

Authentic Assessment

A subject is said to be inauthentic whenever students can pass all the assessment tasks and still not learn anything worthwhile (Ramsden 2003, p. 40). In these imitation subjects, students acquire large amounts of factual knowledge that is only useful within the narrow confines of the university assessment processes. Typically there is limited personal relevance or connection with the world of work students will face after they graduate from their course.

To ensure students are learning worthwhile outcomes requires careful crafting of the subject's learning objectives. Where the course intended learning outcomes identify particular attributes needed to be considered by a member of a target profession or discipline, the subjects within that course must be able to demonstrate how they contribute to those graduate attributes.

Knowledge that can only be demonstrated in classroom settings has limited value to graduates. The value of assessment comes from the confidence students acquire in their ability to apply what they have learnt to complex, ill-defined situations. In addition, the format of the assessment tasks need to be capable of making judgements about the students' ability to meet those learning outcomes in situations where they will be applied.

The practice-oriented nature of authentic assessment makes it a particularly relevant form of assessment for UTS subjects. This guide is intended as a resource to enable UTS staff to become familiar with the issues behind authentic assessment and develop a common understanding of the outcomes, contexts and formats used to assess authentically. The case studies are a resource that may assist peer reviewers and subject coordinators resolve some challenges they face when designing authentic assessment tasks to meet **learning.futures** criteria.

“All exams test is your time management skills. I’ve known people who are really good students but just can’t cram it into one-and-a-half hours.”

UTS Student

What is authentic assessment?

In the FACULTY OF SCIENCE first-year physics students test equipment for *Choice Magazine*. The students confirm whether there are faults in equipment such as TVs or vacuum cleaners.

Authentic assessment judges students' performances on practice-oriented tasks. An assessment task would be described as authentic when it requires students to apply what they learnt to a context that reflects what occurs in settings beyond the educational environment. To be authentic, the assessment task needs to mirror the complexity and high-level thinking that is required to solve problems in real-world settings. An assessment task is judged to be authentic by the combination of learning outcomes, intended context for its application and format of assessment tasks.

In the FACULTY OF DESIGN, ARCHITECTURE AND BUILDING first-year architecture students design an outdoor kitchen. They begin by looking at designs created to suit other sites before creating a drawing model for the specific site set for the assessment task.

Learning outcomes

Assessment is the mechanism by which we determine the students' abilities to demonstrate the learning objectives. In authentic learning, the subject objectives need to account for more than the subject matter. Authentic assessment is future-oriented (Boud & Falchikov 2007), targeting the higher level, meta-cognitive thinking required to be successful in the future. Narrow technical skills have a narrow application and quickly become out of date. Employers value graduate capabilities like interpersonal and communication skills, critical reasoning, problem solving, self-awareness, confidence, teamwork and leadership (Lewis 2014).

In the FACULTY OF LAW students have an open book exam in which they have 24 hours to produce a brief for a client.

Intended context

The intended knowledge and skills can only be recognised as authentic in a given context. The location of the student's performance of the assessment task itself could be within an educational setting and does not necessarily need to occur in a simulated environment. However, the conditions constraining the assessment tasks need to be as realistic to the target setting as possible. For example, objective structured clinical examinations (OSCE) present contextual information that is sufficiently realistic to allow transference of the learning to an actual clinical setting. The setting may help students to contextualise their learning but also brings unpredictability, ambiguity and complexity to the task. Therefore the design of authentic assessment tasks needs to balance realism with the practicalities of marking.

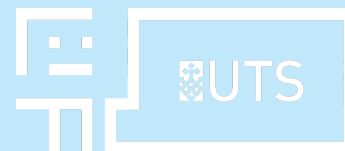
In the FACULTY OF ENGINEERING AND INFORMATION TECHNOLOGY first-year students work in a team with different engineering disciplines to complete the Engineers without Borders Challenge. The teams have to address questions of social responsibility and sustainability as well as how to communicate their answer to a panel of industry people who are the project outcomes reviewers.

Format of authentic assessment

Authentic assessment requires students to respond to a situation and create a product for marking. These assessment products are usually presented in formats that would be used in work practice settings. They generally do not limit the assessment outcome to a single solution and will offer a degree of student choice in how to present their answers. The restrictions imposed by the format develop students understanding of the relative importance of different aspects of the assessment task as they select and edit earlier work to suit a different mode of presentation.

Formative authentic assessment

Authentic assessment commonly allows students to revise earlier versions of their assignments prior to final submission for marking. This formative process provides students with opportunities to refine their knowledge and skills in response to feedback. As part of a multi-assignment mix, authentic assessment can also be used to make summative judgements about students' understandings and skills in particular domains, like communication and teamwork.



Skills for the Professional Chemist

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It is necessary to prepare science students to work safely with chemicals. An earlier subject with this goal had an exam worth 80% that was largely a memory test of lists of chemical properties and labelling requirements. It became obvious that important capabilities needed to work safely in science industries, such as written and verbal communication, project management and ethical work practices, were missing.

To help students build an understanding of legislative requirements and work health safety, students now work in groups of 3–4 to complete an organisational analysis related to the safe handling of chemicals.

Preparation for the assessment task includes interactive workshops to build communication skills, benchmarking of exemplary student reports and conflict resolution role-plays.

Each student group produces a written report of a chemical incident in an industry setting and a risk assessment of the processes involved. Groups also make a 15-minute presentation of their analysis to the class. The contributions to the group dynamics and teamwork are assessed by peers using SPARK^{PLUS}.

Ideas in History

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A foundational principle of the communication degree is for all subjects to have at least one multimodal digital assessment task. In the core first-year subjects, it is also necessary to prepare students for academic writing in the university context. Students coming into the degree have extensive experience in writing a certain kind of essay that is not particularly well suited to studying humanities and social sciences.

In Ideas in History students undertake a critical examination of how ideas influence communication socially, culturally and politically. They are still required to write a traditional 2000-word essay and are taught how to persuade an audience on the merit of their positions while using the faculty conventions for citing authoritative sources.

To convert their essays into a more widely read format, students work in a production team to publish an ebook. They begin by presenting an expression of interest on themes they would like

their ebook to explore. The first assessment task translates this expression of interest into a proposal for the ebook and a plan for the individual chapters.

Students receive feedback on their essays before forming a team with five distinctive roles. The **book editor** has responsibility for the intellectual coherence of the ebook while **copy editors** look at grammar and referencing. The **layout editor** creates the design and **legals** ensure no plagiarism of text or images. It is left to the **production editor** to get the final publication into UTSONline.

Students rate their team members using SPARK^{PLUS} to ensure all students contribute equally to the ebook production process. High distinction work is published in a public UTS student journal which has subscribers from all around the world.

<http://epress.lib.uts.edu.au/student-journals/index.php/iih>

In the UTS BUSINESS SCHOOL students interview real business managers and write a report of the processes they describe using the organisational theory they have identified.

Designing authentic assessment tasks

Marking assessment tasks that target higher level graduate capabilities can take a considerable amount of time and effort. The following steps in designing authentic assessment help balance authenticity with streamlined methods of marking:

1. define learning outcomes that are the foundation for authentic assessment tasks
2. review outcomes with content experts, professional and industry representatives to determine relevance to the intended context
3. identify an appropriate level of realism to balance complexity with efficiency in marking
4. decide how students would usually communicate their outcomes in the workplace
5. develop scoring rubrics for the learning outcomes
6. collect student work examples for benchmarking
7. check outcomes validity and marker reliability.

Suggestions for making assessment more authentic

Common strategies for making assessment more authentic are to:

- involve industry representatives in the marking of student work using workplace standards of performance
- use assessment formats that replicate workplace practices
- interview industry leaders or create industry case studies
- add creative elements to traditional assessment tasks
- create portfolios in which students showcase their best work
- provide existing data from research studies
- invite industry to nominate relevant assessment tasks
- reflect on learning outcomes developed during field trips.

ADDITIONAL RESOURCES

Assessment futures:
<http://www.uts.edu.au/research-and-teaching/teaching-and-learning/assessment-futures/>

References

- Anderson, L.W. & Krathwohl, D.R. (Eds.). (2001). *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. New York: Longman.
- Boud, D. & Falchikov, N. (Eds.). (2007). *Rethinking assessment in higher education: learning for the longer term*. London: Routledge.
- Finlay, N., Huggett, J. & McCulloch, M. (2008) *Practical Work Portfolios and Field Experience: an evaluation of modes of assessment for archaeological skills*. Presented at: The Teaching and Learning in Archaeology Conference (HEA), 25–26th June 2008, Liverpool, UK.
- Lewis, E. (2014). *Graduate Outlook 2013. The Report of the Graduate Outlook Survey: Employers' Perspectives on Graduate Recruitment*. Melbourne: Graduate Careers Australia.
- Newmann, F.M. & Wehlage, G.G. (1993). Five standards of authentic instruction. *Educational Leadership*, 50, 8–12.
- Nilson, L.B. (2015). *Specifications Grading: Restoring Rigor, Motivating Students, and Saving Faculty Time*. Sterling, VA: Stylus Publishing.
- Ramsden, P. (2003). *Learning to teach in higher education*. London: RoutledgeFalmer.
- Meyer, C.A. (1992). What's the difference between authentic and performance assessment? *Educational Leadership*, 49, 39–40.
- Stiggins, R. J. (1987). The design and development of performance assessments. *Educational Measurement: Issues and Practice*, 6, 33–42.
- Wiggins, G. P. (1993). *Assessing student performance*. San Francisco: Jossey-Bass Publishers.

FURTHER INFORMATION: <http://www.uts.edu.au/research-and-teaching/teaching-and-learning/learningfutures/>

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