

## Pros and Cons of Assessment Methods On Student Learning

Some good resources are:

- Palomba, C.A, & Banta, T. W. (1999). *Assessment Essentials: Planning, Implementing, and Improving Assessment in Higher Education*. San Francisco: Jossey-Bass.
- American Psychological Association: “Evaluating Assessment Strategies” site: [http://www.apa.org/ed/eval\\_strategies.html](http://www.apa.org/ed/eval_strategies.html)
- Solomon, David J. (2001). Conducting web-based surveys. *Practical Assessment, Research & Evaluation*, 7(19): <http://pareonline.net/getvn.asp?v=7&n=19>
- William M.K. Trochim: Plus and Minus of Survey Methods: <http://www.socialresearchmethods.net/kb/survaddi.htm>
- Bridgewater State College, Assessment Guide Book, Chapter 5: <http://www.bridgew.edu/AssessmentGuidebook/chapter5.cfm>

### Sources of Information about Student Learning

Sources of Information/ Example Assessment Methods	Pros of Method	Cons of Method
From course work (embedded, course-based) (direct assessment methods)	<ul style="list-style-type: none"> <li>• In general, students take embedded course work seriously; therefore work has a good chance of reflecting actual abilities.</li> <li>• Reflects program or department’s course and curriculum, and program outcomes</li> </ul>	<ul style="list-style-type: none"> <li>• In general, biases of the data over years, instructor or departmental differences can influence the results.</li> <li>• Reluctance of faculty to share results with entire faculty membership.</li> </ul>
<ul style="list-style-type: none"> <li>• Tests, including pre-post, entry and exits</li> </ul>	<ul style="list-style-type: none"> <li>• Inexpensive</li> <li>• Comprehensive</li> <li>• Pre-post testing allows for “value added” assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Developing appropriate test questions that reflect learning outcomes and complex levels of learning takes time and skill.</li> <li>• For pre-post testing: difficult to design tests that are comparable at different times.</li> </ul>
<ul style="list-style-type: none"> <li>• Graded Homework</li> </ul>	<ul style="list-style-type: none"> <li>• Reflects students’ ability when they have access to resources</li> </ul>	<ul style="list-style-type: none"> <li>• Does not assess students’ ability or overall learning as typically defined.</li> </ul>

<b>Sources of Information/ Example Assessment Methods</b>	<b>Pros of Method</b>	<b>Cons of Method</b>
<ul style="list-style-type: none"> <li>Ratings or Rubrics judging quality of papers, reports, projects,</li> </ul>	<ul style="list-style-type: none"> <li>Can be used by others besides instructor, to assess quality</li> </ul>	<ul style="list-style-type: none"> <li>Developing accurate rubric dimensions that reflect learning outcomes and levels of learning takes time and skill</li> </ul>
<ul style="list-style-type: none"> <li>Tests, rubrics on paper, projects from capstone course experience</li> </ul>	<ul style="list-style-type: none"> <li>Allows for assessment of higher cognitive abilities such as synthesis and evaluation of knowledge</li> <li>Can assess in-depth knowledge</li> <li>Allows creativity</li> <li>Assessment of integration of learning</li> </ul>	<ul style="list-style-type: none"> <li>Labor intensive for both faculty and students</li> <li>Because course and project are high-stakes, it may produce student anxiety that may result in assessment reflecting lesser ability than actual ability.</li> </ul>
<ul style="list-style-type: none"> <li>Concept mapping or knowledge mapping</li> </ul>	<ul style="list-style-type: none"> <li>Unique technique to understand connections of concepts within students knowledge-base</li> <li>Assessment of complex relationships</li> </ul>	<ul style="list-style-type: none"> <li>Difficult to compare across students</li> <li>Difficult to obtain objective judgment on abilities</li> </ul>
<ul style="list-style-type: none"> <li>Expert's judgment of performance (e.g., art, drama, healthcare)</li> </ul>	<ul style="list-style-type: none"> <li>Improves face validity of assessment activities</li> </ul>	<ul style="list-style-type: none"> <li>Obtaining appropriate experts' time</li> </ul>
<ul style="list-style-type: none"> <li>Criteria, rating, rubrics judging thesis, dissertation work</li> </ul>	<ul style="list-style-type: none"> <li>Allows for judgment about overall graduate program across several students</li> </ul>	<ul style="list-style-type: none"> <li>Difficult to define rubric dimensions that relate to multiple thesis or dissertations</li> </ul>
<ul style="list-style-type: none"> <li>Qualifying exams for graduate work</li> </ul>	<ul style="list-style-type: none"> <li>Developing exam questions across several graduates allow for better assessment of the graduate program.</li> </ul>	<ul style="list-style-type: none"> <li>Oral presentations may be a challenge for those with language difficulties</li> <li>Difficult to define questions that relate to several students</li> </ul>
<p>From longitudinal, cross-sectional or cross-course comparisons including student portfolios (direct assessment methods)</p>	<ul style="list-style-type: none"> <li>In general, shows longitudinal trends with rich detail</li> <li>Assessment becomes an integral part of students' learning process</li> </ul>	<ul style="list-style-type: none"> <li>In general, validity depends on how work is collected</li> <li>Can overload assessment committees with too much information</li> </ul>
<ul style="list-style-type: none"> <li>Rubrics judging quality of work across time, sections or courses</li> </ul>	<ul style="list-style-type: none"> <li>Highlights' students' strengths and weaknesses in comprehensive manner</li> </ul>	<ul style="list-style-type: none"> <li>Developing accurate rubric dimension that reflect learning outcomes and levels of learning takes time and skill</li> <li>Content may vary widely by students</li> </ul>
<ul style="list-style-type: none"> <li>Comparison of best examples of student learning</li> </ul>	<ul style="list-style-type: none"> <li>Students do the work of providing the assessment "data" by supplying their best examples</li> </ul>	<ul style="list-style-type: none"> <li>Student's judgment of "best examples" may not actually reflect faculty's judgment of "best examples"</li> </ul>

Sources of Information/ Example Assessment Methods	Pros of Method	Cons of Method
<ul style="list-style-type: none"> <li>Reflections by students about their learning</li> </ul>	<ul style="list-style-type: none"> <li>Provides opportunity for students to synthesis own work;</li> <li>Identifies strengths and weaknesses</li> </ul>	<ul style="list-style-type: none"> <li>Difficult to judge objectively</li> </ul>
From internships/coop experiences	<ul style="list-style-type: none"> <li>Supervisors typically provide feedback to students anyway</li> </ul>	<ul style="list-style-type: none"> <li>Ratings and criteria of supervisor may not reflect program outcomes</li> </ul>
<ul style="list-style-type: none"> <li>Surveys completed by intern/coop advisors/faculty about student's abilities (direct assessment method)</li> </ul>	<ul style="list-style-type: none"> <li>Based on actual work experience that may reflect future career</li> </ul>	<ul style="list-style-type: none"> <li>May obtain information only on a small number of outcomes</li> <li>Limited observation time</li> </ul>
<ul style="list-style-type: none"> <li>Survey, interview, focus groups about satisfaction with student's performance (indirect assessment method)</li> </ul>	<ul style="list-style-type: none"> <li>Provides information about other outcomes besides competencies such as attitude</li> </ul>	<ul style="list-style-type: none"> <li>Satisfaction with performance may not be reflective of student's ability</li> </ul>
From employers/potential employers	<ul style="list-style-type: none"> <li>In general, improves face validity of assessment activities</li> </ul>	<ul style="list-style-type: none"> <li>Difficult to identify where alumni are employed</li> <li>Sensitive information for both employer and program/department</li> </ul>
<ul style="list-style-type: none"> <li>Surveys to employers about student's abilities (direct assessment methods)</li> </ul>	<ul style="list-style-type: none"> <li>Provide information about student's abilities needed by employers</li> </ul>	<ul style="list-style-type: none"> <li>Difficult to get direct supervisors to respond to surveys</li> </ul>
<ul style="list-style-type: none"> <li>Survey of those who interview for employment purposes about perceived students' abilities</li> </ul>	<ul style="list-style-type: none"> <li>Best person to compare quality of one institution's graduates to other institutions' graduates</li> </ul>	<ul style="list-style-type: none"> <li>May only be able to assess a small number of general outcomes such as communication skills</li> </ul>
From outside evaluations Experts judge overall major/program quality of students' abilities (direct assessment methods)	<ul style="list-style-type: none"> <li>Improves face validity of assessment activities</li> </ul>	<ul style="list-style-type: none"> <li>Obtaining appropriate experts' time</li> </ul>
From nationally-normed tests (direct assessment methods)	<ul style="list-style-type: none"> <li>Ability to compare from year to year or to other groups</li> <li>National standard can be used for program's performance criteria</li> <li>Convenient</li> <li>Well developed test</li> <li>Nationally or commercial surveys have reliability and validity information</li> </ul>	<ul style="list-style-type: none"> <li>May not reflect program or institution's curriculum or outcomes</li> <li>Limited faculty ownership</li> <li>Costly to institution or student</li> </ul>
<ul style="list-style-type: none"> <li>Information about student's satisfaction, attitudes (indirect assessment method)</li> </ul>	<ul style="list-style-type: none"> <li>Important to hear from student's viewpoint</li> <li>Conduct comparison of different groups of students on same outcomes/questions</li> </ul>	<ul style="list-style-type: none"> <li>In general, students' perception of their ability may not relate to their actual ability</li> <li>In general, alumni are more satisfied than graduating seniors who tend to be more satisfied than sophomores, etc.</li> </ul>

Sources of Information/ Example Assessment Methods	Pros of Method	Cons of Method
<ul style="list-style-type: none"> <li>Surveys about satisfaction with learning environment, faculty, courses, curriculum, their learning, equipment/tools from prospective, current, graduating, withdrawn students and alumni</li> </ul>	<ul style="list-style-type: none"> <li>Easy to administer</li> <li>Low cost</li> <li>Nationally or commercial surveys have reliability and validity information</li> </ul>	<ul style="list-style-type: none"> <li>Usefulness is based on good design of survey questions</li> </ul>
<ul style="list-style-type: none"> <li>Interviews or focus groups about satisfaction with learning environment, faculty, courses, curriculum, their learning, equipment/tools from prospective, current, graduating, withdrawn students and alumni</li> </ul>	<ul style="list-style-type: none"> <li>Can provide rich data, personal perspectives; can go into depth about a particular aspect or factor</li> <li>Other factors may arise that relate to academics such as pedagogy, class size, etc. which not expected or asked about.</li> <li></li> </ul>	<ul style="list-style-type: none"> <li>Those who participate tend to have either very positive or very negative opinions which is a selection bias</li> <li>Fear of retributions may bias respondents' answers</li> </ul>
<ul style="list-style-type: none"> <li>Inventories about students' attitudes; monitor attitude changes over time</li> </ul>	<ul style="list-style-type: none"> <li>Commercially available instruments provide reliability and validity information</li> </ul>	<ul style="list-style-type: none"> <li>Usefulness depends on how related to program outcomes.</li> </ul>
<ul style="list-style-type: none"> <li>Information about Faculty's satisfaction (indirect assessment method) through survey, interviews or focus groups</li> </ul>	<ul style="list-style-type: none"> <li>Important to hear from faculty's view</li> <li>Factors may arise that relate to academics such as pedagogy, class size, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Usefulness is based on good design of questions</li> </ul>

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