



Creating authentic assessment

Authentic assessment gives students the opportunity to connect their learning and apply essential knowledge and skills to real-world tasks and problems.

Authentic assessment as opposed to more traditional forms of assessment, such as essays and examinations, involves assessment tasks that simulate or are actually engaged with “real life” conditions or situations. These are knowledge enhancing learning experiences. Students are required to generate a response that will require a complex employment of knowledge and skills in unpredictable real world contexts. The aim is to provide valid and accurate information about what students really know and are able to do in real contexts, under natural conditions. Authentic assessment is sometimes called performance assessment because the assessment criteria focus on observation of complex behaviour rather than on atomistic knowledge or skills.

Benefits of authentic assessment

Authentic assessment provides many benefits for promoting deeper, more engaged learning:

- ♦ It involves “ill-structured”, unpredictable challenges and roles, and therefore helps students rehearse for the complex ambiguities of the “game” of working and professional life.
- ♦ It respects that there can be more than one answer.
- ♦ It responds to the demands of external stakeholders (e.g. industry, the professions) for universities to offer more relevant experiences that enhance graduate employability, including the development of authentic graduate capabilities.
- ♦ It requires students to construct unique responses rather than to select responses from pre-existing options and focuses student activity on complex higher order thinking skills.

- ♦ It requires students to be aware of the criteria that will be evaluated, encouraging them to reflect on and assess their own work and effort.
- ♦ It is holistic and integrated, using work samples collected over time (sometimes to create a portfolio).
- ♦ It is useful for providing opportunities for creativity and personal reasoning and enables the development of specific graduate attributes.
- ♦ Its “test validity” depends upon whether the test simulates real-world “tests” of ability.

Traditional Assessment

Authentic Assessment

Selecting a Response	↔	Performing a Task
Contrived	↔	Real-life
Recall/Recognition	↔	Construction/ Application
Teacher-structured	↔	Student-structured
Indirect Evidence	↔	Direct Evidence

When to use authentic assessment

Authentic assessment is best used in contexts such as the following:

- ♦ Professional education programs
- ♦ Authentic clinical, production or research contexts
- ♦ Application and problem solving with preclinical concepts and laboratory work
- ♦ Cross disciplinary integration

Characteristics of Authentic Assessment

Grant Wiggins (1993: 229) describes authentic assessment as *...engaging and worthy problems or questions of importance, in which students must use knowledge to fashion performances effectively and creatively. The tasks are either replicas of or analogous to the kinds of problems faced by adult citizens and consumers or professionals in the field.*

The following is Wiggins' list of characteristics of authentic assessment:

A. The Structure and Logistics

1. Are more appropriately public; involve an audience, a panel, and so on.
2. Do not rely on unrealistic and arbitrary time constraints.
3. Offer known, not secret, questions or tasks.
4. Are more like portfolios or a season of games (not one-shot).
5. Require some collaboration with others.
6. Recur – and are worth practicing for, rehearsing and retaking.
7. Make assessment and feedback to students so central that school schedules, structures, and policies are modified to support them.

B. The Intellectual Design Features

1. Are “essential” – not needlessly intrusive, arbitrary, or contrived to “shake out” a grade.
2. Are “enabling” – constructed to point the student toward more sophisticated use of the skills or knowledge.
3. Are contextualized, complex intellectual challenges, not “atomized” tasks, corresponding to learning outcomes.
4. Involve the student's own research or use of knowledge, for which “content” is a means.
5. Assess student habits and repertoires, not mere recall or plug-in skills.
6. Are representative challenges – designed to emphasize depth more than breadth.
7. Are engaging and educational.
8. Involve somewhat ambiguous (“ill structured”) tasks or problems.

C. The Grading and Scoring Standards

1. Involve criteria that assess essentials, not easily counted (but relatively unimportant) errors.
2. Are not graded on a “curve” but in reference to performance standards (criterion-referenced, not norm-referenced).
3. Involved demystified criteria of success that appear to students as inherent in successful activity.
4. Make self-assessment a part of the assessment.
5. Use a multifaceted scoring system instead of a one aggregate grade.
6. Exhibit harmony with shared school-wide aims – a standard.

D. The Fairness and Equity

1. Ferret out and identify (perhaps hidden) strengths.
2. Strike a constantly examined balance between honouring achievement and native skill or fortunate prior training.
3. Minimize needless, unfair and demoralising comparisons.
4. Allow appropriate room for student learning styles, aptitudes and interests.
5. Can be – should be – attempted by all students, with the test “scaffolded up,” not “dumbed down,” as necessary.
6. Reverse typical test-design procedures: they make “accountability” serve student learning.

Modes of Authentic Assessment

Problem-based learning (PBL) uses real world problems and tasks in which a team of students, over an extended period of time, evaluate what they know and what they need to learn in order to gain the necessary capacities to generate a response. PBL requires students to work with one another to identify and define problems and to formulate and test hypotheses, always searching for and applying theoretical knowledge and skills to new and ill-defined contexts.

Objective Structured Clinical Examinations (OSCEs) use actors in simulated real world health problems which students must observe, diagnose and treat in a limited period of time. This is more individualistic than PBL. These are labour-intensive and expensive, but are replicable so that all students are subjected to the same challenges which is not possible in real clinical contexts.

Scenarios can require students to notice what is important, explain it using theoretical concepts of the course, and plan and theoretically justify an intervention; OR require students to notice critical factors in a given situation, investigate the implications and prepare and present a report for a prescribed audience for a prescribed purpose.

Portfolios require that students understand and internalise the learning outcomes of a unit of study and then plan their own set of activities that will generate validated evidence of their performance capability and skill mastery. The most important feature of the portfolio is the contents and commentary page in which the student directs the assessor to particular evidence in relation to specific learning outcomes to explain and justify their learning achievements.

Designing a solution to a real community or workplace problem and presenting the solution to its intended audience. This might be combined with learning to conduct small scale research and surveys of contemporary issues that are published in a report for a specific audience.

Writing a journal article or short story for publication. This can be extended to requiring students to form editorial panels to review the work produced and undertake the full publishing responsibilities.

Constructing a website to develop a public education resource and educate a community

group about a contemporary issue that the students have identified, studied and researched. This requires the student to not only investigate the often conflicting explanations and viewpoints, but also to consider the needs and motivations of the community in relation to the issue.

Workplace or community placements require students to draft, negotiate and establish their own learning outcomes that are congruent with the learning objectives of the unit and reflect the context they are in. Students then gather validated evidence that they have achieved the learning outcomes.

Forensic problems for science are based on scenarios which require students to gather, record and analyse materials for their normal bench work laboratory education. Student groups may have to report or receive findings in relation to another group of students. This requires multiple levels of systematic organisation, teamwork and communication. Sometimes this might be combined with dramatizations such as court cases where results and conclusions are argued and defended. At the same time, routine laboratory skills are learnt and developed to have greater meaning and purpose because of the “big picture” setting and real-life interest established by the scenario.

Designing authentic assessment

The design of authentic assessment requires considerable up-front work prior to the commencement of a unit. It involves:

1. Clearly articulating the expected learning outcomes of the unit:

Basically, any assessment can be authentic if it is grounded in well-articulated learning outcomes reflecting real world contexts. Based on these the unit designer will then establish clear criteria and performance standards. Students require these learning outcome statements and performance criteria and standards to understand what is being asked of them and so to devise and undertake the learning activities to produce evidence of their achievements. These statements are also needed to assist students self-assess and to ask others, peers and external experts, to observe, assess and verify their performances.

2. Designing the real world conditions:

This requires describing problems or scenarios, finding placements in authentic settings, or designing a learning environment, taking account of the following:

- ♦ It is important to recognize that placements in “real world” learning contexts have a higher chance of “risk” for both the student and those in the context with whom they will interact. Appropriate duty of care must be exercised in terms of preparation and on-going management of students under these circumstances. The needs of all parties must be recognized, especially where outside groups are involved. The more “natural” the learning context is, the greater will be the risks involved.
- ♦ Where placement in a real setting is not possible or desirable, technologies can be exploited to design scenario-based virtual learning environments in which conditions, characters, circumstances and parameters are drawn to simulate a real life context for learning (Herrington et al, 2003). It is important to ensure that students have the requisite knowledge and skills to carry out the tasks. Plan to teach them or provide examples.

- » Are students aware of what a report looks like in contrast to more academic essays?
- » Do students know how to make written or verbal presentations to the public?
- » Do students know the legal implications of designing a web site?
- » Do students to have an appreciation of the ethical issues involved in reporting their observations?

Don't forget students doing real world activities may be the “face” of the university for the wider community and need to present themselves as responsible and well-prepared.

3. Managing the assessment load:

In authentic assessment situations, students may be over-zealous, producing very large portfolios or very long reports. It is important to set limits on the size of the submission, if for no other reason than to manage students' and staff workloads. If students are to keep journals, rather than have them submit the journals, ask them to write periodic learning statements based reflections from their journal.

References and resources

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