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#### Presentation

'[...] I do think of instruments as having the best interfaces that have ever been designed [...] If there's any object in human experience that's a precedent for what a computer should be like, it's a musical instrument: a device where you can explore a huge range of possibilities through an interface that connects your mind and your body, allowing you to be emotionally authentic and expressive'. (Jaron Lanier, quoted in Burkeman, 2001)

#### Authenticity

One theme running through the many versions of experiential learning is that of 'authenticity' – the correspondence, in some way or other, of learning to the world of practice. The concept is an important one, for it lies at the heart of the attempts by educators since Dewey (1916) to address the relationship between learning and life. Indeed, debates about authenticity draw us into issues of representation and the constitution of reality – philosophical matters that are highly complex and take us beyond the usual bounds of educational psychology. And yet as the work of Dewey exemplifies, such analysis is necessary, not least because it clarifies for us the implicit assumptions we hold about such concepts.

In many respects, a number of educational theories such as constructivism have evolved in order to make sense of the concept. Jonassen (1993; 1994) and Tenenbaum et al. (2001) give us in broad terms the key elements of constructivist learning, while Wilson (1993, 77) characterised it as being 'best understood as ordinary cognitive practices that are situationally defined, tool dependent, and socially interactive'. Such practices are based on experiential learning, and authenticity is a key element of them – indeed it is often taken as being the touchstone of the situated practices that Wilson describes in his paper.

The language of authenticity, though, is problematic for higher education, as is the analysis of it. If we examine Wilson's words above, for example, it is easy to accept that in the professional workplace learners learn best using tools that they have to hand, and which they use as a matter of course in their workday tasks. But what about learners in further (FE) and higher education (HE)? If authentic tasks are 'situationally defined', then this is one reason why transfer of learning from academy to professional workplace is problematic. If, for example, a task is tool dependent within the practice that is situationally defined, then tool use outside that environment will be untypical of that environment in the interactivity for which it is used. In terms of being

authentic to real world tasks, it would appear that higher education, and professional and vocational learning in particular, has a difficult task on its hands when it uses constructivist approaches to learning.

#### Authenticity as mimesis

But this is only the case if we adopt a particular view of what constitutes authenticity. Behind my brief and rather naïve analysis of Wilson's definition of constructivism above, for example, lies an implicit model of mimesis, namely that in an constructivist encounter there is, in some form or another, a replication of aspects of reality. This is suspect on at least two counts. First, any attempt to replicate reality can only fail: reality is too complex, uncertain, immediate and cannot be reconstructed in this simplistic way. This has not stopped educationalists from claiming that constructivism 'turns towards a consideration of what real people do in a particular knowledge domain and real life context typically do'. (Bednar, Cunningham, Duffy & Perry, 1992), A statement such as this begs the question whether there is anything typical about real life contexts. In effect it essentialises roles, relationships, views found in reality in order that these may be instrumentalised in educational action.

Second, the model of mimesis ignores how technology is used in the context of FE and HE. In many respects, the arguments that surround the concept of authenticity in Early Music are germane to this point. One may construct an exact copy of a baroque flute; one may play it exactly as Johann Joachim Quantz describes in his celebrated On Playing the Flute; but we live in a different cultural context, musically, conceptually, aurally, and cannot hear the music with an 18th-century mind; nor can we ever understand what Quantz really intended by any one of his 300 or so concertos. Authentic performances cannot remove us from our cultural and economic contexts (Kenyon, 1988; Kivy, 1995). In an analogous way, the use of technology in authentic tasks carried out in simulations in FE and HE cannot be the same as the use of technology in actual tasks carried out in the environment of work: the contexts, in place and time, are significantly different.

#### Authenticity as engagement

But there are of course more sophisticated analyses of authenticity than my mimetic example above, analyses that avoid mapping tools and tasks in an educational context upon the tools and tasks of a workplace environment. Constructivist analysts such as Petraglia (1998) or Jonassen (1992), or activity theorists such as Engeström and Coles (1993) or situated learning theorists such as Wenger (1998) take account of the role of educational theory in learning, and the complexity of the reality of actual educational encounters. Again, the musical analogy is helpful. If the concept of 'authentic performance' is unattainable, this is not to say that the concept has nothing to add to performance or audience appreciation. Early music played in period styles and on period instruments has in many ways transformed our modern view of historical musical reality - sonority, voicing, phrasing, articulation, musicography – and helped us to understand anew not merely historically musical practice but our own contemporary musical culture. In the same way, authenticity in learning engenders its own benefits for learners. Education has more to offer us in the way of reflection, variation, feedback, distributed cognition and negotiated learning than a mere mirroring of real-life tasks. It can also involve rich analysis and discussion and the many forms of symbolic interaction that take place in what might be termed second-level analysis of reality.

#### Authenticity and professionalism

There is, though, another meaning to authenticity that we should explore as being relevant to student experience when learning, and that is emotional and expressive authenticity. In this sense, Jaron Lanier's comment in the epigraph, drawing another analogy between musical instruments and computers, is apt. It points to the need to create an environment in which students can begin to comprehend and practise through active performance the complexity of a professional task or transaction, and how they may develop their own professional voice within it. Computers may thus become flexible instruments of

changes in perception and learning; electronic mediation of experience may thus enable richer and more complex role play and personal engagement arising out of experience than would otherwise be possible using more conventional media.

The conditional tense dominates the last sentence. The question, of course, is how to bring about such engagement in authentic performance on professional tasks.

#### Authentic fictions: Ardcalloch

In the use of a virtual community with professional law students at the Glasgow Graduate School of Law (GGSL) we are developing a model that will help us develop task authenticity (Maharg, 2001; Maharg and Paliwala, 2002; Maharg, 2004; Barton and Maharg, forthcoming). We call this 'transactional learning'. Before I go on to describe the features of transactional learning in more detail, however, let me first describe the learning environment that we have created for students in order to facilitate this form of learning.

Transactional learning is used principally on the Diploma in Legal Practice at the Glasgow Graduate School of Law. This is a postgraduate, one-year course taken by students who already have a LLB degree, and who wish to become either solicitors or advocates in Scotland (this year there are 273 students on the course – over 50% of the total annual intake into the profession in Scotland). After completion, students are required to undertake a two-year traineeship with a firm of solicitors (or if they wish to go to the Faculty of Advocates, then one year and a period of preparatory training) before they are granted their Practice Certificate by the Law Society of Scotland.

Within the Diploma at the Glasgow Graduate School of Law we have created a transactional learning environment (TLE) that we use to help students to perform practical legal transactions. It consists of a fictional town on the web, situated on the south bank of the River Clyde, quite close to Glasgow. The town is represented by a civic history, a map and by an online directory of several hundred institutions, businesses, virtual student law firms and people (see figures 1–4)



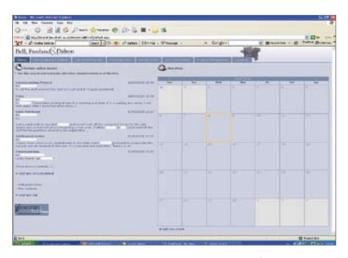
Figure 1 History of Ardcalloch – extract of section from town origins to early medieval period



Figure 2 Map of Ardcalloch



Figure 3 Directory of Ardcalloch



**Figure 4** Example of student law firm intranet (student names have been removed for privacy). Transactions are listed on the strap line below the firm title

The fictional town is of course an ancient device, whether sombre Platonic Republic, Augustinian urbs beata, the dystopian futurescapes of Bladerunner, or vast contemporary multi-user online games such as Second Life. In the latter examples, there is no separation between the backdrop of the narrative and the sense of place: the narrative is often an integral part of the place itself. The same is true of our use of the fictional online

environment; and in this sense we have learned a lot from the way in which narrative and constructed place interact with each other. We use the environment as an integral part of the transactions that students carry out in the course. In Conveyancing, for instance, they learn how to convey domestic property within Ardcalloch using a (real) text book and styles resources, both of which are used in a series of face-to-face tutorials. They then put this learning to use in the transactions whereby they purchase and sell property over the web. Such experience is fairly unique on courses such as the Diploma, where normally students are trained in dealing with parts of transactions, but rarely have experience in dealing with an entire transaction.

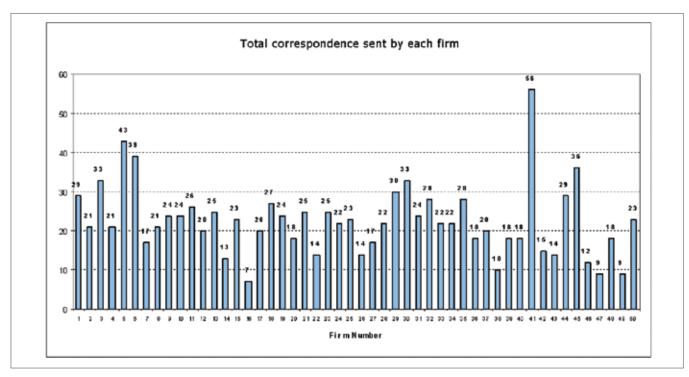
This has been adapted to a number of different legal domains. For example, we run simulations along similar lines of a Personal Injury transaction; students draft pleadings for a court action in the module on Civil Court Practice, while in Private Client, students learn and are assessed on their ability to wind up the estate of a deceased client.

#### Authenticity and transactional learning

The key concept is that of transactional learning – in effect, simulated learning environments where students practise legal transactions. Below are stated briefly the five general principles of our approach.

#### 1 Transactional learning is active learning

Our students are involved in activities within legal actions, rather than standing back from the actions and learning about them. There is, of course, a place for learning about legal actions – indeed, transactional learning is rarely possible unless students first have a conceptual understanding of substantive and procedural law, which in the GGSL they gain from paper resources, video VLEs and face-to-face tutorials. However, transactional learning goes beyond learning about legal actions to learning from legal actions. We would claim that there are some forms of learning from tasks that can only take place if students go through the process of some form of active learning.



**Figure 5** Total correspondence sent by each firm to persons, businesses and institutions within Ardcalloch in the Personal Injury transaction

## 2 Transactional learning is based on doing legal transactions

Within the firms, students act as trainees/newly qualified lawyers; and in those subjects that use this mode of learning the transaction is both learning zone and assessment zone.

## 3 Transactional learning involves reflection on learning

Transactional learning involves thinking about transactions and includes consideration of action to be taken on ethical issues arising from the transaction. For our students it means documenting their firms' transactions, logging individual activities, keeping a (confidential) personal log and taking part in group reflection on these transactions with a tutor who is the firm's Practice Management tutor/consultant.

## 4 Transactional learning is based on collaborative learning

This involves transaction as collaboration, indicating the root of the word. Students are valuable resources for each other, particularly if they have opportunities to engage in both cumulative talk (the accumulation and integration of ideas) and exploratory talk (constructive sharing of ideas around a task - van Boxtel et al., 2000). In the GGSL, collaborative learning is used to balance individual or cellular learning. There is of course a place for silent study, individual legal research and so on, and we emphasise this as a preparation for collaborative work. Thus, in a personal injury transaction, students carry out fact gathering and analysis, legal research, and negotiation. On average a firm will generate 20–30 letters in this process, which ends with a negotiated settlement of the claim. Aspects of firm performance are tracked, and presented in feedback sessions to students (see for example figure 5).

## 5 Transactional learning requires holistic or process learning

In their traineeships, the students are asked to undertake tasks that demand a more holistic understanding of legal process and legal procedure than they often have gained on the Diploma in the past. In this sense, students need to arrive in their traineeships not only with a sufficient knowledge of the parts of a transaction – which letter is sent to whom, why, what it should contain, for instance – but also a holistic knowledge of the whole transaction. When they are given a file-in-progress in the office, for instance, they need to be able to move from partto-whole, and vice versa, in order to identify what has been done and why, and what needs to be done next. It therefore makes sense to give them as much practice in carrying out whole-to-part and part-towhole thinking. Such thinking is effectively practical legal reasoning, and a form of Aristotelian phronesis. Our students begin to achieve this by working through simulations of office-based and court-based transactions.

How might all of this translate in actual educational practice in professional legal education? In the Diploma curriculum, Private Client is that subject dealing with transactions such as the inheritance of property after death, the winding up of estates and the making of wills. There are no lectures, no examinations. Instead, the tutorials focus on the work of two transactions, namely winding up the estate of a deceased intestate client, and drafting a will for a client. We have four assessment points, which involve students in drafting wills, court documentation, letters and Revenue tax forms. The virtual firms are given two opportunities to pass learning outcomes for each task, with feedback from tutors. Each year the feedback demonstrates how useful students found the assessment:

- Assignments were excellent from a practical point of view – I would feel confident enough to complete these tasks in the office now
- Assignments were a good way of bringing together knowledge obtained at tutorials. It is a practical

- subject and it makes sense to assess with practical assignments
- Again excellent practice for traineeship
- Realistic and a very reasonable form of assessment
- Provided with good feedback when made mistakes
  with any of these assignments. Allowed us to complete
  them properly the second time round. Good idea that
  students have an opportunity to correct work as I feel
  that I learned more and got more from the exercise as
  a result
- Very good assessments helped understand work done in tutorials. Very useful
- Good learning tool feel I learned more doing this than just reading about it

#### Authentic learning

Simulations such as these are only beginning to be recognised as powerfully authentic learning environments (Gee, 2003). They are highly flexible: they can be adapted to full-time or part-time courses, and can be developed as part of an undergraduate curriculum or can be the basis for professional competence assessment frameworks. There is, though, much that needs to be done to develop both theory and implementations. There is still a need for attractive task environments and, above all, assessment activities that draw students into tasks that are absorbing and which retain the complex, multilayered sense of reality while at the same time enabling students to reflect on practice, and obtain feedback upon that practice. If we are in the midst of digital and communicational supercomplexity (Barnett, 1999), it makes sense to use the tools of that environment in the learning processes that students undertake. Such an approach requires a fresh view of what constitutes authenticity in professional learning.5

<sup>&</sup>lt;sup>5</sup> In an experimental control-group experiment on use of such materials, for instance, Vermetten et al. (2002) found evidence of improved performance in students only where the authentic approach was a prominent element of the curriculum. See also Vermunt and Verloop (1999).

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#### Discussion summary

#### Ardcalloch

The simulated town, Ardcalloch, has been in constant development for the last five years. The map of the town is important for a sense of place, both topographical and cultural/historical. There are districts which could be found in west-coast Scottish provincial towns such as Paisley, Ayr, etc. There is a medieval town centre, areas of poor housing around the docks, lower-middle-class tenement properties, streets of semis, posh leafy suburbs, on the outskirts a business park, etc. This is important if the resource is to be used for other disciplines such as Architecture or Engineering.

Apart from learning design, there were two practical reasons why a fictional town was developed. The first reason concerned the problematic interface between reality and actuality in a simulation. In Conveyancing, for instance, students are supposed to buy and sell real properties, with real title sheets, real pictures and real ground plans. But the addresses have to be fictional, for obvious reasons. In the latest instance of the Personal Injury (PI) project, an employee of Ardcalloch University, an electrician, is injured falling down a set of external steps and is claiming compensation. Witness statements, medical reports, health and safety reports, etc are provided in character when students request them (and follow procedures – eq obtaining client mandates for confidential medical information, etc). Photos and video are also provided. But if the university were to be an actual university, there would be 274 keen law students pestering them for information about their health and safety policies, asking for information about a non-existent employee, etc. Simulation also allows interesting evidential problems to be set up.

Secondly, fictionalisation allows more flexibility in preparing the resources. However, one of the problems with setting up fictional scenarios (to adapt a metaphor from photography) is depth of field. Expert photographers know about depth of field, how light affects it, placing

objects within it, when to alter it, etc. Novice photographers do not. Expert personal injury practitioners know what evidence they need, how to get it, what to do with it. Students do not. When data is placed within the informational field, it is important to be careful, therefore, that one data point is not privileged over another. It must be as nearly random as it would appear in reality. In fact-gathering, law students have been socialised into searching for the key fact that will solve the entire file for them (as if the file were a roman à clef), because throughout their undergraduate courses, that is how problems are provided for them. In the reality of legal practice, there is rarely such a thing; and if the project is to claim authenticity, randomness has to be planned into it.

The Diploma course is run mostly by two full-time academic staff, and administrators and secretaries in the department, together with around 150 part-time practitioners. Training and communication is crucial therefore, not only in the application itself (the map, directory, student intranet law offices) but in the administration and assessment tools they need to use, and the way that the transaction becomes the centre of any subject. In Conveyancing, for example, the course used to be taught by a lecture course, linked very loosely to tutorials, followed by a three-hour academic exam. Now, there are almost no lectures. There are the same number of tutorials, but the focus of the tutorials is the set of two transactions carried out by the student firms. We rarely use lectures (and where we do, they are largely constructed as sets of video lectures with associated resources) and materials are now organised around the transactions – texts, tutorials, document styles, supplemental 'surgeries', ie voluntary large-group sessions where students can come along if they wish to discuss any substantive issues of law or procedure which they might not understand from tutorials or transaction. The surgery model works well: it is in effect having a conversation with students. This conversation could be conducted online, but the course is blended and it is helpful for students to be able to access tutors directly, in just-in-time mode.

When Ardcalloch was first introduced many tutors were bemused at first. Then most realised that the transactional approach was actually a new way of organising the curriculum, which gave them more freedom to express their practitioner expertise. The iron cage of the lecture > tutorial > academic exam model is in many ways a barrier to practitioners: they don't necessarily have the skills that full-time academics have in these arenas, and some hold - with good reason - that academic exams are not the best way to assess practice, ethics, attitudes, values. Situated learning, authenticity of task related to student experience, the development of substantive discipline knowledge within a strongly ethical structure – all these approaches open up the central importance of the practitioner's practice-based articulacy and intelligence. Simulations are thus a method of drawing tutors into educational concerns, and freeing their expertise.

### Transfer of learning

The paper makes the point that 'transfer of learning from academy to professional workplace is problematic', and a simulation environment is thought to facilitate that transfer. Research has proven how problematic it is for teachers, for instance, to transfer practice from one sub-domain of teaching to another, and it is also the case with lawyers (one reason why specialist accreditation is a hot topic for lawyers). Simulation provides a bridge between Thorndike's approach (set up an educational laboratory to teach teachers how to teach) and Dewey's approach (the school is the lab).

There is anecdotal evidence from both solicitors and trainees that the transactional approach helps trainees to understand more quickly two things that normally take time to develop an understanding of. The first is what might be called the 'arc' of a transaction: the sense not only of what has been done and why in a file, but what ought to happen next, how long it should take and so on. Secondly, if one develops a normative sense of what should be in a file (and clearly there are different levels of such senses, from novice to expert practitioner), then it is easier to maintain an awareness of what one might

term peripheral vision: which problems lie just below the horizon, which ethical issues could arise out of specific forms of communication with client or other professionals, etc.

What needs to be researched further is whether transactional learning enables students to develop more effectively their 'voice' as trainees. Traineeship is an anxious time in any profession, when trainee performance is monitored and performance relates directly to decisions taken as to retention of the trainee at the end of the training contract. Very often this means that trainees take on the office culture and the firm's styles of communication in order to be perceived as capable. For instance, if they are drafting a letter to a client, which would normally be revised by a senior partner before it leaves the firm, they will write in the style favoured by the partner, regardless of whether they think it is effective communication or not. They're writing, as it were, to two audiences: the client and the senior partner. Pragmatically, it means the letter comes back with less red ink, and it gets out to the client. Rhetorically, it is a complex game to play, but one that's necessary to their success in traineeship. Where, one wonders, do trainees have the opportunity to develop their own voice and styles? Transactional learning and simulations allow them to begin to develop that, and this is important to the development of capable, responsible professionalism.

The academic literacies movement is concerned with how to enable students to negotiate between the disciplinary requirements of their studies and the necessity to find their own voice and develop out of that a sense of identity within a discipline. Diana Laurillard's Rethinking University Teaching describes this paradox as 'we want all our students to learn the same thing, yet we want each to make it their own'.

Is there a difference, for students, between disciplines that educate towards joining a professional community of practice and those that do not?

Authenticity can have a role to play in those disciplines that do not necessarily point to easily-identifiable vocational or professional cadres in society. If authenticity is seen as a correspondence or relationship, then it must relate to something. In Law, for instance, there are many areas where separate discourses overlap with other disciplines and with professional life – for example, human rights, unjustified enrichment, public international law, ethical codes and professional responsibility, corporate responsibility. In a discipline such as Philosophy, authenticity relates to the community of practice within the discipline, which exists largely within universities, but whose objects of research are by no means restricted either to the discipline itself or universities themselves. With regard to such disciplines there are two levels of authenticity. The first is to the discipline itself – learning it, so that the local community of practice accepts you as a practitioner. Second, there can be a correspondence with the practice of that discipline with regard to objects and discourses that form part of other disciplines. The concept of authenticity may, if taken seriously, make us rethink fundamentally the purpose of higher education, and its relationship to society. This involves thinking first about relations and correspondences of learning and teaching, rather than the products and essences alone.

In language learning there is a great deal of interest in authenticity, both in terms of the learning materials (eg should texts be used directly from original native sources or altered/adapted for the learners?), and the task (how representative is the task of how people actually communicate?). A simulation can never replicate the reality of a transaction, any transaction – it is always going to be some kind of simulation. Also, reality cannot be repeated.

#### Virtual Learning Environments

How can the theories and skills of communication be transferred to the virtual community? The skill of a legal practitioner relies on the ability to articulate verbally and non-verbally. The written element can be practised easily, but how can students practise verbal skills in a text-based medium such as a VLE?

Performance skills, eg interviewing, negotiation, advocacy, cannot at present be easily transferred to the environment of a VLE. A virtual space such as MySpace is shaped around the interests and concerns of the user, and allows users to communicate, share, break-up content, mash it up in new ways, control their space, create, re-create and represent their identities. Students cannot do many of these things on an institutional VLE. In most institutions, the VLE is an institutionally-centred environment that caters more for course administration than anything else. In order to facilitate the learning of the full curriculum, institutional VLEs need to change. They need to alter according to the perceived needs of specific disciplines and become truly student-centred, rather than institution-centred.

Once there has been change, portfolios that can accommodate the communication can be built in. These can then be commented upon, analysed, edited, etc by students, staff, practitioners. They can be carried forward from undergraduate to postgraduate level and into workbased environments. There will also be more opportunity for innovative forms of masterclass learning.