APPLICATION SUMMARY

Concept: Designing and delivering 'Authentic' assessments

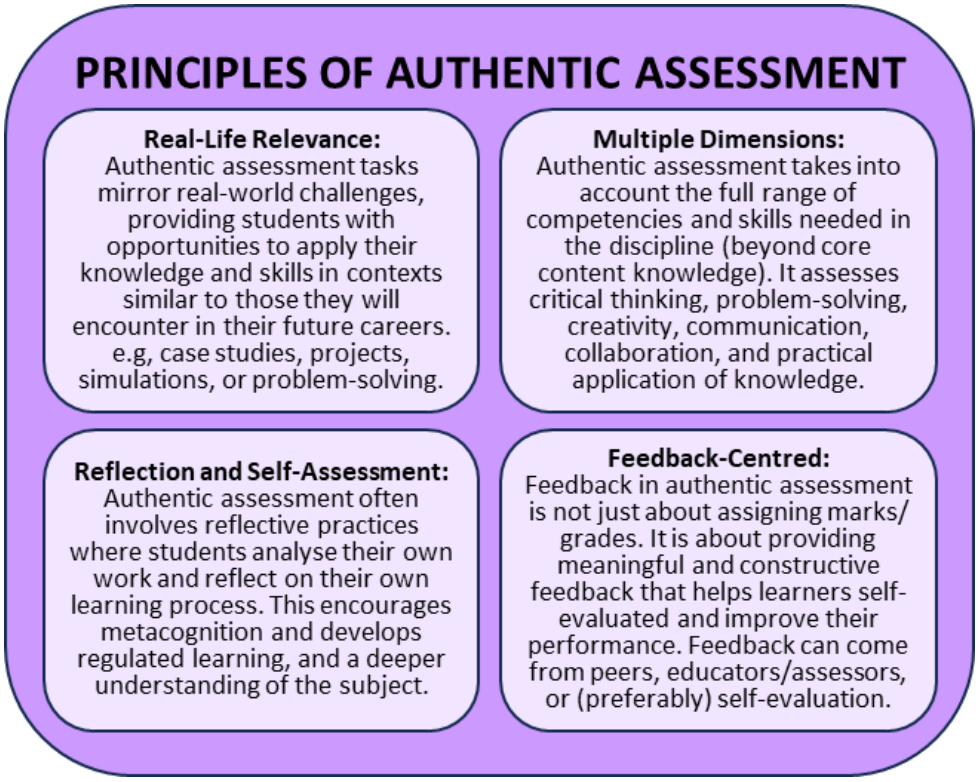
Brief summary of concept:

Authentic assessment is the delivery of assessments that align with real-life activities (Ashford Rowe *et al*., 2014; Wiggins, 1998; Wiggins, 2019). Many assessment types in university (most notably time-limited examinations, closed-book assessments, and extended written essays) are quite specific to educational contexts, and activities that the students will probably never have to undertake in their working life. A central concept to authentic assessments is the engagement of students centrally working on real problems, using approaches that are relevant to their future careers, and in real contexts (Erekson, 2011; Crowl et al., 2013; Raymond *et al.,* 2013).

Wiggins (2019) defines authentic assessment as something which tests "worthy intellectual tasks"; i.e. those activities which are relevant and important to the learner. Authentic assessment offers a powerful alternative to traditional assessment methods. By emphasising real-world relevance, holistic evaluation, and the development of practical skills, it prepares students for success beyond the classroom. While it presents challenges, the benefits of authentic assessment make it a valuable approach for fostering deep learning and real-world preparedness in higher education.

Figure 1 summarises some principles of Authentic Assessment.

Figure 1: Principles of Authentic Assessment



A major factor is considering whether the student is learning a particular skill in order to complete an assignment task, and if that skill will then be a direct use to them once they complete their course of study. By developing assessment approaches which are valid only for the purposes of assessment, we are increasing the ***cognitive load*** on our students. They will need to develop skills related to the assessment, as well as the skills they need for their future careers. Our assessment needs to be focused and support students' learning, not add to their cognitive burden. Ensuring that assessment is authentic to their future activities ensures that assessments are both meaningful, and do not overload learners cognitive capacity and focus on the concepts and knowledge that matter most. An important element in the application of these principles is engaging with employers to clarify the fundamental skills required by them in the workplace, and applying those concerns to the assessment design.

So what does an authentic assessment look like? Koh (2017) defines a list of 8 attributes of an authentic assessment.

1) authentic assessment "is realistic" and replicates how a student's knowledge, skills, and/or dispositions are assessed in a real-world context..
2) tasks require students to make good judgments and be creative and innovative in solving complex and non-routine problems or performing a task in new situations.
3) task enables students to deeply engage in the subject or discipline through critical thinking and inquiry.
4) students are given opportunities to rehearse, practice, look for useful resources, and receive timely quality feedback so as to improve the quality of performance or product.
5) Multiple evidences of student performance over time and the reasons or explanations behind the success and failure of a performance.
6) multifaceted scoring system is used, and scoring criteria must be transparent. Sharing of scoring criteria explicitly with students will enable them to understand and internalize the criteria of success. .
7) student self-assessment must play a pivotal role in authentic assessment.
8) reliability or defensibility of teachers' professional judgment or scoring of student performance or work is achieved through social moderation (Klenowski & Wyatt-Smith, 2010).

Brief summary of approach:

Applying these principles in practice requires the review of individual assessments as well as assessments strategies for a degree course or School/Department/Faculty, or even an institution. There are some ideas around authentic assessment approaches in the **EAT Decision-making cards**, focusing particularly on how you can work with students to embed authentic assessment principles in your assessment practice.

Framing the assessment:

The framing of an activity within a 'real world' scenario adds authenticity to the activity, but also is likely to engage interest and inspire motivation from the learner. If they can see how an activity will be *directly* relevant to their future, they are far more likely to engage with it to a deep level (James & Casidy, 2018).

Assessment output medium:
The approach that should be taken is to consider what format the evidencing of this skill or competence will be in the working environment. For example, evidence of content knowledge might be in the form of a lay summary for an employer or a position paper for a regulatory agency. Problem-solving might be focused around a real-world problem for an employer in the discipline, or optimising an approach, or identifying the key challenges which might impact on a suggested course of action. Presentations are likely to have a specific goal or purpose. Team-work is likely to feature heavily in an activity.

Time-frame/duration of the assessment:
It is rare that work-related activities need to be undertaken within a very short window of time, although they will almost certainly include a deadline. So a realistic timeframe for the assessment should mimic the likely timeframe faced in real practice. In some cases an activity would need to be delivered in a matter of hours, in others a deadline of days or weeks is more likely.

Access to resources:
Consider what resources the professional is likely to have access to when performing this task in a professional context. The format of the assessment should mimic this. If asked to write a position paper for an employer, it is unlikely that an employee will be required to do so in a couple of hours, with no access to notes, reference material, or communication with others (i.e. the format of a closed-book examination). Similarly, a health professional dealing with a patient is unlikely to have the time to access detailed notes, text books, or online resources.

Partnership with students and/or employers:
Providing students with the agency to either consult on the design of an assessment/ assignment, or have a degree of choice in the selection of the area of focus can help with enhancing authenticity. Equally, active engagement with an employer, or an organisation in the discipline, would also be mutually beneficial.

EXAMPLE ACTIVITY:
Work in partnership with a company of relevance to the discipline (e.g. a business, or an engineering facility, or a healthcare trust) to frame a problem in their organisation which needs addressing, but which they do not have the time or resources to dedicate to solving. Make finding a solution the assignment for your students. Each student is tasked with developing a solution to the problem, using their learning from your course. The students benefit by being involved in solving a real problem, the educators benefit by having a new challenge each year (without the need to recycle assessments), and the business is then potentially presented with a selection of potential solutions to the problem (with the students' consent), one of which might be viable and work developing further.

Table 2 suggests some ways in which a 'traditional' assessment could be reimagined as an authentic assessment. These ideas are not by any means exhaustive, but hopefully might prompt some ideas.

Authentic assessment has many benefits, but also some challenges. Figure 2 suggests factors that can be benefits or challenges associated with authentic assessment.

Table 2 – Authentic assessment alternatives to traditional assessments.

Traditional Assessment type	Potential Authentic Assessment alternatives
Time limited, closed-book exam	Open-book, problem-solving or data-interpretation challenge, with pre-assessment preparation opportunities
Time limited, open-book exam	Lengthen the period of the assessment; focus on the process of developing the output more than the output itself;
Oral presentation on a topic	Problem-based activity with a presentation on how the outcome was achieved; video/audio recording; designing a training resource on the topic; presenting a plan/solution/ proposal
Extended essay	Position paper for an employer/agency; preparatory document for a debate, highlighting pros and cons of an argument; problem-solving activity; funding proposal.
Knowledge test/quiz	Focused on real-world problems that require factual knowledge to solve. Scenario-based questions.
Dissertation/Thesis	Grant funding proposal; Position paper to a government agency; journal article; Gap analysis of a problem; solving a real-world problem; *viva voce* discussion.
Group Project	Reframe as a 'team task'. Focus on the process of working in the team and fulfilling specific roles relevant to authentic practice; focus on planning and time management with deadlines.

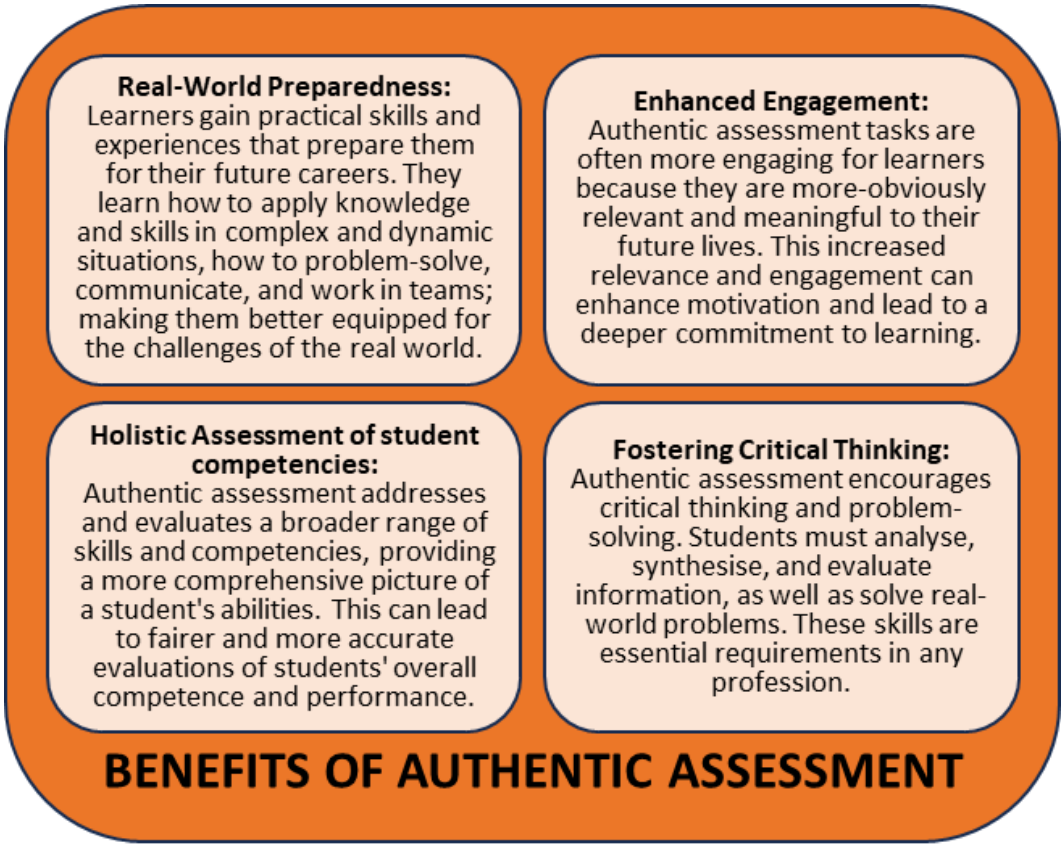
Authentic assessment and Generative Artificial Intelligence

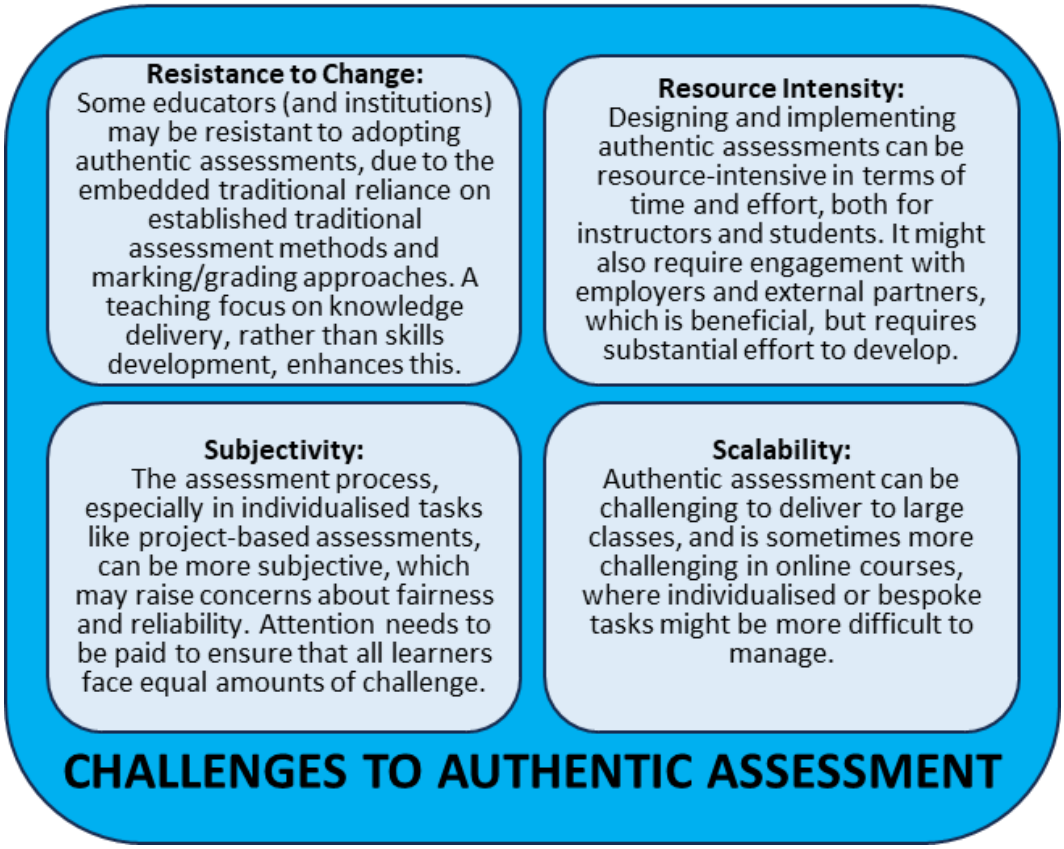
A key employability skill that is likely to be required in the immediate future is the effective use of AI tools, especially generative text AI, such as ChatGPT and equivalent products. This application summary highlights some of the issues associated with AI for assessment. However, by building assessments which focus on the process of an assignment, rather than the final outcome, both addresses these challenges, and develops this important employability skill. This other document summarises an example way of using this for a written assignment.

SUMMARY

Authentic assessment centres the assessment process around what is required for the learner and their development. In particular the aim is to enhance their ongoing progression as a lifelong learner and as an employable graduate. We need to frame our assessment modes to align with these skills, rather than requiring students to develop 'exam techniques' that will only be of use to them at university.

Figure 2: Benefits and challenges associated with authentic assessment





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Co-funded by the Erasmus+ Programme of the European Union

This project has been funded with support from the European Commission (Grant Number: 2020-1-UK01-KA203-079045). This Web site reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.