

Figure 5

Examples of Direct and Indirect Measures of Student Learning (Course, Program, and Institutional Levels)

	Direct Measures	Indirect Measures
Course	<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	<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	<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.