

## **Beyond the Current E-Learning paradigm: Applications of Role Play Simulations (RPS) - case studies**

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Current E-learning models have been criticised by constructivists for providing content without a learning social context and have argued that such learning contexts need to be designed into E-learning programs. This paper takes issue with this approach arguing that it unnecessarily imports into E-learning assumptions and strategies from the traditional classroom/lecturing environments.

The paper explores some general pedagogical principles and outlines a pedagogy that takes the next step in redefining the social space of learning enabling educators to leverage the capabilities of the new communicative media as well as enhance and expand current models of E-learning beyond traditional models. This pedagogy is then demonstrated in a number case studies where learning is achieved using Role Play Simulations (RPS). It will be argued that RPS enable diverse learning objectives, from diverse subject domains, and thus constitute a useful pedagogical model of good E-learning.

### **The Current E-learning Approach and its Discontents**

There is increasing concern among researchers, teachers and administrators that the new technologies for E-learning are used to deliver content without providing appropriate context for learning. As Kathleen Gilroy from MIT says “The emphasis of most E-learning programs to date has been on the accumulation, organization, and delivery of content.” (Gilroy, 2001).

Similarly Professor Stills from Staffordshire University reminds and warns us not to assume that the delivery of content by the computer in virtual learning environments is sufficient – a computer cannot replace a teacher. (Stills 2001). And Tony Featherstone bemoans what he calls the ‘transmissive’ approach which focuses on transmitting content rather than providing a context for learning (Featherstone, 2001).

The call from these and similar social constructivists is that the social space of learning needs to be addressed in the design of virtual learning environments. Gilroy suggests that it is “the knitting together of content, pedagogy, and community into a unique learning experience, which is what people are buying when they step on to the MIT campus.” And thus “E-learning should be first and foremost about creating a social space that must be managed for the teaching and learning needs of the particular group of people inhabiting that space.” (Gilroy, 2001). For Professor Stills, virtual learning environments must be separable from content and Featherstone suggests a shift in focus from using the technology as a delivery medium to its use as a pedagogical tool in a constructivist mode.

The crux of these arguments is that we need to somehow integrate the social context of learning with the content delivery capability of E-learning programs in the way that the traditional MIT merges content pedagogy and social context. In effect this approach proposes to design E-learning programs that reproduce the traditional learning environment on-line.

To understand the weakness of this approach we need to more closely analyse and understand the relationship between content, pedagogy and social context or community. On the one hand, and in the general sense, every educational context presupposes three pedagogical objectives with regard to content: the acquisition by learners of (a) knowledge (b) understanding and (c) skills, particular to their fields. Though sometimes the emphasis may be for learners to acquire certain skills, it is more often entwined with particular kinds of knowledge and understanding. At least in the social and human sciences we more often hope that learners also gain an understanding and expand their knowledge. The content of that knowledge, understanding and skills of course depends on the particular discipline and course content.

On the other we have to select the best means to deliver that content so that these pedagogical goals can be achieved, including being pro-active in situating both means and content within the social context of learning. As Gilroy suggests above and as all constructivist models emphasise, apart from the way content is

presented on-line we need to create a social context for learning. Indeed, one of the main strengths of the constructivist approach to E-learning is this demand - the collaborative learner centred approach is another. But is it advisable to re-create the traditional social context of learning on-line?

On the surface, given our experience of traditional modes of learning and the constructivist critique of E-learning, it seems plausible to create an on-line community that will serve the same function in E-learning programs as the traditional social contexts for learning do in traditional modes of learning.

However, there are at least two powerful reasons why creating traditional learning contexts on line is counterproductive. Firstly because traditional learning contexts are based on assumptions regarding communication and social space, authorship and authority, that are too narrow with regard to, or are not reconcilable with, on-line environments. And secondly, there are still technological constraints that actually exclude putting on-line precisely what is the most useful ingredient of the traditional environment - the dynamic intimacy of face to face interaction.

In principle, as George Mead has argued - communication is the organizing principle of a community<sup>1</sup>. Thus to understand the learning environment and the community of learners within it, we must attend to the underlying communicative organization of that environment (Linser & Naidu, 1999).

The social space of learning in traditional learning environments<sup>2</sup> is largely based on face to face communication supplemented and infused by the written medium. By contrast, on-line learning environments, are mostly written and iconographic supplemented by face to face communication and/or virtual synchronous interactions. The types of structural codes and constraints of traditional face to face environments on communicative interaction that lead to both appropriate<sup>3</sup> selection and acquisition of knowledge, understanding and skills by learners, are so intricate and sublime that it is, at least presently, impossible to reproduce them on-line. It is like delivering a not so funny joke in such a way that it is hilarious as opposed to reading the joke.

We are dealing here with a wide gamut of linguistic and para-linguistic codes that sustain the traditional learning environment and are specific to a community of learners. These codes and constraints, relative to specific cultural and locational contexts, define the authority, validity, appropriateness and the allowed and/or required level of learners participation among other things. In short they define who can say what to whom, in what channel, how it is to be interpreted and the degree of reliability.

The many subtleties of face to face interaction that constitute the background to the traditional learning environment are at the very least, at present, very costly to achieve on-line, if not impossible. But that does not mean that we should abandon the constructivist approach. Rather the task is to re-define what constitutes the learning social context. If indeed we can create a social space on-line, why create the traditional learning environment when we can create the social space of the content itself? And if the tools which the new technologies of communication provide can create the course-content itself as an interacting social environment in which the learner is a participant then there seems no need to create an additional social context. In other words, our suggestion is that rather than reproduce the learning space of traditional paradigm, use a simulated social space in hyper reality to bring to life the course-content itself. And this we suggest can be achieved for every course-content that has as its focus human social relations and organization because the principle underlying these is communication.

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<sup>1</sup> This is not the place to go into a detailed discussion on theories of communication and power with regard to educational contexts, and so the presentation here is only sketchy and at a very general level. Suffice to say that what is presented here relies on sociological, socio-linguistic and medium theories of communication.

<sup>2</sup> i.e. the traditional space of lecture halls, classrooms, hallways, libraries, administration and lecturer's offices, cafeterias, student union, sports grounds, clubs, societies etc...

<sup>3</sup> i.e. pedagogically intended

### **RPS pedagogical strategy**

The question is how to create course-content as an interacting social environment. To do this we are relying on a pedagogy that infuses dynamic goal-based learning, role-play and web-based communication and collaboration into a powerful pedagogical tool based on learner centred and collaborative principles. Elsewhere we have outlined the pedagogical structure of RPS so the exposition here will be brief (Linser, Naidu, & Ip, 1999). Particular examples of how this works in practice will be provided in the next section.

The general idea is to simulate on line aspects of the social context relevant to the course-content by letting learners act out the various roles that constitute the reality addressed or problematized by the discipline.

**Dynamic goal-based learning** is a strategy that leverages the experience and motivation of participants trying to reach a goal, in the service of pedagogical objectives. The idea is that in attempting to achieve game goals, especially ones set by themselves, in a dynamic and reflexive environment, i.e. one which continuously emerges from the impact of their own actions; participants will be motivated to evaluate, learn, and exercise the necessary skills required to be successful in order to reach these goals and in the process acquire the knowledge and understanding needed.

Taking on a 'persona' in a **role-play** simulation involving multiple roles whose objectives may be in opposition or in alignment with the 'persona's' own objectives, creates such a dynamic and reflexive context for participants. Given that all roles must respond 'in character' to an initial scenario, and further, must respond to the actions of other roles, a reflexive and dynamic process emerges that continuously provides participants with the impact of their own actions on the context. Thus, they must acquire more information, reflect and then adjust their further actions in order to reach their objectives, or indeed perhaps even alter or abandon them and set new ones. The idea of 'play' cannot be over-emphasised and should be understood in its senses of playing a game, playing a role in a play, and in the sense of playing with possibilities (experimenting).

The communicative interaction of such a role-play simulation in the on-line environment of the **World Wide Web**, has the further advantage of providing a space that can be used in both synchronous and asynchronous modes. Moreover, the ability to create a 'persona' as opposed to the real identity of the student has many advantages - not the least of which is to provide a sense of security for the learner. Still more, this on-line environment provides a space where the resources needed for acquiring the necessary knowledge for playing the game, can be made available 'just in time' when they are needed. And this includes moderators who become a resource in the service of game objectives through which they fulfil pedagogical objectives. If moderators are also sensitive and committed, our RPS environment (supported by the Fablusi platform) creates a 'safe' and supportive space for participants to learn from their own experience.

The upshot of playing the game, of attempting to implement different strategies and seeing their outcomes, is that participants learn the subject's content, acquire skills and learn to understand what is involved in the process. And this is precisely the pedagogical utility of RPS <sup>4</sup>.

The uniqueness of this pedagogical structure is that it separates the learning space, where participants learn from their experience, from the institutional and organizational environment which provide the resources for learning including moderators or educational facilitators. It does so without reproducing these institutional and organizational aspects of the learning environment e.g institutional hierarchies. The structure of RPS thus creates a flexible space for participants to fill with their own objectives, actions, and results that ultimately relate back to the pedagogical objectives of the course as set down by the institution.

### **4 Case Studies**

So what does a 'social space of the content itself' look like? how does it provide a social space for learning? and is it helpful in reaching the pedagogical objectives of courses in which this is implemented? What

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<sup>4</sup> for more info on the pedagogical foundations of RPS see Linser & Naidu, 1999; 2000, for the role of Moderators see Ip Jasinski and Linser, 2002 forthcoming.)

follows is a brief description of a number of different applications of role play simulations using the pedagogy above.

The most important aspect in RPS design is the decision on which roles and what kick-start scenario will best serve the particular pedagogical objectives of the course. The relations between the roles within the kick-start scenario and their differential membership in asynchronous 'forums' modelling institutions and organisations derived from the course content, provide the social space and context for learning. And it is to these which we now turn relative to the particular pedagogical objectives of the different courses.

## **2 Simulations of International Politics**<sup>5</sup>

Over the past 11 years we have conducted RPS for a variety of political science courses at the University of Melbourne, including Middle East politics, World Politics, Theories of Power, Russian Politics, Australian Foreign Policy, and International Politics of the Asia-Pacific. In general the stated pedagogical objectives of all these courses included understanding the political processes and dilemmas faced by leaders in these regions and the theories and explanations that may be useful to understand these processes. All of these courses were originally lecture based with essays and tutorial participation as their mode of delivery. For all these courses students were given the choice between participation in the simulation involving working on roles as teams or individually doing another essay or exam. Significantly in all these courses the majority usually choose to do the simulation despite the fact that they were warned and knew from former students of the course that it involved more work than the other alternatives. (see Ip, A. & Linser R., 2001)

For the sake of brevity I will discuss the content of only two of these simulations. The Russian Politics course focused on the internal political dynamics between the central government of the Russian Federation and the governors of the Regions. Because of the small size of the class (45 students), we decided to focus the simulation on only 3 regions, the internal security forces, the army, the government, 2 opposition parties (to the right and left of the government) and the media (16 roles). The kick-start scenario then provided a short overview of the current situation in Russia with the President calling for reform of the State council – the organization that brought together the leaders of the regions. To this was added a fictional element that during a recent meeting of this council some governors severely criticised both the reform and the president and stormed out. Thus a conflict of interests between the central government and the regions was set in motion, requiring all the roles to take sides, to negotiate, threaten, cajole, back-stab and generally attempt to secure the aims of their respective roles (which they have researched and published on the web-site before being aware of the initial scenario.)

This was a fairly simple simulation focusing on just one set of issues - but the overall effect was the creation of a space of relations, modelled on the real world which the course content addressed as narrative in lectures. A social context was created and developed in the conjunction of research efforts and response to simulated events, that participants themselves set in motion. And this served as a context for learning the historical facts, the organizational relations and some of the possible processes that can occur within Russian Politics.

A more complex simulation involved two different courses in the same department, the Australian Foreign relations course (120 students) and Theories of Power course (45 students), both taking part in a joint simulation<sup>6</sup>. Each of these courses obviously had different contents, so we decided to create two types of roles. One type, like in the Russian Politics simulation, focused on Australian foreign policy issues from the perspective of the government, the opposition parties, the military, and Australia's neighbours in the region including US and European powers. The other type of roles which could only be taken by students in the Theories of Power course, were of theorists, commentators, and advisers. The initial scenario involved a fairly comprehensive overview of real events and process in the region and different fictional crisis in Australia's immediate region - clashes between the Indonesian army and local rebels in Aceh, West Papua and East Timor as well as reports of money laundering in some of the smaller pacific islands.

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<sup>5</sup> <<http://ausis.com.au/polsim>>

<sup>6</sup> We have also had simulations that brought together different courses from different universities around the world.

The interesting aspect of this simulation was the cross fertilisations of issues. The 'theory' based roles had to publish explanations of the simulation events as they were occurring from the perspective of different theoretical positions, Weberian, Arendian, Faucauldian etc, and give advice to the more 'political' roles who then accepted or rejected these as basis for action, and used them as justification or condemnation of others relative to their political interests and priorities. Again we see how a social context for learning can be created from the contents of very different courses by creating specific kinds of roles to fit the course content. This in turn shifts the students focus on the contents of their course and from this perspective evaluate and use what other students produce in other courses for their own purposes.

### **Australian History: the First Fleet 1788 Simulation**<sup>7</sup>

Professor Sandra Wills from the University of Wollongong has developed a database of the convicts who arrived on the First Fleet to Australia in 1788 and has added a role-play simulation as an active learning methodology for students to develop a better understanding of the lives of those involved in the early days of white Australian settlement.

In this simulation players adopt the roles of either convicts or officials of the colony in an attempt to solve the problem of theft. Unlike, the political science simulations above, participants do not research their roles but are given a description of their character, which is based on known historical fact found in the database. Depending on their role, each belongs to one of the following camps: Governor's Table, Officers' Mess, or Convict Camp which has two subsections.- female gossip and male gossip. Each character can communicate either privately with a particular character or post a general message for all to 'hear' in their camp. Other camps cannot see these conversations until the group collaboratively decide to share it with others. The scenario, also based on the historical record, revolves around the decreasing food supplies, the action of some to plant vegetable gardens, and others who steal the vegetables because there is nothing to protect the more law abiding community members, who are tired of seeing their gardens raided. How will order be maintained? How will thieves be brought to justice to deter others? Those are the problems that participants tried to solve.

Unlike the simulations discussed above, the pedagogical objective here is to bring to life the records of a database so that students better understand the historical conditions of early white settlement in Australia rather than current affairs and concerns. The social context for learning is developed out of the contents of the database and the interactions between roles within and across 'camps' constitute the collaborative arena for finding a solution. In the process students acquire, knowledge of the facts, an understanding the difficulties and skills for researching this database.

### **Staff Development and Sexual Harassment**<sup>8</sup>

This simulation was developed as a tool for a staff development project at the Douglas Morley Institute of Technology in Adelaide. The pedagogical objective was to provide training in creating and using web-based role play simulations. We decided that the best way to achieve this objective was to actually play a simulation before the training began and then leverage the experience in workshops where participants then worked in teams creating their own simulations for particular courses which they deliver to students - one of these is the Fashion House simulation that was later actually used in a course about fashion design.

We decided that 'sexual harassment' would be a useful topic as participants in this kind of educational context would be familiar with this sort of content and participants would be able to explore this issue in the overall context of training in creating simulations. By not having to do much research in order to act appropriately 'in character', participants would be able to spend more time on thinking through the pedagogy and experiencing the capabilities of the software, as well as their limitations This enabled participants to reach the ultimate objective of being able to create and run such simulations.

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<sup>7</sup> <<http://www.dls.au.com/firstfleet>>

<sup>8</sup> <<http://www.roleplaysim.com/default2.asp?SimID=rpsim00000123M1B>>

Unlike the simulations above the setting (an educational institute) and all roles (16) in this simulation were fictional and so each of the roles was given the position of the role (like head of the Institute, secretary, ceramics teacher, equal opportunity officer etc.) and an outline of the character of role (e.g. the Managing Head of the institute was characterised as authoritative and intellectual, open to rational argument, recognized as a good mate, hates details, gives subordinates lots of freedom and in return, expects them to resolve their own issues. Has an inner circle of trusted colleagues where you can let your hair down and tell it like it is... ). The initial scenario, again totally fictional, was designed to bring out possible areas where sexual harassment may become an issue and thus the roles faced the task of collaborating through their 'persona' to identify and resolve these issues where possible.

### **To what extent are these RPS effective in reaching pedagogical goals?**

In the social sciences, I suspect the degree to which any pedagogy actually achieves its objectives will always be contested grounds. Research on the effectiveness of RPS is still scant. What is there suggests that it is a transformative experience for most learners who by enlarge report gains in knowledge understanding and skills specific to their subject (Ip & Linser, 2001; Vincent & Shepherd, 1998). However, the novelty of the approach may be skewing the judgement on the relative effectiveness of this approach as perceived by learners. As a user and observer the impression is that not only does it reach the pedagogical objectives but does so above expectations.

### **Summary: Good E-learning and how to make it better using role play simulations.**

The argument that E-learning programs need to not only deliver content but also a social context for learning is acceptable if the social context for learning is not simply imported on-line from traditional learning contexts. MIT may have a winning formula in its traditional context, but that is because the underlying structures of face to face communication anchor the relationship between the local institutional spaces of MIT to content and pedagogy. But we cannot, and should not attempt, to reproduce this on-line. A different social space already exists in on-line environments and to reproduce another context on-line seems unnecessary if not counterproductive. The social context of learning can be created from the content itself. If we can create social spaces on-line than in so far as disciplines connected with the social sciences are concerned, that content can be created as an interactive learning environments with unique, though simulated, social contexts for learning as our 4 case studies have shown.

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