Being There: Closing the Gap between Learners and Contextual Knowledge Using Near-World Scenarios

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Abstract: The use of near-world scenarios by university teachers to deliver relevant and authentic adult learning opportunities is becoming increasingly popular as the pressure to bridge perceived gaps between subject theory and professional practice comes to the fore. This paper proffers the idea that near-world scenarios, explored via role-play, mental projection, discussion and/or debate, can provide an excellent experiential vehicle for tertiary students to align subject/disciplinary knowledge with professional practice. Such scenarios can also provide a base for critical thinking, decision-making, and the testing out of ideas. The author points out a range of factors that likely determine the success, or otherwise of near-world scenarios in intended educational outcomes: In particular, he focuses on the social construction of scenarios, the ways that tutor-facilitator language adjusts by design or default the depth of engagement; the need for a 'willing suspension of disbelief' by learners and tutors; learner perceptions of relevance; and, the (professional) authenticity of assessment and learning. The author uses several in-depth near-world scenario examples to demonstrate how these factors may work singularly or in combination to engage or alienate student involvement.

Keywords: Near-world Scenarios, Experiential Learning, Contextual Knowledge, Student Engagement, Critical Thinking

Introduction

THE USE OF near-world scenarios by university teachers to deliver relevant and authentic adult learning opportunities is becoming increasingly popular as the pressure to bridge perceived gaps between subject theory and professional practice comes to the fore.

As an academic development adviser based within Teaching and Learning Development at James Cook University, Australia, I have a central role in helping academic staff of all disciplines help their students explore and gain contextual knowledge. One effective stratagem for negotiating contextual knowledge is scenario-based learning: a learning design informed by situated learning principles.

This paper advances the idea that 'near-world' scenarios explored via a range of scaffolded learning activities can provide an efficacious vehicle for helping students better align disciplinary knowledge with professional practice. The tenets of situated learning emphasise the need for students, as aspiring professionals, to acquire knowledge within the culture of the profession. Near world scenarios are used to replicate, as closely as possible the roles, language, cultural customs and dilemmas students are likely to face in their elected profession.

Given the above, this paper has two main aims: The first is to outline the efficacy of employing near-world scenarios as vehicles for contextual knowledge. What are the characteristics of near-world scenarios? Why use them? What does a scenario learning process entail?

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COMMON GROUND

The second aim is to describe fifteen characteristics that may be harnessed to optimise scenario learning success; these combine the basic principles of situated learning with some inherent dramatic qualities of scenarios.

(1) Near-world Scenarios as Vehicles for Contextual Knowledge

(a) What is Scenario-based Learning?

The term 'scenario-based learning' (SBL) refers to any educational approach that involves an intentional use of scenarios to bring about desired learning intentions. In essence, scenario-based learning draws on situated knowledge - that is, understandings particular to the context in which they are generated. At the same time, scenarios, inherently possess the dramatic potential to optimise learning processes and outcomes, (Errington, 2005).

Learning scenarios *per se* are given various names in the literature: Wilkie, (2000) calls them 'dilemmas' or 'critical incidents'. For Stewart (2003) they are 'essential slices of reality'. A scenario can be a snapshot of a real-life experience; alternatively it may be based on an imaginary event; and, focus on an individual, an issue, and/or a skill to be acquired.

Observers such as Miller (1980) and Parkin (1998) note that scenarios contain similar ingredients to good stories: characters (roles/perspectives), some element of conflict (e.g. a problem to be solved), and a resolution (e.g. tasks achieved/problem 'solved').

However, unlike most stories, scenarios are usually offered 'incomplete'. Indeed their very incompleteness can be cognitively motivating for students as they grapple with ill-defined problems and "*find* as well as *solve* problems" (Herrington & Oliver, 1995:4). The identification and pursuit of 'missing knowledge' is the mainstay impetus for problem-based forms of scenario, and reflect more realistically the kind of dilemmas and situations that professionals are likely to encounter in workplace settings.

A scenario-approach invites students to enter the scenario, take on board roles and perspectives, and to take up the challenge offered by relevant professional dilemmas – while still maintaining a distance. The journey towards task completion involves students in processes of problem-solving, decision-making, critical analysis, evaluation, and reflectivity. Students are exposed to the problems, issues, challenges, dilemmas and choices they may face in their chosen profession.

(b) 'Near-world' Scenarios and Situated Learning

The rationale for using near world scenarios is based on situated learning theory which highlights the importance of learning in context. The learning that takes place is "based on context or situations and social frameworks", (Lamos & Parrish, 1999:9). In situated learning, there is a fundamental assumption that knowledge cannot be known and fully understood independent of its context. Scenario-based learning "occurs as a component of authentic activities that are common to the community of practice in which the learner is involved", (Orey & Nelson, 1994:5).

As vehicles for situated learning, near-world scenarios are constructed by tutor and/or students to replicate, as closely as possible, the kinds of professional relationships, events, processes and dilemmas specific to that professional context.

Scenarios are deemed 'near-life' rather than 'real-life' in acknowledging that simulations can never be *the* real-world. The real-world is just so: scenarios are simply mental fabrications that can only replicate aspects of life - rather like snapshot images. The fact that these snapshots can be examined in minute detail from a range of perspectives, gives some indication as to their value. A scenario can be dissected, re-run many times over, and set in a different time or place. In short, scenarios can be manipulated in many different ways, whereas life, once it has passed by, is lost forever. Near-world scenarios may be explored freely without participants ever having to suffer the consequences and implications that the real-world can engender.

There follows a speculative scenario example with its attendant descriptor, focus questions and associated tasks. The teacher's intention is to have the undergraduate history students consider a range of factors beyond the immediate choice of historical figure; to use background knowledge gained on this course; and to speculate on what they do not know about their historical figure. For the students, it provides insights into the work of historians' – demanding scholarship beyond speculative appeal:-

A Scenario Example

Time travel for students of history (as prospective historians)
Imagine you and your team are able to travel back in time and interview any historical figure you have encountered during this course.
Focus questions/Tasks
- Which historical figure would like to interview?
- What information would you like to gather in your interview?
- Write down no more than six interview questions that would encapsulate the information you wish to gather?
- What local/global influence might these 'new' information have on the course of history to the present day?
- Which historical figure would like to interview?

Be prepared for your group to share their ideas on Monday 5 July and to justify the conclusions you have reached with appropriate evidence.

This scenario was chosen to illustrate that not all scenarios need deal with concrete practice – they can involve students exploring theories, concepts and ideas.

(c) What Happens in a Scenario Learning Process?

In the history example:-

- Students, as would-be historians, are presented with a scenario dilemma/choice, focus questions and tasks.
- Scaffolding activities are used for students to explore the scenario (e.g. discussion, focus groups, role-play of the interview, a possible debate between historical factions (based on choices made) in order to identify what they know already about their chosen historical figure.

- Students reach a tentative hypothesis about the figure and what to ask him or her.
- They then identify what still needs to be known to support or dismiss their preliminary ideas. They gather evidence to support existing knowledge.
- Students work collaboratively to refine likely responses by the historical figure. The aim is not consensus – more in reaching an understanding based on evidence and reasonable assumptions.
- The groups present their findings to the rest of the class who constitute a quasi-historical society armed with questions and peer commentary appropriate to similar cultures.
- Participants evaluate and reflect on the process from personal, group and professional perspectives.
- Scenario engagement may last from a few minutes to a period of days – much depends on the complexity of the scenario, the nature of the dilemmas, and ultimately the learning intentions of the teacher.

(2) Fifteen Features of Successful Scenarios

The author has identified fifteen significant features consistent with scenario learning success.

Scenarios are Successful when they

1. Deliver key themes, competencies, concepts and dilemmas

Key themes, competencies, concepts and dilemmas are chosen that focus on human factors, professional responsibilities, cultural behaviour, and/or workplace (human) processes. Human situations are most suited to exploration through scenario-based processes.

2. Build on students' working knowledge

It is important to identify what students know already: What kinds of knowledge do students bring with them to the scenario experience? How can this be ascertained? How will this knowledge be incorporated into the scenario learning process so that its wisdom may help all students? Scenarios work best when the working knowledge of students is built upon and valued.

3. Relate to Specific Learning Intentions

Errington (1997) earlier identified four main kinds of scenarios in the literature. Each is designed to meet specific learning intentions. Together the four main options incorporate the majority of scenario offerings in tertiary education:

1. *Skills-based scenarios* deliver fundamental knowledge. Learning intentions focus on the student's ability to demonstrate acquired skills, abilities, attitudes, behaviours and understanding of professional procedures;
2. *Problem-based scenarios* help students integrate theoretical understandings with practical knowledge in challenging ways. Opportunities for decision-making and critical analysis are incorporated into the problem-based scenario process – thus demanding higher order learning skills. For example, would-be nurses are presented with a patient displaying particular symptoms. The task is one of diagnosis – establishing first what the problem is, and following problem-based processes to arrive at informed solutions;
3. *Issues-based scenarios* have students explore concerns that inform professional practice. The issues often incorporate ethical and moral dimensions surrounding a profession. For example, law students debate concerns surrounding euthanasia in an attempt to

learn more about human motivations, agencies, and the interests which influence this and other authentic, real-world issues;

4. *Speculative-based scenarios* allow students to contemplate a range of past, present, and future factors that influence present-day trends, perceptions and issues. For example, trainee forensic scientists investigate the causes of a victim's death; business students look to current trends to determine the likely future viability of a company. Van der Heijden (2003) states that the more speculative scenarios "enhance perception by providing a framework to understand events as they occur; make people think; (and provide) a structure for dealing with complexity", (2003:142).

These main kinds of scenarios may be used singularly or in combination to achieve a range of learning intentions.

4. Reflect Authentic Professional Contexts

Brown, Collins and Drugguid (1989) and Lave and Wenger (1991) point out that contextual learning is necessarily acquired within an *authentic* context: One that clearly represents the reality and complexities found in the professional setting. Authentic learning is more likely to occur in the kinds of social groupings that best represent those found in the professional setting. For example, would-be managers work together as part of a project team. The direct relation to the real world necessitates that scenarios not only be authentic in replicating aspects of the professional setting, but also to be robust and relevant, (Brock 2003).

5. Focus on Authentic Real/Near-world Problems and Dilemmas

Naidu (2008) points out that learning is most effective when learners work on realistic problems with guidance. Such problems are likely to be "messy" and ill-defined" as with everyday life (Miller et al, 2003), and do not lend themselves to simplistic solutions. Indeed, determining the nature of the problem itself is often a basic part of the scenario learning process. 'Diagnosis' is a case in point where prospective nurses are faced with a patient presenting one or more symptoms. Before they can proffer suggestions for treatment, they must first identify the exact nature of the problem(s) by possibly interviewing the patient, determining what they do and do not know, pursuing missing knowledge, and deliberating on possibilities. These are early steps in deciding on an appropriate intervention. Students are assessed primarily on the decision-making processes rather than the attainment of 'solutions'. Once exposed, hypotheses can be deliberated and tested.

According to Newman and Wehlage, (1993), authentic activities are real-world tasks that a person can expect to encounter in the job and other social contexts. Such tasks can be motivating as students clearly recognise the value of exploring scenarios that best replicate professional, near-world contexts (Woo et al, 2007).

6. Provide Opportunities for a Mental Rehearsal of how the Learning Process will Operate

Initially students may need to know why the teacher is using a scenario approach and associated learning gains. They may require help in making connections between popular experience of scenarios (via the media) and subject-based learning scenarios. Adult learners particularly will want to know about the stages of the scenario learning process, consisting of an introduction/discussion (stating why scenarios are useful); scenario engagement (enactment and/or discussion); how and in what ways feedback will be given and opportunities for reflection on the process.

7. Engage Students in Collaborative Team Work

Lave and Wenger (1997) state that if learning is to be successful it requires social interaction and collaboration. Successful scenario-based approaches are based on positive social frameworks, (Lamos and Parrish, 1999). Clearly, it is important to foster an atmosphere that is congenial to the scenario learning process – where students do not feel threatened or exposed, if they proffer alternative opinions, or act in a certain ways (Errington 2005).

8. Introduce Students to the Culture of the Professional Workplace

Nelson (1994) notes that "learning requires participation in the actual practices of the culture" (1994:623). Lave and Wenger (1991) add that being able to use the language and relate the stories of a culture are important facets in becoming part of it. Members of such a culture constitute 'communities of practice', (Orey and Nelson, 1994). Students have to become acquainted with the cultural norms of the profession if they are to survive, grow and prosper in their chosen career. Effective near-world scenarios aim to replicate the culture as far as is possible, albeit 'at a distance'.

9. Appeal to the Dramatic Imagination

It is important that scenarios appeal to the 'dramatic imagination' (Courtney, 1980) through elements of action, storyline, journey, plot, conflict, climax and resolution. Without human actors, or sufficient "life" or appeal, students are likely to become bored. To highlight this point, there follows a scenario example used with prospective lawyers. The dramatic qualities used to generate and sustain interest are marked in bold type:

> Euthanasia Scenario [used with 2nd Yr Law Students]
> *Descriptor*
> *"Imagine you are a member of the jury* **[motivational role]** *where the accused is charged with murdering her mother who was experiencing severe pain as a victim of cancer* **[authentic storyline...]** . *In her defence, the accused says that she was asked by her mother to end her life painlessly* **[dilemma]**. *The accused administered an overdose of morphine to her mother.*
> *Focus questions*
> *What are the issues here?*
> *What is your position and why?* **[relevance]**
> *Task*
> *Be prepared to meet other jury members in 30 minutes to see if a consensus can be reached* **[challenge leading to resolution]** . *You will be required to justify your position before other peers".*

10. Are Scaffolded by Appropriate Learning Activities

Scenario explorations might be supported by one or more of the following learning activities, e.g. discussion, role-play, visualisation, focus groups, quasi-public meetings, and any other conventional interactive means that professionals might reasonably be engaged. These activities provide a scaffold for the scenario exploration to progress. The learner's task within these activities is to "deal with the repercussions of the precipitating and related events efficiently", (Naidu, 2008:5). Therefore, it is most important that learning activities are appropriate to the scenario dilemma. For example, issues-based scenarios which involve students taking on board one or more perspectives might best be explored via role-play and/or debates - beyond simple discussions. Here students have an opportunity to make a

stand on issues which they may or may not support. Through combinations of experience, observation and reflection, students may come to identify and appreciate other points of view – a necessity for survival in any profession with its human agencies and motivations (Mansvelt, 2003).

Naidu (2008) notes that: "Efficient and effective execution of these activities and successful resolution of the (associated) problem situation will reflect learner's understanding of the issues at hand and their skill and competence in being able to deal with such situations in real life".

Engagement in authentic professional-centred activities might also incorporate assessment based on the kinds of tasks common to the workplace. For example, law students are assessed on their ability to write a coherent brief; medical students write a report for a patient; disaster education students prepare a disaster action plan to deal with a specific crisis. Brown et al (1989) add that assessment becomes an authentic activity when it forms an "ordinary practice of the culture" (Brown et al, 1989).

11. Have a Well Constructed Script – Written and/or Verbal

Scenarios descriptors may be based directly on real life experiences, or developed from an imagined situation that resembles real-life. It can be about an individual/professional, a programme, or a situation. It is written as briefly as possible (without disciplinary parameters). It highlights the complexity of a situation, and through the dramatic elements, it can enable students to feel they have experienced the situation. The more experiences they enjoy, the more flexible they are likely to become in their chosen setting. To assist the development of flexibility, scenarios may be delivered cumulatively, that is, information is added on a step-by-step basis in the wake of student responses to the previous steps. A cumulative approach may also help reveal the complexity of situations and perspectives. Students may be offered 'red herrings' to get them to distinguish between what is and is not relevant to their investigations (Stewart 2003).

12. Have Multiple Roles and Perspectives for Students

Through scenario engagement students have an opportunity to take on board a range of perspectives. Each scenario invites participation within the unfolding human drama whether at a discussion-only level or with more active strategies such as role-play (Errington 1997). Role perspectives can reveal hitherto unconsidered interests – and render a deep level approach to scenario learning. Students must often defend various role positions and be able to justify their positioning on issues – from both a personal, and a role-taking perspective.

13. Enable Work across Time and Space

Scenarios may focus on past, present or future sites, or combine them to investigate how things came to be as they are, and/or how things are now, and why.

'Space' can also refer to a concept or simple idea. With a disaster scenario example, students from different courses/ subjects may come together to work on one common scenario. This multi-disciplinary approach truly will reflect the way that members of the broader community have to pull together in the aftermath of such a disaster.

14. Shape the Distance between Students and the Scenario Dilemma

The teacher's use of language will likely determine the psychological distance maintained between the student and the contextual dilemma. This distance may be set far or near:

1. *Far positioning* is attained when the teacher employs future or past-conditional language with students: Students are asked: 'what would happen if so-and-so occurred?' or 'What would you have done if...'
2. *Near-positioning* is achieved when the teacher communicates in the present tense, as in the following example with pre-service teachers: 'You're entering the classroom...How are you feeling? What can you see? What are you doing? Now what? Why?' The distance has closed and, concentration permitting, this is as close as the students are likely to get, without stepping foot in the actual classroom. Note the demands on students can feel very real when scenario experiences incorporate believable, lived dilemmas. The distance between students and the event will be determined by specific learning purposes.

15. Teachers Adopt a Brechtian Approach to Teaching

Though some proponents of scenario learning would have students suspend their disbelief in the quasi-reality of the scenario (Herrington & Oliver, 1995), this author favours more of a Brechtian approach where the (student) audience is encouraged to distance itself from the scenario's construction in order to develop and maintain a critical frame of mind in respect of the structure, process and assumptions underpinning the scenario. How real is this scenario? Does it represent relevant dilemmas and tasks. Students "are deliberately kept aware of the falsehoods inherent within the scenario, enabling them to interrogate what they see, reflect upon their observations, and to take a critical stand on what unfolds", (Boomer 1989:7).

In the Epic Theatre of Boomer, "The audience...is pressured to see the familiar in a new light, to question old constructs and to be shocked (though not surprised)" (Boomer 1989: 13). Scenarios may well shed new light on taken-for-granted understandings – and so make an ideal vehicle for exploring and updating their contextual knowledge. As Brecht says, "when something seems the most obvious thing in the world, it means that any attempt to understand the world has been given up", (Willett 1964: 71, quoted in Errington 1992:43).

Conclusion

This paper promotes the idea that near-world scenarios, when explored with appropriate support, can provide an excellent vehicle for assisting students, as would-be professionals, to bridge practical and conceptual gaps between discipline theory and conceptual knowledge.

The author identifies fifteen characteristics of near-world scenarios that may engage students more fully in scenario-based approaches to learning. These features derive from the (a) expressed tenets of situated theory that underpin scenario-based learning; and, (b) those dramatic qualities most evident within a constructed 'scene' or scenario.

It was noted that the role of the teacher is a particularly crucial in terms of achieving specific learning intentions. It is a role that lends itself readily to a Brechtian 'detached' approach, rather than one where students are encouraged to immerse themselves within the scenario by willingly suspending their disbelief' that the construction, and the assumptions underlying it, represent some specific "real-world". Detachment becomes a critical factor if students are to engage in scenario-based learning at a deep more meaningful level. It is hoped that the targeted characteristics will provide a useful framework for discussion and intent when attempts are made to close gaps between learners and contextual knowledge.

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