Course-Embedded Assessment

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What is course-embedded assessment?

- Takes place in a class or a group of classes
- Determines whether students are learning pre-established learning outcomes
- Takes advantage of pre-existing student motivation to perform well
- Assesses what is actually taught
Why use these techniques?

- Individual instructor
  - To improve learning in a course
  - To assess learning in a course with multiple sections
- Assessment Director with Instructors
  - To assess learning that crosses discipline boundaries, e.g. general education outcomes
  - To assess learning in a discipline
  - To assess various learning competencies

Techniques of Course-Embedded Assessment: some examples

- Individual Instructor
  - Specific assignments that provide feedback to the instructor about desired outcomes, e.g. Classroom Assessment Techniques (Angelo and Cross)
    - Muddiest Point
    - Background Knowledge Probe
    - Teacher-Designed Feedback Forms
  - Pros and Cons to all CATs
Techniques of Course-Embedded Assessment: some examples

- Assessment Director
  - Questions embedded in final exams
  - Common questions in tests/exams across course sections
  - Rubrics used to grade a class project/presentation/performance
  - Pre/post tests
  - Samples of student work, e.g. writing
  - Portfolio assessment, e.g. writing, art, research papers, etc.
  - Some form of authentic (real life situation) assessment, e.g. a public dance performance or written work submitted to a journal or an art showing

Audience Examples

- Good course-embedded techniques that you use and like…..
- What are the advantages/disadvantages of your technique?
Advantages of Course-Embedded Assessment (Individual & Director)

- Student motivation is high because the assessment activity is part of a course activity
- Costs are reduced because incentives are unnecessary
- It usually does not require additional student time as it is part of the curriculum
- It is faculty-driven and thus, more likely, to be used for improvement
- Because it’s linked to the curriculum, it’s more likely to identify specific curricular needs/deficiencies
- Feedback to faculty is relatively quick

Disadvantages of Course-Embedded Assessment (Director)

- Faculty commitment is absolutely essential, but can be hard to get
- Faculty resistance to the process may be substantial
- Achieving agreement among faculty on learning outcomes and an assessment approach across courses is a challenge
- Usually there are no comparable data (except between sections—which has its own problems)
Process of Embedding Assessment by an Assessment Director

1. Buy-in from faculty, chairs, Provost, others is essential
2. All faculty involved must identify specific learning goals for course(s)
3. For multiple sections, all faculty must agree to the goals and commit to teaching to the goals
4. Assessment methods must be agreed upon, including when and what will be used, e.g. pre/post, final exam, rubrics, test questions, prompts, etc.
5. Standards or expectations must be agreed upon
6. Results must be analyzed and then interpreted
7. Information must be shared with all relevant faculty
8. Where appropriate, the course should be improved or the assessment technique modified

Example of the Process:
Scientific Reasoning

- Chairs/faculty representatives from all science disciplines drafted goals
- Goals were shared with all units and revised
- Brainstormed assessment ideas, found science articles, and developed test questions that reflected goals
- Call for volunteers to use test toward end of course
- Following semester, pre/post testing in courses
- Assessment office prepared analysis of tests and committee reviewed
- DISASTER!
- Revisit the fit of learning goals and teaching practices, refine the assessment approach to reflect discipline language
Example of the Process:  
*Written Communication*

- Representatives from all colleges and some departments make up a committee
- In workshops led by WAC director, each unit brainstorms criteria for good writing, and creates a rubric and a writing prompt
- Academic unit selects writing-intensive course(s) to collect sample papers
- Using the rubric, a trained faculty team rates papers
- Unit prepares a report analyzing the results, creating standards and describing changes to be made

Example of the Process:  
*Oral Communication*

- Two existing required oral comm courses with specific learning goals
- Faculty-designed rubric to assess specific speeches was modified
- Instructors teaching these courses, trained in rubric, assessed student speeches (not their own classes)
- Assessment Office will aggregate data and report back
Task

- Convene in small groups
- Identify a course with multiple sections and multiple instructors, e.g., composition, basic math or science
- Create **one** learning goal
- Design **one** approach to assessing this goal
- Identify the advantages and limitations of this approach
  - Take about 15 minutes
  - Designate a reporter

Considerations

- Political considerations if selecting samples, e.g., Why me or my class?
- Incentives for faculty to be involved?
- Incentives for students?
- Course-embedded assessment can be labor intensive
- It is more likely to produce real improvement in the classroom than non-embedded assessment.