Closing the Loop: Using Data for Improved Learning

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2015-2016

Workshop #3

The Three Basic Steps of Assessment:

WS #1 Articulate learning goals "When students complete this [course, major, gen-ed program] we want them to be able to…."

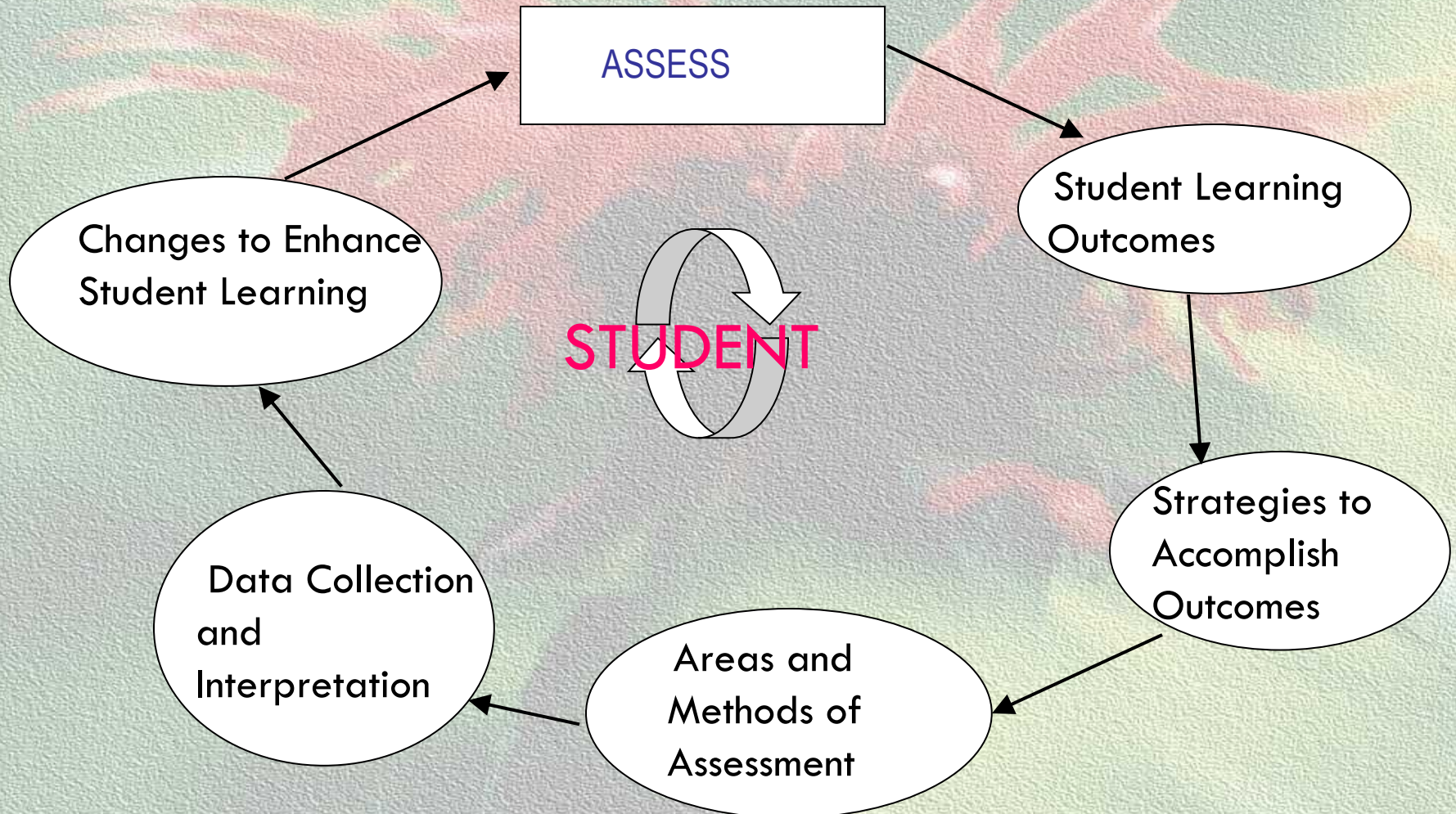WS #2 Gather information about how well students are achieving the goals and why

WS #3 Use the information for improvement

Designing the Assessment Cycle

'CLOSING THE LOOP'

- What will the program do with findings described in the data?

- How will the findings lead to decisions that improve the program and opportunities for students to learn?

ASSESSMENT – LOOP

ASSESS

Student Learning Outcomes

Changes to Enhance Student Learning

STUDENT

Strategies to Accomplish Outcomes

Data Collection and Interpretation

Areas and Methods of Assessment

Adapted from: St. Cloud State University. (2008). *Assessment Peer consultant training.* Patricia Aceves, Ackerman, Bjorklund, Foss, Johnson, Kolodzne,, & Jim Sherohman

Tie Assessments to other Outcomes

Tie assessment of student learning to another outcome or program or general education. Consider this situation:

- A student completes an assignment in BIO 210 course that meets one of the course level outcomes.

- That one course outcome is mapped (linked) to a specific program outcome in the AA pre-med program and to three general education outcomes: one in critical thinking, one in communication, and another in quantitative literacy.

By assessing that one assignment, we have data regarding how well a set of students have met four learning outcomes. Assessment at the course level can provide a great deal of information on how well or poorly students are learning at a variety of levels.

Program Assessment

1. Review learning goals for a degree program
2. Map them onto College General Education Goals
3. Identify which courses in the program meet which learning goals. This will help you identify where/how it would be assessed.
4. Assess two learning goals in courses using ***existing data*** and ***rubrics.***
5. Close the Loop: Identify gaps/deficiencies → take action → Repeat.

Tying Program Outcomes to General Education

- Students graduating with a B.S. in Food Science and Technology will be able to:

- Effectively express themselves orally, and in writing. (*Communication Skills*).

- Apply scientific principles to solve problems in Food Science. (*Critical Thinking and Scientific Inquiry Skills*).

- Engage in activities that enhance their professional development. *(Life long learning)*

Diagnosing Learning Problems and Action Steps

Frame Assessment as a Research Project

- When considering action plans for addressing weaknesses: develop a hypotheses, research questions.

- Consult literature on college student learning (e.g., Halpern & Hakel, 2002; Kuh, 2008; Kuh, Kinzie, Schuh, & Whitt, 2005; Kuh, Kinzie, Schuh, Whitt, & Associates, 2005; Mentowski & Associates, 2000; National Research Council, 2001; Pascarella & Terenzini, 2005).

- Determine and share results.

Consider Research-based Practices in Action Plan

- Many institutions spend too much time changing titles, content, emphasis, number, and learning goals of required courses. Consider improvement strategies that:
  - focus on faculty development, not (or not only) courses.
  - use research-based pedagogical approaches: e.g. active learning.

Research-Based Seven Principles for Good Practice in Undergraduate Education

Good practice …

1. Encourages contact between students and faculty
2. Develops reciprocity and cooperation among students
3. Encourages active learning
4. Gives prompt feedback

Research-Based Seven Principles for Good Practice in Undergraduate Education

Good practice …

5. Emphasizes time on task
6. Communicates high expectations
7. Respects diverse talents and ways of learning

Chickering and Gamson, 1987, widely available online.

Good Practices and Closing the Assessment Loop

- AND, to get the benefits, you have to do them well.
  - Use published research about how to effectively implement good practices.
  - Use assessment in your own setting to inform your practices.

Moving From Assessment Results to Action

- Determine what is most important in the results.

- Focus on the areas that show the greatest weaknesses.

- Determine what is feasible now and what might be addressed in the future. Consider what changes can be made within the department and what changes involve others. Investigate resources and available assistance.

- Keep good notes, both for your own follow-up and for reports that you might have to submit.

(Maki, 2004; Walvoord, 2010)

Common Follow-Up Actions Resulting From Assessment

- Changes in program design
- Pedagogy
- Changes in program delivery
- Changes in which students are advised into participating in which programs
- "Changes to policies, funding, and planning that support learning" class size, qualifications of teachers, tutors
- Faculty development

Closing the Loop: Logistics for discussing data and developing Action Plans

Forum to discuss data and identify action plans – Close the Loop

- One two-hour department meeting each year to discuss data it has about student learning in one of its degrees or program
  - Decides on one or two action item(s) to improve student learning and assign responsibility for follow-up
  - Keep minutes of the meetings

Most Basic, Minimalist

Members of University department despise assessment… "plot to destroy faculty autonomy." Decided as group to work on students' research papers…spent hours grading student work

- At meeting each faculty identified two strengths and two weaknesses they observed in student papers.

- Used flip chart. **Department Voted** on one action item.

  - Item: students could not identify research question…

  - Action: faculty mapped curriculum to see where inquiry was taught and implemented new strategies

  - Documentation: Minutes and Report

(Adapted from: Barbara Walvoord, *Assessment Clear and Simple*)

Form Ad-Hoc Committee

- Form **ad hoc committee** and hold forums to identify strengths and weakness in student writing (against outcomes).

- Include adjuncts and use small groups and convenient locations and times.

- Generate lists of strengths and weaknesses.

- **Ad hoc committee will aggregate** lists and make recommendations for departmental action

Do the Annual Meeting, Now!!

Annual meeting to discuss data and identify action items.

- Set aside at least 2 hours to discuss ONE of your degree programs

- Don't wait for the perfect data

- At the meeting, consider whatever data you have about learning, no matter how incomplete or inadequate.

(Adapted from: Barbara Walvoord, *Assessment Clear and Simple*)

Annual Meeting

Outcomes of the meeting:

- At least ONE action item to improve student learning, with a timeline and assignment of responsibility

- Keep minutes of the meeting to 1) serve as your own record and reminder, 2)document for accreditors that assessment is taking place

- Consider asking adjuncts to submit a short report of students' strengths and weaknesses measured against student outcomes. Use reports as data for developing action plan

Summary

- Faculty submit rubrics or individual reports to department or ad hoc committee (measured against common outcome)
  - Results are aggregated
- Or, convene faculty forum to identify strengths and weaknesses (Basic, Minimal)
- Decisions are made for actions
- Assessment plan and activities documented
- Actions are implemented
- Data collected

Choosing the Action Item

- What is most important/fundamental to success?
- Which areas show the greatest problems with learning?
- What is feasible?

Not all faculty engage in programmatic outcomes assessment

Need enough to have a critical mass

Team Up

- Find willing Peers – put together a plan
- What outcomes will we assess?
- Set up meeting to discuss assessment results…document!!!
- Common final exams
- Embedded Questions
- Own or Common Rubrics

Other options

Adopt a value rubric – and consider recruiting and collaborating with peers to assess a common outcome

Discussion

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