Submissions Abstract Book - All Papers (All Submissions)

0152

Thu 12 Dec 2019

10:30 - 11:00

Consider the role and value of authentic assessment in a contemporary HE assessment framework

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Research Domain: The Digital University and new learning technologies (DU)

Abstract: There is currently a debate around contract cheating in HE, This has in many respects evolved from the current often from an essay or exam driven pardigm. Clearly, Univerisities and their national quality assurance organisations need to be able to respond to these concerns in order to guarantee the quality of what is an increasingly internation commodity. However, as well as a legislative approach to these types of challenges, many are considering a range of alternative mechanisms that could lead to higher standards of academic integrity and, moreover, make it increasingly more difficult to 'cheat' in assessment. It is to this end that this session proposes to consider the question as to whether one counter to this, and in support of an educationally designed response might be to determine whether the assessment regimes of modern Universities be less exam driven and more focussed upon the greater use of authentic approaches to assessment.

Paper: Why authentic assessment

There is currently a debate around contract cheating in Higher Education. Thus, it is that universities need to be able to respond to these concerns in order to provide assurances as to the quality and integrity of their awards. A range of approaches are being taken across the educational world ranging from the use of technologies to authenticate student identity or provide 'online proctoring'; to the consideration of using legislation to address these challenges. All of these approaches are aimed at ensuring academic integrity, with the intention of making it more difficult for students to 'cheat' on assessment. In addition to the deployment of often expensive technologies or the implementation of the sometimes-blunt instrument of legislation, this paper proposes that another option might be the design of increasingly authentic assessments that could provide an additional mechanism to make it harder to cheat.

What is assessment?

Higher education curriculum has increasingly come to be expressed in the form of 'learning

outcomes' and it is the 'demonstration of the achievement' of these learning outcomes, most often measured by assessment instruments, that is the most prevalent mechanism by which the necessary evidence of such achievement is provided, and thus academic expert judgement reinforced and credentials awarded. This means that the focus of the educational attainment is essentially predicated upon the 'demonstration of achievement of a learning outcome'. If this is so, then it is reasonable to assume that the assessment activity itself is designed to be able to sufficiently demonstrate that the appropriate levels of outcome (whether performance or product) have been met. As Race, Brown and Smith (2005) noted:

Nothing that we do to, or for, our students is more important than our assessment of their work and the feedback we give them on it. The results of our assessment influence our students for the rest of their lives and careers – fine if we get it right, but unthinkable if we get it wrong.

Why authentic assessment?

An inherent challenge within the assessment of a learning outcome is that the demonstration of its attainment is often, of itself, more complex and may involve the aggregation and measurement of a greater range of capabilities (or learning outcomes) than a single discrete 'skills' or 'knowledge' acquisition. This requires that we be better able to provide assessments that are capable of measuring this complexity and, in addition, that better reflect the complexity of the challenges that graduates (as employees) will likely find in their workplaces. This leads us to the consideration of approaches to assessment that enable such complexity to be deliberately designed into an assessment activity. One such approach, that does enable this complexity to be so designed for is that of 'authentic assessment'. As Neely and Tucker describe (2012 in Villarroel et al (2019)):

Authentic assessment is a way to relate learning and work, creating a correspondence between what is assessed in the university and what graduates do in settings in the outside world.

Villarroel et al (2019) concur acknowledging that:

Higher education must assess critical competences needed for solving realistic and contextualized problems using high-order skills in order that students become good professionals and citizens.

The use of increasingly authentic assessments, which are often complex in their design can also make them more difficult to 'cheat' upon. In this context, where an assessment is designed to fit a complex set of criteria, tailored to more specific situations, it is likely that responses to such a design will be more nuanced by the student undertaking that assessment, and to the context within which it is being undertaken. This, in turn, can make it harder for an individual without the relevant experience, and out of the context of that situation, to replicate. It is also possible that in an authentic assessment regime, the assessment act itself will be played out across a range of responses over a period of time, as opposed to at one single instance as per the more traditional exam or essay. This means that the opportunity of seeking a third party to undertake the assessment and provide the artefact would of itself be a much more complex transaction.

In order to drive a closer alignment between university skills and knowledge acquisition with workplace capability beyond graduation, at least one university in Australia, the Queensland University of Technology, has sought to implement authentic assessment as an integral component of its intention to be *A University for the Real World*. Under the auspices of 2020 Real World Learning (RWL), a number of indicators of success are described, including: that [University] units have at least one summative authentic assessment task explicitly aligned to and supported by authentic learning and pedagogy. In support of this, the RWL Vision seeks to define authentic assessments as having the following characteristics, they:

- Are based on or related to real world issues and problems
- Are replicas of or simulate as closely as is practicable what is done by and asked of professionals
- Relate to real world contexts (e.g. roles, interactions, audiences)
- Involve learners representing their learning in a mode/medium of representation relevant to professional

In progressing an authentic assessment approach, QUT has established mechanisms that enable it to track and map its uptake by courses across the University. Thus, in 2017 QUT was able to report that it had delivered nearly 200 000 authentic assessment experiences, across 1658 units. This represented 74.8% of all of the University's units at the time.

So, if authenticity in assessment has value what does it look like and what are the design characteristics that need to be applied to enable it. This is an area that has significant literature but for this purposes of this paper, and in order to describe a range of those characteristics, the research by Ashford-Rowe et al (2014) is described. Within this research, it is suggested that, if authenticity in assessment is an important consideration then it can be deliberately designed for but that to do so, a number of characteristics need to be considered, including: 'challenge'; 'performance or product'; 'transfer of learning'; 'metacognition'; 'stakeholder/end user perception'; 'fidelity of assessment environment and tools'; 'internal discussion and feedback'; and, collaboration'.

Thus it is considered that an assessment should be challenging. That is it should establish connections between the training environment and 'real-world' experiences. It should also present students with the full array of tasks that mirror the priorities and challenges found in the work environment. The degree of the challenge must itself reflect the authenticity of real-world situations and tasks. Within an authentic assessment regime, students should be required to demonstrate their ability to analyse the task and synthesise, from the range of skills and knowledge that they have acquired, those which will be necessary for the completion of a specific outcome, where the approach to the potentially correct response may not always be clear cut or obvious.

The outcome of the assessment itself should be in the form of a performance or product. It is thus the responsibility of assessment designers to determine the extent to which the assessment activity requires the production of a completed outcome or product. It may be that the actual application of a specific set of skills and knowledge may be of less importance than the requirement to produce a functional product or acceptable performance outcome. To this end, it may be that the successful assessment outcome measured more by the successful outcome than by the mechanism or means by which it was achieved. Provided, of course, that it was produced by the assessed student(s).

The assessments design should also ensure transfer of knowledge. Where in a real world or authentic operational or working environment, it is not always the case that the skills and knowledge required will come from a single content area or domain. Thus, in authentic work performance, knowledge and skills will likely be drawn from a range of domains, though they may be applied within a single domain to produce successful performance. So, authentic assessment activity should support the notion that knowledge and skills learnt in one area can be applied within other, often unrelated, areas.

The assessment should allow for metacognition, in that to succeed in complex operational environments, future employees will likely need to be capable of metacognition, that is they must be able not just to complete a task but to be aware of how and why they did it, and in the way that they did. To that end, metacognition establishes the value and importance of both critical reflection and self-evaluation for successful workplace performance, as well as personal development.

The assessment should require sufficient accuracy of performance. This means accuracy that is recognisable not only to the learner developing understanding and applying knowledge. But accepting that the student may also be required to demonstrate the developmental process that has led to the final assessment outcome. Acknowledging again that, more often, in a workplace context, it is the degree to which a final product or performance meets its purpose that is the overall determinant of its success.

The assessment environment and the tools used to deliver the assessment task should also be accurate. Thus the fidelity of the environment within which the assessment is to occur, as well as the use of any tools that would be considered appropriate to this environment are extremely important. As a 'real world' context might be sometimes hard to recreate in a classroom environment, consideration needs to be given to the ways in which an accurate environment can be simulated.

The assessment design should ensure capacity for discussion and feedback. The ability to discuss and give and receive feedback is critical to workplace performance, and should; therefore, be included in an assessment activity. The value of feedback as both guidance and a means of determining areas for improvement is vital to improved performance. Finally, the assessment should ensure collaboration as the ability to collaborate is indispensable in most work environments. The value of collaboration, as a means of seeking out external sources for gathering critical data, is integral to any business performance.

These characteristics were refined into a set of eight questions intended to enable teachers and educational designers to consider them in assessment design. A website was developed to further assist teachers and educational designers to use them (see below). The website provides access to the eight questions in the form of the 'Authenticity Rating Tool'. The Tool allows teachers and educational designer to use the eight critical questions as a heuristic that enables them to make informed, and consistent, educational design decisions that will enhance the degree of authenticity within their assessment regime, thus, it is hoped increase the academic integrity of the assessment regime.

References:

Race, Brown and Smith (2005), 500 Tips on Assessment, JISC - Effective Assessment in a Digital Age (2010)

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