Open Research Online

Academics understanding of authentic assessment

Conference or Workshop Item

oro.open.ac.uk

Academics' Understanding of Authentic Assessment

Denise Whitelock and Simon Cross
The Open University, UK

Abstract

This paper reports on a project undertaken at The Open University which set out to explore academics' notion and practice of authentic assessment through the exploration of the following research objectives:

1. To understand what is meant by authentic assessment in the literature by examining a set of examples of authentic assessments.

2. To construct a questionnaire which could be used by Open University academics to explore their understanding of authentic assessment.

3. To investigate through means of a questionnaire the types of assessment academics were currently undertaking and whether they fitted into a broad definition of authentic assessment.

The findings from the electronic survey suggest that Open University academics are on the way to designing meaningful assessments for their students. Although many of the courses were employing assessment tasks that could be considered as 'authentic', only 25% of the academics had heard of the terms 'authentic learning' and 'authentic assessment', which is a low response compared with 'learning design'. However, there has been a well publicised Learning Design initiative taking place across the University.

Introduction

There has been a growing interest over recent years in how higher education can provide students with meaningful experiences and better prepare them with the knowledge and skills for their future careers and lives. This often aligns with an interest in making learning a more authentic experience. And of course, any innovation seeking to build more authenticity in to the learning experience should also seek a corresponding drive to greater authenticity in how, when and why students are summatively and formatively assessed.

Understanding what is meant by authentic assessment is a task in itself. The literature reveals that the academic community believes that designing and implementing authentic type assessments is a laudable goal and contextualizing assessment, within a set of authentic and real life tasks, is one to be taken seriously (Dochy, 2001; Gielen, 2003). However there is little agreement around the definition of authentic assessment, which in itself presents a challenge when seeking to innovate and change current assessment practices within a higher education institution.

This paper reports on a project undertaken at The Open University which set out to explore academics' notion and practice of authentic assessment through the exploration of the following research objectives:

1.   To understand what is meant by authentic assessment in the literature by examining a set of examples of authentic assessments.

2.   To construct a questionnaire which could be used by Open University academics to explore their understanding of authentic assessment.

3.   To investigate through means of a questionnaire, the types of assessment academics were currently undertaking and whether they fitted into, through means of a questionnaire, a broad definition of authentic assessment.

The Research Communities understanding of Authentic Assessment

Over the last twenty years, authenticity in learning and teaching has evolved into a complex, multi-layered discourse with a supporting research base and practical application. The idea that learning needs to be more 'authentic' has several origins

but became more established by the mid-1980s. However, it was the use of 'authentic assessment' by social constructivism that has had the most widespread impact. It was used within this context to reframe the role of assessment and to problematise traditional assessment which formed part of what Serafini (2001) considers the most recent of the assessment paradigms, known as 'assessment for enquiry'.

Wiggins (1993) used the authentic notion of assessment to question the usefulness of current testing regimes in the US by defining authentic as '[the extent to which] a student experiences questions and tasks under constraints as they typically and "naturally"occur, with access to the tools that are usually available for solving such problems'. Torrance (1995) too makes a useful attempt to summarise this idea by declaring; '[it is that] assessment tasks designed for students should be more practical, realistic and challenging than what one might call "traditional" and went on to suggest it is used as 'a generic term… to describe a range of new approaches to assessment.'

The notion of authenticity in assessment task has gained momentum and has been integrated into models or principals of instruction as illustrated by the first of Merrill's five principles of instruction (2002). Falchikov (2005) also observes that 'authentic assessment appears to be increasingly used in further and higher education'. However, she also notes that the term is less widely-used or understood than the actual activities that can be identified as authentic. Falchikov gives an example from her experience:

> 'My own work… has involved my students in all of the activities [I regard as authentic]. However, I have not used the term "authentic" to describe the type of assessment being carried out. Of course this does not mean that the activities were not authentic. Dierick and Dochy (2001) have argued that students rate assignments such as projects, group exercises, portfolios and peer assessment as meaningful because they are authentic. Thus the use of authentic assessment may be far more widespread than appears at first glance' (p72)

Furthermore, as the notion has matured a number of questions have arisen about it: some in relation to clarifying how it differs from other related ideas such as alternative assessment, competence-based assessment, performance assessment and sustainable assessment; yet others have been more searching. Inbar-Lourie & Donitsa-Schmidt (2009) described authentic assessment as a 'controversial concept' which, whilst a view not shared by all critics, certainly reveals the range of perspectives held within the research community.

It is not only a difficult notion to define but it is also problematic to collate features within an assessment task that define it as an authentic assessment. We have drawn on the work of Savery & Duffy (1995); McDowell (1995); Hart (1994); Herrington & Herrington (1998); Cronin (1993) and Struyven et al (2003) to counter a number of features that were common to a range of "authentic" assessment tasks. These included:

- Collaboration that is similar to that experienced by practitioners or experts in the field

- Simulations of role-play or scenarios

- Problem tasks that are like those encountered by practitioners or experts in the field

- Resources (documents, data, etc.) taken specifically from real-world case studies or research

- Tasks that students find meaningful

- Examinations take place in the real world settings

- A range of assessment tasks rather than just the "traditional" ones

- Demonstration and use of judgment

- Students are involved in the negotiation of the assessment task

- A test of how well the student thinks like a practitioner/expert in the field (i.e. "in-tune" with "disciplinary mind")

These features were then turned into a set of statements in the questionnaire administered to OU academics.

Method

An electronic questionnaire (which was powered by SurveyMonkey) was constructed to investigate academics' understanding of authentic assessment in such a way that a definition was not revealed to the participants per se but instead elicited through an examination of their practice. The questionnaire consisted of three major sections. The first asked participants to rate how important the factors identified from the authentic assessment literature were to assessing students in their own particular discipline. The participants had to rate each factor on a 4 point Likert scale as either Very Important; Quite Important; Slightly Important; or Not at All Important.

The second part of the electronic questionnaire asked participants to reflect upon one module they were currently chairing and to respond to a number of questions about the type of assessment they were using in that module. The questions were designed to show, for example, how successful the assessments were in getting students to:

- Collaborate in similar all life experiences.

- Answer problems which are like those encountered by practitioners or experts in the field.

In other words, these questions mirrored those in Section 1 but now we were probing whether the desirable features of authentic assessment tasks were taking place in their own teaching – without giving away what we meant by authentic assessment or designing it as such so far in the questionnaire.

Only in the third and final section of the electronic questionnaire are the academics asked if they have encountered the term "authentic assessment" before, together with a set of other terms which included:

- Alternative assessment

- Authentic assessment

- Learning Design

- Authentic Learning

- Feed-forward

They were finally asked in the third section of the questionnaire:

"How important is it to you and your students that assessment activities and questions try to be as authentic as possible." They were asked to respond again using a 4 point Likert Scale ranging from Very Important to Not Important.

The Associate Deans with responsibility for Teaching and Learning were contacted from all the Faculties. They were asked to circulate the invitation to participate in this survey about Assessment practices (Authentic Assessment was not explicitly mentioned) to their module chairs.

In MCT and Science the Associate Dean circulated the invitation to respond to all module chairs. In the other Central Academic Unit 's a sample of 20 staff were personally invited to take part. The response rate for the latter group was 30-50%.

The final number of participants was 102 and the breakdown into Faculty respondents is shown in Table 1 below.

Table 1. Number of responses

CAU	Number of responses
Social Sciences	7
Maths, Computing & Technology	39
Science	24
Faculty of Education & Language Studies	6
Health & Social Care	7
OU Business School	10
Institute of Educational Technology	8
Total	**102**

There are a greater number of responses from the Maths, Computing & Technology Faculty and Science and so when reviewing the results from the electronic survey the "totals" are weighted in their favour.

Results

The findings from the first part of the questionnaire revealed that the most important factors where over 80% of respondents rated them as important were that assessment tasks should be:

- Meaningful

- Aligned to learning outcomes or objectives (which implicitly would be termed as authentic)

- Resources taken specially from real world case studies or research

Seven of the other factors as shown in Table 2 below were less important, such as:

- A range of assessment tasks rather than traditional ones

- Demonstration and use of judgments

Those that were considered to veer towards slightly important or not at all important included:

- Examinations taking place in real world settings
- Collaboration that is similar to that experienced by practitioners or experts in the field and coursework or reflective logs

The second part of the questionnaire probed how successful the academics were with the following factors. There were only two factors where they declared they were **fully successful** and these were:

- Use of resources taken specifically from real-world case studies or research (41% said fully successful)
- Use of a range of assessment tasks rather than just traditional ones (29% said fully successful)

The factors where the academics felt their achievements were **mostly successful** were:

- Students consider assessment activities meaningful (49%)
- Answer problems that are like those encountered by practitioners or experts in the field (39%)
- Use methods and procedures similar to those used by real practitioners or experts in the field (28%)

Meanwhile the areas where there was **less success** included:

- Demonstrate how well they think like a practitioner
- Adopt a sustainable life-long approach to learning
- Experience collaboration similar to the real experience of relevant practitioners or experts

Table 2. Academics responses to factors that are important for assessment tasks in their subject domain

	% responding			
	Very important	**Quite important**	**Slightly important**	**Not at all important**
Tasks that students find meaningful	75	19	3	4
Tasks that are fully aligned with learning outcomes or objectives	74	19	3	5
Resources taken specifically from real-world case studies or research	52	30	6	7
A range of assessment tasks rather than just the traditional ones	46	33	13	1
Demonstration and use of judgement	44	34	18	4
Problem tasks that are like those encountered by practitioners or experts in the field	42	34	16	3
Complex assessment tasks that require use of multiple skills and knowledge	39	44	8	2
Assessment tasks that students enjoy	33	46	16	1
Marking criteria that relate specifically to competences and practice	33	28	17	16
A sustainable life-long approach to learning	31	40	17	5
Processes and methods that are similar to those used by practitioners or experts in the field	30	33	24	8
A test of how well the student thinks like a practitioner (is 'in-tune' with the disciplinary mind)	25	31	27	9
Course work or reflective logs	23	23	28	20
Collaboration that is similar to that experienced by practitioners or experts in the field	13	29	33	19
Examination takes place in real world settings/places	10	18	17	43
Student involvement in the negotiation of the assessment task	10	17	28	37
Grading of assessment by those who, in a relevant real-world situation, would do so	10	14	31	36
Simulations of role-play or scenarios	2	14	33	46

These results have implicitly probed the academics' notions of authentic assessment and finally we asked them to make explicit if they had heard of the term 'authentic assessment'. In fact only 24% were familiar with this term as shown in Table 3 below.

Table 3. List of terms of which academics were already aware

Terms probed by questionnaire	% responses
Alternative assessment	37
Authentic assessment	24
Feed-forward	59
Authentic learning	26
Learning Design	55

Discussion

One of the features of authentic assessment described in the literature is that the assessment tasks are meaningful to the students. Only 26% of the academics surveyed believed they had 'fully succeeded' in producing a course where the students considered the assessment tasks meaningful. A further 49% felt they had 'mostly succeeded', yet in the first part of the survey 75% of the participants declared that meaningful tasks were very important for assessment in their subject area. This is not such a surprising finding as designing probing, insightful and meaningful assessments is a difficult undertaking but one can see from the responses that the academics in question are working towards this goal.

About a third of courses were using fieldwork or work-based learning in their assessment portfolios. However, 'simulations of role-play' and 'examinations taking place in real world settings' were regarded as of little importance in these subject areas. This is a surprising finding as one would expect those subject domains which make use of fieldwork or work-based assessment in their courses would also consider the examinations taking place in real world settings as important. This finding deserves further investigation and will be followed-up in a set of semi-structured interviews.

Another interesting finding was that although 43% of courses are using electronic tutor forms for assessment, the course chairs declared that they had only partially succeeded in designing a course that gives students 'experience of collaborations that are similar to the real experiences of relevant practitioners or experts'. In fact a 'real experience' of collaboration was regarded as 'not at all important' to most participants despite almost half of them making use of the tutor forums for assessment purposes.

Although many of the courses were employing assessment tasks that could be considered as 'authentic', only 25% of the academics had heard of the terms 'authentic learning' and 'authentic assessment', which is a low response compared with 'learning design'. However, there has been a well-publicised Learning Design initiative taking place across the University. This finding suggests that Authentic Assessment needs to be given priority in future Assessment projects at the Open

University. Particular emphasis needs to be placed on meaningful assessment especially since student negotiation around assessment was not considered important across the different subject domains but has been shown to impact on how meaningful students find their assessments. More negotiation can be seen to take place with open-book, open-web examinations. Williams & Wong (2009) used this approach when assessing final year business students as they believed this approach mirrored real life problem solving scenarios. They also found that authenticity "engages students and inculcates deeper and enriched learning".

Although Cummings & Maxwell (1999) argued that authenticity is the way to go, they found that a lack of understanding what makes an assessment really authentic resulted in a shortfall in assessment practice. This questionnaire has revealed academics' lack of comprehension and points the way towards increasing understanding in order to avoid making assessment appear on the surface to be more like real-life but the students perceive them as more artificial and contrived. Looking towards frameworks for designing authentic assessment and drawing upon Gulikers et al's (2008) five dimensions of authenticity will prompt future work in this demanding arena in order to promote the "Assessment for Learning" agenda throughout the University.

References

Cronin, J.F. (1993). Four misconceptions about authentic learning. *Eduational Leadership, 50*(7), 78-80.

Cummings, J.J. & Maxwell, G.S. (1999). Contextualising authentic assessment. *Assessment in Education: Principles, Policy and Practice, 1*(2), 143-166.

Dierick, S. & Dochy, F. (2001). New lines in edumetrics: New forms of assessment lead to new assessment criteria. *Studies in Educational Evaluation, 27*(4), 307-329.

Dochy, F. (2001). A new assessment era: Different needs, new challenges. *Research Dialogue in Learning and Instruction, 10*(1), 11-20.

Falchikov, N. (2005). *Improving Assessment Through Student Involvement.* USA: Routledge Falmer.

Gielen, S., Dochy, F. & Dierick, S. (2003). Evaluating the consequential validity of new modes of assessment: The influence of assessment on learning, including pre-, post- and true assessment effects. In M. Segers, F. Dochy & E. Cascallar (Eds.) *Optimising new modes of assessment: In search of quality and standards.* Dordrecht: Kluwer Academic.

Gulikers, J.T.M., Bastiaens, T.J. & Kirschner, P.A. (2008). Defining authentic assessment: Five dimensions of authenticity. In A. Havnes & L. McDowell (Eds.) *Balancing Dilemmas in Assessment and Learning in Contemporary Education.* New York: Routledge.

Hart, D. (1994). *Authentic Assessment: A handbook for education.* CA: Addison-Wesley.

Herrington, J. & Herrington, A. (1998). Authentic assessment and multimedia: How university students respond to a model of authentic assessment. *Higher Educational Research & Development, 17*(3), 305-322.

Inbar-Lourie, O. & Donitsa-Schmidt, S. (1996). Authentic Pedagogy and Student Performance. *American Journal of Education, 104,* 286.

McDowell, L. (1995). The impact of innovative assessment on student learning. *Innovations in Education and Training International,* 32(4), 302-313.

Merrill, M.D. (2002). First principles of instructions. *Education Technology Research and Development, 50*(3), 43-59.

Savery, J.R. & Duffy, T.M. (1995). Problem based learning: An instructional model and its constructivist framework. In B.G. Wilson (Ed.) *Constructivist learning environments.* NJ: Educational Technology Publications.

Serafini, F. (2001). Three paradigms of assessment: Measurement, procedure and inquiry. *The Reading Teacher, 54*(4) 384-393.

Struyven, K., Dochy, F. & Janssens, S. (2003). Students' perceptions about new modes of assessment in higher education: A review. In M. Segers, F. Dochy & E. Cascallar (Eds.) *Optimising new modes of assessment: In search of quality and standards.* 171-224. Dordrecht: Kluwer Academic.

Torrance, H. (1995). Introduction. In H. Torrance (Ed.) *Evaluating authentic assessment: Problems and possibilities in new approaches to assessment.* Buckingham: Open University Press.

Wiggins, G. (1993). Assessment: Authenticity, Context and Validity. *Phi Delta Kappan, 75*, 212.

Williams, J. B. & Wong, A. (2009). The efficacy of final examination: A comparative study of closed-book, invigilated exams and open-book, open-web exams. *British Journal of Educational Technology, 40* (2), 227–236.