

BRIDGING THE GAP:
*Transforming Knowledge
into Action through
Gaming and Simulation*

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35th Conference of the
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Authenticity in Learning: Transactional Learning in Virtual Communities

PAUL MAHARG

'Learners need instructional conditions that stress the interconnections between knowledge within cases as well as different perspectives of viewpoints on those cases [...]. Learners need flexible representations of the knowledge domains that they are studying, representations that reflect the uncertainties and inconsistencies of the real world'
(Jonassen, 1992)

1. Authenticity in learning

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 John Dewey (1916) to address the relationship between learning and life. In dealing with it, we must acknowledge that there are many factors that affect authenticity of task such as context, learner motivation, task, feedback, social interaction, and social presence; and it is clear from the literature that they require to be carefully managed in any curriculum that involves e-learning.

In many respects, a number of educational theories such as constructivism have evolved in order to make sense of this 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.

Behind the authenticity debates lies an implicit model of mimesis, of education in some form or another replicating reality. However, I would argue that this devalues both the role of education in legal learning, and the complexity of reality. Education has more to offer us in the way of reflection, variation, feedback and negotiated learning than a mere mirroring of real-life tasks; and the reality of professional practice and culture often affects such tasks in ways that are unexpected, difficult to predict and almost impossible to replicate.

In this paper I want to suggest three propositions:

1. That, in Jonasson's terms quoted in the epigraph above, 'flexible representations of knowledge' can be created using electronic resource-based

learning environments that can considerably enhance the student experience of learning the law.

2. But we must always be aware that in creating such learning environments we are in the curious position of mediating student experience at *two* removes. First, we simulate the experiential context of an actual task, for example, writing a letter to a client. We then mediate this simulation at a second remove, namely through the process of mediating the simulation in the electronic domain. The result can be that users' experiences of the task are so far removed that the task no longer becomes an authentic one.
3. However, if we:
 - focus on creating carefully-designed simulation tasks along the lines of what I shall call 'transactional learning'
 - create flexible, sensitive software instruments by which students can express themselves and carry out that task-based learning,

then we become involved in creating an environment where students can begin to comprehend through active learning the complexity of a professional legal task or transaction. Computers thus become flexible instruments of changes in perception and learning. In this sense, Jaron Lanier's comment drawing an analogy between musical instruments and computers is apt:

'[...] 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'. (Burkeman, 2001)

Note how Lanier uses the term 'authentic' in a different way to that used by constructivists – one more akin to that of arts-based and expressive disciplines. Used to support this end, the electronic environment is not a hindrance but can actually enable authenticity and communication. What Petraglia (1998) has termed the 'rhetoric of authenticity' may then be harnessed to enable the rhetorics of legal practice. Electronic mediation of experience can enable richer and more complex role play and personal engagement arising out of experience than would otherwise be possible using more conventional media.

2. The virtual environment: 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 & Paliwala, 2002; Maharg & Muntjewerff, 2002). I 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, and its educational context.

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 (the course comprised 252 students in 2004 – over 50% of the total annual intake into the profession in Scotland). After completion, students require to undertake a two-year traineeship with a firm of solicitors (or if they wish to go to the Bar, 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 virtual learning environment (VLE) that we use to help students learn how to learn 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 map (see figure 1) and by an online directory of several hundred institutions, businesses, virtual student law firms, and people.

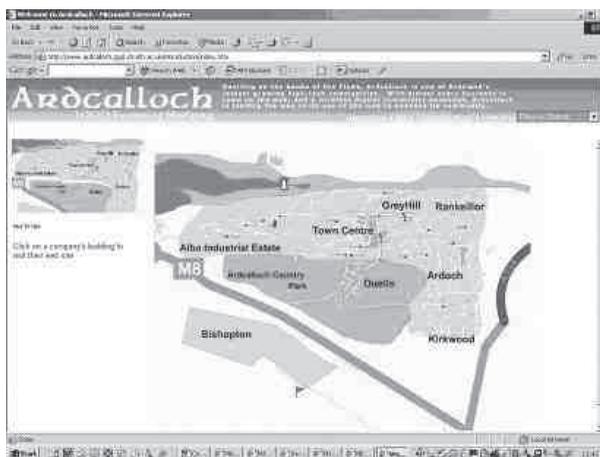


Figure 1: Map of Ardcalloch

The fictional town is of course an ancient device, whether sombre Platonic Republic or the dystopian futurescapes of *Bladerunner*, or vast contemporary multi-user online games such as *Second Life*. In most, 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 using a 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. This means that by the time they have completed the Diploma, they have experience of two entire conveyancing transactions – both purchase and sale. 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. In order to create the background to the tasks, we created fictional clients and firms with which there would be interaction by the ‘real’ firm of students. There could thus be real-time messaging between the client, the other firm, the student firm, and relevant institutions in Ardcalloch.

This has been adapted to a number of different legal domains. For example, we run simulations along similar lines of a Personal Injury transaction, and we are in the process of setting up a Public Administration simulation whereby firms will apply for a liquor licence on behalf of clients wishing to open a bar or bistro. In Private Client, students learn and are assessed on their ability to wind up the estate of a deceased client (this is discussed in more detail below).

3. Transactional Learning

In all of these projects, the common denominator is the legal transaction. The Diploma educates and trains students to become capable trainees in firms; and therefore the education that students engage in ought to be as practical as possible. From the outset, it became clear that we would need to define, for ourselves and others, what ‘transactional learning’ actually meant; and we stated the following five characteristics as defining what at present we would claim to be the outline features of our current practice:

1. *Transactional learning is active learning.* Transactional learning should be active learning, not passive. In that sense, we want students to be involved in activities within legal actions, rather than standing back from the actions and merely discussing 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 what the process actually entails. However, transactional learning goes beyond learning *about* legal actions to learning *from* legal actions. We would claim that there are some forms of professional legal learning that can only take place if students go through the process of active learning.

2. *Transactional learning is based on doing legal transactions.* As befits the type of learning that students do in a professional legal course, we aim to give them experience of legal transactions. In addition to learning about how property might be conveyed, students also take part in the transaction. They thus learn considerably about the practical realities of legal actions.
3. *Transactional learning involves reflection on learning.* Transactional learning involves thinking about transactions -- indeed (to go back to the root of the word) thinking *across* transactions. It includes the ability to rise above detail, and 'helicopter' above a transaction; or the development of the ability to dis-engage themselves from potentially damaging views of the group process within the firm, and re-construct that view. It includes documenting firm transactions.
4. *Transactional learning is based on collaborative learning.* Transaction as collaboration, indicating the root of the word: literally 'acting across'. 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, we create around 64 'virtual firms' of four students, in which they carry out transactions using the virtual community. Collaborative learning breaks down the isolation and alienation of what might be regarded as individual or cellular learning. There is of course a place for individual learning, silent study, literature review and so on, and we emphasise this as a preparation for collaborative work. But students can help each other enormously to understand legal concepts and procedures by discussing issues, reviewing actions in a group, giving peer feedback on work undertaken in the group, and so on. And perhaps what is even more important is that they begin to trust each other to carry out work that is important (there is assessment value to the projects). In other words, students begin to learn how to leverage knowledge amongst themselves, and to trust each other's developing professionalism (learning about know-who, know-why, as well as know-what within the firm). Often, we have found, if there are virtual firms that are not producing good work or keeping to deadlines, it is because they do not know how to work together effectively; and this often arises from a lack of trust.
5. *Transactional learning requires holistic or process learning.* In seminars and lectures and in their reading of texts, students engage with ideas, and form understandings of legal concepts, the identity and purpose of documents, actions and the like. However such learning is part-to-whole; we also need to give them opportunities for whole-to-part learning, and for learning about legal process. The transactional projects provide the environment for this form of learning.

4. Transactional Learning in Practice: Private Client Project

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 a deceased client's estate, and the making of wills. After consultation with tutors we focused on four assessment points:

1. Drafting a will
2. Drafting an initial writ
3. Composing letters to other professionals to ingather and evaluate the deceased's estate
4. Dealing with inheritance tax arising from the deceased's estate.

In the first year we held these assessments as open-book examinations. However it became clear after the marking of these assessments that open-book assessment was not particularly appropriate for the tasks in hand. Students could score as much as 80% or more in the assignments, but could so fail particular elements of it that the documents produced by students would be regarded by practitioners as seriously flawed documents in certain respects – the wording of particular clauses, or the omission of key phrases or clauses, for example.

Instead, we decided to use the virtual learning environment of Ardcalloch as both a learning tool and an assessment tool, and to turn the open book examination into a form of coursework. The four assessment tasks would be strung together as the narrative of a transaction. The project began with a memo from a senior partner to the four trainees in the firm, asking them to complete the winding up of an intestate estate, and giving the necessary details. The students then required to fill out an initial writ to begin the transaction. They knew from their tutorials the details that should comprise the writ (though of course the details of the scenarios do not replicate the templates they are given in tutorials – students must adapt the template to their own scenario). There were deadlines for each of the assessments that students knew in advance, and could therefore plan their work. They had all the information that they needed at the start of the project that would normally be available to them in the real life transaction. They also needed to gather information from characters or institutions in Ardcalloch, particularly when they in-gathered and valued the deceased's estate.

At the same time, we wanted to leverage knowledge between members of the firms. As with all such transactions, the firm itself is given a mark, not the individual four members of the firm. Each of them therefore require to co-operate with each other, and there must be evidence that they have agreed each assessed document before it is submitted. In this way, we want to maximise learning within the group, and ensure that they have the experience

of working on a legal transaction as part of team, with each person taking responsibility for part of a transaction.

Each firm was given a different scenario. Effectively all scenarios were built around the same generic narrative – deceased dies intestate, and brother or sister arrives at the office with a collection of his or her estate – bank books, bills, share certificates, etc. This meant that we needed to create 64 different scenarios. In order to manage the detail of this, we created each scenario as a database of details which draw upon the central scenario. In planning this, we resorted to laying out the scenario as a matrix. What we have, in effect, is a cascade of variable across the scenarios which creates every scenario as a unique set of data. The problems involved in the creation of such a huge number of course documents were considerable, and it is only recently that we have developed administrative systems that will cope effectively with the generation, cross-checking and final proofing of such datasets.

Did this work as a form of transactional learning? Many of the students believed the assessment was useful to them, and embedded well within the subject, as the quotes from this year's course feedback below demonstrate:

- *Assignments were excellent from a practical point of view – I would feel confident enough to complete these tasks in the office now. Our assignments were also returned promptly which was great.*
- *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.*
- *Support and advice was given by the tutor on relevant problem areas of the assignments.*
- *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.*

5. Conclusion

Looking to the wider perspective, it is clear that if e-learning is to be successful, it requires a change in perception of traditional ways of thinking about education, and in educational practice – much of the research literature supports this view (Holt *et al* 2002; Waycott 2002). If the change is to be success-

ful, those of us involved in e-learning needs to give thought to the management of change within his or her organisation, whether that be a university or a law firm. Such change is always contingent upon local circumstances: of personnel, of hardware and software, of educational aims, the needs of a specific discipline, the horizon of what is possible on a particular course, the often fiendishly-complicated problems of timetabling, diarising and so on (Maharg, 2004). This is hardly surprising; for the management of learning is really only another version of the management of culture change. Often, high-end theory, either educational or legal, has little to say about this (Barton, McKellar & Maharg 2000; Weiss, 1995). And as much of the research points out (albeit this stems from universities in the West, rather than in Asia or the Far East where the local educational situations in Higher Education are quite different – (Biggs & Watkins 2001; Le Brun, 2002), it is the ground-up perceptions and moves for change that come from teaching staff that are most likely to succeed in the long-term. Hannan & Silver (2000, 2) point this out, emphasising the contingency of change: ‘initiatives to improve teaching and learning that were located in a department [...] were more likely to succeed’, and were more like to be sustained when grown from within a department or unit, than imposed from without.

If this is true of higher education, it is true also of e-learning in law firms. Even more so with this audience is there a need to produce imaginative and creative applications that lock into what fee-earners and others do in every day practice, and produce applications that enhance, enchant and engage practitioners. Drills and skills, mini-quizzes, talking heads and the like can go so far in ensuring compliance. But if learners are to return from learning to everyday tasks feeling they have learned significantly, they need attractive environments, elegant presentations of knowledge and above all activities draw them into absorbing tasks and which retain the complex, multi-layered sense of reality – what Jonassen in the epigraph to this paper called ‘the uncertainties and inconsistencies of the real world’ – while at the same time enabling them to reflect on practice, and obtain feedback upon that practice. They also need powerful tools to create of such learning objects the programme of learning that they need for their own individual needs.

Is this possible? Yes – the experiments at the GGSL prove that is possible to create such authentic learning tasks, using simulation and transactional learning. More than that – it is absolutely necessary if learning is to disengage from formal, traditional educational models which were appropriate for classrooms in the paperworld era (and still are in many ways). In our internet age, though, we need to rethink the architecture of education, and use the new materials of digital learning to prepare our students not only for the globalised world of knowledge around them, but also the avalanche of knowledge that awaits them in our technological century. Barnett’s (1999) age of ‘supercomplexity’ is already upon us as far as knowledge and technology is concerned. If there is one way of coping, indeed thriving in this environment, I would hold that it lies in the route of re-thinking authenticity

in learning for our law students. Transactional learning is one such possible route to authentic learning, in both universities and law offices.

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