



## **LEARNING CAN BE FUN: COMBINING LOW-TECH TEACHING METHODS WITH HIGH-TECH ELEARNING TO PROMOTE CRITICAL REFLECTION**

Mark Brown  
Massey University, New Zealand

### **Summary**

*This paper describes how online role-play is being used to help initial and in-service teachers to critique the rapid growth of information and communication technology (ICT) in education. It argues that the latest elearning movement is inherently problematic and teacher educators must encapsulate this basic principle in their course design. Example scenarios in which online role-play has been used to problematize the ICT movement are presented and this innovation is shown to offer considerable potential in exposing the tensions, contradictions and half-truths associated with the new digital learning environment. The paper demonstrates how relatively low-tech teaching innovations, such as role-play, can be blended with the latest hi-tech developments in elearning to engage students in deeper levels of critical dialogue over current efforts to transform education through new technologies—for better and worse.*

### **Introduction**

The growth of elearning is one of the most spectacular technological phenomena of the last century. A new digital revolution has taken place that most hi-tech proponents agree is slowly but surely transforming higher education. However, this paper adopts a cautious approach to the digital revolution, as the use of information and communication technology (ICT) in education is not on an independent trajectory (Clegg, Hudson & Steel, 2003). eLearning is intertwined deeply with the globalisation movement, the rise of neo-liberalism, the celebration of technology consumption, and ecologically destructive cultural patterns (Bowers, 2000). Thus, this paper is based on the assumption that the rapid growth of ICT in education is problematic and teacher educators have a key role in disrupting a growing culture of technology lust.

There are three parts to the paper. The paper begins by describing the competing and co-existing mindsets that make the elearning movement problematic. In the second part, the paper outlines the author's underpinning philosophy and discusses how the relatively low-tech combination of case-based scenarios augmented through online role-play offers tremendous potential for establishing a hi-tech culture of technology critique. Lastly the paper takes a closer look at some of the activities students undertake and their response to these as we strive to create an environment for debate and rich critical dialogue..

## **Competing Mindsets**

The virtual digital classroom is far more problematic than many educators realize (Brown, 2005). Typically policy briefs celebrate the benefits of ICT in education with little concern for the unplanned effects and negative consequences. In Postman's (1993) terms, 'every technology is both a burden and a blessing; not either-or, but this-and-that' (p.5). In a similar vein, Oppenheimer (2003) claims in his seminal book that the ICT movement is a type of Chinese crisis—that is, it symbolizes both danger and opportunity simultaneously. It is this idea of seeing the many, different and hidden faces of ICT, and the messy interplay between the competing mindsets that we encourage our students to understand.

To this end, we often introduce students to an adapted version of Bigum's (1995) framework for mapping the different perspectives evident within the educational computing discourse. According to Bigum (1995) most techno-advocates can be classified as "Boosters". This category is used to describe a large group of general proponents of technology—parents, teachers and industry stakeholders—who uncritically see new digital technology as the solution to many of their problems.

In contrast, another group of advocates fall within the "Deschooler" category, which loosely describes those people who are proponents of technology as the solution to dismantling our archaic educational institutions

At the other end of this theoretical continuum is the "Doomster" who adopts a negative and often illogical response to the threat of a perceived technocratic nightmare.

Another major group that Bigum (1995) fails to acknowledge in his original framework is the "Toolster". These are educators who simply view ICT as another tool in their pedagogical toolbox. They are often heard saying that 'It's just another tool and it's how you use the tool that's important'. Arguably, the "Toolster" is by far the largest group numerically in the education profession.

The smallest group is the "Critics" who do not automatically oppose all aspects of elearning but challenge the unrealised promises and taken-for-granted assumptions about the potential of new digital technology in education. This group does not define the ICT movement in a binary fashion as demon or panacea as such bipolar thinking is not overly productive. Rather the Critics question proponents who justify the use of technology in education just because it can be done (Bigum, 1995). They ask why ought it be done and who will benefit from its use?. Albeit an overly simplistic analysis, when adopting this framework in my teaching the intention is to encourage initial and in-service teachers to see elearning through a more critical lens.

## **From philosophy to transformative practice**

At a philosophical level, the approach we adopt is akin to the Chinese proverb that you can either give a person a fish to feed their family for a day or teach them how to fish so that they can feed their village for a lifetime. In attempting to feed the minds, hearts and souls of our students, as opposed to providing just a quick technological fix, we attempt to embed elearning experiences in problems requiring deep thinking and complex reasoning.

In a nutshell, we want students to adopt critique as a permanent philosophical ethos. Such an approach fits neatly with the university's traditional role as 'critic and conscience of society'. This philosophy is influenced, in particular, by the move to design learning experiences that promote active learning for critical citizenship. One of the ways we attempt to translate this philosophy in to transformative practice is through the relatively low-tech combination of case-based scenarios—augmented through online role-play. A well

developed body of literature exists on the pedagogical value of these two teaching strategies (e.g., Errington, 2003; Jonassen, 2004). In the case of role-play, it is well accepted that:

*To read or hear about something is not the same as experiencing it, and it is often only by actual experience that understanding and change can come about (van Mentis, 1999, p11).*

In recognition of this role-play is a very hands-on form of pedagogy (Bender, 2005). When participants adopt a role different from their everyday viewpoint, they potentially acquire new insight by stepping into another person or stakeholders' perspective (Errington, 1997). Taking on a persona in a role-play with multiple perspectives that may be in opposition or alignment with the participant's own goals, helps to create a dynamic and reflexive learning environment (Linser & Jasinski, 2002).

Notably, the combination of role-play and case-based scenarios is ideally suited to asynchronous learning. The asynchronous nature of online role-play provides time for students to consider alternatives, craft their response and gather information relevant to the discussion. In addition, online role-play overcomes the problem of face-to-face role-play, where participants may feel shy about taking on another role. Anonymity allows free exchange of opinion without the risks associated with a face-to-face environment. Moreover, the sub narrative of taking on another persona, living the character and trying to figure out the actual identity of fellow classmates can be a lot of fun!

It needs to be noted that the use of role-play values 'emptiness' in that students are expected to interact to create a learning experience for themselves (Errington, 2003). The relative emptiness of role-play is in stark contrast to the growing sophistication of many new electronic teaching spaces where the tendency is to overkill the learner through technology.

### **Description of innovation**

A web-based virtual school has been designed to facilitate the use of online role-play. This virtual school has a twin purpose. It helps to situate different case scenarios within an authentic context. There is a wealth of literature on the importance of making learning relevant (e.g., Jonassen, 2004) and the virtual school helps to operationalise this literature. The second function of the virtual school is to encourage more talk and critique amongst students through the use of online role-play.

There are two variations of the virtual school to accommodate both primary and secondary teachers. Students access the virtual school through a link in the University's learning management system. Although the school is illustrated as realistically as possible, the description is sufficiently generic so the same architecture can be used to support a range of different case-based scenarios. Notably, we have used humour deliberately as a powerful tool to explore serious and sometimes sensitive issues in a manner that deflects attention away from local and personal circumstances. A brief description of the primary school follows:

*Mallards Primary School is located in an established suburb within a large New Zealand city. The School has approximately 415 children and is classified by the Ministry of Education as Decile 3. This means that the School is part of a moderately low socio-economic community. The school community consists largely of blue collar and factory workers along with retail assistants, hospitality workers and a small number of self-employed tradespeople.*

*Despite ongoing resource constraints, since the arrival of the new Principal the*

*School has steadily developed a reputation for its "Go Ahead" attitude. Indeed, the School's new mission statement is to prepare "hi-tech" students for the "hi-tech" knowledge economy of the future. There is a strong emphasis throughout the School on making learning authentic and meaningful to tomorrow's world.*

We have steadily added to the number of case-scenarios that can be selected from since developing the original concept. At present, eight reasonably well-developed scenarios exist, which in one way or another have the potential to be incorporated into our courses as part of a role-play experience. Each scenario reflects a real issue facing schools and involves a proposal to adopt a new policy and/or purchase a new type of technology. The scenarios include a proposal to:

- Build a new computer lab
- Purchase an integrated learning system
- Mandate the use of laptops for all students
- Install electronic whiteboards in all classrooms
- Provide unrestricted Internet access to all students
- Participate in an ICT professional development programme
- Establish a digitally enhanced classroom on a user-pay basis
- Enter into a commercial partnership to increase access to ICT

### The Characters

Up to 30 individual biographical profiles have been written to represent the various stakeholders involved in the role-play. These include the principal, senior management, parents and Board of Trustee members along with the individual teaching staff. Embedded in these profiles are the different mindsets or perspectives discussed earlier in the paper.

*Dot is the most vocal of the so-called techie teachers. She has worked tirelessly to push this school into the Digital Age. She strongly believes that teaching with technology is the only way to go. The school must prepare children for the world of the future. Dot sees this as another step toward bringing the school into the 21st Century.*





 <b>Massey University</b>		<b>College of Education</b>
<h2 style="color: blue;">Mallards Primary School - Profiles</h2>		
<p><b>Name:</b></p> <p><b>Position</b></p> <p><b>Age:</b></p> <p><b>Status:</b></p> <p><b>Gender:</b></p> <p><b>Ethnicity:</b></p> <p><b>Qualifications:</b></p> <p><b>Experience:</b></p> <p><b>Interests:</b></p>	<p>Dot Com - Booster</p> <p>Senior Teacher - Leader of the Techie Teachers</p> <p>Forty Two</p> <p>Married with Two Children</p> <p>Female</p> <p>European</p> <p>Diploma of Teaching / Bachelor of Education</p> <p>Over 15 years Teaching Experience in Several Different Schools</p> <p>Gardening, Music and Reading</p>	

Figure 1: **Dot Com – Booster**

In contrast, the profile for Irma Fossil, one of the Doomsters, reads:

Irma is one of the old guard teachers. She has taught at Mallards Primary since before computers started making their way into schools. Irma likes well-behaved children who know the limits. She expects children to learn and they achieve high standards of work in her classroom. In her opinion, no computer can replace a good teacher.

 <b>Massey University</b>	<b>College of Education</b>
<b>Mallards Primary School - Profiles</b>	
<b>Name:</b>	Irma Fossil - Doomster
<b>Position:</b>	Senior Teacher - One of the Old Guard
<b>Age:</b>	Fifty Six
<b>Status:</b>	Married with Two Adult Sons
<b>Gender:</b>	Female
<b>Ethnicity:</b>	European
<b>Qualifications:</b>	Diploma of Teaching
<b>Experience:</b>	More than 25 years Classroom Teaching Experience
<b>Interests:</b>	Loves Cats and Children - Sometimes



**Figure 2:** Irma Fossil – Doomster

### The setting

The role-play unfolds and is discussed in a virtual community meeting following a preset agenda in which each group is allocated time to present their particular viewpoint, and respond to questions. Unlike face-to-face role-plays, this meeting is conducted asynchronously over a period of two or three weeks.. At the end of the meeting participants vote on whether or not they support the proposal with a brief justification of their decision.

### Structuring for success

A number of lessons are worth sharing from our experience. First, this type of elearning can be a lot of fun. The role-plays are highly engaging and they appear to engage and bring into the fold even those students who might otherwise be known as 'lurkers'. The following student reports how the role-play activity changed her online participation:

*Before the role-play started I wasn't really that interested in posting to the discussions. I read some of them but I just focused on my own reading. But the role-play forced me to participate and it took me out of my comfort zone. Initially it was scary but no one knew who I was and I gradually saw the value of the debate. By the end of the role-play I was sad that the activity was over.*

That said, the success of each role-play highly depends on the nature of scaffolding and teacher intervention. In particular, we have found that teachers can prime students for better quality contributions by sending them private email messages with additional resources to read and possible questions to ask..

In contrast to the rules of face-to-face role-play, the teacher needs to adopt the role of chairperson. This point underscores the value of setting a clear time limit for the meeting

from the outset and notably we have found that online role-plays do not always have to run to full completion. However, the expectation to participate in the role-play and ensuing discussion relating to the specific scenario must be aligned with course assessment. Students expect some reward for their participation beyond enjoyment of the activity, which can create a tension with conventional assessment. Ideally, the role-play activity should provide “feed-forward” assessment for a larger assignment task later in the course. As one student reports:

*The role-play was excellent for situating the major report we had to write. The assignment gave the role-play value beyond the time we had to spend online. It was important that we understood the link between the two tasks as this gave greater incentive to participate. I found the role-play kept coming to mind when I was writing about the key issues educational leaders have to consider when implementing a major change or innovation.*

### **Reflecting on the experience**

Ultimately, the value of the role-play depends on the quality of the debrief exercise at the end of the experience. To facilitate this debrief, out of role, we adopt the ‘FUN’ of reflection approach (Korthagen, 2001). That is, students are asked to reflect on, and respond to, the following questions in an open discussion forum:

F = What were the **fundamental** points?

U = What was most **useful** outcome for you?

N = What **new** approach or idea related to your work does this inspire you to do?

The public response adds a real bite to the reflection and is often the catalyst for further dialogue about the particular scenario. However, we have yet to determine whether the online role-play activities truly contribute to better learning outcomes. This is the unresolved question that still hangs over many investments in technology-enabled innovation.

Although the FUN of reflection evokes an enthusiastic response, we have also used Actor Network Theory (ANT) to support a much deeper level of critical reflection. The value of ANT is that it looks at the nature of the relationships between the various actors, including both technical and non-technical elements (Lotour, 2005). In this regard, ANT recognizes the important interplay between both people effects and machine effects in the adoption of a new educational innovation. Thus, in simple terms, as a theory, it is neither socially or technologically deterministic.

### **Conclusion**

This paper shows how the relatively low-tech use of online role-play can be blended with the latest hi-tech developments in elearning to engage students in deeper levels of thinking over current efforts to transform education through new technologies. More to the point, online role-play has helped us to create a culture of critique strongly informed by theory and research where students understand the value of ICT in education—for better and worse

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