3. Getting There: Choosing scenarios to meet specific professional needs

Edward Peter Errington

Introduction

Scenario-based learning (SBL), founded on situated learning theory and the valuing of contextual knowledge, may provide one stratagem for getting students closer to the realities of their intended profession through the construction and deconstruction of authentic learning experiences. In scenario-based learning, students, as potential professionals, are presented with a scenario descriptor, (or set of realistic circumstances). This is accompanied by one or more focus questions and/or dilemmas designed to help them pursue lines of inquiry and fulfil specific learning intentions along possible pathways. Students often assume specific roles, and/or at least consider perspectives that will allow them to explore the scenario from a range of vantage points. Through the crafting of the scenario and the teacher's discerning choice of focus questions, students may demonstrate a skill/ procedure, pursue a problem, explore an issue, and/or speculate on knowledge.

In most instances, SBL is not used to substitute work placements but rather intended to supplement them. Subject theory and experiences encountered in real work settings (placements/internships) invariably inform scenario content, and the dilemmas and tasks explored. Scenario delivery may be scaffolded by guided observation, targeted discussion, paired deliberations, focus groups, teamwork exercises, presentations, role-play, debate - all interjected by periods of reflection.

Literature surveys carried out in 2003, 2005 and 2009 respectively, suggest that university educators employ four main scenario approaches: The first is skills-based - used to deliver substantive subject content. Herein opportunities are given for students to demonstrate acquired skills, abilities, attitudes and basic understandings of complex procedures. This approach is favoured by nursing (Gammer; Van Wissen, 2003) and the health sciences (Bell & Page, 2003) where there is a need for students to demonstrate acquired skills. It is notable that a skills-based approach is usually subsumed within the remaining three approaches - as basic knowledge is required for the other three strategies to operate successfully.

The second orientation is problem-based - created to help students integrate their theoretical understandings with practical knowledge in demanding ways. Decision-making and critical analyses are often incorporated in a problem-based scenario process. This stratagem is employed specifically in the areas of nursing (McLoughlin et al, 2003; Miller et al, 2003; Miller & Nambiar-Greenwood, 2010); digital design media education (Fleischmann & Daniel

2010); veterinary science (Parkinson, 2003); social work; teacher education (Adam, Worsley, Taylor, Sorin, 2010); food science (Stewart, 2003); disaster management education (Aitken, 2010); and, psychology (Caltabiano, 2010).

Issues-based scenarios provide a third orientation and are employed to explore issues that underpin or influence an area of study/practice. Students have the opportunity to take a stand on an issue, and importantly understand more clearly the impact of human interests on (professional) decision-making. Areas favouring issues-based scenarios are: law (Holm, 2010); medicine (ethics education); teacher education (Errington, 2003); social sciences (Mansvelt, 2003); cultural sensitivity/awareness (Bernanke, 2003, Errington [R], 2010, Ireland, 2010); and mental health (Pernice, 2010).

Finally, speculative-based scenarios allow students to contemplate a range of past, present, and future factors that influence their work. Speculative scenarios are employed in the areas of mental health (Pernice, 2003, 2010); teacher education (Allard & Santuro, 2010); business (Van der Heijden, 2000); and, social work/policy (Murray, 2010a, 2010b).

Given the above, the first aim of this chapter is to provide a series of questions that may be used to interrogate the adoption, or otherwise, of scenario-based learning. No singular stratagem can deliver all educational intentions. So we ask: On what bases might we decide to choose or reject SBL? The second aim is to explore four common approaches to scenario-based learning, noting how each can make a specific contribution to the professional preparation of graduates. Knowing the kind of learning intentions each may facilitate and their specific professional advantages can prove useful in deciding which specific approach to choose.

It soon becomes clear that there is overlap between and across 'types', but for the purposes of clarity, each approach or orientation is treated, as-if separate in this chapter. Clearly, any approaches may be combined and, by so doing, encompass a broader range of learning intentions in preparing graduates.

How appropriate is a scenario-based approach?

As an academic development adviser, I am constantly being asked by teaching staff to suggest, and (often) justify a particular teaching approach to meet particular educational intentions. When asked about scenario-based approaches, I proffer the following focus questions designed to help teachers reflect on the potential use, or otherwise, of scenarios to advance specific kinds of learning.

Focus questions

(i) What are the specific needs of your class/group, and course/paper in respect of graduate preparation? Can needs be met through scenario-based learning? And, if so, how?

Clearly, if needs are unlikely to be met using a scenario approach, or if scenarios are seen as insignificant by students, then SBL is doomed to failure. Teachers need to explain why they are using them, what they hope students,

as intending professionals will gain, and when they know achievement targets have been met. Scenarios are ideal for aspects of the curriculum that lend themselves to situated learning where contextual knowledge is highly prized. Scenarios introduce human elements to subject inquiry; they place students in circumstances similar to those found in the profession. The way students navigate through the scenario process with its accompanying questions, problems and dilemmas will determine what and how they learn.

(ii) What specific value can a scenario add to this course/paper?

If no particular value can be ascribed to the use of scenario-based learning, then there is little value in employing it as it is more time consuming than discussion per se. I ask what specific advantages SBL offers. SBL can allow teacher and students to explore particular sets of circumstances found/generated in professional settings. This is achieved by using realistic circumstances, authentic tasks and communicational styles similar to those found in the profession. For instance, would-be teachers explore playground or classroom issues. Not with the sole purpose of finding a particular solution, but rather in experiencing the process that teaching professionals engage in to achieve (any) solutions. The process is more important than the product which is subject to change anyway.

(iii) Does the learning material lend itself to genuine enquiry, or are the answers already there?

Motivation and retention of students may well depend upon convincing them of the notion of professional relevance so that scenario pursuits reflect those experienced by trained professionals. As adult learners, students soon distinguish between scenario dilemmas that invite *genuine* (the kind found in the profession) enquiry, and those they are expected to trudge through to reach predetermined and obvious solutions. Real-life scenarios can incorporate real-life, genuine problems, dilemmas, issues and speculations. This genuineness can provide a rehearsal for the real thing.

(iv) Would straight forward discussion be more appropriate than engagement in a scenario that potentially can be very basic or quite complex?

If the answer is 'yes', then discussion would be the way forward. However, the discussion may be supplemented by the introduction of one or more scenarios designed to place students 'on the spot', to bring the content of a discussion to life, to have student invest more deeply in the arguments under scrutiny. Discussion is often used to scaffold the exploration of issues in a non-threatening atmosphere.

(v) Will student resistance towards scenarios be high or low? If low, how will I motivate them to engage in the scenario? If high, what kind of learning challenges can I use to 'stretch' them?

If there are a large number of uninvolved students then there may have been errors in planning. Such errors might focus on the construction of tasks (too hard/ easy?); selection of focal questions (clarity?); choice of roles (realism?); and/or

expectations about the process are too hard/easy. Alternatively, there may be cultural reasons why students from particular backgrounds do not see scenario learning as an educative process - preferring to be given the "facts" rather than participating directly, or in groups. The teacher needs to find out why the class are not responding and modify the scenario work appropriately.

(vi) Scenarios invariably incorporate human agencies (roles/ positions): Which human agencies would I want to include (if any)?
The human agencies present in scenarios are often representative of the profession or of antagonists set against the profession on one or more issues. For example, medical professionals (professional involvement) who do not subscribe to euthanasia may be set against family members who favour it (personal involvement). All, or at least as many as possible, human agencies need to be represented as holders of vested interests which include various ethical stands on issues, such as the one mentioned. A good exercise is to pursue and include the voices of those seemingly silenced on an issue.

(vii) Are their sufficient learning resources for students to pursue a problem/position using scenarios?
Problem-based scenarios in particular fail to facilitate learning if they are not supported by a bank of authentic, relevant resources. The path of enquiry should provide some indication as to what resources students are going to need to support likely hypotheses (e.g. web sites, references, course notes, books, videos). Not only do students require resources to achieve one or more outcomes, but also they need assistance in planning the route itself - which is where the importance of the teacher (and other students) as resource comes to be realised.

(viii) Am I able to offer students scenarios that are authentic (have a certain realism about them); relevant (connections are clear between the scenario and 'real' practice); and purposeful (students will know why this scenario is being used and for what educational purposes).
Affirmative responses to the above set of questions are important in optimising likely scenario success. Students need to be given the above information before engaging in scenario-based learning processes.

If we decide that scenarios are relevant to the preparation of our graduates/ our courses, below are four main scenario possibilities; each with their own kinds of learning intentions, idiosyncratic strategies, and opportunities for evaluation and reflection. This is not to rule out combining approaches to attain broader achievements in a more systematic way than any singular approach might afford.

A beginning is made with skills-based scenarios, the most fundamental of the scenario approaches.

(a) Skills-based scenarios

Skills-based scenarios provide simple structures to allow students to demonstrate what they have learned or understand already. The learning may consist of set

procedures, practical knowledge, processes, or other basic skills associated with the profession.

The following example focuses on media students whose task is to demonstrate what they have learned about 'effective' interview techniques:-

Interview Technique Example

> *The class understand the theory underpinning effective interviewing techniques. They are shown a video clip of an interview where there are a number of errors displayed by interviewer and interviewee respectively.*
>
> *The students are asked to spot the errors and then carry out the interviews themselves - without the errors.*
>
> *The class is divided into threes. One member of each pair assumes the role of interviewer; the other member becomes the interviewee. The third member acts as an observer whose task is to give feedback to those engaged in the interview. How well will they manage to rectify the previous errors?*
>
> *At the end of the interview, all three change roles so that each has an opportunity to be the interviewer, interviewee and observer.*
>
> *At the conclusion of the interviews, the observer provides feedback on what s/he has observed in relation to given learning intentions.*
>
> *There is a period of reflection where students recount their observations, experiences, and gained knowledge with input on the overall process from the teacher.*
>
> [Adapted from Errington, 2005, p.18]

Skills-based scenarios are useful when dealing with knowledge that appears 'fixed'. Scenarios usually incorporate clearly defined, observable steps, competencies, abilities, or procedures that lend themselves to practical expression. Roles and responsibilities have to be made crystal clear, including the way that these are to be executed in practice according to agreed professional standards. 'Appropriate professional behaviour' is clearly defined and students are measured against their ability to meet these requirements. The 'skills' vary from carrying out simple safety checks (e.g. customer service) to more complex but demonstrable procedures (e.g. surgical techniques).

Prospective teachers might demonstrate their ability to explain something clearly to children. Similarly, would-be lawyers give a speech in a moot court; potential designers present their ideas to peers (e.g. Fleischmann & Daniel, 2010). The gaining of these skills is a pre-requisite for engaging in problem-based scenarios, or investigating issues and speculations.

Arguably, most scenarios subsume some kind of demonstrable skills/ knowledge but not all of them are skills-focussed as will be seen in the second and subsequent scenario approaches.

(b) Problem-based scenarios

Problem-based scenarios centre on the use of scenario-based learning to engage students in deep level learning processes of problem-solving and problem-seeking. A problem-based approach involves students investigating specific information in order to arrive at reasoned conclusions that were not predetermined.

In a problem-orientation, participants are required to draw on their knowledge of the discipline area; use their own appropriate working knowledge; and seek out 'missing' knowledge in response to a series of challenges/dilemmas. They must react appropriately to problems as they arise (not simply 'give up'); and, (ideally) arrive at considered solutions/responses supported by evidence which they and their peers will have evaluated. One main purpose of problem-based scenarios is to have students generate and apply knowledge to the solution of problems, and more importantly, learn from the problem-based process.

A common example of a problem-based scenario is one that focuses on the diagnoses of (real/virtual) hospital patients by potential medical graduates (See Chapter for a fuller set of examples. Here is my own diagnosis example:-

Problems in Ward 4

> *A patient has just been admitted to Ward 4. She speaks little, if any English, refuses to be physically examined, and seems to be complaining about her throat. Her tongue is covered in black fur, and she has vomited twice. What are the underlying problems here? Why?*

[Adapted from Errington, 2005, p.21]

In the above example, there is no obvious singular 'solution' and the problem itself is ill-defined or "muddy". Miller et al (2003) note the value of problem-based learning scenarios in highlighting "the unreliable nature of knowledge" (p.106).

Establishing the nature of the problem(s) must be a priority. Students may be asked what they know of similar circumstances (possibly from knowledge met in the course to date). That is as far as their current skills will take them. What they must do is fill in the missing knowledge. Find the gaps and fill them in.

How students seek out this information and apply it to their problem will engage them in processes of decision-making, evaluation of evidence, critical thinking, clarifying of the problem(s), justification of their findings, peer evaluation and powerful moments of deliberation and reflection.

Problem-based scenarios are particularly useful for applying knowledge in demanding circumstances; facilitating spontaneity in response to changing circumstances; exploring notions of 'uncertainty'; and for engaging students in complex issues and events at a deep level over a lengthy period of time.

Some students find that dealing with 'uncertainty', that is, the realistic 'messiness' of problems is an uncomfortable experience – and require teacher support, underpinned by ample resource materials. The University of Medicine

and Dentistry of New Jersey, offers its students a thorough orientation towards problem-based learning.

(c) Issues-based scenarios

Skills-based scenarios provide simple structures to allow students to Issues-based scenarios focus on the use of scenarios to promote potential graduates' understanding of a range of contextual issues and concerns that underpin or inform a profession. Having researched an issue, students assume and then defend this informed position/perspective in response to the issue-laden scenario or set of circumstances. Students assume the positions of the real-life, human agents and then contend with each other to bring about desired outcomes. In so doing, they often reveal ways by which stands taken on issues are informed by vested (human) interests and are invariably contested.

Beyond simply acknowledging a difference in attitudes, beliefs and values surrounding one or more issues, students are required to investigate these positions in depth. This means assuming the various roles themselves, researching the belief-laden positions, avoiding stereotypical positions, seeking out informed information, opinion and knowledge, and subsequently putting forward and defending a reasoned argument. So what can students as potential graduates gain from this approach?

Perhaps the most obvious advantage to students engaged in an issues-based approach is possible realisation that all professional issues are laden with beliefs, attitudes and values of role bearers within the profession and that all humans hold beliefs no matter how naïve or untested they might be. Here they are given the opportunity to take a particular stand on an issue; enter a scenario situation where this stand is revealed, articulated, possibly defended and certainly evaluated in relation to similar and dissimilar positions represented by other students. They can negotiate or contend with those holding dissimilar positions and possibly take an opposing stand on an issue.

A further aim is to enable students to contrast and compare positions taken on issues - to observe the consequences of holding such positions (actions taken), and by assuming a range of perspectives, develop empathy and greater tolerance towards those holding dissimilar views to their own.

Role-takers may be brought together to debate the issue in a conventional manner e.g. – at a simulated 'public' meeting. Alternatively, student engagement may remain at the level of discussion.

Here is an example of an issues-based scenario given to environmental education students:

Sea bed predicament

> *(a) Students are given a newspaper article about controversy surrounding the salvage of a sunken ship and the significance of maritime graves. Should shipwrecks be left on the seabed, or removed for safekeeping? Whose viewpoints need to be represented? Which viewpoints are absent from the article?*

(b)Students identify the various role positions representing obvious and less obvious interests.

(c)They then execute an in-depth analysis of the particular views and dispositions of selected role holders which are believed to guide attitudes and subsequent actions.

(d) Role-holders with their respective interests are brought together for a meeting/debate. Here, views are aired and debated as they might well be in a court of law, at an inquest/tribunal, and/or at a local public meeting - or indeed in any conventional meeting place/venue.

(e) Following this interaction, students are guided in reaching some tentative conclusions about these positions – their interests, motivations, continuing positions and conclusions (if any). These positions are identified, evaluated, and possibly challenged in the light of evidence contributed by teacher and students.

[Adapted from Errington, 2005, p.23]

Many students claim they do not have a position on an issue, that is, until their beliefs are put to the test in relation to it (Errington, 1997). Observing the position of others, seeing how they are constructed, and the teacher helping them link the issues with their own positions is a valuable way of looking at any professional culture.

In summary, issues-based scenarios are useful for having students explore the attitudes, beliefs and values held by human agencies within the profession. They are also good for encouraging students to take a particular stand on an issue, and perhaps later being required to take an opposing stand; to see the other person's point-of-view in an informed way, possibly realising that every (genuine) issue is multi-faceted. Having students negotiate with those holding similar or dissimilar positions can reap rewards.

(d) Speculative-based scenarios

Skills-based scenarios provide simple structures to allow students to Within a speculative scenario format, students are given, or seek out current knowledge about the world (data, facts, information, trends), and either postulate on aspects of the future, as it might be (e.g. business studies), or aspects of the past as it might have happened (e.g. forensic science).

Scenarios are used to generate ideas, formulate and test hypotheses, and have students support these with evidence. Participants in the (speculative) planning process may generate their own perceptions of the future (rather than simply accepting those of others without question). However, they must justify their positions based on evidence found in the present or the past. Futures are not based on notions of probability so much as 'degrees of fit' with the contemporary realities of what they know already.

Below is a speculative-based scenario designed to help business students postulate on the factors that are likely to influence the success, or otherwise, of a company.

Here is a speculative scenario where students assume the role of company executives and come together at a board meeting:-

The scenario: 'Company Downturn'?

> *Welcome to the year 2015. Your company has experienced many changes over the last decade. However your own department was one of the few to come out unscathed....*
>
> **Focus questions**
>
> *What factors present NOW within your company department may have contributed to its successful survival in 2015?*
>
> *Given your knowledge of successful company profiles, which of these factors might require sustained work to maximize the chances of their survival in 2015?*

[Adapted from Errington, 2005]

The process consists of a number of stages which unfold in the following order:

(i) Identifying contextual factors

Time is spent brainstorming influential factors embedded within the given circumstances. What factors appear to determine the success of the company in future times?

(ii) Determining what is known already

What do participants know already about the company? Where does it need to be to survive in the future? What do they know about similar companies that are currently successful? What experience and knowledge does the group possess now?

(iii) Finding out more information

Given what they now know, what do they need to find out if they are to meet their objective of, for example, 'improving the communication style of the company'? Where can they obtain this information? Is it accessible? Who owns it?

(iv) Accessing 'missing' knowledge?

How specialist is this 'missing' knowledge? Could the knowledge be generated by the group itself? What hypotheses can they formulate in the light of known and missing knowledge now?

(v) Evaluating 'new' knowledge

When they analyse existing and newly acquired knowledge about successful communication which factors are influential and which are inconsequential? In what ways do these factors impinge? What behaviour can be engaged in by company members to optimise positive factors and minimise negative ones?

(vi) Locating vested interests

How are the factors which impinge on the success or otherwise of the company the result of vested interests and outcomes? What might these interests be? To what extent do they serve the well-being of the whole department? And in what ways?

59

(vii) Constructing, justifying and presenting conclusions

Given acquired knowledge about the influential factors, and identified interests — what are the findings? In respect of these discoveries, what alternative solutions/ scenarios have been identified as viable for the future survival of the company? What actions could be taken now to progress any department towards desirable (common) outcomes consistent with future survival?

(viii) Presenting conclusions

How might these aspiring business colleagues best present their findings so that the chosen media clearly reflects their message? For example, they might jointly construct a progress report with appropriate recommendations. The scenario example can intrinsically motivate students because of its direct relevance, realistic purposes, and authenticity.

(ix) Reflecting afterwards

Students who engage in speculative scenarios often comment on the inter-connectedness of knowledge - observing how one speculation is invariably linked to another (Murray, 2010b). They also note how their speculations about the past or future are intricately bound to current belief systems (Errington, 2008). Students speculate on a range of plausible futures, presents and pasts. Future scenarios ask: "What would happen if?" (eg. implications of financial trends). Past scenarios ask: "Why did 'x' or 'y' come to be as they are?" (eg. forensic scientists work out cause of victim's death). Present scenarios ask: "Why do people live in this way?

Speculative-based scenarios are useful where students have (or pursue) sufficient information about the past, present or future-set scenario. In a speculative-based scenario process, students, as would-be professionals are required to reach and justify their evidence-based conclusions in a systematic way. Unlike their problem-based counterparts, they are asked to deliberate on what might have been or what might be. The dimensions of time and space add complexity and richness to the student learning experience. Speculating on the future particularly can only value add to the notion of 'future-proofing' students, discussed in the first chapter.

Conclusions

The main purposes of this chapter have been to present readers with a set of useful criteria for choosing to use scenarios *per se*, and secondly, to describe four very different kinds of scenario-based examples most commonly employed by tertiary teachers. Knowing that each type of scenario can deliver specific may go some way towards helping teachers make appropriate choices, ones that are better aligned with learning intentions. Experience indicates that scenarios are most likely to be selected on the basis of 'the known', and the tried and tested, rather than discernment: We are limited by what we know and inevitably we may stick to the 'tried and true'.

Each kind of scenario can potentially make a specific contribution to the professional preparation of graduates via the discerning choice of the teacher.

Discernment involves identifying appropriate scenario types, the kind of learning intentions they facilitate, their delivery characteristics, and their specific professional advantages. It soon becomes clear, however, that there is overlap between and across 'types'. However, for purposes of clarity, each has been treated as a separate 'type'. There is much potential in using various combinations of approaches and, by so doing, make a greater contribution to the preparation of graduates.

References

Aitken, P. (2010). Scenario-based disaster health education: "War stories" as vicarious experience. In E.P. Errington (Ed.), *Preparing graduates for the professions using scenario-based learning* Brisbane, Australia: Post Pressed.

Allard, A. & Santuro, N. (2010). Questioning good practice: Using speculative scenarios to develop knowledge of teacher thinking. In E.P. Errington (Ed.), *Preparing graduates for the professions using scenario-based learning*. Brisbane, Australia: Post Pressed.

Bernanke, J. (2003). Can we all just get along? Exploring cultural sensitivity through student-centred scenarios. In E.Errington (Ed.), *Developing Scenario-based Learning: Practical insights for tertiary educators*. New Zealand: Dunmore Press.

Bell, S. & Page, R. (2003). Paper to Program: Developing a computer-based learning program for SBL. In E.Errington (Ed.), *Developing Scenario-based Learning: Practical insights for tertiary educators*. New Zealand: Dunmore Press.

Caltabiano, M.L. (2010). Using scenario-based learning to teach clinical diagnostics. In E.P. Errington (Ed.), *Preparing graduates for the professions using scenario-based learning*. Brisbane, Australia: Post Pressed.

Center for Teaching Excellence: University of Medicine and Dentistry of New Jersey. *Introduction to Problem-Based Learning*. Retrieved 24 November 2009, from http://cte.umdnj.edu/active_learning/active_pbl.cfm

Davenport, A. & Barron, J. (2010). The use of issues-based scenarios to promote authentic learning and assessment in higher education contexts. In E.P. Errington (Ed.), *Preparing graduates for the professions using scenario-based learning*. Brisbane, Australia: Post Pressed.

Eland, J., Hill, A., Lawton, R., Morton, N. & Popovic, C. (2010). Creating future-proof graduates using scenario-based learning. In E.P. Errington (Ed.), *Preparing graduates for the professions using scenario-based learning* Brisbane, Australia: Post Pressed.

Errington, E. (1997) *Role- Play. HERDSA Green Guide No 21*: Melbourne, Victoria, Australia: HERDSA Publications

Errington, E. (Ed.) (2003). *Developing Scenario-based Learning: Practical insights for tertiary educators*. Palmerston North, New Zealand: Dunmore Press.

Errington, E. (2003). Developing student-constructed scenarios to explore gender issues. In E.Errington (Ed.), *Developing Scenario-based*

Learning: Practical insights for tertiary educators. New Zealand: Dunmore Press.

Errington, E. (2005) *Creating Learning Scenarios: A planning guide for adult educators.* Palmerston North, New Zealand: Cool Books.

Errington, E. (2008) Exploring Real World Scenarios as vehicles for authentic learning. *International Journal of Interdisciplinary Social Sciences,* 3 (5), pp.1-6

Errington, E. (2009) Being There: Closing the gap between learners and contextual knowledge using near-world scenarios. *The International Journal of Learning,* 16, (8), 585-594.

Errington, R. (2010). What's in a relationship? Exploring cultural assumptions from an international perspective. In E.P. Errington (Ed.), *Preparing graduates for the professions using scenario-based learning* Brisbane, Australia: Post Pressed.

Fleischmann, K. & Daniel, R. (2010). Enhancing employability through the use of real-life scenarios in digital media design education. In E.P. Errington (Ed.), *Preparing graduates for the professions using scenario-based learning* Brisbane, Australia: Post Pressed.

Gammer, S. (2003). Demonstrating professional skills through scenario-based learning. In E.Errington (Ed.), *Developing Scenario-based Learning: Practical insights for tertiary educators.* New Zealand: Dunmore Press.

Hickey, R. & Taylor, P. (2010). 'It happened just like we talked about: Using scenarios to develop professional identity in pre-service teachers. In E.P. Errington (Ed.), *Preparing graduates for the professions using scenario-based learning* Brisbane, Australia: Post Pressed.

Holm, E. (2010). Using real-life scenarios in law to prepare graduates for professional work practices. In E.P. Errington (Ed.), *Preparing graduates for the professions using scenario-based learning* Brisbane, Australia: Post Pressed.

Ireland, L. (2010). Scenario-based Learning: An effective transformational tool for cultural diversity. In E.P. Errington (Ed.), *Preparing graduates for the professions using scenario-based learning.* Brisbane, Australia: Post Pressed.

Mansvelt, J. (2003). Where in the World Am I? A multi-national scenario. In E.Errington (Ed.), *Developing Scenario-based Learning: Practical insights for tertiary educators.* New Zealand: Dunmore Press.

McLoughlin, M., Hogg, C. & Darvell, A. (2003). Rather than being told: Using SBL for teaching diversity in health care contexts. In E.Errington (Ed.), *Developing Scenario-based Learning: Practical insights for tertiary educators.* New Zealand: Dunmore Press.

Miller, E., Smailes, S., Stark, S., Street, C. & Watson, K. (2003). Craving (un)certainty: Using SBL for teaching in health care contexts. In E.Errington (Ed.), *Developing Scenario-based Learning:Practical insights for tertiary educators.* Palmerston North, New Zealand: Dunmore Press.

Miller, E. & Nambiar-Greenwood, G. (2010). Understanding Experience: The collaborative journey using scenario-based learning. In E.P. Errington (Ed.), *Preparing graduates for the professions using scenario-based learning* Brisbane, Australia: Post Pressed.

Murray, M. (2010a). The Human-Animal Zoo: Exploring enclosure, species and space. In E.P. Errington (Ed.), *Preparing graduates for the professions using scenario-based learning* Brisbane, Australia: Post Pressed.

Murray, M. (2010b). Living Forever: Exploring mortality and immortality with scenario-based learning. In E.P. Errington (Ed.), *Preparing graduates for the professions using scenario-based learning*. Brisbane, Australia: Post Pressed.

Nickson, A. (2010). Social Work Ethics in Scenario Based Learning. In E.P. Errington (Ed.), *Preparing graduates for the professions using scenario-based learning* Brisbane, Australia: Post Pressed.

Parkinson, T. (2003). Focus Farms: Learning scenarios for dairy cattle medicine. In E.Errington (Ed.), *Developing Scenario-based Learning: Practical insights for tertiary educators*. New Zealand: Dunmore Press.

Pernice, R. (2003). Writing-in-Role: Helping students explore emotional dimensions within scenarios. In E.Errington (Ed.), *Developing Scenario-based Learning: Practical insights for tertiary educators*. New Zealand: Dunmore Press.

Sorin, R. (2010). Webfolio - 'Real-life' scenarios in an online learning environment. In E.P. Errington (Ed.), *Preparing graduates for the professions using scenario-based learning* Brisbane, Australia: Post Pressed.

Stewart, T.M. (2003). Essential Slices of Reality: Constructing problem-based scenarios that work. In E.Errington (Ed.), *Developing Scenario-based Learning: Practical insights for tertiary educators*. New Zealand: DunmorePress.

Van der Heijden, K. (2002) *The Sixth Sense*. Chichester, UK: John Wiley & Sons.

Van Wissen, K. (2003). Developing reflective practice through scenario-based learning. In E.Errington (Ed.), *Developing Scenario-based Learning: Practical insights for tertiary educators*. New Zealand: Dunmore Press.

Worsley, J. & Taylor, P. (2010). Using scenarios to train peer mentors online. In E.P. Errington (Ed.), *Preparing graduates for the professions using scenario-based learning* Brisbane, Australia: Post Pressed.