

Strengths and Weaknesses of Direct Assessment Instruments

The methods (Instruments)	Potential Strength	Potential Limitation
<p>Published Tests (Standardized Examinations)</p> <p>Departments with a successful history in using commercial tests and examinations include many general education programs, mathematics, chemistry, biology, computer science, geology, physics, psychology, sociology, education, engineering, foreign languages, music, exercise science, and literature.</p>	<ul style="list-style-type: none"> ✓ They are commonly used in association with cognitive goals in order to review student achievement with respect to a common body of knowledge associated with a discipline or program. ✓ In most cases, nationally developed tests are devised by experts in the discipline, having good validity and reliability ✓ Institutional comparisons of student learning are possible. ✓ Very little professional time is needed beyond faculty efforts to analyze examinations results and develop appropriate curricular changes that address the findings. ✓ Tests are traditionally given to students in large numbers and do not require faculty involvement when exams are taken by students. ✓ Online versions of tests are increasingly available, and some provide immediate scoring. 	<ul style="list-style-type: none"> ➤ If the test does not reflect the learning objectives that faculty value and the curricula that students experience, results are likely to be discounted and inconsequential. ➤ Students may not take the test seriously if test results have no impact on their lives. ➤ Test can be expensive.

<p>Locally developed tests</p>	<ul style="list-style-type: none"> ✓ Can provide direct evidence of student mastery of cognitive knowledge ✓ Can provide for authentic assessment of higher-level learning. ✓ Students generally are motivated to display the extent of their learning. ✓ Because local faculty write the exam, they are likely to be interested in results and willing to use them 	<ul style="list-style-type: none"> ➤ These exams are likely to be less reliable than published exams ➤ Reliability and validity generally are unknown ➤ Creating effective exams requires time and skill ➤ Traditional testing methods may not provide authentic measurement ➤ Norms generally are not available.
<p>Course embedded assignments and activities</p>	<ul style="list-style-type: none"> ✓ Can provide direct evidence of student mastery of learning objectives ✓ Out-of-class assignments are not restricted to time constraints typical of exams ✓ Students are generally motivated to demonstrate the extent of their learning. ✓ Data collection is unobtrusive to students. ✓ Faculty who develop the procedures are likely to be interested in results and will use them. 	<ul style="list-style-type: none"> ➤ Requires time to develop and coordinate ➤ Requires faculty trust that the program will be assessed, not individual teachers. ➤ Reliability and validity generally are unknown ➤ Norms generally are not available.
<p>Capstone This method of assessment is unique</p>	<ul style="list-style-type: none"> ✓ Capstone courses integrate knowledge, concepts, and skills 	<ul style="list-style-type: none"> ➤ Faculty need to create the Capstone courses that provide students with

<p>because the courses themselves become the instruments for assessing student learning.</p> <p>Many research universities are currently using capstone courses in a variety of academic disciplines including general education programs and other academic units in the Arts and Sciences. Departments at other research institutions using this instrument to gather information about student learning in the major include many general education programs, chemistry, political science, physics, music, religious studies, theatre, history, and foreign languages.</p>	<p>associated with an entire sequence of study in a program. Therefore, evaluation of students' work in capstone provides a holistic picture of student learning in the program.</p> <ul style="list-style-type: none"> ✓ These courses can provide a final common experience for student in the discipline. 	<p>a forum to combine various aspects of their programmatic experiences, otherwise, it can't be used as instrument for program assessment.</p> <ul style="list-style-type: none"> ➤ Faculty training is needed when use rubric to grading a capstone project.
<p>Portfolios:</p> <p>Departments using portfolio evaluations include English, history, foreign languages, fine arts, theatre, dance, chemistry, communications, music, and general education programs.</p>	<ul style="list-style-type: none"> ✓ Can provide direct evidence of student mastery of learning objectives ✓ It allows faculty to analyze an entire scope of student work in a timely fashion. ✓ Portfolios also give faculty the ability to determine the content and control the quality of the assessed materials. ✓ Students can use portfolios and the portfolio process to prepare for 	<ul style="list-style-type: none"> ➤ Analyzing portfolio could be time consuming for faculty members. ➤ Not easy to assign grades. ➤ It may be difficult to protect student's confidentiality and privacy. ➤ Maybe difficulty to motivate students to take the task seriously

	<p>graduate school or career applications</p> <ul style="list-style-type: none"> ✓ Webfolios or CD_ROMs can be easily viewed, duplicated, and stored 	
<p>Videotape and Audiotape Evaluation Disciplines, such as theatre, music, art, communication, and student teaching that have experienced difficulty in using some of the other assessment methods have had significant success in utilizing videotapes and audiotapes as assessment tools.</p>	<ul style="list-style-type: none"> ✓ Provide direct evidence of student mastery of knowledge, skills and competences. ✓ Provide chance for students to learning from each other 	<ul style="list-style-type: none"> ➤ Faculty needs to develop criteria for evaluation. ➤ Training of grading is needed. ➤ Equipment is needed. ➤ Could be time consuming
<p>Pre-test/Post-test Evaluation Academic departments currently using this form of assessment to measure student learning include communications, economics, geography, linguistics, theatre, and dance.</p>	<ul style="list-style-type: none"> ✓ Provide evidence of “value added” education. ✓ It is feasible for certain programs. 	<ul style="list-style-type: none"> ➤ It is not applicable to every program.
<p>Competence Interviews</p>	<ul style="list-style-type: none"> ✓ Can provide direct evidence of student mastery of learning objectives? ✓ The interview format allows faculty to probe for the breadth and extent 	<ul style="list-style-type: none"> ➤

	<p>of student learning</p> <ul style="list-style-type: none"> ✓ Can be combined with other techniques that more effectively assess knowledge of facts and terms. ✓ Can involve authentic assessment, such as simulated interactions with clients ✓ Can provide for direct assessment of some student skills such as aural communication, critical thinking and problems solving 	
<p>Thesis Evaluation Thesis evaluation has been used effectively for program assessment and improvement in such disciplines as foreign languages, literature, and the sciences.</p>	<ul style="list-style-type: none"> ✓ A good instrument for assessment student's mastery of an array of skills, knowledge and competences. 	<p>➤</p>

Strengths and Weaknesses of Indirect Assessment Instruments

The Instruments	Potential Strength	Potential Limitations
<p>External reviewers: Peer review of academic programs is widely accepted method for assessing curricular sequences, course development and delivery and the effectiveness of faculty.</p>	<ul style="list-style-type: none"> ✓ Recommendations initiated by skilled external reviewers can be instrumental in identifying program strengths and weaknesses leading to substantial curricular and structural changes and improvements. 	<ul style="list-style-type: none"> ➤ It is not always readily available without cost.
<p>Surveys Student exit survey Alumni survey Employer survey</p>	<ul style="list-style-type: none"> ✓ Are complimentary to direct measures ✓ Are flexible in format and can include questions about many issues ✓ Can be conducted relatively quickly ✓ Open-ended questions allow faculty to uncover unanticipated results. ✓ Can be used to collect opinions from respondents at distant sites 	<ul style="list-style-type: none"> ➤ Provide indirect evidence about student learning ➤ Their validity depends on the quality of the questions and response options. ➤ Results might not include the full array of opinions if the sample is small ➤ What people say they do or know may be inconsistent with what they actually do or know ➤ Open ended responses can be difficult and time-consuming to analyze
<p>Reflective essay</p>	<ul style="list-style-type: none"> ✓ Can provide insights into the reasons for the participants' beliefs, attitudes, and experiences, answering why and how students learned or did not. ✓ Can be conducted relatively quickly 	<ul style="list-style-type: none"> ✓ Their validity depends on the quality of the questions. ✓ Responses can be difficult and time-consuming to analyze

	<ul style="list-style-type: none"> ✓ Are flexible in format and can include questions about many issues. ✓ Can provide direct assessment of some learning outcomes. 	
Curriculum and syllabus analysis (Input analysis)	<p>It ensures that all phases of the curriculum and each individual course would cover the entire base needed to provide student the opportunity to learn the essential components of those objectives. This indirect assessment is especially important useful when multiple sections of a course are offered by a variety of instructors. It provides assurance that each section will cover essential points without prescribing the specific teaching methods to be used in helping the students learn those objectives.</p> <p>The matrix then provides assurance to the department that, assuming certain sequences are taken by the student candidates for that major, they will in fact have the opportunity to learn those objectives.</p> <p style="text-align: center;">✓</p>	✓
Interviews	<ul style="list-style-type: none"> ✓ Interviewers can prompt respondents to provide more detailed responses 	<ul style="list-style-type: none"> ✓ Poor interviewer skills can generate limited information ✓ Can be relatively time consuming

	<ul style="list-style-type: none">✓ Interviewers can respond to questions and clarity misunderstandings✓ Telephone interviews can be used to reach distant respondents✓ Can provide a sense of immediacy and personal attention for respondents	<ul style="list-style-type: none">✓ Can intimidate some respondents✓ Results can be difficult and time-consuming and costly
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