

Examples of Direct and Indirect Evidence

	Direct Measures	Indirect Measures
Course Level	<ul style="list-style-type: none"> * Course and homework assignments * Examinations and quizzes * Standardized tests * Term papers and reports * Observations of field work, internship performance, service learning, or clinical experiences * Research projects * Class discussion participation * Case study analysis * Rubric (a criterion-based rating scale) scores for writing, oral presentations, and performances * Artistic performances and products * Grades that are based on explicit criteria related to clear learning goals 	<ul style="list-style-type: none"> * Course evaluations * Test blueprints (outlines of the concepts and skills covered on tests) * Percent of class time spent in active learning * Number of student hours spent on service learning * Number of student hours spent on homework * Number of student hours spent at intellectual or cultural activities related to the course * Grades that are not based on explicit criteria related to clear learning goals
Program Level	<ul style="list-style-type: none"> * Capstone projects, senior theses, exhibits, or performances * Pass rates or scores on licensure, certification, or subject area tests * Student publications or conference presentations * Employer and internship supervisor ratings of students' performance 	<ul style="list-style-type: none"> * Focus group interviews with students, faculty members, or employers * Registration or course enrollment information * Department or program review data * Job placement * Employer or alumni surveys * Student perception surveys * Proportion of upper-level courses compared to the same program at other institutions * Graduate school placement rates
Institutional Level	<ul style="list-style-type: none"> * Performance on tests of writing, critical thinking, or general knowledge * Rubric (criterion-based rating scale) scores for class assignments in General Education, interdisciplinary core courses, or other courses required of all students * Performance on achievement tests * Explicit self-reflections on what students have learned related to institutional programs such as service learning (e.g. asking students to name the three most important things they have learned in a program). 	<ul style="list-style-type: none"> * Locally-developed, commercial, or national surveys of student perceptions or self-report of activities (e.g., National Survey of Student Engagement) * Transcript studies that examine patterns and trends of course selection and grading * Annual reports including institutional benchmarks, such as graduation and retention rates, grade point averages of graduates, etc.

Middle States Commission on Higher Education (2nd Edition)(2007). Student learning assessment.

Examples of Evidence of Student Learning

C = evidence suitable for course-level as well as program-level student learning

Direct (Clear and Compelling) Evidence of What Students Are Learning

- Ratings of student skills by field experience supervisors
- Scores and pass rates on appropriate licensure/ certification exams (e.g., Praxis, NLN) or other published tests (e.g., Major Field Tests) that assess key learning outcomes
- “Capstone” experiences such as research projects, presentations, theses, dissertations, oral defenses, exhibitions, or performances, scored using a rubric
- Other written work, performances, or presentations, scored using a rubric (C)
- Portfolios of student work (C)
- Scores on locally-designed multiple choice and/or essay tests such as final examinations in key courses, qualifying examinations, and comprehensive examinations, accompanied by test “blueprints” describing what the tests assess (C)
- Score gains between entry and exit on published or local tests or writing samples (C)
- Employer ratings of employee skills
- Observations of student behavior (e.g., presentations, group discussions), undertaken systematically and with notes recorded systematically
- Summaries/analyses of electronic discussion threads (C)
- “Think-alouds” (C)
- Classroom response systems (clickers) (C)
- Knowledge maps (C)
- Feedback from computer simulated tasks (e.g., information on patterns of actions, decisions, branches) (C)
- Student reflections on their values, attitudes and beliefs, if developing those are intended outcomes of the course or program (C)
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Indirect Evidence of Student Learning

(Signs that Students Are Probably Learning, But Exactly What or How Much They Are Learning is Less Clear)

- Course grades (C)
- Assignment grades, if not accompanied by a rubric or scoring guide (C)
- For four-year programs, admission rates into graduate programs and graduation rates from those programs
- For two-year programs, admission rates in four-year institutions and graduation rates from those institutions
- Quality/reputation of graduate and four-year programs into which alumni are accepted
- Placement rates of graduates into appropriate career positions and starting salaries
- Alumni perceptions of their career responsibilities and satisfaction
- Student ratings of their knowledge and skills and reflections on what they have learned in the course or program (C)
- Questions on end-of-course student evaluation forms that ask about the course rather than the instructor (C)
- Student/alumni satisfaction with their learning, collected through surveys, exit interviews, or focus groups
- Voluntary gifts from alumni and employers
- Student participation rates in faculty research, publications and conference presentations
- Honors, awards, and scholarships earned by students and alumni

Evidence of Learning Processes that Promote Student Learning (Insights into Why Students Are or Aren't Learning)

- Transcripts, catalog descriptions, and course syllabi, analyzed for evidence of course or program coherence, opportunities for active and collaborative learning, etc. (C)
- Logs maintained by students documenting time spent on course work, interactions with faculty and other students, nature and frequency of library use, etc. (C)

- Interviews and focus groups with students, asking why they achieve some learning goals well and other less well (C)
- Many of Angelo and Cross's Classroom Assessment Techniques (C)
- Counts of out-of-class interactions between faculty and students (C)
- Counts of programs that disseminate the program's major learning goals to all students in the program
- Counts of courses whose syllabi list the course's major learning goals
- Documentation of the match between course/program objectives and assessments (C)
- Counts of courses whose final grades are based at least in part on assessments of thinking skills as well as basic understanding
- Ratio of performance assessments to paper-and-pencil test (C)
- Proportions of class time spent in active learning (C)
- Counts of courses with collaborative learning opportunities
- Counts of courses taught using culturally responsive teaching techniques
- Counts of courses with service learning opportunities, or counts of student hours spent in service learning activities
- Library activity in the program's discipline(s) (e.g., number of books checked out; number of online database searches conducted; number of online journal articles accessed)
- Counts of student majors participating in relevant co-curricular activities (e.g., the percent of Biology majors participating in the Biology Club)
- Voluntary student attendance at disciplinary seminars and conferences and other intellectual/cultural events relevant to a course or program (C)

Suskie, L (2009). *Assessing student learning: A common sense guide (2nd ed.)*. San Francisco,CA: Jossey-Bass.