies;
4. assess how economic behavior and policies affect members of society;
5. apply appropriate economic models to highlight key aspects of decision-making.

Outcome 4. The faculty were satisfied with the results and no changes were recommended; however, the faculty noted that if the “marginal” category increases in the next assessment cycle (in 2010) action will be needed.

Outcome 5. The faculty decided students be given more opportunities to apply economic models through case studies in E250. The faculty also decided to emphasize this outcome in E380.

The Department Chair convened a meeting in March and the Assessment Coordinator reported on the results for Outcomes 4 & 5.

Outcome 4. 90% of students were rated as “exceptional” or “acceptable.” The remaining 10% were rated as “marginal.” Results met the pre-established criteria of success, which was 90% of students rated “exceptional” or “acceptable.”

Outcome 5. 80% of students were rated as “acceptable.” 15% were rated “marginal” and 5% were rated as “unacceptable.” Results did not meet pre-established criteria of success, which was 90% of students rated as “exceptional” or “acceptable.”

Overview
• **Timeline.** Outcomes 4 & 5 in 2007-08; Outcomes 1, 2, & 3 in 2008-09
• **Assessment research question.** Have we achieved our desired program learning outcomes?
• **Data-collection method.** Outcomes 1, 2, & 3: standardized exam; Outcomes 4 & 5: capstone project.
• **Sampling:** Outcomes 1, 2, & 3: all graduating seniors; Outcomes 4 & 5: 50% randomly selected.
• **Evaluation of data:** Faculty team agrees on the exam cut-off values/benchmarks; faculty team applies rubric to capstone project.
• **Report results:** Faculty teams summarize results and make recommendations then submit them to the Assessment Coordinator for department discussion and action.
Program Assessment Resources

- Assessment Office
  - Staff
    - Marlene Lowe: 956-4283, mplowe@hawaii.edu
    - Monica Stitt-Bergh: 956-6669, bergh@hawaii.edu
  - Workshops/Events
  - Poster Session - Nov. 10, 2008, 3:30 - 5:50 pm, Sinclair Library
  - Webpage - http://manoa.hawaii.edu/assessment
    - FAQs
    - Assessment How-to’s
    - Links to: handbooks/guides, articles, university assessment & institutional research websites
  - Lending Library (HAW 107)
    - List of available books in “Resources” section of website

- School/College and Department Assessment Coordinators
- Google

Classroom Assessment and Teaching Resources

- Center for Teaching Excellence
  - http://www.cte.hawaii.edu

Student Support Resources

- Student Success Center
  - Offers study groups, learnability sessions, tutoring, exam proctoring, etc.
  - http://gohere.manoa.hawaii.edu
American colleges have a long history of grading and certifying student work. The more recent practice of assessment builds on that history by looking at student achievement not only within courses but across them, asking about cumulative learning outcomes. As a systematic process of gathering, interpreting, and using information about student learning, assessment is a powerful tool for educational improvement. . . . The core value behind [these 9 principles] is the importance of improving student learning. Implicit in the principles that follow is a vision of education that entails high expectations for all students, active forms of learning, coherent curricula, and effective out-of-class opportunities; to these ends, we need assessment--systematic, usable information about student learning--that helps us fulfill our responsibilities to the students who come to us for an education and to the publics whose trust supports our work. . . .

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 continuous 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 continuous 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.

Authors:

Alexander W. Astin, University of California at Los Angeles; Trudy W. Banta, Indiana University-Purdue University at Indianapolis; K. Patricia Cross, University of California, Berkeley; Elaine El-Khawas, American Council on Education; Peter T. Ewell, National Center for Higher Education Management Systems; Pat Hutchings, American Association for Higher Education; Theodore J. Marchese, American Association for Higher Education; Kay M. McClenney, Education Commission of the States; Marcia Mentkowski, Alverno College; Margaret A. Miller, State Council of Higher Education for Virginia; E. Thomas Moran, State University of New York, Plattsburgh; Barbara D. Wright, University of Connecticut.