Direct and Indirect Methods of Assessment

In order to gather evidence of student learning, assessment efforts are categorized as direct and indirect measures. These methods are used to provide adequate feedback to the program to identify strengths and weaknesses (Maki, 2004). There are basically two types of assessment methods.

A **direct** method which is based on a sample of actual student work, including reports, exams, demonstrations, performances, and completed works, requires students to produce work so that reviewers can assess how well students meet expectations.

- The strength of direct measurement is that faculty members are capturing a sample of what students can do, which can be very strong evidence of student learning.
- A possible weakness of direct measurement is that not everything can be demonstrated in a direct way, such as values, perceptions, feelings, and attitudes.

An **indirect** method is based upon a report of perceived student learning. Indirect measures of assessment provide opportunities for students to reflect on their learning, and inform the reviewers their perceptions of their learning experience (Palomba & Banta, 1999).

- The strength of indirect methods is that they could be helpful in interpreting the findings of direct methods. Also it can assess certain implicit qualities of student learning, such as values, feelings, perceptions, and attitudes, from a variety of perspectives.
- The weakness of indirect measures is that they are not as useful in identifying specific knowledge and skills deficiencies. Indirect measures are not as strong as direct measures because self report is used very often and instructors have to make assumptions about what exactly the self-report means. For example, if students report that they have attained a particular learning goal, how do we know that their report is accurate?

Because each method has its limitations, an ideal assessment program would combine direct and indirect measures from a variety of sources. This triangulation of assessment methods can provide converging evidence of student learning. Examples of direct and indirect assessment methods are given in the table below.

**Examples of direct and indirect methods of assessment:**

**Direct Methods of Assessment:**

1. Pre and posttests
   - Multiple-choice test question
   - Essay test question
2. Course-embedded assessment (e.g., homework assignment; essays, locally developed tests)
3. Comprehensive exams
4. Standardized test
   - National Major Field Achievement Tests
   - Certification exams, licensure exams
5. Portfolio evaluation
6. Case studies
7. Reflective journals
8. Capstone projects
9. Class project (individual or group)
10. Internship and clinical evaluation
11. Performance piece (e.g., musical recital)
12. Poster presentation
Indirect Methods of Assessment:

1. Exit interviews
2. Surveys
   - Departmental survey
   - Alumni survey
   - Employer survey
   - Survey of current students
   - Survey of faculty members
   - Survey of internship supervisors
   - Survey of graduates
   - Survey of employers
   - Survey of transfer institutions
3. Focus groups
4. Job placement statistics
5. Graduation and retention rates
6. Percentage of students who study abroad
7. Classroom Assessment Techniques such as “muddiest point”

Please note that many of the examples are already incorporated into our classroom and program activities. Occasionally an assessment plan will lead to developing a new assignment or test, but generally it is advisable to use the data that are already being collected from students about their learning. Time constraints inside and outside of the classroom can be a real obstacle to assessment activities, so it is best to plan assessments that are time efficient. A faculty member may assign a term paper that is graded according to course and instructor goals. Using the term paper to measure a program goal may be as easy as adding a quick rating of each student’s use of reference materials in writing the paper.