Using Assessment Data

Office of Assessment of Teaching and Learning

Basic uses of data include (Peter Ewell, Assessment Institute 2011)

- Create a set of "dashboard light" to monitor
- Identify a problem or issue
- Illuminate context for decisions or action. Collect all the information we have about an issue to illuminate it.
- Check expectations: what do campus members think is the situation and then see if that's accurate.
- Disaggregate into meaningful subgroups; identify the technical and contextual limitations of data
- Use for data dialogue; set aside time for discussion and questions; seek feedback from the key population (students, faculty, staff, etc.) on meaning and interpretation of the questions and findings

Some common responses to assessment data

- Review program's mission, goals, outcomes
- Identify strengths and weaknesses of students in the program related to content skills and knowledge
- Update curriculum map to consider alignment of courses and student learning outcomes
- Analyze or improve content, assignments, etc. for specific courses
- Compare student performance levels with previous performance; with expectations of graduate schools or employers
- Identify resources that could add to level of student achievement in the program
- Determine potential program changes for curricular review cycle
- Use information regarding needed faculty expertise for future hires
- Identify information that can be used to recruit students
- Analyze or improve program assessment process – measures, sampling rationale, methods, participants, tools, etc. Include participation from additional stakeholders.

Kinds of actions / changes which may be informed by assessment data from multiple sources

Changes to curriculum, scheduling and requirements, programmatic structures or other aspects of the students' course of study
- Goals, Outcomes, and Alignment
  - Developing or refining program learning outcomes and/or appropriate means for assessment
  - Better aligning program, department, college and institutional goals
  - Increase communication about outcomes to students and faculty
- Curriculum and Instruction
  - Make curricular changes to improve student learning and retention; changes to core courses or assignments, or
  - Redesign content or pedagogy of specific core assignments or courses; increase alignment of assignments across courses
  - Refine, reorganize or refocus curricula to reflect changes in the discipline or profession
  - Verify that course sequencing and scheduling are appropriate

- Changing the number of student required in course sections so that student learning and effectiveness of teaching are maximized
  - o Modify program requirements or course scheduling
    - Change sequence of courses in major curriculum; refine pre-requisites
    - Guide changes in scheduling rotations, course offerings, etc.
    - Add or delete courses
    - Change scheduling or frequency of certain courses
  - o Non-curricular changes to facilities, departmental policies and procedures
    - Ex: Refine design or use of lab facilities
  - o Faculty changes
    - Re-assign faculty / staff or request new lines
    - Adjust faculty teaching loads and assigned release time

Faculty or TA professional development
- o Design needed professional development program(s)
  - to improve pedagogy and/or curricular cohesion; to implement new teaching techniques
  - support more effective use of TAs
  - to help faculty learn how to develop and assess learning outcomes
  - to help faculty learn how to interpret and apply assessment data

Changes to assessment process, participants, tools
- o Gather additional or different information
- o Refine or change measures, tools, methods, sampling or timing
- o Identify partners and/or benchmarks
- o Include new stakeholders, or involve stakeholders in a new way (e.g., create student advisory board, or employer advisory board; invite participation from other WSU programs or colleges)
- o Identify bottlenecks and improvements to logistics of assessment (data collection and storage, analysis, and dissemination; related technology needs and training)
- o Refine departmental access and other interventions to improve retention and graduate data
- o Link and, as appropriate, aggregate program review results to the institution's broader quality assurance improvement efforts

Changes to co-curricular aspects of students' experience
- o Reorganize or improve student support systems, such as advising, library services, and student development initiatives to improve the academic success of students in the program
- o Identify facilities needs

Changes to the policies, funding, and planning that support learning
- o Reorganize or refocus resources to advance student learning or specific research agendas
- o Provide funding for profession development for faculty (journals, conferences, etc.)
- o Inform changes about how resources are used in department
- o Adjust allocation of faculty resources across Gen Education and the major
- o Identify and promote partnerships between departments or units to leverage efforts or share resources
- o Make recommendations for resource allocation outside the department (ie, libraries, tutors, IT, etc.)
- o Inform other decision-making, planning and budgeting, including resource re/allocation

Steps to get the process started

A) Bring together for constructive dialogue individuals who can:

- Effect changes to relevant programs and services
- Allocate resources and determine priorities for change
- Understand the technical and contextual limitations of such assessment

B) Seek feedback from the target population (students, faculty, staff, as appropriate) on meaning and interpretation of the questions and findings

C) Consider carefully to whom the results or conclusions apply:

- Disaggregate into meaningful subgroups
- Set aside time for discussion and questions

D) Create executive summaries, recommendations and questions for use in department, college, and administration that may include:

- Patterns of results: complementary findings … strengths, weaknesses, any red flags?
- Patterns of activities: common efforts and activities
- Use information for decision making, resource allocation (time, expertise, resources) where there is widespread or key need

See also Barbara Walvoord's *Assessment Clear and Simple: A Practical Guide for Institutions, Departments, and General Education*, Second Edition (2010)

"Digesting the Data": Analysis and Interpretation

Sample Discussion Questions for Assessment Committees looking at assessment data

1. Questions to consider:

   a) What do the data suggest about student mastery of subject matter and disciplinary skills, or of WSU's Seven Goals of the Baccalaureate?

   b) What do the data suggest about your students' preparation for taking the next step in their education or careers?

   c) Analysis of strengths: Identify areas of your program in which students excel. This can help recruit students; help faculty identify assignments and activities that produce high quality learning -- these assignments need to be preserved. You don't want to lose some of your best teaching strategies in the course of program restricting. Evidence that supports the effectiveness of a course, a class project, or other teaching strategy keeps us focused on which aspects of a program we need to keep.

   d) Analysis of weaknesses: Where are students struggling or encountering difficulties? Knowing about the areas where students encounter problems can help departments think about interventions that might help (adopt new teaching strategies; revise curriculum, provide additional course or support to students, etc.)

   e) Do these assessments provide useful information? Would a different assessment approach provide more useful data? (Different measures? Complementary measures? Different sampling strategy or timing?)

   f) Does different data point to similar conclusions?   Are complementary measures (such as student work and student exit surveys) providing similar results?

   g) How might this data shed light on faculty? What does it contribute to shared understandings of the SLOs or curriculum, to assignment design or teaching practices?

2. Who is looking at the various kinds of assessment data?   Do you need to get input from others (students, faculty, staff, as appropriate) on meaning and interpretation of the questions and findings?

3. How are findings from assessment used by programs, departments, and colleges?

Questions adapted from *Tools and Techniques for Program Improvement: Handbook for Program Review & Assessment of Student Learning*, Western Washington University, and from *On Using Assessment Information and Closing the Loop*, University of Northern Iowa Office of Academic Assessment.