

Exploring Real-world Scenarios as Vehicles for Authentic Learning

Edward Peter Errington, James Cook University, Queensland, AUSTRALIA

Abstract: Arguments have been advanced over the past two decades about the need to embed authentic learning opportunities within higher education curricula. This paper posits the idea that real-world scenarios, explored via simulation, discussion and/or debate can provide excellent vehicles for helping students as would-be professionals bridge the gap between subject/discipline-based theory and professional practice. Such authenticity is advanced through scenarios which include emotional as well as cognitive learning dimensions, simulate complex workplace relationships, and invite students to participate in deep level learning tasks. The author demonstrates by example, how students can singularly, or in groups/teams, explore real-world problems, investigate a range of human issues, and speculate on both past and present events. The author reports that through direct exploration of scenarios, students come to realise that all human knowledge is interrelated, it is important to take an informed stand on significant issues, and the quality and direction of speculations on future events are invariably governed by who and what they are now. He concludes that singularly, and in combination, real-life scenarios can be used to render a true sense of authentic, relevant learning.

Keywords: Real-World Scenarios, Authentic Learning, Higher Education

Introduction

OVER THE PAST two decades, arguments have proliferated among higher education professionals and graduate employers alike about the need to embed authentic learning tasks within curricula, with the intention of bridging perceived gaps between discipline-based theory and professional practice.

'Authenticity' is defined by Herrington & Herrington (2006:1) as "learning centred on rich, real-world, immersive and engaging tasks." In some higher education (real/ virtual) classrooms, such 'authenticity' is achieved through a guided process of 'scenario-based learning' (SBL). SBL refers to educational approaches that involve an intentional use of scenarios to bring about desired (authentic) learning intentions. SBL draws on situated knowledge, that is, understandings which are particular to the context in which they are generated (Kindley, 2002).

Within a shared scenario learning context, students assume specific professional roles and pursue the kind of tasks or challenges associated with such contexts. The journey students undergo engages them in processes of problem-solving, decision-making, critical analysis, evaluation and reflectivity. En-route, students are exposed to real-world problems, issues, challenges, dilemmas and choices they are most likely to encounter in their would-be profession. Scenario learning purposes may range from the acquisition of professional skills to the construction of far-reaching speculations (Errington 2005:12).

Marra (2008) notes that the essential key to authenticity is that "students are able to relate the real world

to what they are learning". It soon becomes clear that the literature defining SBL and that delineating 'authentic learning' overlap - whereby the former potentially provides a vehicle for the latter.

Given the above observations, the purposes of this paper are twofold: The first is to outline the efficacy of real-life scenarios in achieving authentic learning purposes. The second is to describe the ways by which one specific scenario was used to help participants explore a genuine real-world problem via engagement in authentic learning tasks.

Why Educators Use Scenarios to Achieve Authentic Learning

The notion of using realistic scenarios to achieve authentic learning purposes is hardly a new one. The Ancient Greeks used descriptive scenarios thousands of years ago to explore and reinforce their social, ethical and moral positioning in society.

Contemporary educators use real-life scenarios to assess the application and integration of students' recently acquired knowledge to dilemmas and challenges found in practical settings (Harden & Cairncross, 1980). Although the scenarios are not 'real-life' as such, they are designed to be as realistic as possible in both construction (content) and delivery (communication). For example, would-be nurses are given the medical details of a fictitious patient and are then required to act on this information in a professional manner by solving one or more accompanying dilemmas. The process they embark upon necessarily involves them in observing professional phenomena, making decisions, applying what they



already know, identifying 'missing' knowledge, pursuing appropriate pathways to learning, and constructing meaning. By doing so, they come to demonstrate (professional/vocational) skills, explore on-going issues, pursue complex problems, and/or speculate on all aspects of their work (Gammer 2003; Van Wissen 2003).

According to Parkin (1998), scenarios contain similar ingredients to 'good' stories. However, unlike stories, scenarios are usually offered incomplete to students, and deliberately so. The pursuit of 'missing knowledge', required to make more sense of the scenario, and its attendant tasks, can prove intellectually stimulating for some students. Successful scenarios necessarily contain a degree of ambiguity - enough to render the task/ challenge intellectually stimulating.

Often promoted as a team challenge, students have the opportunity to work with others to explore issues, pursue problems, demonstrate acquired skills/abilities, or speculate on constructed knowledge. Teamwork in simulated contexts can replicate the kind expected in real professional settings. Team spirit is more likely to occur when students feel able to explore the scenario, and choose roles and tasks without fear of failure. Confidence is strengthened by frequent opportunities for social analyses, evaluation, and reflection on experience with tutor guidance (Errington 1997).

Scenarios can be used to replicate, as faithfully as possible, specific kinds of professional contexts, descriptive circumstances and (often) complex tasks present in the workplace, (Harden & Cairncross 1980). The choice of scenario is highly selective as are the focal questions designed to help interrogate the situation, professional roles and circumstances. Unlike life, scenarios can be modified many times, and re-played (as appropriate) until complex issues are more fully understood.

As a further motivating factor, scenarios can appeal to the dramatic imagination (Courtney 1980), providing a 'hook' to draw in participants. Dramatic components may include (albeit incomplete) storylines, an interesting plot, elements of conflict (meeting of vested interests), unresolved tensions (surrounding an issue), notable climaxes ('Eureka' moments), and (problem) resolution. The 'drama' also contains credible, professional roles found in workplace settings which can be manipulated to provide a variety of positions on issues and problems. The unfolding script is invariably improvised whereby students have to think on their feet.

During moments of evaluation and reflection, an exploration of the artificiality of the scenario drama can prove useful for deconstructing experience in the socially critical spirit of Brecht's "Epic Theatre", whereby the participatory 'audience' are made fully

aware throughout the experience that the performance can be manipulated (for purposes of exploration) by the human actors themselves. Participants are invited to stand outside their own 'dramatised' experience and render considered judgments not readily accessible in life. Participants often recognise the scenario as a socially constructed phenomenon - invariably bound within a specific context which can be used to explore the attribution of personal, professional and cultural meaning(s). Participants perceive themselves as social actors in ways advanced by Goffmann (1959). Scenarios may be explored via role-play, debate or discussion, or any combination of these. Much depends on the preferences and experiences of tutors and participants.

Scenarios also encompass an affective dimension as actions are invariably influenced by held beliefs, attitudes and values that surround role perceptions in specific contexts. The notion of actually 'being there' within the scenario is intensified as students invest their feelings by taking a stand on an issue, or by pursuing problems in particular ways. The process works when participants collectively engage in (Coleridge's) 'willing suspension of disbelief'. That is, they agree to engage actively in a shared pretence that the scenario is reality itself, in order to bring a focus and clarity to this particular slice of reality. Clearly scenarios are not real life but, as Kindley (2002) points out, "some forms of learning attempt to get as close as possible to this ideal".

Scenario: "The Day the Oil Ran Out"

Much scenario work has focused on either analysing past worlds/times (the domain of forensic scientists) and/or speculated on the probable characteristics of future worlds based on observations of our current world (See for example the work of Kees van der Heijden, 2002). Both employ a common scenario characteristic: participants are able to move freely within space and time in order to compare the present circumstances with past or future. With reference to exploring future worlds, Ellis et al (2001), note that many educators subscribe to the notion that "many different future worlds are possible and both big and small (factors), can change the course of history". One consequence of this assumption is that scenario participants are freed to speculate on numerous possibilities - 'to think outside the square' - using supportive evidence found in this world to back up/justify their projections.

About the Participants

Workshop participants to date have consisted mainly of academic staff from a range of disciplines. They may have attended my practical scenario workshops to enhance their teaching repertoire; to build on

present knowledge of scenario-based learning; and/or submit to their inherent curiosity regarding notions of 'real-life scenarios'.

About the Scenario

The purpose of choosing this specific scenario was to help participants envision alternative/ parallel worlds (not exclusively set in the future) where they may affirm that what is done today has consequences for many possible tomorrows. It was also designed to introduce participants (academic staff) to the pros and cons of using a scenario-based learning approach to achieve learning that extends beyond a simple (simplistic?) economic debate on the depletion of fossil resources.

The scenario was selected because of the topic's currency in the context of rising oil prices, depletion

of oil reserves, the on-going rhetoric by politicians that "something needs to be done soon", and the realisation that the world's so-called "developed" nations appear slow to commit to alternative energy sources.

Clearly, a move away from total dependency on fossil fuels will necessitate more than a tokenistic, quick-fix solution. Rather, it seems reasonable to assume that the exhaustion of fossil fuel reserves without any viable transition to alternative energy sources will have an enormous impact on human life: socially, culturally, politically, environmentally, commercially - even spiritually. The following scenario was constructed with these social/human dimensions of experience in mind. In this example, participants are pushed to consider a negative future, and to deliberate on its implications for present and future living.

The Scenario Descriptor and Associated Tasks for Participants

THE DAY THE OIL RAN OUT

It is the year 2038. All of the world's known oil resources have been exhausted. In recent times, lives have been lost through violent clashes in the Arctic as the final few resources were fought over.

Society as we knew it back in 2008 has disintegrated in other ways too. Despite the rhetoric from governments around the world, investments into alternative energy sources to meet whole population needs were never realised.

TASK: Working with a fellow social commentator, consider the implications for living in a 2038, post fossil fuel world with respect to one or more of the following dimensions:-

-Personal	-Social	-Spiritual	-Economic
-Environmental	-Political	-Cultural	- Scientific

FOCAL QUESTIONS

- How does this future world differ from what we experience now?
- What are the specific implications for your chosen dimension(s)?
- What evidence is there to support your conjectures on this 2038 world?
- What steps can be taken in 2008 to avoid the pitfalls of 2038?

Be prepared to share your deliberations with the whole class in 'x' minutes

Delivering a Scenario Learning Process

The tutor communicates the scenario to the participants. Careful explanation is given regarding the educational intentions of the scenario; how the process will operate; the specific task(s) to be explored; the role of the tutor; available resources to support the task; and, how findings/ deliberations will be reported back to the rest of the group. There will be moments for evaluation, de-briefing and reflection, before, during and after the session.

The participants cast as social commentators form groups of 5-6 to identify, record and discuss their immediate reactions to the scenario content, alongside considered deliberations on the focal questions/task.

Following a brainstorming of ideas, the groups distil their observations in readiness to present their ideas to the rest of the class. Groups select two or more presenters to represent their ideas before others.

Each group presents their ideas in turn. Then observers are invited to ask questions, draw inferences, evaluate, and reflect on what they have heard.

Following the presentations, the class are invited to evaluate and then reflect on their experience – as individuals, group members, and active citizenry.

Observations

Scenarios *per se* have the potential to make participants (in my case, university teachers) look at the whole notion of learning through inter-disciplinary eyes. There is no escaping the connections of all things. Scenario learning promotes the need to generate knowledge from a collective human knowledge pool in order to explore more complex problems/issues. It is notable that when participants begin their scenario journey they often underestimate the complexity of issues/problems. Once underway, they come to realise the need to draw upon many sources of knowing required to bring the task and its alternative solutions into focus.

So it is that in our example, it soon becomes clear that the economic factors surrounding the depletion

of oil reserves have a direct impact on personal, cultural, environmental, social and spiritual dimensions of living. These dimensions, with humankind at their epicentre, are inter-related. One cannot wholly consider the implications of one dimension without taking the others into account. A message perhaps for the world leaders who may possibly be blinded by the primacy of the economic dimension without fully appreciating the inter-relatedness of other human factors/dimensions.

The scenario reveals the importance of taking an informed stand on significant issues that influence the formation of particular futures. Active citizenship is promoted through a greater realisation that the power to change the world is in the hands of selves as participants in a democracy.

Speculations on past and future events are invariably framed by who and what participants are now. Despite the many scenarios experienced, and the innumerable roles assumed, the conclusions drawn from scenario learning experiences are inevitably governed by participants' beliefs, attitudes and values.

In similar vein, academic participants come to recognise that the choices of scenario are invariably influenced by the beliefs, attitudes and values of facilitators, in particular respect to what constitutes 'worthwhile' knowledge. This realisation is usefully generalised to all decisions made about the selection of higher education curricula. Scenarios serve to reveal to participants what their own dispositions are, and how their combined (dispositional) dynamics can determine thought and action. Thus scenario participation might well enable participants to experience a more conscious reality - far exceeding the original parameters of authentic learning.

Conclusion

The paper outlined the efficacy of using scenarios as vehicles for authentic learning. During the exploration of a specific real-world scenario, participants came to realise that human knowledge is interrelated, that it is important to take an informed stand on significant issues, and the quality and direction of our

speculations on future and past events are invariably governed by who and what we are now. Singularly, and in combination, real-life scenarios can be used to provide authentic learning opportunities.

The kind of scenario discussed herein suggests the potential for students as social actors to engage in a whole range of real-world scenario learning opportunities with a view to linking discipline/subject-

based theory with professional practice as well as becoming more active citizens.

Finally, Kees van der Heijden (2002) reminds us that “people are natural scenario planners; it is how we make sense of the world and how we decide upon which course of action to take in every day life”. Clearly the courses of action taken today will determine the kinds of tomorrows available to the inheritors of a post-fossil fuel world.

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About the Author

Dr. Edward Peter Errington

Dr. Edward Errington is an academic development adviser based in the Teaching and Learning Development section of James Cook University (JCU). He has a background as a primary & secondary drama teacher, arts educator, teacher educator, and academic development adviser in the UK, New Zealand and Australia. At JCU, he works with teachers from all disciplines to help them provide authentic and relevant learning opportunities for their students. He has presented scenario-based work in 12 countries so far, and has published six non-fiction books and numerous book chapters and articles on drama education and the efficacy of scenario-based learning approaches in higher education. He is also a fiction writer and has written one comedic novel shortlisted in the UK, and had one radio play broadcast by National Radio New Zealand.