Portfolios

Students collect examples of their work, select items to illustrate specific kinds of learning, write a reflective essay on the learning process and connect their insights to past or future experiences. Through the steps of collection, selection, reflection, and connection portfolios can both demonstrate and deepen learning. As records, portfolios can illustrate development of knowledge and intellectual skills over time.

	Advantages		Disadvantages & Solutions
•	Are adaptable to different levels, purposes, and kinds of materials	•	Can be labor-intensive to review, so use a sampling method for assessment and focus on a specific set of goals
•	Can elicit higher order thinking through self-reflection Can document both the process and the product of learning	•	Can involve a complex gathering and reflection process that is difficult to oversee, so make students the responsible agents
•	Draw on the authentic work products of a student's education and can use them to provide external validation	•	Can be cumbersome to store in paper form, so consider electronic portfolios
•	Actively engage students in the learning process	•	Require trained reviewers, clear criteria, and consistent rating scales, so invest in faculty development

Capstone Experiences

When designed to truly "cap" prior learning, the experience does not so much teach new material as allow students to review, make connections, and apply their knowledge to new problems or in new environments. For assessment purposes, a program's faculty can collectively survey the work produced, looking for evidence of the complex, integrated learning expected of all graduates. Taken as a whole, the year's "vintage" provides information about the program's strengths and weaknesses.

Advantages	Disadvantages & Solutions
 Can demonstrate cumulative learning, integration, and transferable intellectual skills 	 May present difficulties in reaching all students of a cohort during their final semester, so plan fall and spring options and require capstones for graduation
 Easily combine assessment of general and 	
disciplinary learning	May require an additional course, but this can be avoided by incorporating capstones into an existing
 Motivate students because they are directly linked to courses of study and often to future professions 	senior requirement
 Provide an occasion for department level collaborative discussion and interpretation 	 May not take into account disciplinary differences, so allow multiple variations on a theme, possible with a common set of principles
Invite external comment and can serve to provide external validation	 May require clarification of criteria as well as issues of confidentiality and aggregation to distinguish between the capstone's roles as a culmination of individual student work and as a vehicle for program assessment

Performances

Unlike a tangible piece of student work, the performance is ephemeral unless captured on tape or disk. Even when recorded for repeated viewing, performances can be difficult to assess, so the development of usable rubrics and adequate training for raters are both of particular importance.

Advantages	Disadvantages & Solutions
 Have strong face validity Emphasize what the student can do, thus are integrative, active, motivating, and reflective of real-world situations Provide a non-written way to demonstrate achievement, thereby giving students the message that doing is as important as knowing Promote self-assessment, internalization of standards, and a coaching relationship between 	 Can be labor-intensive, time-consuming, and expensive to organize, so review a sample of student performances Require clear definitions of criteria and rating scales and careful training of reviewers, so regard the process as an educational investment May frighten off insecure students, so embed in routine, non-threatening situations(e.g., internships, clinical settings) and remind students they must eventually demonstrate employability
 students and faculty, especially when presented to external reviewers Are highly adaptable even to liberal arts disciplines 	

Common Assignments, Secondary Readings, & Other Embedded Assessments

Embedding assessment is an efficient way to collect high-quality, direct evidence of learning with minimal disruption and maximum utility. One technique is to give a piece of student work a "secondary reading" in addition to the primary reading it receives by the professor to assign a grade. For example, an assessment committee could sample a set of research papers from an American history class, asking general educations about historical perspective, critical thinking, writing, or information literacy skills. The secondary readings could be used both to evaluate an individual's achievement and to assess a course or a program. Another technique is to ask students in a number of different courses to complete a common assignment (response to a common reading using guiding questions) or give examinations that include a common question.

question.		
Advantages	Disadvantages & Solutions	
 Use work that students already complete for a course, thereby ensuring typical quality of effort 	Can require considerable coordination and political negotiation when done through common assignments, so keep the task simple (e.g., use a few	
 Are efficient and economical, with potentially rich results 	questions if an entire common assignment is impractical)	
 Are flexible, can be adapted to all fields, and respect disciplinary differences 	Can be labor-intensive to score, so focus on the most important questions that need to be answered	
Have face validity	 Require careful definition of rubrics and training of reviewers, so make the investment in faculty 	
 Respect local autonomy while encouraging collaboration 	development	

Classroom Assessment Techniques/Action Research

CATs locate assessment of student learning right in the classroom and put its control into the hands of individual instructors. Although the CATs were originally intended for formative assessment at the course level, they can be adapted to the program level and also help answer summative questions.

Advantages	Disadvantages & Solutions
 Have maximum relevance and usefulness for immediate improvement because assessment takes place at the point of student learning. 	Are highly dependent on the cooperation of individuals, so create a culture that values and supports the entire assessment process
• Can be conducted continuously to emphasize that teaching is a formative, evolving process.	 Can present challenges in generalizing to program or institution level, so encourage an ongoing forum for sharing approaches and results.
 Can provide feedback on what students know and can do, how they got there, and what helps or hinders learning 	
 Engage students in their learning, motivate them to monitor themselves, and help them become reflective learners 	
 Communicate that professors care about students, but also respect faculty autonomy 	

Local Tests

With local tests, the testing instrument can be tailored to the intellectual content, curricular design, teaching practices, and expectations of the campus's educational programs. It can lend itself to rapid adaptation if those conditions change. The process can also promote faculty ownership of learning by solidifying collective commitment to outcomes, curricular elements, and assessment methods.

elements, and assessment methods.	
Advantages	Disadvantages & Solutions
Have content validity because they are designed for local learning conditions	May focus on surface learning, so provide a gripe sheet to extract deeper reflection
Can reflect the campus's culture and teaching- learning processes	May lack norms for reference, so supplement with a commercial test if norms are essential
Can be integrative and highly creative in format	May contain ambiguous items or offer questionable
Elicit high-quality student effort if course- embedded	reliability and validity, so pilot the test to identify and evaluate such problems prior to any large-scale administration
Provide directly relevant and useful information.	 Can be seen as threatening, so keep the focus on useful information for learning improvement, not on test scores per se.

Commercial Tests

The terms "standardized" and "objective" are often applied to commercially available tests, implying that other assessment methods meet neither criterion. Standardized refers to uniform test conditions and scoring procedures, so ratings from multiple administrations are presumed to be reliable. However, locally developed tests and other assessments can also maintain consistency.

Advantages	Disadvantages & Solutions
 Are a traditional, widely recognized, and accepted means of assessment 	 Provide poor validity if not closely aligned to assessment questions or students' actual learning, so use with caution
 Require little on-campus time or labor Prepare students for licensure and other certifications 	Reinforce a limited view of learning as factual recall and of assessment as simple testing if in short-answer format
Offer longitudinal dataAre technically high quality	 Provide little insight into the level of understanding or quality of thinking behind the answer, so supplement with other methods
	 Give students no opportunity to construct their own answers or demonstrate important affective traits (e.g., persistence, creativity) if in short-answer format

Course-Management Programs

Electronic course-management programs (like Blackboard and WebCT) have made it possible for professors and students to interact in new ways. They have the capability to keep a running record of discussions that would be lost if they took place in the classroom. If a course (or general education program) expects students to develop critical questioning, collaborative decision making, or an ethical perspective, these capacities may be captured well over time in a threaded electronic discussion.

electronic discussion.	
Advantages	Disadvantages & Solutions
 Are adaptable to a wide range of learning goals, disciplines, and environments 	 Rely heavily on student writing skill and comfort with technology, so incorporate into a comprehensive assessment approach
 Record ephemera that are normally impossible or cumbersome to capture 	 Pose challenges to levels of aggregation beyond the individual course, so develop precise rubrics
 Can preserve a large volume of material Are efficient, low-cost, and completely non- 	 Can involve managing a large volume of material, so use built-in data management tools
 Allow prompt feedback and develop students' meta-cognition when assessment results are shared. 	May promote surface rather than deep learning, so use the incorporated tests and quizzes with caution
	 May make direct observation of student performances difficult and encourage the collection of indirect evidence, so supplement the built-in survey tools with other methods