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**Introduction**

Authentic assessment “reflects the kind of understanding that requires an active demonstration of the knowledge in question, as opposed to talking or writing about it” (Biggs and Tang 2007, p.181).

Authentic assessments frequently focus on complex, multifaceted, real-life scenarios including their inherent challenges. Learners must utilise and apply a mix of knowledge and skills in coordination and should be able to justify solutions to encountered constraints. Hence, authentic assessments are more likely to engage learners and motivate them versus conventional tests (Wiggins 1989).

**Background**

- Theory and practical applications of learning, using electronic media and learning technologies, are taught in the “Learning Environments” module within the **Intercalated BSc in Medical Education**.
- Students are exposed to ‘**flipped learning**’ techniques, where short Panopto videos and readings are offered in advance of teaching sessions.
- Students are expected to learn about **technology enhanced learning (TEL)**, through an exploration and analysis of examples and published studies.

**Summative assessment**

- Students work in small groups (3-5) and are required to develop an online learning package, using **Xerte**, from the point of view of a teacher and curriculum planner.
- Students are encouraged to design a package which demonstrates that appropriate theoretical perspectives from **inter-professional education** and technology enhanced learning (TEL) are incorporated.
- Elements of “**hidden curriculum**” are uncovered as students undertake tasks that demonstrate meaningful application of essential knowledge and **21<sup>st</sup> Century Skills** (Advance HE 2018).

**Critical elements that determine authentic assessment**

The summative assessment can be viewed as an example of authentic assessment through alignment to **Ashford-Rowe et al.’s (2014)** practical framework and its 8 critical elements.

**Examples of student projects**

**Delirium in the Hospital Setting**

[https://xerte.cardiff.ac.uk/play\\_9164](https://xerte.cardiff.ac.uk/play_9164)

**Delivering primary care to refugees & asylum seekers**

[https://xerte.cardiff.ac.uk/play\\_9259](https://xerte.cardiff.ac.uk/play_9259)

**Abuse Towards Healthcare Professionals**

[https://xerte.cardiff.ac.uk/play\\_9179](https://xerte.cardiff.ac.uk/play_9179)

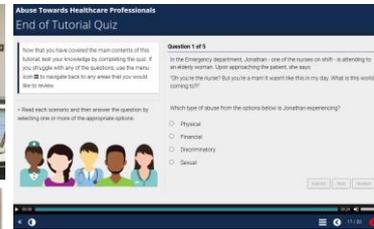
**Student Feedback (18/19)**

End of module feedback (response rate 57%) :

- **87.5%** overall satisfaction
- **100%** 'agreed' or 'strongly agreed' with the statement: “The module has provided me with opportunities to explore ideas, practices or concepts in depth”

What do you consider the best thing about the module?

- “Being able to achieve a **product** at the end of the module”
- “Being able to **pick any topic** you want as the focus of the e-learning module”
- “The fact part of the module is **group work** and lots of **freedom** is allowed with regards to ideas for E-Learning module”
- “[NAME] was very supportive as a teacher; making the e-learning software was fun”



**Images:** In-class group activity (top left); Example of a storyboard developed in a teaching session (bottom left); Screen capture of a completed Xerte project (top right).

The assessment is **challenging**

- Students expected to produce an interactive eLearning package in small groups.
- Students required to demonstrate a range of skills and knowledge (e.g. sourcing and synthesising literature in developing content; engaging with educational theories and multimedia principles; creative skills in design).

The outcome of the assessment in the form of a performance or **product**

- The assessment outcome is a functional product (Xerte learning object) which stems from the skills and knowledge acquired through the module.

There is a **transfer of knowledge**

- The task assess a range of skills, knowledge and attitudes beyond a single content area.
- The group work assignment requires demonstration of a repertoire of attributes relevant to the workplace (e.g. multimodal literacy, creativity to solve problems, cooperate, work in teams to negotiate a complex task).

Metacognition (**reflection**) is a component

- A justification essay is required whereby students are expected to engage in active critical reflection and reflect on the experience of designing a workbook, increasing their ability to re-apply the acquired knowledge.

**Accuracy** in assessment outcome, demonstrating a developmental process

- Students submit a justification essay and storyboard which demonstrates the developmental process that has led to the final assessment outcome.
- It is recommended that students conduct focus groups with potential learners, which helps ensure that the final product meets its purpose within the workplace.

There is appropriate **fidelity** (replication of workplace tools & methods)

- Students are required to use authoring tools, widely used within the higher education sector, such as PowerPoint and Xerte.
- Students work within a collaborative environments which has a high fidelity when creating eLearning modules.

The process provides opportunities to discuss and provide **feedback**

- Teachings sessions incorporate interactive exercises which scaffold the analysis, design and development of projects. Regular Feedback provided by peers and tutors, designed with a view to improve outcomes.
- Prior to submission a “show and tell” session culminates in real time feedback from tutors and other students.

The process values **collaboration**

- Influenced by social constructivist principles, co-operative learning is at the heart of the module, whereby students work with peers in preparing, developing and presenting materials.
- The module team facilitate in-class collaborative activities which are designed to scaffold students’ understandings and knowledge.

**References**

- Advance HE. 2018. *21st century skills*. Available at: <https://www.heacademy.ac.uk/knowledge-hub/21st-century-skills> [Accessed: 01 August 2019].
- Ashford-Rowe, K. et al. 2014. Establishing the critical elements that determine authentic assessment. *Assessment & Evaluation in Higher Education* 39(2), pp. 205-222. doi: 10.1080/02602938.2013.819566.
- Biggs, JB. and Tang, C. 2007. *Teaching for quality learning at university: What the student does*. 3rd ed. Berkshire: McGraw-Hill education.
- Wiggins, G. 1989. Teaching to the (authentic test). *Educational Leadership* 46(7), pp. 41-47.