

1-1-2006

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Recommended Citation

Herrington, Janice A. and Herrington, Anthony J.: Authentic conditions for authentic assessment: aligning task and assessment 2006, 141-151.
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Authentic conditions for authentic assessment: Aligning task and assessment

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Abstract: Despite major discussion and consideration of authentic assessment through the 1990s, little progress appears to have been made towards its widespread adoption in higher education. Universities often serve to limit the use of authentic approaches in learning tasks and assessment, through restrictive policies. In this paper, we briefly review the literature and summarise the characteristic elements of authentic assessment, and argue that task, assessment and university policies must be aligned for truly effective use of authentic assessment to occur in higher education.

Keywords: authentic assessment, authentic task, higher education

Authentic assessment in higher education: A major issue

If exploring alternative approaches to assessment was ‘one of the major issues of the decade’ in the 1990s (Cognition and Technology Group at Vanderbilt, 1993), it could be argued that higher education teachers in the current decade are scarcely more informed when it comes to the practical implementation and use of alternative, authentic assessment methods.

Innovative and appealing ideas about a range of alternative assessment methods have been espoused over the last decade, perhaps in response to the challenges and opportunities offered by new technologies, in particular, online learning (Reeves, 2000). Because online courses are not constrained by the requirement for fixed and regular timetabled classes, they allow teachers to use more complex and sustained, product-based assessments. As is often the case with technology-based learning (Mioduser, Nachmias, Oren, & Lahav, 1999), just as these doors were opening, further developments were reducing opportunities, with the widespread adoption of course management systems. Such systems, most noticeably in their early years, enticed teachers to design their courses in weekly segments with regular assessments that were often easily marked on a computer, such as multiple choice tests. While innovative teachers have always been capable of finding ways around these limitations, the overall movement to more authentic forms of assessment has clearly been compromised, or at least delayed.

In this paper, we argue that there are two major impediments to the widespread adoption of authentic assessment in higher—*one institutional, the other pedagogical*. One constraint comprises the policies and accountability procedures set by universities that often limit the discretion of teachers to use appropriate forms of assessment. Another problem is that even in situations where teachers have discretion in assessment, reporting systems can cause a lack of

alignment between task and assessment. Both of these constraints are discussed in more detail below, together with a discussion and review of characteristics of authentic assessment.

The characteristics of authentic assessment

Many authors have provided criteria with which to design and evaluate authentic assessment. For example, Newmann and Wehlage (1993), Wiggins (1990, 1993), Reeves (2000), Reeves and Okey (1996) and others have provided guidelines or elements that help to explain the nature of authentic assessment. Building on our summary of the essential characteristics of authentic assessment (Herrington & Herrington, 1998), the list below attempts to provide a synthesis of the recent literature and research while considering assessment *context*, *student factors*, *task factors* and *indicators*. Using these guidelines, assessment is most likely to be authentic if it satisfies the following criteria:

Context:

- Requires fidelity of the task to the conditions under which the performance would normally occur (Reeves & Okey, 1996; Meyer, 1992; Wiggins, 1993)
- Requires connectedness and transfer to the world beyond the classroom (Newmann & Wehlage, 1993; Newmann & Archbald, 1992)

Student factors

- Requires problem solving skills and higher order thinking (Reeves, 2000; Newmann & Wehlage, 1993)
- Requires production of knowledge rather than reproduction (Newmann & Archbald, 1992)
- Requires significant student time and effort in collaboration with others (Linn, Baker, & Dunbar, 1991) (Reeves, 2000)
- Is characterised by substantive conversation (Newmann & Wehlage, 1993)
- Requires students to be effective performers with acquired knowledge, and to craft polished, performances or products (Wiggins, 1990, 1993)
- Promotes depth of knowledge (Newmann & Wehlage, 1993)

Task factors

- Stimulates a wide range of active responses (Reeves, 2000)
- Involves complex, ill structured challenges that require judgement, multiple steps, and a full array of tasks (Wiggins, 1990, 1993; Linn, Baker, & Dunbar, 1991; Torrance, 1995) (Reeves, 2000)
- Requires the assessment to be seamlessly integrated with the activity (Reeves & Okey, 1996; Young, 1995)

Indicators

- Provides multiple indicators of learning (Lajoie, 1991; Linn, Baker, & Dunbar, 1991)
- Achieves validity and reliability with appropriate criteria for scoring varied products (Wiggins, 1990; Lajoie, 1991; Resnick & Resnick, 1992)

Such guidelines enable teachers to create learning environments using authentic contexts and scenarios that ensure assessment truly measures whether students can use their knowledge effectively and realistically, as opposed to the reproduction of surface knowledge that is quickly forgotten after an examination or test.

However, any teacher wishing to use these guidelines to design authentic assessments needs to be able to accommodate university policies (some are more restrictive than others), and to be mindful of the need to clearly align the task with its assessment.

Restraints of university assessment policies

Quality assurance and greater accountability measures in universities have contributed to pressures on teachers to conform to set standards. Most universities in Australia and New Zealand have introduced assessment policies which in many ways run counter to constructivist philosophies and situated approaches to learning. For example, the requirement for courses to have a minimum number of assessments means complex course-based assessments are impractical. Similarly, restrictions on the amount of group work permissible for assessment makes collaborative, large-scale projects unworkable. Similar concerns overseas about restricted or adhoc assessment policies and their implications on course design and teacher practices have been reported in the literature (e.g., Ecclestone & Swann, 1999). Perhaps the major assessment concerns in higher education currently, are those that are largely of concern at the institutional level, such as grade inflation, plagiarism, large classes and their impact on assessment (James & McInnis, 2001), and the potential for student litigation (Ecclestone & Swann, 1999).

For the university teacher wishing to use effective and authentic assessment in his or her own courses, such issues can create genuine constraints. Further confusion can also arise from the different interpretations of the nature of authentic assessment (as described in detail by Cumming & Maxwell, 1999). The requirement to give a mandatory examination or online test, for example, can be antithetical to a teacher's fundamental pedagogical beliefs, even though there is much research and evidence in the literature to support this stand.

Other policy-driven assessment practices must also be questioned. Despite much research to show that there are benefits to be derived from collaboration (Qin, Johnson, & Johnson, 1995), assessment strategies that take advantage of the use of group work can often be used only minimally because of assessment policies that limit the use of group work. In such cases, the focus is on each student learning—and being assessed—independently of the social context in which learning takes place. Of course, economic constraints may also compound the problem where university courses over rely on lectures that necessarily inhibit collaborative learning.

As alternatives to norm-referenced, standardised tests, McLellan (1993) suggested that assessment can take the form of a number of evaluation measures, such as portfolios, diagnosis, reflection and self-assessment. Maclellan (2004) has argued that students' perception of an assessment task affects the level of engagement and depth of learning, creating a clear imperative for the need to examine the nature of assessment, and to measure what is truly important.

However, as noted by Reeves (2000), higher education teachers rarely receive adequate training in the use of assessment strategies, and teachers are often confused in the process of marking and reporting authentic assessment. Indeed, an authentic task is often stymied by teachers inadvertently and inappropriately applying standardised or norm-referenced criteria in their marking of the varied products presented by students. The importance of alignment between a task and its assessment is at the heart of this problem, and is discussed in more detail in the next section.

Alignment of task and assessment

Consider the situation where a teacher of an introductory research methods course develops an authentic task that requires students to produce a research report for publication in a magazine (such as a consumer magazine like *Choice*). The task is presented in the form of a scenario to capture the authentic nature of the task, where the students are asked by the editors of the magazine to produce a report comparing five products, such as five different types of detergent powder or yoghurt or car insurance. If the assessment is to be aligned with the task, the teacher must take care to use the principles of the authentic scenario to assist with the assessment of the task. It would not be aligned if, for example, the teacher marked the work according to the guidelines for writing a research report (say from a textbook), and took marks off because the students did not have a literature review or a section describing the ‘Significance of the research’ or ‘Limitations and delimitations of the research’, as might be required in a formal research report. It would be important for the assessment to use the purpose of the work to guide its assessment, and thereby assess the work on how appropriate it would be for publication in a consumer magazine.

A most useful distinction between the content and context of assessment has been described by Cumming and Maxwell (1999) who distinguish between the *first order expectations* of a task, and the *second order expectations*. They draw on the work of Wiggins (1993) to explain the construct. Wiggins gave an example of students required to learn historical analysis through the examination of author perspective in a text. The scenario within which this task is set is a trial in a courtroom, where the student is required to take the role of a prosecutor or defence lawyer in the trial brought to court by a parent group seeking to forbid the use of a particular textbook in a high school. In this example, Cumming and Maxwell describe the historical analysis of author perspective as the *first order expectation*, and the skills required to present the workings of a court-room as the *second order expectation*. They question the usefulness of the second-order scenario in this example on the grounds of its lack of ‘personal and practical usefulness’, the emphasis on ‘courtroom behaviour rather than historical analysis’, and the uncertainty about whether or not the issue needed to encompass ‘the notion of censorship’ (p. 186). That is, if students unduly emphasise the protocols of presenting evidence in a courtroom, they do so at the expense of the true learning context—the examination of author perspective in text.

This example illustrates how important it is to ensure that the second order expectations of a task (usually providing the purpose for an activity in an authentic context) are realistic and fully in keeping with the expectations of the academic requirements of the task. However, if care is taken to ensure that this is done, such an authentic context is a powerful tool in giving meaning and justification to the assessment of any student product. Several illustrative examples of this principle in higher education practice are given below.

Evaluation of technology-based learning

In a course designed to teach evaluation of technology-based learning environments, Agostinho (2006) described how students are invited to participate in a scenario where they are new recruits to an evaluation company. It is within this context that they learn evaluation skills and strategies, and each task is given within the context of a realistic evaluation. In the major task, students are asked to prepare a proposal for an evaluation of a post-graduate course. They do this as representatives of the company, and in accomplished and professional manner, with reference to a real online course. The teacher’s role in assessing each assignment readily reflects the realistic role of an assessor of an evaluation proposal (rather

than a teacher marking an assignment), and realistic criteria can be brought to bear on the final grade.

Project management

In a course on project management, McLoughlin and Luca (2006) described the authentic task students perform as they form teams to create a multimedia website for a fictional client. Students are required to create contracts, create management models, plan roles and responsibilities for each team member, document progress, and produce an effective website to meet client needs. The websites are assessed by the teacher and peer assessed by the other teams in accordance with the needs of the client, the proposed purpose of the website and its quality.

Fiction and film

Fitzsimmons' (2006) description of a literature course described a similar alignment between an authentic task and its assessment. In a course on North American fiction and film, one task is to write a critical review of a book for publication in an electronic journal. This is a real online journal established for the course and published each time the course runs. The students not only submit their book reviews for consideration but also act as members of the editorial review board for the journal. Thus, students and teacher jointly and authentically assess journal papers and select the best for publication, in direct contrast to a teacher simply marking an essay.

Conclusion

It can be argued that the majority of higher education courses continue to use traditional, transmissive approaches to course delivery, and continue to assess using traditional measures (Reeves, 2000). This situation is compounded by university policies that, unintentionally but effectively, limit the use of authentic assessments through restrictive assessment and teaching practices.

This paper has argued that the alignment between an authentic task and its assessment is also frequently neglected. Failure to effect this alignment can lead to the negation of the impact of any authentic task used by teachers and educational developers—even with the best of intentions. Alignment among task, assessment and policies effectively frees the teacher from a judgemental, teacher-driven role to one where realistic criteria can be used to assess real products. In so doing, students become better prepared for their future experiences as effective professional practitioners.

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