

Risks and opportunities in authentic learning via the Internet

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Abstract

Authentic learning is a powerful approach for educators because it motivates students to attend closely to their studies and improves the application of skills and knowledge beyond the classroom. The Internet is a particularly important tool for such learning; it not only can make authentic learning practical in many cases but also prompts students to develop awareness of the public, networked form that knowledge work now takes. In this paper I will:

- summarise approaches to authentic learning in the BA (Internet Communications) at Curtin University;
- identify the key benefits in using a public knowledge networking approach to authentic learning; and
- highlight risks and strategies for managing those approaches in the pursuit of authentic learning online.

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Introduction and Preliminaries

Good morning and thank you for your attendance: I hope that I will be able to contribute some words of value and relevance to you today, following on from a very interesting set of presentations and discussions on the first day of this forum. To begin with, may I thank the organisers for the opportunity to address you today and, indeed, for creating and hosting this event: such forums provide diverse opportunities to engage with important ideas concerning education at a time of significant change in the post-compulsory education sector in Australia. I would also like to acknowledge the Australian Learning and Teaching Council, of which I am a Teaching Fellow, for its support in the past two years for my fellowship project Learning in Networks of Knowledge which is in part the basis for my presentation. Finally, may I also thank my colleagues in the Department of Internet Studies at Curtin University. I have benefited greatly from their generosity in both trying out innovations in curriculum and assessment and their perspicacity in shaping some of my ideas towards more effective solutions to the problems of current university education.

I am going to spend some of my time today presenting to you examples of an array of assessment techniques within the BA (Internet Communications). These techniques rely heavily upon the idea that assessment can (and should) be conducted within the broad framework of public knowledge networking utilising the Internet. They are an attempt to make authentic our assessment practices. Because of the close relationship between assessment and learning within education, they therefore also contribute significantly to the broader goal that learning can be better when it is 'authentic'. These examples demonstrate the diversity of ways in which something might be authentic and, of course, the role of the Internet in that process. Obviously in the time available I will only be able to present a brief overview: I will be preparing a virtual handout which will be available by the end of the week listing more details and providing web links.

Before presenting the examples, I will first lay out a brief argument that attempts to explain the relationship between authenticity and learning, education and assessment. This argument provides a necessary conceptual foundation on which the sense and meaning of my discussion of the examples from Internet Communications rests. I will then follow up the examples with an argument that explains why these specific examples are more generally relevant. Self-evidently, a BA (Internet Communications) would naturally and productively use assessment that requires public knowledge networking; the authenticity of such assessments would also seem obvious. The more difficult step to take is to see the relevance of public knowledge networking as the basis for assessment (and learning) in other disciplines and professional practices. I will advance some reasons why the use of the Internet by students engaging in assessed public knowledge networking is of value more generally, outside of the specific cases I present as examples.

I will conclude by suggesting that 'authentic learning' is not produced by simplistic additions to study of this or that 'real' experience but is, instead, a complex site for the negotiation of the different expectations and authorities of students and teachers, institutions and contexts. Ultimately authentic learning works to improve learning precisely because it does highlight the relationship between two different states of knowledge work: authentic learning does not replace 'preparation' or 'become' work: it combines learning of tasks *with* the practice of such tasks outside of the educational context.

Learning, authenticity, education & assessment

I have, over the past two years, worked extensively on the concept of authentic assessment, an idea that has been in play in higher education for at least twenty years. I have focused pragmatically on what can be done to make the assignments that students do ‘more authentic’ to some context other than the formal transaction of assessed student and assessing teacher (if you like, the *real* context of assessment). I have been primarily concerned to mobilise students’ *motivation* since it is generally true that students learn best only if they are motivated. Assessment, for a variety of reasons, is the moment in a course of study with the greatest potential to harness that motivation and increase the attention of students to their learning.

It is easy to see how motivation to learn is essential for learning to succeed, and how assessment is both a principal agent in motivation and a primary means through which learning occurs. It is, alas, much more difficult to know reliably how exactly students come to be motivated (and at what times, with what cues, and for what purposes). It is equally difficult to know how a specific assignment task might aid or even hinder that motivation. The examples which are to come might shed some light on my own thoughts on this subject.

But, I will start with a discussion that, more abstractly, helps us understand how authentic assessment, within higher education, is essential for achieving authentic learning. I will do this by tracing a path from learning to education, with reference to ‘authenticity’.

The starting premise for this discussion is that learning is not doing (doing here means being or acting in the world as a human agent, in a given social context). While we can, of course, learn *by* doing and are often doing something while learning it, they are indisputably not the same thing. Deductively, if learning is to mean anything it must be distinguished from the performance of what is being learned, even if at times the two states occur simultaneously.

So, if we seek authentic learning, then it must come into existence when learning *closely approximates* doing, perhaps to the point where – at first sight – it is difficult to tell which of those two states is determining the activities undertaken. Authentic learning, in this close approximation, means that one learns *as if* doing, but while not actually doing. In other words, authentic learning is like a middle ground between learning and doing; indeed such learning can be seen as occurring as a kind of interface *between* learning and doing, having qualities of both, but not being either exactly.

Authenticity does not, of itself, serve as a guarantee of correct or successful learning: there is no value judgment within this definition. However, to the extent that we seek to support or promote authentic learning as a foundation of human education, we do so by mobilising a specific and close relationship between learning and doing so as to achieve greater benefits for learners. At the interface, it is presumed, something of the reality or significance of the act as *practiced* influences positively the act being *practised*. So, to be good, authentic learning must never be simply ‘doing’ (for there would be no sense of the imperative to learn), but is always more than just learning, divorced from the doing.

The original and most complete form of authentic learning was the system of apprenticeship which bonded, in many different ways, a learner to a master so that the learner could in many stages narrow the gap between their knowledge and expertise and that of their supervisor and teacher. What apprentices did was, quite literally, an approximation: carpenters for example built miniatures of the real furniture to be produced once they were sufficiently skilled. Authentic learning, while not being reducible to apprenticeship, is clearly a modern equivalent of the kinds of experiences and outcomes that might once (and in some cases still

are) gained in this ritualised bringing together of those learning and those doing and the intermingling of them.² Authenticity is, to a large extent, a product of the physical and social closeness of the learning and the doing. Such that proximity enables the fundamental approximation by which learning becomes authentic.

Learning is not, however, the same as education. Or, to be more accurate, learning takes place *within* education, but not in the same way that occurs without the surrounding social and intellectual machinery of the educational institution. For professional educators, it is tempting and often useful to prioritise or privilege the learning that occurs in universities and schools: but it should never blind us to the reality that most learning, by most humans, has nothing to do with our courses and classes. Education is a specific form of learning, which has two distinctive features.

The first is signalled by the literal meaning –educating someone is leading them ‘out’ (out of one state or situation into another). Therefore, education involves a form of learning in which someone – the teacher – must *lead* the student, to help them to study better, more quickly or at all. Education requires and creates a relationship of authority and subjection: a productive form of power relations between students and teachers. Indeed it is one of the reasons consistently why people choose to be educated: they seek the validation and support of someone in authority to assist them. Ineluctably, then, education is always learning *and* teaching. Note the passive voice: while one seeks to learn, one always seeks to *be* educated.

This leadership, with its necessary subordination of the student to the leader, means that education is also act of judgment: the leader determines when sufficient or excellent learning has occurred. Thus assessing what has been learned, to what standard, and for what effect, is always part of education, even as it is never (in this formal way) part of learning. While some kinds of learning outside of education may also involve a form of assessment (perhaps the watchful eye of the coach, or selector, determining the final selection of a sporting team that is at practice), only in education does assessment intrinsically become part of the learning process.

Education is also a social institution in which this process of leadership for learning, with its attendant acts of judgment, is organized and made routine in our lives, playing critical social and political-economic functions. Central to this social institutional role is, first, the role of the teacher (and their institution) as manager of learning, controlling when where and how learning takes place. Put simply, for political and economic reasons, education changes learning so that a relatively small number of teachers can to work with more and more students, in places which ‘take care’ of those students. Places, forms and expectations (even the cultural meaning of educational institutions) play a significant role in shaping learning within education.

Second, the certification of learning, based on educational processes and performed within institutions (not just at the end, but also the *start* of study), turns individual learning into a socially transferable good. What has been learned can be traded for something else – money, prestige, opportunity and so on. Note here the benefit of education: the ‘good’ is not used up in the trading and therefore repays the investment made in it mightily. The judging role of education establishes a primary difference in context from other kinds of learning.

2 For an extension of this relationship consider the work on community of practice and peripheral participation (Lave and Wenger) as well as the zone of proximal development within cognitive apprenticeship (Vygotsky).

Education, therefore, makes learning something much more separate from the doing for which it is, in theory, a preparation: in place and time, education is done away from, and before, the actual activities for which students are preparing. The challenge for higher education is, therefore, to overcome the doubled effect of assessment and institutionalization which both create barriers to the production of authentic learning experiences (authentic as an approximation of the ‘doing’). I should note, too, that learning – outside of education – faces its own challenges: too easily, learning without education can involve too much doing and not enough learning. Being thrown into the deep end and having to learn to swim may significantly increase motivation to succeed, both often at the expense of the time to learn to do it well!

Educational institutions are in fact regularly facing and successfully moving past this challenge. Authentic learning is part and parcel of many university and other post-compulsory educational courses. Creative techniques are used across a range of disciplines – medicine to media production, social work to surveying, public relations to physiotherapy – all designed to overcome the lack of proximity. Having mentioned before the significance of apprenticeship, I should remind us of the current enthusiasm for work-integrated learning (whose importance can be judged from the fact it has its own acronym – WIL – and is often now measured statistically in university courses). WIL is manifestation of the ‘return to the apprenticeship model’; what used to be learning-integrated work, locating the subject within work while learning, is now reversed – students are not in work, and therefore must integrate work *into* their learning.

The modernisation of higher education, throughout the latter half of the twentieth century, with the attendant increase in mass and the inclusion within the university of many professions previously learned outside of it, has been a significant force for WIL even before it had an acronym. Yet, while work-integrated learning (placements, practicums and so on) can be applauded as important efforts to improve the quality of education, nevertheless, the importance of and attention to WIL is itself an argument for the lack of authenticity in ‘education’ – because learning is assumed to be lacking in some respect *without* WIL.

The curious thing is that the best way to discover and implement authentic learning strategies within education is, actually, to focus on that which divides learning from education: assessment, that distinctive element of educational learning, is also what permits us to most effectively recreate the approximation of learning and doing in a way that genuinely leads students into a productive learning situation. Secondly, the artificial context of education, divorced from the real circumstances of authenticity, creates the room for safer playing, trial and error, and other ways in which students can pretend to be doing something for real, even while they are not. In other words, authenticity in learning requires attention both to the reality of the task *and* the unreality of the environment in which it is performed.

Examples from BA (Internet Communications)

Some context:

The course is an attempt to forge a new kind of degree, one combining some of the traditional but still highly relevant analytical and deep critical skills of the Arts degree, with the requirements for specific, professionally oriented skills and knowledge. It is highly successful, especially in recent years, with the rise of social media and the general condition of ‘the digital network’ now infusing our creative and commercial world. It is also challenging for us because of the diversity of the cohort and many places and contexts of teaching. I refer to it as an ‘indeterminate’ cohort: no assumptions can be made about why and how people will study or what they might bring to the learning and teaching encounter. Such

indeterminacy has challenged us to not take for granted the ‘authority’ with which we might speak as educators (our leadership is more contingent); but has also created the opportunity for successful innovation based in different kinds of authority, where our choices as teachers are authorised by the relationship of teaching to the Internet of which we teach. If anything, we succeed or fail depending on the degree to which we practice *authentic teaching*.

Examples

See

<http://www.slideshare.net/netcrit/risks-and-opportunities-in-authentic-learning-via-the-internet>

The general value of knowledge networking

Whatever discipline or profession in which a student is learning, the approaches which I have demonstrated above will have relevance, for pragmatic and theoretical reasons.

Pragmatic / educational reasons

I want to start with two practical reasons that link us back to my earlier arguments about the nature of ‘authentic’ learning and its position within educational institutions. You will recall that I have used ‘approximation’ as a key term – that learning which approximates doing tends to be authentic. Approximation involves proximity (understood as being a state analogous to the collocation of work and learning within a single place). We could also add in the idea of a proxy – standing in for, yet not being, the original authorised representative: a ‘playing’ of the part.

The Internet, when used for public knowledge networking, enables teachers to overcome organisational constraints of mass education: you can’t run a real conference on campus without significant disruption and difficulty – on the Internet it is relatively easy and, more to the point, flexible enough to overcome student resistance to a change in their schedule. Time and space really can be reconfigured via knowledge networking. The challenges of creating proximity can be managed: the virtual space more easily enables collocation of doing and learning.

The Internet also enables authentic learning to proceed by increasing the capacity of educators to create believable simulacra of ‘real’ situations and also encouraging students to play their roles. For example, I can undertake a sophisticated geo-political game with students as participants via the Internet by creating profiles and communications which sustain the ‘roles’ being played much better than what can happen in a classroom.

Approximation also invokes a more ephemeral sense of movement that never quite reaches its destination (as in the mathematical sense of ‘approximation’). This reveals the critical importance of reflection, of measuring by the student the gap between their ‘work’ and work per se; of reviewing the movement they have undertaken from one place to another, as if becoming more authentic themselves. There is a third reason, therefore, why online knowledge networking matters: working on the Internet to produce knowledge as part of this kind of authentic learning involves creating trails, histories, metadata, and contexts which enable a much richer process of reflection; there are also cognitive engines online which materially aid reflection as well, far better than pen and paper journals.

External imperative

The three reasons I have given provide pragmatic reasons for educators, ways in which we might 'exploit' this technology in ways that mimic the kind of advantages many people seek from the Internet, regardless of any connection to learning. However a different kind of imperative towards the use of knowledge networking approaches also exists:

Knowledge work is undergoing a profound change under the twin impacts of the digitisation of the artefacts and processes of knowledge work and the availability and power of the computer-mediating devices to create and circulate those artefacts and enrich those processes. Knowledge is now knowledge networking in which the distance and distinctiveness of the 'frozen moments' of knowledge - the book, the lecture, the essay, research, writing, and so on - become more fluid and interwoven and, at the same time, the differentiation between knowledgeable people and knowledge objects breaks down.

In the network, process and outcome, system and individual, human and device, become nodes which, though differently linked and with varying degrees of interconnection, are nevertheless all 'in play'. The conditions of the network society may have already existed, but could not be realised without technologies such as the Internet (as Castells has observed): but, regardless, the change has been dramatic if, at times, unevenly distributed among social and cultural groupings. The change is marked out in the way that knowledge work becomes more:

- **collaborative** (with shared cognition between humans, computers, and more involvement of human actors not directly engaged in the task at hand but whose inputs, mediated by the network, bear on our work)
- **distributed** (in both time and space, both within one person's frame and also those of collaborators),
- **granular** (being composed of fragments and relationships rather than whole);
- **immediate** (being done just in time, and with more rapid publication and sharing);
- **multiple** (by which I mean copied, reprised, recreated as well as presented in multiple ways).
- **public** (in that it occurs with much wider audiences than ever before)

These changes do not easily map to the conventional forms of educational practice. If education (which is all about knowledge work) is to be able to implement authentic learning that it must also adapt to how knowledge work generally experienced in society, today and in the near future for which we are preparing graduates. And, it should be noted, these are changes not just in professional work, but also in the sensibility of students towards knowledge work as they experience, more and more, a world of shared and distributed cognition. In other words, the relationship between knowledge networking and authentic learning is determined by forces outside of the educational institution. It can be asked: if learning does not, at least at some times and in some ways, involve a close acquaintance with public knowledge networking.

Authentic learning as negotiation

Before concluding, I want to signal two challenges for the use of public knowledge networking to support and develop authentic learning. Note, there are no substantive technical challenges, at least none greater than the challenges of organising education in other forms, in classes or through virtual environments such as Blackboard.

The first challenge is that, for all the hype about the 'net generation', students are not as skilled in or capable of using the Internet for knowledge work as we might hope or expect.

They *are* increasingly skilled at using the Internet and natively – perhaps naively – undertake knowledge work online without realising it. They have semi-transferable skills but they cannot be relied upon (even in a course like Internet Communications).

The second challenge is that *public* condition of knowledge networking (and it must be public for it to be authentic) exposes students, universities and the rest of the Internet to the risks attendant on sharing and communicating without thinking about copyright, defamation and other legal risks, and without regard for quality and relevance.

However these two challenges are also opportunities or, at least, revealing of the necessity of working in this way. First, we need to encourage and even challenge students to become more sophisticated and digitally literate workers. Digital media literacy, for effective and extensive knowledge work, will underpin their success in future. Second, we need to educate students about the way in which the public dimension of knowledge work poses certain (limited) risks. I would add: the risks are far less important than we might think. Compared to *most* of what is contributed online, the work of students is actually rather good and unlikely to be offensive.

This complexity shows how education is not *just* governed by the authority of the teacher and the institution, but beholden also to the expectations and desires of students and the world in which they operate. Therefore ‘authentic learning’, within education, is revealed to be always about the process of negotiating competing conventions and requirements.

And, more generally, authentic learning is always a compromise. It can never be the same as ‘real’ work; it can never be solely about ‘real’ education. And, in that state, we see why authentic learning is a powerful educative application: it relocates compulsion, upon students to work in a particular manner away from the traditional authority of the teacher or master (“do as I say!”) and into a place where both teachers *and* students must submit to a higher authority. When I ask students to do something such as I have just demonstrated, their willingness to engage with the task comes from our shared acceptance of the reality of the task: it makes sense because it is authentic. In decentering the relationship of domination and subjection between the teacher and the student, authentic learning can create a powerful place in which students learn that, in the real world, there is no leader and that learning is their own responsibility.

Practically speaking: authentic learning emerges out of assessment, embedded in a plausible context in which the artificiality of ‘education’ (along with its inherent requirement for obedience to the demands of the teacher) gives way to an agreement between students and teacher about the legitimacy of tasks to be performed judged against some external standard. This agreement is a negotiation: the ‘real’ authenticity of learning is not a priori, but a negotiated compromise in which students must suspend their disbelief in being ‘students’ and teachers must stop ‘teaching’, and both must trust each other at the moment when the act of judgment by one over the other re-enters the field of play.