Playing Serious Games In Journalism Classes

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One of the defining features of journalism education in a university setting is the requirement that students demonstrate their understanding of core skills by producing professional work. Writing skills are assessed by news reporting tasks, research skills are tested by research exercises, interviewing ability is demonstrated by conducting an interview, and so on.

Sometimes this skills assessment is managed in the form of regular student publications or broadcasts. At other times it is structured as class writing exercises. In some cases mock news conferences or simulated news events are used. Regardless of the form it takes, teaching effective journalism practice in a university context necessarily involves simulating the workplace to some degree (Ester, 2000).

Journalism educators are often looking for opportunities to give students realistic experience of the working life of journalists. Patching (2000) has noted the enthusiasm with which institutions channeled hundreds of students into various volunteer media roles for the 2000 Sydney Olympics. In recent years I have supervised students at Charles Sturt University-Bathurst in New South Wales, Australia as they covered floods, bushfires, street parades, agricultural shows, motor races, and elections at all levels of government.

Of course, it is not practicable or desirable to send students to every news event that comes along. There are the practical considerations of time, cost, safety, geography and access. There are educational concerns such as supervision, assessment and the desire for analysis or discussion of the work being done. Hence journalism educators have long used classroom scenarios or simulations to give a measured sense of what it is like to "do" journalism. Accordingly the fictional toll from the accidents, fires, cyclones, and plane crashes written about in newswriting classes around the nation must be frighteningly high each year.

It is the premise of my ongoing research that training simulations may need to become more sophisticated and media rich in order to stimulate and engage students. Educators are ©AsiaPacific MediaEducator Issue No.11 July - Dec. 2001 already dealing with students who see nothing wrong with using their mobile telephone in class (Leone, 2002). Many young adults appear to treat computers, *PlayStations*, and mobile phones with a casual familiarity because, as Alan Kay notes, "technology is only technology if it was invented after you were born" (in Prensky 2001:38).

One possible interface between journalism simulations and technology is the area of video games. Contemporary computer games, and those designed for proprietary systems like *PlayStation* and *Xbox*, are pushing further into realistic simulation through graphics, animation, sound and interactivity (Turkle 1997:68).

Taking Games Seriously

"Videogames are not going to go away. You can't hide under the stairs. Resistance is futile. Any industry with such a vast amount of money sloshing around in it is by token alone worthy of investigation." (Poole 2000:24)

In the three decades or so since video games became more widely available to consumers, the blockbuster titles have reached the commercial status of mass-market movies. In 2000, the U.S. computer and console game market was estimated as worth more than US\$6 billion – compared to Hollywood's US\$7.7 billion dollar box office take the same year (Savitz, 2001).

Despite their mass-market popularity and obvious economic relevance, video games often struggle to be taken seriously as an area of academic study. Part of this reluctance to seriously evaluate these texts probably stems from their position within popular culture. The very term "game" places them into a category associated with trivial entertainment. Poole suggests that video games today occupy a similar position to that of cinema and jazz prior to the Second World War – "popular but despised, thought to be beneath serious evaluation." (Poole 2000:26)

Video games are increasingly gaining serious attention as training tools in a wide range of disciplines. The notion of computer simulation, previously confined to game-players, scientists and the military is now a training buzzword (Prensky 2001:211). The evangelists of digital game-based learning, such as Marc Prensky, remind us that young adults today have not known a world without computers, video games, special effects laden movies, and rapid cut music videos (Prensky 2001). Video games, they argue, are a logical and effective training tool for this generation.

Similarly, Turkle notes that the image of the computer as a calculator has become quaint and dated. Computing today is less about rules and calculation and more about simulation, navigation, and interaction (Turkle 1997:19). We are accustomed to using

computers as a medium for simulation and representation, an obvious example being the desktop metaphor used by operating systems such as Microsoft Windows and Macintosh OS. If we use both "real" and simulated folders with equal acceptance, "in what sense is a screen desktop any less real than any other?" (Turkle 1997:23)

The distinction between simulations and games is fuzzy. Simulations have traditionally been seen as models of real systems, while games have been free to explore territory that has no real referent (Frasca, 2001:25). Games arguably require elements such as a sense of fun, victory conditions, competition, and rules such that simulations are not in and of themselves games (Prensky 2001:212). Yet "the process of simulation is intrinsically related to the process of play ... Most striking and relevant of all perhaps, are parallels between the role of play in society and the role of simulation in education" (Myers, 1999). Computer game designer Chris Crawford argues that playing games to practise skills "is a vital educational function for any creature capable of learning" (Crawford, 1982: 16).

Further complicating this research area is the suggestion that some forms of computer-mediated training may in fact be better classified as "interactive fiction" (Juul, 1999). This is a form of computer-mediated narrative in which the reader helps to determine the outcome of the story, or at least chooses from a set of story paths (Jerz, 2000). It has a literary parallel in the *Choose Your Own Adventure* series of books. Thus training tools which lead participants through pre-determined narratives may more accurately be defined as non-linear texts than journalism simulations. This could include current examples of online training tools such as *City Council* (Cameron, 1999), Columbia University's *Fire* scenario (Pavlik et al. 2001), and the *Flood* site created for this project (Cameron, 2001).

Crawford (1982:8) argues that while simulations are mainly computational or evaluative in purpose, and games are created largely for education or entertainment, the two may blend in the area of educational games. Simulation is based on accuracy and games are based on clarity – two elements that are not necessarily mutually exclusive. Also, as Prensky notes (2001:214) there can be degrees of simulation – low fidelity for those based loosely on reality, and high fidelity for those modeled on reality as closely as possible. Trainers such as Prensky seek to balance the need for accuracy with the desire to provide training tools that are engaging or fun for the participants.

The journalism classroom often departs from a "chalk and talk" theoretical focus. Stuart (1997) describes how from the early

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1970s some Australian journalism courses were providing students with access to on-campus radio and television facilities, or entering into arrangements with local broadcasters. Many were also using both regular and ad hoc campus-based publications as teaching tools, or developing publishing relationships with local newspapers.

While the use of publications and broadcasts is a logical and long accepted approach to giving journalism students valuable pre-graduation experience, it must be remembered that simply "doing" something does not guarantee learning (Burns, 1997:59). Some educators have turned to simulated training scenarios as part of a pedagogical approach that seeks to develop deeper problem-solving skills.

Green suggests that simulations may be a particularly appropriate strategy for journalism education given the industry approach "of throwing people in at the deep end" (Green, 1991:92), although he adds that adequate planning and supervision are required to make simulations a powerful teaching tool. He also notes that some skills, such as reading critically or writing logically, don't readily lend themselves to a simulation format (Green, 1991:92).

The "sink or swim" approach of many newsrooms may be linked to the problem-based learning (PBL) approach to journalism education. This teaching and learning philosophy requires students to acquire knowledge as they tackle problematic situations, "thus reflecting the real way in which knowledge is generated in the world" (Meadows, 1997:98).

Burns (1997) argues that these simulated exercises can provide a strong platform for incorporating PBL into journalism education. The use of mock news conferences and similar hypothetical newsgathering exercises "places students in the active role of problem solvers (practitioners) and confronts them with a situation that reflects the real world" (Burns, 1997:60). Students are required to adapt to the situation that unfolds around them, and make decisions on the run as would be expected in their working life as journalists.

Technology In The Classroom

Would digital game-based training materials find a place in journalism classrooms? There is evidence that journalism educators are willing to make use of new technology in the classroom when there is a direct link to professional skills. Pearson reflects favourably on the speed with which Australian journalism courses moved to acquire desktop publishing software from the mid-1980s, and urges that "wherever possible, journalism education should position itself at the leading edge of industry

developments" (Pearson, 1993:138).

Using desktop publishing as a similar benchmark, Stuart's portrait of journalism education in Australia finds evidence of an early adoption of technology in some courses. He names the then Darling Downs Institute of Advanced Education as the first to develop a desktop publishing laboratory to produce a daily newspaper (Stuart, 1997:51); the model was soon followed by other institutions.

One documented early foray into computer-assisted learning by Australian journalism educators focused on ways to better handle the sheer volume of writing exercises being produced by growing class sizes. The University of Queensland's *JournLearn* package tested the potential of software to manage, deliver and assess newswriting exercises (Green, 1991).

At around the same time the development of the *HyperCard* authoring system for Apple Macintosh computers gave some educators a taste of the power of multimedia and hypermedia that would become even more prevalent today in the World Wide Web. Greene (1991) has outlined the mostly positive impact the use of HyperCard materials had on a news editing and design subject taught at San Jose State University in the early 1990s.

Other Australian examples from the literature include the use of e-mail as a medium for regular student publications (Pearson, 1993); the use of the Internet and videoconferencing to conduct simulated news conferences (Mackey and Phillipps, 1997); and the use of video to stimulate analysis of performance following simulated news conferences (Burns, 1996).

More recently, Blake (2000) identifies at least two main uses journalism educators have found for the Internet. The first is as a vast library, with an emphasis placed on teaching research and computer-mediated communication skills. The second is as a "virtual classroom", capable of "supplementing or replacing the physical classroom as an instructional medium" (Blake, 2000:4).

The first approach has been reflected in the inclusion of computer-assisted reporting (CAR) subjects and methods in journalism curricula (see for example Tapsall and Granato, 1997; Quinn, 1997). The research outlined in this article is primarily concerned with use of the Internet as an instructional medium, and in particular the delivery of an online news simulation as a tool for journalism training.

One recent example of Web-based journalism training material is Rich Cameron's *City Council* (Cameron, 1999), which uses hypertext to simulate coverage of a local government meeting. Set in the small town of Falconville, California, *City Council* requires participants to navigate through the website to review the meeting agenda and gather information about the

issues raised. The participant has access to their notebook, which contains pre-scripted jottings about each agenda item, and to a Rolodex which provides navigation to key news sources. Interaction with sources is in the form of scripted text responses to a brief list of questions presented as hypertext links. Media content is limited to still images and text, and the participant is forced down limited narrative paths for each story.

Another example is Columbia University's *News simulation:* A fire scenario (Pavlik et al. 2001), which uses a Web interface to lead participants through coverage of a residential fire. In this simulation, students take on the role of a newspaper reporter assigned to the police round in the fictitious mid-western town of Freeport. Fire breaks out in a high-rise residential building and the student's assignment is to cover the story for the *Freeport News* within a two-hour deadline. During the course of the simulation students are exposed to information sources in the form of prepackaged video responses to listed questions. There are also multimedia elements such as a police scanner and an interactive map of the town. Although fairly rich in multimedia content, this simulation still forces students down a relatively linear path with a pre-determined narrative. It is also slower to download than *City Council* because of the video content.

The question remains - can Web-based training scenarios like *City Council* (Cameron, 1999), *Fire scenario* (Pavlik et al. 2001) and *Flood* (Cameron, 2001) be considered games? Games designer Chris Crawford defines four basic characteristics of a computer game (Crawford 1982):

- 1.Representation: a game is a self-contained system that subjectively represents a subset of reality. By "subjective", Crawford means the game content can be fanciful, provided the participant is willing to suspend disbelief.
- 2. Interaction: a game is a dynamic form of media. Participants can observe change as a result of their input.
- 3. Conflict: a game has goals, and participants are confronted with obstacles.
- 4. Safety: a game event does not place the participant in real danger.

It is not overly difficult to apply these criteria to the current examples of online training material canvassed in this article. Each of the sites referred to presents a self-contained scenario based on a reality that would be recognizable to most participants. The Web by its nature requires a minimal degree of interaction in the form of hypertext linking. Some elements of these sites, such as the artificial intelligence software used in *Flood* (Cameron, 2001) may point the way towards development of even greater levels of interactivity. Participants in these scenarios have goals (such as

the gathering of material to write a news story) and obstacles (for example potential sources that are unavailable for comment). Finally, these scenarios do not place the participants in direct danger from their contents – which is part of the rationale for developing simulated experiences of fires and floods.

The Flood Project – Background to the Beta version

Flood is a Web-delivered newsgathering / newswriting scenario based on the flooding of an Australian regional city. Participants take on the role of a journalist covering the event. They are presented with information from news releases, wire service stories, and sources contacted via a telephone contact book. Participants can "contact" sources by clicking on their phone number, which appears as a hyperlink on the page. Sources are interviewed by following hypertext links to reveal lines of predetermined questions and responses.

Participants can follow these hypertext links to discover all of the information that a particular source has to reveal. Some of the information will be relevant, and some sources will ultimately prove to be largely a waste of time. While the participants have no choice but to pursue the lines of questioning built in to the scenarios, they are still required to assess what information is relevant or newsworthy, and which story angles are worth chasing.

Artificial Linguistic Internet Computer Entity (ALICE)

The bulk of the project thus far is built on detailed but ultimately pre-determined hypertext narratives. As is the case with other examples of Web-based news simulations, such as *City Council* (Cameron, 1999) and *A Fire Scenario* (Pavlik et al. 2001) students are effectively guided down investigative/interviewing paths designed for them by the author. They have no input into the questions asked of the sources they encounter during the course of the simulation.

For this project it was decided to experiment with a more interactive element that might allow students to pursue their own line of questioning. An online search was conducted to find suitable "chatterbot" software that might be adapted for inclusion in the project. These computer programs are designed to operate in synchronous communication environments such as online chat rooms. The software analyses text input from human users and returns text replies designed to give the impression that a real person is responding.

The software uses a series of rules to filter the input, and return a (hopefully) suitable reply from a database of pre-written options. For example, the chatterbot may look for certain keywords

and offer a pre-determined response when one or more is detected in the human input. There is an element of "trickery or deception" inherent in the design of chatterbot software (Wallace, 2002), but it does provide a potentially useful and powerful tool for online simulations based on human interaction with virtual characters.

In this project a key source of information is "played" by software rather than relying on the pre-scripted hypertext questions. The software chosen was ALICE, designed by Dr Richard S Wallace in 1995 and subsequently refined by Wallace and others (Bush, 2001).

More Work To Be Done

This project is still to be tested and evaluated rigorously. The first "beta" version was trialled in two newswriting tutorials at Charles Sturt University (CSU) in Spring 2001 (July-November). Evaluation was informal and largely anecdotal, but the majority of participants were enthusiastic about the project. Most felt it was a welcome alternative to the paper-based writing exercises encountered for the bulk of the Session. A revised version with a more formal evaluation component will be used for a first-year newswriting subject at CSU in Spring 2002. The revised version of the project will include more multimedia content, such as video footage and audio grabs. There will also be refinements to the interactive elements, particularly the ALICE chatterbot.

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