Online role play stories, engagement and learning in higher education

by

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Abstract

Online role plays in various forms are increasingly popular in higher education. While some of the technologies used for role playing online are highly sophisticated, common to all of them is the age-old playful learning format of taking a role to influence events within a make-believe story world. This thesis explores the relationships between students' engagement in the stories they develop jointly in online role plays and their learning.

Stories can be found throughout our personal, social and working lives and can be seen as one of the main devices by which we make sense of the world. However, many of the stories we encounter every day—including in higher education—employ culturally-determined genres, stereotypes and assumptions, and position readers, viewers or players in certain ways to help them to engage emotionally with the story events and to learn certain things from the experience. While these cultural conventions may be important for helping us understand and engage with a story, they place limitations on the shape of plots that may develop and types of characters that may appear in the setting. In so doing, they limit the meanings that readers or players in these stories may draw from the experience. This thesis aims to inform the ways in which online role plays are designed and managed to develop students' ability to engage more fully with and learn from the stories they create collaboratively during the activities; and also to develop their ability to deconstruct the stories and challenge cultural assumptions at play within them.
The thesis analyses three case studies that represent a range of existing practices in the design and management of online role plays and deconstructive drama activities in the Australian higher education context. It focuses on the students' response to these practices, using qualitative and quantitative methods to collect and analyse data. It applies theories from the fields of literary theory, learning theory, engagement theory, educational drama, interactive multimedia theory and the schools of critical pedagogy and critical literacy to deepen the enquiry into the nature of students' engagement, learning and critical learning.

As a result of the findings of this study, the thesis recommends that certain conditions be incorporated into the design and management of online role plays to support students' learning by helping them to build engaging and meaningful stories, and at the same time to develop their critical awareness and skills.
CHAPTER 1

Introduction

In this chapter I introduce myself as a researcher, my aims in undertaking the research project on which this thesis is based and the thesis itself. I outline the thesis structure and its theoretical underpinnings, explain some of the key terms I have used and describe the ways in which I have delimited my research to create a manageable project.

My story

Looking back on my own life, I can see the profound influence stories have had on how I have learned about the world, and how I understand my place within it. Some of my most vivid childhood memories are images I created from my mother's bedtime stories—I can remember Heidi's Alpen meadows, Gerald Durrell's menagerie on Corfu, and Jane Eyre's harsh boarding school easier than I can remember some of the houses we lived in. As an adolescent, I know I learnt more about how to be a teenager from television programs such as 'The Class of 74' and teenage magazine fiction than from my parents' well-meaning attempts to guide me. I enjoyed the world of stories so much that when I left school I studied literature and writing at university. However, when I became a small-town journalist in my 20s and assumed responsibility for crafting stories for others, I became aware of the insidious power of the yarns I spun. My editor taught me to find an 'angle' amongst the myriad details of an event in order to make an interesting story for our readers, and while I took his point, I frequently found myself grappling with the limitations this angle
placed on the ways I could present the facts I had gathered in a way that contributed to the narrative line I was building. I realised what a responsible position a narrator of life's events held, and how impossible and 'undesirable' it was to be truly objective.

I am glad to say that, even after my experience as a journalist, and more recently my reading of poststructuralist theories about ways in which stories pervade and shape our thinking, I still find well-formed stories hard to resist. I might reflect cynically on the messages in some stories, and recognise the subtle means by which these meanings are embedded in the narrative, but I still find the stories in even simple television advertisements—let alone novels on the scale of *Anna Karenina*—bringing me pleasure and insight even years after I first encountered them. I know from conversations with others recalling films, novels, TV dramas and advertisements from years ago that some stories provide a similar sort of engagement and resonance for many other people.

After a few years I left my job as a journalist and ventured into teaching. I now work as a lecturer in academic professional development in an Australian university. In this environment, finding ways to increase students' engagement in their learning has assumed high priority in recent years (Bradley 2008: 69-78, ACER 2009). I have found academics using the story form as a way to achieve this. As I go about my work of helping academics develop strategies and skills in teaching online, I see many examples of techniques that take advantage of the power of stories to capture and hold students' interest. Some common story forms include case studies, illustrative examples, anecdotes and role plays. I hear academics telling how these techniques have helped students
make a personal connection with, reflect upon and remember the complex sorts of things they come to university to learn. However, except in literature, writing and cultural studies subjects, I have never heard or seen evidence of academics analysing the story components of these techniques as stories, with the aim of considering how the aesthetic elements of this structure can be designed to maximise the engaging effects of the stories. Neither have I heard academics outside these disciplines discussing ways to encourage students to recognise the cultural assumptions contained in the ways events, characters and settings are portrayed in these stories and challenge the meanings that are implied as a result. This suggests for my research that opportunities are probably being lost both to optimise the effects of these stories and to educate students about how subtle and pervasive meanings are made in these appealing formats.

A group of story-based techniques that is becoming increasingly easy to implement because of improvements in technology, and according to the literature is popular with students and capable of supporting a range of learning outcomes (Wills, Leigh & Ip 2011), involves students playing roles in make-believe scenarios online. My interest in these techniques led me to complete a Master of Education research project in 2007, in which I studied the impact of the dramatic story elements in a blended online/face-to-face role play students performed in a Master of Business Administration 'Change Management' subject. This experience helped to highlight and ultimately crystallise the contentious issues regarding ethical story-based learning for me, and I will describe it briefly here because it ultimately supplied the research questions for this project.
The students in this role play were divided into two main groups based on two real semi-government organisations in Victoria. They were then divided into sub-groups to represent various management positions within these organisations. The students worked collaboratively online in their sub-groups researching and negotiating change strategies for their respective organisations from the point of view of their sub-groups' management roles. After a few weeks of online work through text-based discussions, the students came together at a week-long residential and continued their role play in face-to-face format. Over several days, the Organisation A and Organisation B chief executive sub-groups worked to integrate their respective management role sub-groups' work into two papers representing their organisations' positions on how they would meet the challenges of the next decade. The students worked towards a climax that was planned for midday on the third day, when the two organisations' executive sub-groups presented their papers to the whole group and the government Minister with authority over these organisations (the main lecturer acting in role), who was expected to make some kind of announcement based on the papers presented to him.

The students made their presentations and the lecturer duly made an announcement, but rather than creating the kind of climax that might lead to a satisfying conclusion to the story that students were ardently building, the announcement just threw the students into confusion. It was simply a judgement, delivered 'out-of-role' as a lecturer, that the Organisation A position paper was better than that of Organisation B. However, the criteria he had used to make his judgement were neither clear nor convincing, and he gave no indication of what the judgement should mean for how the role play should...
proceed. The lecturer then sent the students to lunch and set them tasks to do in the afternoon that were unrelated to the role play. For the whole afternoon and evening students were not sure whether the role play was over or would soon resume. The lecturer allowed confusion to reign. The groups took it upon themselves to call meetings to plan their follow-up strategies just in case the role play continued. In the Organisation B meeting room the atmosphere was electric, with many group members making angry, rude comments and senior members of the executive team making desperate attempts to explain and prove themselves to their colleagues to avoid the coup that had been rumoured. I sat observing at the back of the room feeling deeply for these students, many of whom in their normal lives were well-paid managers of organisations, used to making decisions and taking responsibility. The next morning, the lecturer assured the students that the role play had indeed finished. However, in the absence of an effective de-role, debrief and reflection session, many students were still expressing confusion about what it all meant several days later.

The lecturer did not explain until the end of the week that he had intentionally broken the convention to remain 'in-role' at the crucial point in the role play to introduce considerable confusion about what was going on, as he wanted students to learn in an experiential, emotional way what it was like to be placed in the kind of powerless position that was commonly experienced by staff undergoing organisational change. As a participant-observer, I shared many students' feelings of anger and cynicism about the way this role play had turned out, and these feelings stayed with me for several months. The thought crossed my mind that I would like to see how the lecturer would cope if he were placed in a similarly humiliating position, for arbitrary reasons, in front of his peers.
My study of this role play confirmed that students’ ability to suspend their disbelief and engage as characters influencing events in a (partly online) role-playing activity could have a powerful influence over their emotional involvement in the activity, and over the kinds of things they learned.

However, the project left me with unanswered questions. Firstly, the role play was framed in a particular setting and supported a particular plotline and range of characters. I wondered whether the important elements of its design that impacted on the meaningfulness and resonance of the story that students co-created could be identified and recreated in role plays suitable for other subjects, cohorts and contexts. Secondly, although this role play had used both online and face-to-face elements, the main action was performed face-to-face. As more and more university education is being conducted online, I wondered how effectively the key design and facilitation elements for the development of engaging interactive, dramatic stories might be translated to a purely online environment, and whether these elements might work differently in this environment. Thirdly, the role play I studied produced significant negative emotions for some students, including anger, humiliation, self-doubt and desire for retribution. While the lecturer argued that these kinds of responses were important to stimulate students to sincerely re-evaluate their assumptions about what workplace change situations were like for employees, I worried about the possibility of long-term negative impacts on some students’ emotional wellbeing. I wondered whether a less risky and contentious approach might be equally as effective. When I looked back on the activity a few years later, after reading poststructuralist and critical theory, I was also disappointed that the lecturer had not capitalised on the strong ambivalence that many participants
expressed about what the activity signified for them. The way the role play story ended could have provided a powerful stimulus for students to identify and discuss the hidden power relations and agendas that existed between the various management groups that were represented—and between the students/players and the lecturer/Minister—and to extrapolate management principles from their experience. This kind of discussion could have prompted them to develop deeper insights into the reasons why they had reacted in certain ways to what had happened to their character in the role play. In doing so, it could have helped them not only to de-role and objectify the experience, but to develop robust mental simulations from their personal experience and reflections on how power plays and relationships work to produce certain outcomes in organisations in uncertain times—and how a more democratic, communicative and compassionate management approach might produce happier and more effective outcomes. These mental simulations could have provided a powerful resource to guide them to use more compassionate, democratic and effective management practices in the future.

As a teacher and researcher of online role plays, my experience of this role play highlighted the discomfort and even debilitation that could be produced for students by managing a role play in a way in which the power imbalance between teacher and students was great and the teacher was able to break the conventions of working within the safety of a story world without warning or explanation. I felt it was ethically wrong for the students to have the convention of working in a safe, make-believe environment suddenly withdrawn without them being given any means of gently divorcing themselves from the character in which they had invested something of
themselves, discussing and sharing what they had learnt and fully regaining their status as equal and valued members of the community.

Through my sympathy for the Organisation B students I understood in an almost visceral way the ethical imperative that teachers face to recognise their students' rights as human beings—to not just focus on passing on to them their subject knowledge, but to allow them to take a dignified position as equal partners in a learning dialogue. I reasoned that with role play, this would mean developing students' understanding about how powerful rhetorical techniques such as this can work to heighten perceived differences and emotions, and would involve developing their skills to recognise clearly, critique and rework the meanings that were suggested in the role play stories if they found these suggestions insidiously limited their power to take positive action in the world.

At the same time, however, I was aware that raising students' awareness of these techniques might reduce the emotional impact of the stories and hence their power as learning activities—which was the very reason I was interested in using story-based techniques in education—and I felt torn. Fortunately, around this time I found Misson and Morgan's (2006) exploration of this very dilemma in the context of secondary school English teaching. Following Misson and Morgan's lead, I decided it should be possible to let the role play stories run, for the students to gain the enjoyment and learning benefits of engaging deeply with the characters, plots and settings in the first instance. Then, at some stage one could introduce activities that would help the students deconstruct these stories and reflect critically on the meanings they suggested, recognise the power issues that were involved in accepting the view of the
world that was promoted, and understand the means that were used to create these suggestions. The activities should include a discussion of how this view could be resisted and the effects this would have on the story and its implications for other participants. I thought that for students to undertake the activities required to develop this kind of critical understanding should also deepen and complicate their understanding of important aspects of the subject matter, as well as developing their confidence to resist and challenge dominant assumptions in the subject area so that they might one day take social action in the field. I believe that these benefits should outweigh any disadvantages associated with undoing the students' enjoyment of the initial story.

I have always been a teacher who feels comfortable sharing power in her classes, and have always looked for ways to develop students' metacognitive skills, but I think the period when I was writing up this case study was when I became strongly aligned to critical pedagogy as a philosophical position. Critical pedagogy (eg as defined by Kincheloe 2008) is committed to developing students' ability to critically assess the validity of any knowledge claims an educator or educational text might make against their own experience. It is also committed to empowering students to debate and challenge prevailing values and assumptions in their educational texts and experiences, as well as in society generally, with the aim of working towards a freer, more just society.

Thus, my very real desire in this research project has been to find answers to the larger questions of the relationship between stories, engagement, learning and an ethical approach, using the developing technique of online role plays for
higher education as the context for my enquiry. My overall aim is to make a useful contribution towards theory and practice in the higher education online role play community so that teachers and students using online role plays in future will be able to harness more of their potential as learning and teaching techniques.

Before introducing the methods and approaches I have used to achieve my aims, I will explain more fully the reasons for the increasing prevalence of online role plays within the Australian higher education research context and the special contribution my research makes.

**Online role play in the contemporary Australian higher education context**

I mentioned above that finding ways to enhance student engagement had become a high priority for teaching staff in higher education institutions in Australia. It is rare, if not impossible, to find a discussion of online role plays in the literature that does not highlight the ability of these techniques to engage students—as well as to support other qualities of teaching and learning techniques that are well regarded in contemporary times, such as encouraging active learning, creativity, collaboration, exploration of alternative perspectives and generic skills development (McWilliam 2008).

**The need for engaging and high quality learning techniques**

Major texts informing Australian higher education teaching practice such as Ramsden (2003) and Biggs and Tang (2007) (and their earlier editions) have for some years focused attention on the factors involved in engaging higher
education students, and proposed teaching practices to achieve this. In recent years the issue has also assumed a central place in the quality agenda of Australian universities (Hagel, Carr & Devlin 2011). In 2007, the Australasian Survey of Student Engagement (AUSSE) was introduced into Australasian universities, and by 2010, 45 institutions were using the instrument to measure engagement in their courses (ACER 2010). Recommendations in the recent major review of higher education in Australia (Bradley 2008) include that student engagement be measured annually using the AUSSE, and that strategies to improve engagement be included in institutional quality frameworks.

The Bradley review provides a comprehensive description and analysis of the contemporary higher education context in Australia. The review found that Australia was falling behind other countries in performance in higher education in a period of increasing demand for highly qualified people to meet the needs of a rapidly developing global economy. This was despite the fact that education was Australia's third-largest export industry (p. 12). One of the comparative measures the review used against similar measures in other OECD countries was the proportion of the population aged 25 to 34 with a degree-level qualification. The report recommended lifting Australia's proportion from 29% to 40% by 2020 (p. 21)—adding the further requirement that 20% of undergraduate students be from low socio-economic backgrounds by the same date (p. 45). The review also found indications that the quality of the higher educational experience was declining in Australia and in comparison to the UK and USA, using a range of quantitative surveys addressing university student graduate outcomes, student experience and the AUSSE (pp. 74-76). In order to
address challenges including the need to educate a greater number of students, of wider diversity, with higher quality teaching and learning, the report made 46 recommendations across a wide range of factors.

It is particularly relevant to my research that one area of priority identified in Bradley’s recommendations was that of monitoring and improving student engagement, based on the argument that 'Student engagement is an important aspect of the quality of the learning experience and hence the quality of teaching' (p. 78). I will discuss throughout this thesis the concept of student engagement and the ways in which online role plays may both support engagement and help create linkages between engagement and learning.

In recent years, the potential of online role plays to support high quality and engaging learning experiences has been recognised in two government-funded projects.

**Government initiatives supporting online role play**

In 2000, the Australian Universities Teaching Committee sponsored a project to identify learning designs that had been demonstrated to contribute to 'high quality' learning experiences, and to redevelop them in more generic forms so that they may be shared between institutions. Online role play was one of the learning designs chosen for this treatment. The 'Learning Designs' website that resulted from this project describes the online role play learning design in detail and presents a selection of six online role plays to serve as exemplars (Wills & Ip 2002).
In 2006, the Australian Learning and Teaching Council funded a two-year project specifically to encourage the uptake of online role-based learning environments with a focus on role play (Wills et al. 2009: 2). This project identified 128 online role plays being used in Australian universities in 2007-09, having risen from just two in 1990-94 (p. 9). The project report describes a multi-part program including an agenda for further research. This research agenda describes online role play as 'an emergent area of learning/teaching practice' (p. 30) that 'has the potential to become increasingly relevant in the context of university education' (p. 31).

The support for online role play as a learning design that is demonstrated in these government initiatives lends considerable weight to my perception of the potential of this comparatively young, story-based technique to support student engagement and learning, and suggests that research such as mine into ways to optimise the technique is both relevant and timely.

**My research aims within this context**
Among the nine areas that Wills et al. (2009) identify as in need of further research is that of 'Developing design capabilities and improving academics' awareness of the design factors implicit in creating engaging and informative learning environments' (p. 39). My research aims to make a contribution in this area through addressing explicitly the factors involved in engaging students in these activities and ways in which the activities can support learning; and as a result of my findings, proposing some recommendations for the design of online role plays.
Numerous journal articles and conference papers have described online role plays used in higher education in Australia and other countries (Wills et al. pp. 40-43 provide a lengthy list). These publications contain a wealth of information and discussion related to ways in which online role plays are helping higher education students to achieve a variety of important learning outcomes in an ever-increasing range of subjects. They also contain information on various technical and structural innovations that have been found to be useful in helping teachers manage these activities, and different ways of evaluating them. It is common for these publications to implicitly acknowledge the importance of story elements of plot, character and setting in their role plays. For example, many of the accounts describe a series of events—or a plot—as a means to not only structure the activity but to create and maintain momentum (two examples are Hirst, Riddle and Young 2005; and Vincent 1998); the writers almost invariably note the benefits of students being able to explore alternative points of view from the safety of their character role (two examples are Bell 2001 and Riddle 2006); and many discuss the importance of providing an interesting and believable setting (two examples are McLaughlan and Kirkpatrick 2004; and Genat, Ip and Fong 2008). However, throughout my research I have found only a small amount of literature commenting explicitly and in any depth on the contribution of the students' engagement with a story in an online role play to their learning. This includes some discussion in Wills, Leigh and Ip (2011) and Wills and Ip (2002), and a paper pointing to the additional scope for story development in 'unrendered' online role plays in comparison to 'rendered' environments such as video games by Linser and Ip (2005).
However, I have found a number of publications discussing approaches that might be used within online role plays to encourage students to reflect critically on the roles and events with which they have engaged, and the cultural assumptions maintained or promoted within them, with the aim of developing students' awareness of social justice issues in the subject area. These include descriptions of several examples in Wills, Leigh and Ip (2011); and case studies in Hintjens (2008); Genat, Ip and Fong (2008) and Linser (2008). These have informed my research in this area and I refer to them in forthcoming chapters.

Thus, my research aims to address the gap in the literature around the design factors involved in creating online role plays that are engaging and support learning by focusing on the factors involved in helping students to engage in the holistic process of building meaningful stories from their experience. In highlighting the importance of the story construct in the students' learning, it also aims to identify approaches that can be used with these techniques to develop students' critical awareness of how meanings are created through techniques such as these and in their subject field generally, and to develop their ability to resist and rework these suggestions if they wish.

Research aims
My research aims as outlined above involve not only exploring the existing practices of online role plays, but considering ways in which more of their potential as teaching and learning techniques may be achieved. I have used the following research questions to guide my exploration.
The overall research question I have used is: *how may online role plays be designed and managed to support engagement in, learning from and deconstruction of stories in higher education?*

The supporting questions that have guided my analysis of the literature and case studies have been:

1. *What are the relationships between engagement, story and student learning in online role plays in higher education?*

2. *In what ways may online role plays support critical learning in higher education?*

3. *What implications do my findings have for the design and management of online role plays in higher education?*

Having outlined important features of the research context and the questions that have guided my research, it is timely to clarify some key terms, and then explain the theoretical orientation I have adopted in pursuing answers to these questions. The first term I will define is 'story'.

**Key terms**

**Story**

I have chosen a definition for the word 'story' that encompasses both the common meaning of the word—an account of something that has happened—and its narratological meaning—a mental reconstruction of a series of events.
arranged in a narrative or dramatic plot (Baldick 1990: 211; Abbott 2002:16). This definition signifies a particular kind of construct that evokes meaning through the interaction of its key elements of plot, characters and setting (Ryan 2006: 7). This construct is evident in numerous formats, including novels, films, anecdotes, computer games, drama and online role plays. In each of these formats one sees characters interacting in a particular place to create events, building a sequence that the reader/viewer/participant may interpret as having a particular meaning. Defining story in this way allows me to analyse the ways in which these three main elements work together in the stories that students build collaboratively in online role plays to support their engagement and learning. It also helps me to focus on where the elements are performing their function well—or not—in case studies and eventually to recommend key design factors to take into account in order to take advantage of the affordances of the format for meaning-making. It also enables me to focus on the ways in which cultural assumptions are embedded in a story via the various story elements, and how students might critique and redress these assumptions at an elemental level.

The other key term whose use I will outline here is the online, interactive, dramatic story form of 'online role play'. (I have provided fuller definitions for both of these terms in Chapter 2.)

**Online role play**
The example I described above of a partly online, partly face-to-face role play conforms in many ways to the definition of an online role play provided by Wills, Leigh and Ip (2011: 6). I have predominantly adopted their definition in
this research. The definition is broad, covering many platforms including online text discussions, video-conferencing, virtual environments and face-to-face interaction, but with a substantial online element. All online role plays share a major focus on role playing: students take roles in simulated social situations to explore issues in the imaginary world from a different perspective, through interacting with other role-playing participants. These teaching and learning techniques evolved from the face-to-face role plays that have been used in education and training for many years (Wills, Leigh & Ip 2011: 7). These in turn developed out of the dramatic aesthetic story-telling tradition (O'Toole & Lepp 2000), which brings an extensive literature on ways to maximise people's engagement and learning—and critical learning—through dramatic means. At the same time, taking role playing online has introduced affordances for engagement and learning that are commonly associated with online network interactions, chat rooms, film and computer games, and there is a growing literature in this area as well.

I have employed several largely complementary theoretical frames to guide and inform my study of online role plays in this context.

**Theoretical frames**
In order to explore the relationships between students' engagement with stories and their learning in online role plays, and the possibilities that exist within online role plays to develop students' critical abilities, I have employed insights and frameworks from a range of fields including literary theory, learning theory, critical pedagogy and critical literacy. I develop my rationale for using
these frameworks in more detail in Chapter 2 but will introduce them briefly here.

Much has been written about the ways in which stories provide tools to support human social life, learning and knowing. Briefly, it has been argued that we use stories as means to help us understand the logic of events, as they can impose a human scale and character on things that happen (eg Egan 1997). Stories' capacity to engage people's imagination and emotions while they convey meaning has given them an important place in entertainment and education, and the field of literary theory provides abundant literature on the function of various devices to maximise these effects (eg Boyd 2009).

Since the late 20th century, poststructuralist theory has provided important insights into the ways in which meaning is made and cultural values are conveyed through stories, and indeed through the very language people use. As education relies on language and references to stories and cultural practices as means to support (and direct) the development of students' skills, knowledge and attitudes, these theories have had a profound effect on educational theory and pedagogical practices (Usher & Edwards 1994). Critical literacy and critical pedagogy approaches combine insights and deconstructive methods from poststructuralist theory with a social activist stance aimed at promoting democracy, freedom and social justice through education (Kinichlo 2008)—an aim that provides the ethical orientation for my research.

A learning theory that recognises the importance of stories and language in learning processes is the theory that has come to be known as social constructivism. This theory, based originally on the work of Vygotsky (1978),
emphasises the socially and culturally situated nature of both knowledge and learning. In a 21st-century world in which information is super-abundant and much of it is quickly out of date, social constructivism provides a way of thinking about 'learning' and 'knowledge' that is more versatile than alternative theories that assume that knowledge is stable over time, and able to be transmitted intact as objective truth from person to person (Duffy & Cunningham 1996). Social constructivist techniques emphasise developing students' abilities to communicate, research, tap into networks and collaborate to co-construct innovative solutions, recognising that both learning and knowing are collaborative social activities. These sorts of techniques are increasingly commonplace in higher education, particularly in online education (Bonk & Cunningham 1998).

**Online role play within this theoretical context**

When the characteristics of online role plays are considered within the theoretical frameworks I have described above, some of the reasons for the format's increasing popularity become evident. As these techniques use make-believe scenarios and characters, in theory they should have the capacity to take advantage of students' predisposition to engage with stories to encourage them to explore certain subject-matter and points of view. As the techniques proceed through a guided process of dialogue, social experimentation and reflection, they support a flexible, student-oriented, social constructivist pedagogy. As they take place (mostly) in an online environment and in many cases require students to draw on the plethora of perspectives and modes of representation that are available via the World Wide Web to develop their
character profiles and debating positions, these techniques also have the capacity to support students’ development of pluralist perspectives on the subject matter. Finally, as they sometimes involve activities or built-in elements to support students' critical reflection on the ways in which cultural assumptions are represented in society, the mechanisms by which they are maintained, what is at stake in maintaining or challenging these assumptions, and ways in which they may be effectively challenged, online role plays also have the capacity to support a critical pedagogy and help bring about social change. I believe each of these areas of potential can be developed further with greater understanding of the ways in which online role play story elements can work to support engagement and learning, and critical learning.

The theoretical frames I have outlined above are each supported with a rich literature. While this thesis engages with some of this literature and makes a further contribution to these fields of thought, it is necessary to clarify the boundaries that define and delimit my study.

**Delimitations and limitations**

I have imposed several delimitations on this research project in order to make it possible to produce meaningful findings in a field that is large and—like many other fields in which technology is a key player—increasing in complexity every day. The project also has some limitations.

Firstly, although it is artificial to set geographical boundaries when dealing with online education, and the theoretical frameworks I have used in this project have been global, my research has been situated mostly in the
Australian university context. This is the context in which I work, and with which I am therefore most familiar and intend to work in the future.

Secondly, although the range of online role-playing formats that can be used in university education is wide, I have focused on methods that might be implemented by academics with minimal technical expertise, time and funding, who make up the majority in this sector. Therefore, I have chosen to focus my research on online role-playing formats at the technically simple end of the spectrum. Just because these activities may be technically simple does not mean they are not powerful teaching and learning techniques (Wills, Leigh & Ip 2011). A further reason for choosing technically simpler formats, rather than complex simulations and computer games, is that the effects of the basic design principles and story structures are easier to identify in these, without the distractions of sophisticated graphics and novel forms of interaction.

A third delimitation I have placed on my research is to focus on the higher education context. As a result of this delimitation, in my second case study, which involved both secondary school and university students, I focused on the experience of the university students. As specified in my ethics clearance, I did not collect data from the school students but relied on previous studies, my own observations and the opinions of the school drama teacher/facilitator and role play designer where I needed information on the school students' perspective.

An obvious limitation of my research is the small number of cases I have studied, of which only one could be called an online role play using the definition above. As each online role play is unique in many important
respects, including its subject area, assessment methods, duration and platform 
(Wills, Leigh & Ip 2011); and every performance is different in its students, the 
choices they make and other contextual factors; attempts to generalise across 
cases have limited value. Therefore, I decided to devote my attention to an in-
deepth study of a small number of cases in order to create a rich understanding 
of how these worked—in these particular instances—and leave it to those 
reading my research to judge whether parallels may be drawn to their situation. 
I have discussed this issue further in Chapter 4.

A second limitation is that my research captures data during and immediately 
after each role-playing activity is finished. However, some of the important 
learning outcomes associated with these types of activities can take a long 
period to crystallise (Coates 2006: 30-31, Morgan & Saxton 1987: 198-9). A 
longitudinal research design may have provided a more accurate account of the 
learning outcomes that were achieved, but it was not possible to conduct this 
kind of research in the timeframe available.

Thirdly, much of my data is based on the perceptions of individual students, 
such as what they learnt, how engaged they were, and why they were engaged. 
This is partly because of the lack of methodologies that may be capable of 
analysing the complex discourse and knowledge-building activities in online 
role plays (McLaughlan & Kirkpatrick 2009: 306-7), as well as because I 
wished to capture the students' own constructions of their experience in their 
own words, in keeping with my chosen methodology.

I will now explain the structure of the thesis. In so doing, I will outline how I 
have drawn on what is known about the ways in which story-based formats
such as online role plays can support engagement and meaning-making, the methodology and methods I have used to conduct my own enquiry, and the approach I have used to present my findings.

**Thesis structure**

I start in Chapter 2 by providing fuller definitions of key terms I have employed in the thesis, and explaining in more detail the theoretical frameworks on which I have drawn. I outline arguments that have been made relating to the centrality of stories in human society as means of passing on knowledge and values, and as a mode of thinking. I then discuss more fully the social constructivist view of learning, factors influencing student engagement in higher education, and reasons why incorporating a critical pedagogy/critical literacy approach into education generally and engaging story-based formats in particular is important.

In Chapter 3 I provide a review of literature surrounding the relationships between engagement with stories and learning in online role plays, and how online role plays might support the development of critical awareness and abilities. I draw on long-established theories about how traditional story formats work as well as more recent theories relating to online and interactive story formats. This is a vast and complex field, so I divide my discussion to address in turn the function of each of the main story elements of plot, character and setting in supporting engagement, learning and critical learning. In each section I start by outlining literary theory on the way these elements function, then I relate the principles that are suggested to ways in which these
elements may work in online role plays, and then I describe techniques that have been used to support the development of a critical approach in these activities.

In Chapter 4 I explain and justify the research methodology and methods I have used. I outline the ontological, epistemological and ethical frameworks within which my research sits, and how my chosen methods flow from these. I explain my rationale for using a multiple case study research design and mixed methods to gather and analyse my original data.

In Chapter 5 I describe the three role play cases I have studied as part of this project. I discuss my rationale for choosing each one, the learning aims each of the role-playing activities was designed to support, and how the students performed the activities within their context.

Chapter 6 is the first of four chapters in which I present my analysis of the three case studies, starting in this chapter with a broad view of the engagement and learning outcomes of each activity, and then focusing in turn on the ways in which the three major story elements were managed. In this chapter I set out indications of the kinds of things students learned from their activities, including any critical learning abilities. I also present indications of the level of students' engagement in the activities and the factors of engagement that were involved.

In Chapter 7 I start to explore the nature of, and relationships between, students' engagement with stories they developed during their role-playing activities, their engagement generally in the activities and the kinds of things
they learned, including critical learning outcomes. In this chapter I focus on the ways in which the story element of setting was managed in each of the cases and the ways in which this treatment may have impacted on students' engagement and learning.

In Chapter 8 I turn my attention to the story plots and how they were managed in each of the cases, and the means by which this treatment potentially impacted on students' engagement, learning and critical learning.

In Chapter 9 I focus on how the characters were managed in each of the cases, and the ways in which this treatment may have impacted on students' engagement, learning and critical learning.

In Chapter 10 I draw together my main findings about how students engaged in each of the role-playing activities, the relationships between this engagement and the types of learning they achieved, and the importance of the stories students created in each case to these relationships and learning outcomes. I also draw together my findings on how critical learning was supported either within these relationships or as an external element to them.

In Chapter 11 I conclude the thesis. From my findings thus far about the relationships between the students' engagement in story-building activity and their learning, and development of critical learning outcomes in the cases, I propose recommendations to optimise the design and management of online role plays in higher education. I also suggest some areas for future research.
Summary
In this chapter I have explained the reasons for my interest in studying the stories evoked in online role plays and ways in which students' critical awareness of cultural assumptions and hidden agendas in story-based techniques such as these may be developed. I have outlined something of the higher education context in which my enquiry is based and provided a rationale for my focus on online role plays. I have provided brief definitions of key terms and introduced the main theoretical frameworks upon which I have built my understanding of how online role plays function as a story-based teaching and learning technique. Finally, I have explained the delimitations and limitations of the study and provided an overview of the structure of this thesis. In the next chapter I will explain the main theoretical frameworks that underpin this research in more detail.
CHAPTER TWO
Definitions and theoretical frames

Introduction
In this chapter I present fuller definitions of ‘online role play’ and ‘story’, and the major theoretical frames that orientate and inform my research. The first theoretical frame is the view that stories are a critical means by which we make things intelligible, and impact on not only how we learn but what we learn. This view is compatible with the social constructivist theory of learning, which I discuss in the succeeding section. My understanding of the concept of engagement, a quality that is seen as important to social constructivist learning as well as to the appeal of stories, is the third theoretical frame that I present. The fourth is that of critical pedagogy and critical literacy, which also links strongly to social constructivist views of learning as it provides the rationale and techniques to help students to recognise, critique and challenge socially-constructed meanings in story-based texts such as online role plays.

Definitions of key terms

Online role play
As I noted in Chapter 1, online role plays were derived from face-to-face role plays (Wills & McDougall 2009). They have similarities with e-simulations and computer/video games (Linser 2011), and as a group they are diverse
(Wills, Leigh & Ip 2011). In order to define online role plays, therefore, I will explain how I see them as similar to and different from their close relations.

**Role play**
The basic idea of 'role play' according to van Ments (1999: 4-5) is that of:

asking someone to imagine that they are either themselves or another person in a particular situation. They are then asked to behave exactly as they feel that person would … each player acts as part of the social environment of the others and provides a framework in which they can test out their repertoire of behaviours or study the interacting behaviour of the group.

Thus, a role play (whether online or face-to-face) can be seen as the collaborative building of an interactive dramatic story in which students can 'walk in the shoes' of other people to experience their perspective of events. It also provides an opportunity for students to practise novel strategies in a safe environment and gain support, ideas and feedback from their peers (van Ments 1999). Role plays are used not only in schools and universities, but extensively in military, business, health and social education, and workplace training (Bolton & Heathcote 1999, Van Ments 1999).

The range of dramatic forms available for role playing is wide, reflecting the range of forms developed over the centuries-long history of dramatic performance (Neelands & Goode 2000, Cahill 2008). However, most role plays used in vocational training and general education use the dominant form of 'naturalistic' role play, in which participants set out to create an illusion that
they are replicating a slice of life (O'Toole & Lepp 2000, Cahill 2008). The naturalistic form is also the dominant one used in online role plays.

**Online role play**
Role plays may be performed online using platforms ranging from simple text discussions to video games, e-simulations, social media and multi-user virtual environments (eg *Second Life*), and the options are widening all the time (Wills, Leigh & Ip 2011; Russell & Shepherd 2010).

Although physical embodiment and immediacy are lost in the translation of face-to-face role plays to online formats, Wills, Leigh and Ip (2011: 7) claim that online role play 'builds on' the pedagogical power of [face-to-face] role play' (my italics). They quote Freeman and Capper's (1999) observation that online role play adds two important features to the face-to-face format: asynchronicity and anonymity. As a result of these features, they argue that students can have more thoughtful, researched, consolidated and reflective interactions than are generally the case with face-to-face role plays (Wills, Leigh & Ip 2011: 13-15). Further advantages of the online format identified by McLaughlan and Kirkpatrick (2004) are that it widens the scope for inter-campus and international interaction, and augmentation with web-based information, multimedia and computer-based information management.

In this thesis I have predominantly adopted the definition of 'online role play' provided by Wills, Leigh & Ip (2011: 6). They describe online role plays as having the following features:

- designed to increase understanding of real life human interaction and dynamics;
• participants assume a role in someone else's shoes or in someone else's situation;
• participants undertake authentic tasks in an authentic context;
• task involves substantial in-role interaction with other roles for collaboration, negotiation, debate;
• interaction between roles is substantially in an online environment;
• learning outcomes are assessable and generate opportunities for participant reflection.

While a significant portion of the interaction in online role plays is conducted online, the described format contains significant diversity, and the authors frequently use the term 'role-based e-learning' instead of 'online role play' to acknowledge this. In the examples Wills, Leigh and Ip provide, features include video-conferencing sessions (sometimes including costumes), a face-to-face element (which technically would make it a 'blended' role play) and collaborative activities such as joint document creation. The online interface that frames the role play interaction may use a graphic metaphor to represent the virtual world, but this is not always the case. Characters generally interact by asynchronous text (eg by posting messages in discussion forums), but some role plays use synchronous text or voice. Participants take a character role either as individuals or as groups (a group may take the role of one player, introducing a requirement for participants to negotiate how they will play the role). An important element of most online role plays is a debriefing session at the end, to provide participants with an opportunity to leave their role behind,
reflect on the events they have enacted, and help them to create meanings from their experience. Wills, Leigh and Ip describe online role plays that have been implemented in very simple forms, for example in university learning management system discussion forums with or without a website to provide contextual detail, background information and resources. They also describe online role plays that use purpose-built software, for use by multiple faculties and universities.

**e-Simulations**
In the literature surrounding online role plays and e-simulations the differences between these formats have not been clearly established. Indeed, some examples that Wills and Ip (2002) include to represent the generic learning design of 'online role play' are actually named 'simulations' by their authors; and Wills and Ip place online role plays into the broader category of 'multi-agenda/social-system/social-process simulations' in Gredler's (1992) taxomomy of simulations and games.

Although the differences between the terms 'role play' and 'simulation' may be blurred in the literature, for several years I found it helpful to adopt Linser and Ip's (2005) distinction between them, keeping simulation at the end of the spectrum where the aim is to mimic causal processes found in the real world as closely as possible, with a small number of variables, and keeping role play at the end where negotiation of parameters is possible, more development of character roles is allowed, and outcomes can be open-ended.

However, Wills, Leigh and Ip (2011) make the point that a binary distinction between these types of techniques does not work very well. Examples that they
have named 'online role plays' vary in the extent to which they emphasise development of the character roles, with some focusing students' efforts on simply solving problems in the make-believe scenario instead. Also, they note that some 'role-based e-learning activities' that have been designed in recent years have blended characteristics from both sides of the kind of role play-simulation divide proposed earlier, for example using sophisticated 'bots' as characters in a role-playing problem-solving activity. In an attempt to create an inclusive but still meaningful classification system for the forms that are continuing to emerge, they have placed all of these techniques under the broad heading of 'simulations', and developed a triangular model bounded by continua on three sides between main emphases on role-based, problem-based and rule-based activities with which to categorise them. In placing examples at various positions in this triangle, they have been able to create a more flexible and illuminating classification system than a simple binary. This model is illustrated in Figure 1.1.
Figure 1.1: Simulation triad used to situate online role play examples (Wills 2010: 1089)

Online role plays also have some features that are commonly associated with games, such as a playful feel and characters with agency to achieve certain goals in a make-believe virtual world. However, writers from both fields argue that there are differences between the two (eg Salen & Zimmerman 2003; Wills, Leigh & Ip 2011).

**Computer/video games**

Game designers Salen and Zimmerman (2003: 88) define a 'game' as 'a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome'. In comparison, role plays do not have winners and
losers. Linser, Ree-Lindstad and Vold (2008) and Wills, Leigh and Ip (2011: 16) make a similar distinction. This design feature has a major impact on the players’ goals in the activity and therefore many other aspects of the experience. However, the similarities between these formats are such that I have looked to key works in the computer games literature to help me understand the potential of the online role play format better.

Thus, online role plays represent a technique with particular aims and methods that distinguish it from its relatives. Story building underlies the activity in each of these formats although, again, the different aims and methods involved impact on the nature of these stories and the extent of their development.

Next, I will clarify the concept of story that I have applied throughout this research, and the ways in which stories are realised differently in different formats including face-to-face and online role play.

**Story**

Most people understand a 'story' to be simply 'a tale in which something happens'. This definition works well in most circumstances, but a dip into theoretical writing on how stories may work to convey meaning shows that this definition is deceptively simple (Cohan & Shires 1988: 178, Martin 1986: 108, Culler 1981: 170, Riessman 2008: 4-7, Ryan 2006: 6-12). I believe that part of the complication in finding a generally accepted definition is because, although it may be easy to recognise stories in a variety of forms—written, oral, digital, physical and visual—the ways in which a story is created and interpreted are different in different media and formats. As I mentioned in Chapter 1, I have chosen a definition that works across formats. I will outline below the ways in
which the structure is created differently in different formats. I will discuss first the way a story works in its traditional, overtly narrated form (the format that is closest to its common meaning), then as it is presented in a drama (the format from which role plays developed), then as it develops in the practice of interactive dramas such as improvised role plays, and finally as it develops in the performance of online role plays.

I have based my definition on a combination of the common meaning of the term and a narratological definition. Baldick (1990: 211) defines 'story' as:

… in everyday sense, any narrative or tale recounting a series of events
… in modern narratology … the sequence of imagined events that we reconstruct from the actual arrangement of a narrative (or dramatic) plot.

This definition predates the widespread use of online role-playing formats, but still applies in a broad sense to newer story forms (eg see Ryan 2006: 7). The definition assumes that each audience member will construct her or his own interpretation of a given 'narrative (or dramatic) plot', and this mental construction will ultimately be the 'story' for her or him regardless of what the author might have intended or what might be written on the page. It also specifies that the sequence of events providing the material for a story is arranged as a narrated or dramatic plot. In the case of interactive formats, there may be multiple possible plots for the participant to choose or develop, but the principle is the same whether the participant has simply chosen from the options provided by an author or has created the events from scratch: the 'story' can be seen as the participant's perception of the events that occurred.
Story elements
The idea of 'plot' dates from Aristotle's Poetics in 350 BCE, its requirements being a central subject; a beginning, middle and end; characters endowed with qualities that determine their actions and the progression of events; and a necessary connection between one event and another such that a sense of coherence and meaning is formed (Halliwell 1986). Contemporary writers still refer to Aristotle's analysis as they explore ways in which people engage with and create meanings from narratives, dramas or even computer games (eg Laurel 1991, Mateas 2001, Boyd 2009, Ryan 2006). Culler (1997: 80) and Cohan and Shires (1988: 53-4) argue that the idea of plot involves a 'transformation': 'There must be an initial situation, a change involving some sort of reversal, and a resolution that marks the change as significant' (Culler 1997: 80). In other words, the plot enables an association to be formed between developments on the level of events with a transformation on the level of theme: 'writers and readers shape events into a plot in their attempts to make sense of things' (Culler 1997: 80). As well as a plot and characters, narrative forms have a setting: a sense of an environment that exists in space and time and is governed by an intelligible and coherent set of parameters (Ryan 2001: 15).

Recognising the importance of the tools of narrative construction for people's ability to create meaningful and engaging stories provides a method for not only analysing the effectiveness of various narrative constructions, but for developing new ones. As such, it is a theme of this thesis. Before proceeding to the ways in which different story formats work to evoke stories, I will further
clarify the distinction between the concepts of narrative and story that I have used in this thesis.

**Narrative**

While 'story' has a distinctly different meaning to that of 'narrative' for narratologists (Martin 1986: 107-8, Herman & Vervaeck 2005: 45), in less technical writing the terms are often used interchangeably. Even some who have written extensively on stories and meaning, such as Egan (1997), Lyotard (1984) and Bruner (1986), use both terms to mean the same thing.

Baldick (1990: 145) defines a 'narrative' as: 'A set of events (the story) recounted in a process of narration (or discourse), in which the events are selected and arranged in a particular order (the plot).’ Contained in this definition is the requirement that narratives involve a process of *narration* to present the story events to the audience. This introduces not only the elements of a point of view and purpose, but also the mediation of a 'sign system': language, genre and discourse (Cohan & Shires 1988: 83-112). A simple semiotic explanation of the relations between the key elements in the concept or 'sign' of the word *narrative* is that the *story* can be thought of as the 'signified' (the concept or meaning); while the *narrative* can be thought of as the 'signifier' (a sound-image, or its graphic equivalent); and the narrative relies for its interpretation on the social framework or *discourse*.

The system is not as simple as this representation may suggest, however, as stories always have a narrator, even if the 'narrator' is the audience simply perceiving events as stories. Also, stories are always created or interpreted by using the signs, language and other materials already in the creator's and
audience's discourse. Further, a story and its narrative form are dependent on each other (Culler 1981: 186, Ryan 2006: 7). As the concept of a story as a mental construct is so difficult to disentangle in practical terms from the representation in various narrative formats that evoked it, in this research I have opted to use the term 'story' to denote its common meaning (the narrative form that evokes a mental image) together with its narratological meaning (the mental construct). I will discuss next how the different formats that I have studied in this research use different means to create and evoke stories.

**Story in dramatic formats**
Drama presents a story, rather than tells one (Martin 1986: 109). This simple difference has wide ramifications for the ways in which the representative forms used in drama may be managed to promote engagement and create meanings. The role of narrator can seen as being taken by the dramatist who directs the drama, although the audience will co-construct the story mentally for themselves as they watch.

**Story in interactive educational drama (role play)**
While the definition of 'story' above is premised on the idea that the reader co-creates even overtly narrated stories, with interactive drama the participants' creative contribution is on a different scale. Because decisions they make dictate to some extent the ways events develop, they have a major influence over the range of meanings that they will be able to interpret from the interaction. However, participant control over plot is problematic for story development as, although people may enjoy the thrill of being able to influence the ways in which dramas develop, most lack a sufficiently nuanced understanding of the aesthetic principles that govern the success of the form to
create coherent and emotionally satisfying dramas (Murray 1997, Ryan 2006).
The difficulty of reconciling significant participant agency and the production
of meaningful, engaging narrative structures is a central and ongoing concern
for designers of all interactive narrative forms (Ryan 2006: 99), and is a
recurring issue in this thesis.

In recognition of the difficulty of maintaining engagement and meaningfulness
in a co-created drama, and of the need to support students' development of
*useful* meanings from the activity as specified by the curriculum, educational
drama experts (eg O'Neill 1995, Bolton & Heathcote 1999) argue that
designers and/or facilitators should 'scaffold' the plot by providing a framework
of incidents for participants to develop, and stay ready to introduce
complications or step in to direct the action along a particular path as the role
play proceeds. They also note the importance of providing details to 'frame' the
drama to suggest a certain setting and point of view, and of choosing
appropriate characters. However, these writers also emphasise the importance
of negotiating the development of the plot and other dramatic elements with
participants in order to give them a sense of agency, to enable them to
personalise the experience, and to support their development of an
understanding of dramatic forms. In these ways, the designer and facilitator of
an interactive drama has an influential role as a kind of co-narrator in these
forms.

**Story in online role-playing formats**
Story development in an online role play can be seen to be influenced by not
only the designer's decisions and facilitator's actions to manage the plot, setting
and characters, but also the affordances of the online environment that is used.
For example, text-based role plays that provide minimal detail for setting, characters and plots give students considerable leeway to create stories that reflect their own interests, imagination and culture (Linser & Ip 2005). At the other extreme, role plays that rely more on graphically-rich, highly programmed interfaces may have sensory effects that can be highly appealing, but players' imagery and choice of actions will be constrained by the budgets, time, imagination, skill and world view of programmers (Murray 1997). In either case, the online role play designer will have the role of co-narrator; and her or his decisions on the types of interactions that are used in the online setting, as well as the types of characters and plots that are able to be developed, will have a profound effect on the stories—and meanings—that students develop.

Thus, I have established the concept of a 'story' as being both a mental construct and its representation in a narrative form. It is a concept that involves an interaction between a plot, characters and a setting, that applies across a variety of media and formats. I will now outline theories on which I have drawn in this thesis relating to ways in which this structure helps people to learn, and influences what they learn. These theories provide a basis for my later discussion of how students' development of engaging stories can produce wide-ranging and profound learning outcomes. I discuss first the basis of the proposal that people learn from stories.
How stories help us learn, and influence what we learn

As I have noted above, stories can be identified in many formats. They are also evident in many aspects of human social life. Not only are they part of our daily lives in the form of news stories, gossip, jokes, novels, films, video games and television dramas, but they can be seen operating in jury decision-making (Graesser, Olde & Klettke 2002), history writing (White 1980), economics (McClusky 1990), science (Harre 1990), and psychology (Huberman 1995, Kristeva 2001).

Two schools of thought have developed to explain why stories are so prevalent. One is that the tendency to create stories is an instinctive human impulse that has evolved over tens of thousands of years as humans have learned how to compete and survive together (Boyd 2009). Alternatively, our predilection for stories may be a cultural habit that is reinforced constantly through stories' ability to function as linguistic media for the creation and satisfaction of desires (Misson & Morgan 2006).

The view that stories are innate cognitive tools

Egan (1997) draws on anthropological studies of several early human cultures suggesting that the story arose as a cognitive tool soon after humans developed language. Egan proposes that stories (in early times narrated in the forms of myths, pictures and anecdotes) would have enabled people to expand their minds beyond merely perceiving events. He extends Vygotsky's (1978: 19-30) argument that being able to reconstruct events using the symbolic form of language allows people to distance themselves from their experience and reflect on how and why things happen the way they do. Egan also suggests that ultimately, early humans' ability to create comprehensive story-based, cause-
and-effect models of their universe would have helped them to explain, predict and attempt to control phenomena. Through stories, groups of people would then have been able to share thoughts and models with one another and pass them on to future generations.

Egan also notes that people do not always learn simply by making content associations between stories and what they already know. He argues that the elements of both fantasy (pp. 44-47) and metaphor (pp. 53-58) that are present to varying degrees in stories provide opportunities for the listener/reader to make leaps in their thinking, to deal actively and creatively with concepts that may not be present or accessible in their normal life, and thus to extend their understanding of what may be possible or relevant.

Egan acknowledges Barbara Hardy's contribution to the development of his theories. Hardy (1975, 1977) suggests that the impulse to create stories is a 'primary' human function:

Nature, not art, makes us all story-tellers. Daily and nightly we devise fictions and chronicles, calling some of them daydreams or dreams, some of them nightmares, some of them truths, records, reports, and plans … Narrative imagination is a common human possession, differentiating us … from the animals, enabling us to 'come together and found cities and make laws and invent arts' (1975: vii).

Hardy (1977) suggests that stories people tell each other in various genres and contexts are a 'continuation' (p. 14) of the stories we tell ourselves in our mental activities such as dreams, memories, doubts, plans and so on. She adds that we tell stories, whether to ourselves or others, as a way of imposing a form
to which we can relate on uncertain, meaningless, unpredictable happenings. Stories thus offer an 'escape' that helps us both re-think what we know about ourselves and the world, and imagine how things could be different. As such, she argues that 'we may be engaged in telling ourselves stories in a constant attempt to exchange identity and history' (p. 14)—even though we know that the conclusions we draw from this activity are neither verifiable nor reliable:

> How often do we as students of politics, self, or literature, make the move from realism back to fantasy again, and translate the despair and pain as stoicism, the madness as aesthetic eloquence, the disorder as a new order? It is hard to stop telling stories (p. 23).

Bruner (1986) reminds us that it is impossible to know in an objective sense what goes on in people's minds, but nevertheless brings a scientific approach to the goal of understanding how stories help us think and learn, and where the impulse to create stories comes from. He supports his theories with empirical scientific evidence demonstrating people's apparently innate tendency to empathise with characters and create plots that capture the intentions of these characters in the ways events are linked. He cites an experiment that showed babies spontaneously seeking and creating causal links between sets of objects presented to them at or around the same time (pp. 17-18). He argues such links are the building blocks of story plot. He also makes the observation that babies from just a few months old will turn to look at what their mother is looking at, showing an early ability to adopt another's perspective (p. 59).
Boyd (2009) draws on numerous anthropological and scientific studies of the development of cooperative societies and increasing human brain size over tens of thousands of years to painstakingly develop his argument that natural selection would have favoured individuals who had been able to develop a more advanced and flexible 'theory of mind'. He argues that this kind of theory formation takes considerable mental energy, but that stories provide a very useful mental tool to aid the process. To summarise his arguments: like Egan and Bruner, he demonstrates how stories may provide a means to exercise, refine and imaginatively extend people's cognitive and empathic behaviour-modelling strategies; and like Egan, he points to anthropological evidence of ancient peoples using these strategies. He builds his arguments by detailing how these strategies might have helped people to develop accurate theories about their physical and social context, and how these theories would have been highly useful in the struggle to survive in prehistoric times. He proposes that the ability to make and share stories would have been such an advantage to those who managed to develop it that over tens of thousands of years it would have influenced patterns of natural selection. Thus, story-making tendencies would eventually have become 'hard wired' into human DNA.

Having made this case for the impulse to create and share stories being innate in modern humans, however, Boyd does not simply dismiss the 'cultural' view that knowledge and habits of mind such as story creation are a product of people's interactions with each other and the language they use to share understandings. As an academic with an established career in literary studies, he argues that the extremely long-term evolutionary theories he proposes can be read in combination with language-based theories to help us understand the
ways in which people create and share understandings through means of language and story: 'Our minds and behaviour are always shaped by the interaction of nature and nurture, or genes and the environment, including the cultural environment' (p. 19). This view, that acknowledges the merit in both arguments without compromising either, provides a useful basis for continuing research, such as mine, into the multiple ways to work with stories in various forms to optimise their abilities to help students learn.

The 'cultural' view
What is known as the 'cultural' view, that the stories by which we come to know the world are heavily influenced by dominant cultural understandings and practices, developed in the late 20th century, originating in and from the work of Derrida, Foucault, Lyotard, Lacan and Kristeva, among others. This school of thought has come to be known as 'poststructuralism', though the arguments of the principal advocates for this view are diverse and in places contradictory.

Poststructuralism highlights the role of language in the ways in which people create and reproduce meanings, and the impact of culture, stories, traditions, accepted practices and definitions (commonly referred to as 'discourses') on the ways in which people come to understand reality. The varying poststructuralist positions share the founding insight that language does not reflect any fixed reality: that there are no intrinsic meanings in either the natural world or social reality, but different languages lend meanings in particular ways that are influenced by the practices, definitions, traditions and stories that together make up the discourses that operate in a group (Weedon 1987). They view the story as a culturally and historically situated tool that has developed as a means
to help people to relate through discourse, but that is far from value-free. Some
poststructuralists share the view that the author's intended meaning is
secondary to the meaning the 'reader' perceives. Constructions of meanings are
influenced by the reader's conscious and unconscious thoughts and emotions,
and her or his sense of herself or himself in relation to others. This has wide
implications—ultimately, even concepts of knowledge and personal identity
can be understood as also being constructed and shaped through language,
discourse and subjectivity (Weedon 1987). In this research, my
acknowledgement of the strength of poststructuralist theory has added
complexity to my understanding of how stories work to convey meaning. It has
prompted me to take a more critical view of ways in which stories are used in
education, and helped me find gaps in previous conversations about the
concept of story in the online role play literature—gaps that I have worked to
fill with this research.

Derrida (1976) introduced a way of analysing or 'deconstructing' texts to
question the ways in which language and discourses moderate the ways in
which we understand the world. He argues that meaning is frequently
generated through definitions that are based on comparison or opposition.
Thus, people understand the meaning of 'nature' (in the nature/culture debate)
in part by referring to its opposite, the word 'culture'. This creation of binary
categories can help clarify thinking and conversation, but it has a polarising
effect on our view of the world, and can limit our sense of what is possible.
Poststructuralists' practice of deconstructing texts is based on the argument that
if we are not aware of the ways in which language can affect the way we think,
we may be left with the misunderstanding that words accurately represent
reality, rather than that they impose a particular way of understanding reality, and as a result many alternative ways of interpreting things are hidden from view.

Two poststructuralist theorists who have provided important insights into the ways stories might work to influence how people think, and whose theories are significant for this thesis, are Lyotard and Kristeva.

*Lyotard: stories as language games*

Lyotard (1984) argues that although stories may appear to be 'natural' forms of communication, and transparent means of sharing thoughts and experiences, they should be recognised as 'language games' that carry powerful messages that help to 'position' tellers, listeners and subject matter in relation to each other. He argues that 'social narratives' (including the fables, myths and songs of popular culture) work to transmit social traditions in several ways.

Firstly, they recount 'positive or negative apprenticeships' (p. 20): they provide examples of what is expected of people in the society to which the story relates, including illustrating the behaviours that are rewarded or punished, providing role models to follow and inculcating respect and understanding for the institutions within which they will have to function.

Secondly, they are not restricted to statements relating to 'truth' as it is arrived at by scientific method and criteria, but can range across a variety of subject areas and use many 'language games' including questions, value judgements and direct forms of address. This flexibility makes them accessible to all social groups, and ubiquitous.
Thirdly, they transmit not just content, but messages about the social relationship between the narrator and the narratee, including the narrator's claim to competence to tell the story (i.e., whether she/he is a member of the social group to which the story relates). They thus transmit information to help build a 'social bond' relating to the narrator, narratee and the story. Blake et al. (1998: 99) describe this analysis as identifying the mechanism by which 'speech acts' confer on the narratee a sense of belonging to (or exclusion from) the social group: 'Educational narratives don't just tell us where we belong, they put us where we belong'.

Lyotard goes on to argue that social narratives may seem to refer to the past, but the raw material for social bonds is actually created in not only the meaning contained in the story, but in the act and situation of their telling. He argues that social narratives can appear to be beyond critique as they do not rely for legitimisation on outside experts— their authority rests on the extent to which they are recognised by the people who recount and listen to them. Blake et al. argue that:

For Lyotard, this means of legitimising the knowledge contained in the narratives is of crucial importance in a world in which information technologies have increased the amount of information available to people to a bewildering degree. The 'problem' for students is less how to access knowledge than how it may be legitimated (p. 97).
Kristeva: stories as a means of exploring, creating and managing identity

Kristeva (2001) does not deny the decentred, fragmented nature of human subjects, the difficulty for people first to find and then to express authentic thoughts through the problematic, culturally laden vehicles of language and story, but she argues that people's endeavours to assemble stories to lend a coherent form to their experience can ultimately provide them with a potentially meaningful vehicle for identity formation and communication.

In her work on Melanie Klein, Kristeva (pp. 236-45) argues that humans have a predisposition to storytelling from the earliest stages of development. She does not deny that these stories, being formed out of language, have the effect of 'decentring' human subjects (the stories are never entirely our own but are inscribed with countless stories that have gone before). However, rather than dwelling on the ultimate ambiguity of stories, she emphasises their utility as means by which people can present themselves as agents, deal with difficult subject matter, and have access to the world of others. While recognising stories' value in providing a means of dealing with difficult concepts and introducing a possibility of dialogue between people, Kristeva does not shirk deeper philosophical debates.

Davis (2004: 151) argues that where Lyotard and other poststructuralists reiterate in their own way the ancient complaint against art as being opposed to clear thinking because it encourages the spread of falsehood, Kristeva establishes a connection between storytelling and 'theory' as both attempting to 'name our fundamental experience of what it means to be human'. He continues:
This does not mean that all distinctions are collapsed and that theory and stories are simply the same as one another. Theory aspires to generality whereas the story points towards specificity; but to understand the difference between them in terms of opposition would be to misapprehend the continuum which links them together. Both theory and story are mired in the ambiguity of being human, they gesture towards the possibility of finding meaning amidst the nonsense, and they imply the viability of a public language which might snatch us from solipsism (p. 151).

The different emphases discernible in Lyotard's and Kristeva's views on the potential impact of stories on the ways in which people think represent a small portion of the diversity in poststructuralist writing on this subject. I do not intend to focus in this thesis on differences such as these, or even on differences between the broader 'innate' and 'cultural' views of stories that I introduced earlier. Like Boyd (2009), I believe both of these schools of thought can shed light on the ways in which stories have influenced our thinking in the past; and I think both suggest ways in which stories may be used to help students to participate fully in social discourse, critically evaluate the validity of the ways in which meanings are made, and seek perspectives that are open to change in the future (to paraphrase Fleming's (2010: 119-20) idea of the role of the critical educator in higher education). Understanding the power of stories to engage and entertain as well as to inform is key to maximising the engaging attributes of story-based teaching and learning techniques; and recognising the ways in which stories position the reader/viewer/participant to
adopt a certain view of events, characters and so on is key to designing-in devices to these techniques that can help students recognise, question and disrupt the process—and take control of rewriting the stories if they wish.

The second major theoretical frame I have used in this thesis is the social constructivist view of how people learn. This view is compatible with the 'cultural' view of learning and thinking that I introduced above, in emphasising the socially and culturally situated context of both knowledge and learning (Duffy & Cunningham 1996: 175).

The social constructivist view of learning and teaching
An important early proponent of the social constructivist view was Vygotsky, a collection of whose writings published as *Mind in society* (1978) shows the influence of Pavlov's theories of classical conditioning, the prevailing Marxist ideology in Russia where he lived, and the work of his near contemporaries Piaget and Freud. However, Vygotsky's theories provide more than a synthesis of these influences. He argues that language is an analogue that people use to enable them to reflect on their thoughts, organise their perceptions and plan their actions; and that the concepts and theories made available in a culture through its language and stories serve the function of a 'toolkit' that enables people to 'reach higher mental ground' by learning from the discoveries and decisions of those who have gone before. His view of teaching and learning involves working in the student's 'zone of proximal development' (ZPD), which he defines as:
… the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers (p. 86).

He describes a teacher’s role as being to provide ‘scaffolding’ by which learners’ understanding may grow into the intellectual life that is around them. Vygotsky also argues that ‘play creates a ZPD of the child. In play a child always behaves beyond his average age, above his daily behaviour, in play it is as though he were a head taller than himself’ (p. 102). This is similar to Egan's proposal that the playful, ambiguous elements of fantasy and metaphor that are frequently found in stories enable people to make leaps in their thinking.

Parkes (2000) proposes that the concept of a ‘zone of proximal development’ can be applied to any encounter with ‘alterity’ or ‘otherness’ mediated by cultural tools such as language. Thus, the process can be seen as common to not only children but also adults, and may occur whether the 'otherness' that is encountered is in the form of a new area of conceptual understanding, a new skill or a novel perspective (as in a role play), for example.

Duffy and Cunningham (1996) provide a summary and analysis of a range of constructivist models that helps to set social constructivist theory apart from its close relatives. In particular, they identify important assumptions underpinning a social constructivist model they name 'mind as rhizome'. This model assumes that every point of knowledge construction can be connected with every other, with blurred boundaries between the understandings learners hold in their minds and those available from others in their network and non-human
sources. It assumes no global, hierarchical view of knowledge, but rather a network of individual understandings that interconnect. Learning involves 'constructing and navigating a local, situated path through a rhizomous labyrinth, a process of dialogue and negotiation with and within a local sociocultural context' (p. 177). This model can be seen as encompassing the learning theory that developed a little later known as 'connectivism' (Siemens 2004). The assumptions that Duffy and Cunningham describe as underpinning their 'mind as rhizome' model (pp. 177-82) emphasise learners working in their zone of proximal development with others to construct and develop a personal world view as a local response to the culture, language and other tools, range of interactions and so on in the communities of practice that make up their learning context. As students learn, they start to contribute to and change the culture surrounding them from this local position. In this sense, Duffy and Cunningham reiterate Cole's view that the zone of proximal development can be seen as 'where culture and cognition create each other' (Cole 1985).

Gee (2004) applies this view of learning to multiple levels of education when he argues (p. 117) that learning needs be situated in concrete exemplifications of experiences learners have, experiences that need to be guided by 'masters' in some form so that learners pay attention to things that will help them form mental models and thus generalisations that will be useful for guiding future thought and action. He proposes (pp. 50-51) that people learn by building mental 'simulations' as they experience things—either physically or virtually. They then 'play games' with the possibilities in these mental simulations, to help them make sense of the world and prepare them for action. Gee also sees learning as profoundly social, in terms of its aims to create an identity that is
valued within social groupings; its processes that involve learning 'the right moves'; and its content, which is the practices, skills and so on needed to perform in certain culturally-based situations. Thus, he emphasises that the simulations we build are not neutral models of information, but perspective-taking, value-laden representations, full of 'feelings, attitudes, embodied positions, and various sorts of foregroundings and backgroundings of attention' (p. 51).

Gergen (1994) argues that stories provide linguistic devices that are ubiquitous in the model-building process. Like Bruner, Boyd and Hardy, Gergen proposes that people are so steeped in stories as a means of understanding accounts of human action from an early age—for one reason or another—that story structures remain a critical format by which they make things intelligible throughout life. Stories do this by imposing a coherent shape on events such that a sense of causality and a beginning, middle and ending is created, and the subject is imbued with values. Gergen emphasises that we call on the stories around us for the cultural materials by which we construct our own stories, whether they are about ourselves or anything else:

Both in science and in daily life, the stories serve as communal resources that people use in ongoing relationships. From this standpoint narratives do not reflect [truth] so much as they create the sense of 'what is true'. Indeed, it is largely because of existing narrative forms that 'telling the truth' is an intelligible act (p. 189).
Hence, the definition of learning I have used in this thesis is a process in which the learner uses the cultural tools available (including stories) to construct knowledge in a dynamic process that draws on the relevant constructions she or he has already made or that exist in the tools, processes, shared stories, knowledge bases and so on in her or his context. Important conditions to support this process are provision of scaffolding to help learners breach the gap between existing and new constructions, opportunities to experiment with possibilities to test the constructions and try out new ones, and dialogue to gain feedback to help refine and consolidate constructions as well as to share them with others and build communal knowledge.

An assumption of this model of learning is that learners are actively engaged in the process. As one of the reasons teachers use stories is that they can help engage their readers/viewers/participants with subject matter, I will outline the theoretical framework surrounding the concept of engagement in a higher education context next.

**Student engagement**

ACER (2009:3) note that the importance of student engagement in a social constructivist paradigm is based on the assumption that 'learning is influenced by how an individual participates in educationally purposeful activities'. The annual Australasian Student Survey of Student Engagement (AUSSE), which is widely used in Australian universities as a diagnostic and benchmarking instrument, is based on this assumption (ACER 2009: 3-4); as are similar surveys in widespread use in North America (Barkley 2010: 4). Coates' (2006)
extensive statistical analysis of surveys such as these and his review of
literature on higher education student engagement found that there were too
many factors at play in both the 'engagement' and 'learning' sides of the
equation to assume a causal link between engagement and learning. He argues
that there is evidence that personality traits, sources of motivation, learning
behaviours, institutional conditions and other factors are all important in the
development of both engagement and learning, but none is sufficient on its
own. However, he argues that engagement is a central factor in the learning
process and it may mediate the influence of the other variables, as well as
having intrinsic beneficial qualities for learning on its own: 'Teachers sense
this when they succeed in getting students involved in the curriculum. Students
feel this when pursuing an activity they find inherently rewarding' (p. 32). He
draws parallels between engagement and a 'deep' approach to study as
described by Entwistle (1987):

engaged students are closer to those exhibiting a deep approach to their
study by constructing meaning in texts, relating new material to current
knowledge, drawing connections with everyday experience and
examining the logic or arguments. Independent to the outcomes, it is
likely that deep or engaged learners have an intrinsically satisfying
relationship to their study (Coates 2006: 33).

Barkley (2010: 3-44) draws on her own experience as well as educational and
psychological literature over the previous 20 years to identify a similar range
of factors contributing to student engagement to those identified by Coates.
She argues that although different students will have different responses to any given technique, if a teacher can ensure that as many of these factors are provided for as possible then it will increase the probability of more students being engaged in their learning. She also claims that the two broad factors of students feeling motivated and the use of active learning techniques must both be present for students to feel engaged, and when they are both present they produce a synergistic effect. She argues that factors that promote this synergy include creating a sense of community in the classroom, optimising the challenge level and using holistic learning techniques; and that these can produce a spiral of increasing intensity and enjoyment leading to deep and transformative learning experiences.

Csikszentmihalyi (1990) provides a theory for how deep engagement in an activity is produced, and also an explanation of how this kind of engagement may be linked to learning. Csikszentmihalyi's primary aim is to explore the characteristics of the state of mind he names 'flow' and the factors that produce it rather than to propose a theory of learning, but he argues that 'optimal experiences' of the type that produce flow create an unself-conscious state of mind in which boundaries are relaxed between a person's sense of self and the 'system' in which he or she is immersed, thus allowing the development of an increasingly complex sense of self:

When a person invests all her psychic energy into an interaction—whether it is with another person, a boat, a mountain, or a piece of music—she in effect becomes part of a system of action greater than what the individual self had been before. The system takes its form
from the rules of the activity; its energy comes from the person's
attention. But it is a real system—subjectively as real as being part of a
family, a corporation, or a team—and the self that is part of it expands
its boundaries and becomes more complex than what it had been
(p. 65).

Csikszentmihalyi also identifies a range of factors that impact on people's
ability to experience flow, principal among which is that the activity with
which they are engaged contains a balance between perceived high levels of
challenge and high levels of skill. There is scope for people to increase their
skill levels to respond to challenges that are ever-increasing, but within reach.
In this way, performing these activities provides an enjoyable sense of
absorption, discovery and mastery of increasing levels of performance
(pp. 74-5). A further important aspect of optimal experience is that the
participant be able to perceive the challenges it contains as meaningful
(pp. 75-7), which he argues depends on how achievement of the goals involved
contributes to the participant's pre-existing 'meaning systems' and sense of their
identity.

Csikszentmihalyi argues that activities can be, and in some cases are, designed
to produce flow. He lists the important design elements as follows:

They have rules that require the learning of skills, they set up goals,
they provide feedback, they make control possible. They facilitate
concentration and involvement by making the activity as distinct as
possible from the so-called 'paramount reality' of everyday existence
… Such flow activities have as their primary function the provision of
enjoyable experiences. Play, art, pageantry, ritual, and sports are some examples. Because of the way they are constructed, they help participants and spectators achieve an ordered state of mind that is highly enjoyable (p. 72).

Educators have also noted the readiness of students to engage with playful activities that allow them to explore, fantasise and imagine how things might be different while working within a relatively safe and controlled environment (e.g., Vygotsky 1978, Egan 1996, Gee 2004, McWilliam 2008). The enjoyment of puzzling, projecting and playing with ambiguous metaphorical associations is also recognised as key to the appeal of people's enjoyment of art and the more aesthetic aspects of stories (Ryan 2001, Misson & Morgan 2006).

There are common elements between flow, Coates' connection-making state of engagement/deep learning quoted above; Barkley's spiral of increasingly intense motivation and active, collaborative learning; and the kinds of supported exploration, accommodation and assimilation that Vygotsky describes as learning within a learner's zone of proximal development. It may be possible to see learning, engagement and enjoyment as all products of working in the zone of proximal development. According to this combination of theories, we like to think and play in the ambiguous space just beyond our present level of understanding, supported by a rule structure or master to guide our activity but not restrict our creativity unduly, and with others: this is where our learning is most effective and where we have the most fun. It is notable for this research that role-playing activities that offer a degree of agency—but not
so much that the aesthetic and meaning-making qualities are lost—offer these conditions.

**Sources of motivation**
Biggs and Tang (2007: 31) identify sources of motivation as a starting point for engagement. They assert that if students feel motivated to learn something, for whatever reason, then this can provide a basis from which their desire to engage with a learning task for its own sake may build later—and that sources of motivation can also help to sustain ongoing engagement if intrinsic motivation wanes. They identify two key factors in motivation: 'It has to be important, it must have some value to the learner' and 'The learner needs to expect success when engaging the learning task' (p. 32, italics in original).

Thus: 'To initiate learning, students need to see the cost-benefits: that engaging in learning has evident value and that engagement is likely to realize that value' (p. 47).

Biggs and Tang then break down both of these factors further. 'Value' may be derived from four different sources. The first of these is extrinsic sources, or the expectation of certain benefits to be gained from completing the task (for example, a pass in the unit or entry into a career path). The second is that value may be derived socially, in that other people who are important to the learner value the task. The third is that it may provide an opportunity for a sense of achievement, or ego enhancement (for example, gained by winning in competition against others). Finally, it may be derived from intrinsic interest and satisfaction in the process of completing the task. They claim that the quality of learning is usually lower when students rely on the first three sources
of motivation, which are all in fact extrinsic, in comparison to the kind of deep learning that is fostered when students value the process of completing the task for itself. However, they acknowledge that extrinsic sources may be useful in providing the conditions for intrinsic motivation to start.

On the 'expectation' side, Biggs and Tang use two contrasting narratives to illustrate the argument that the stories students tell themselves about why they have succeeded or failed in the past are important to the kinds of expectations they will take forward. A more motivating self-story will be to attribute failure to not having put in enough effort, which is something they can control, than to their not having the inherent capability to ever be able to do something. On the other hand, it will be more motivating if they can attribute success to their inherent ability, to believe that they can succeed at a particular kind of task as long as they apply themselves.

Competition or conflict is a major factor in engagement with games (Crawford 1997, Salen & Zimmerman 2003), and it warrants special attention here as it is frequently used in educational contexts as an extrinsic motivator (Biggs & Tang 2007: 35). However, Biggs and Tang make the point that competition kills collaboration with the larger group, and only a minority of students enjoy competition—the majority see it as threatening and work less well in a competitive environment. Biggs and Tang also argue that competition ‘changes the priorities of students, because content mastery plays second fiddle either to winning or to avoiding the appearance of losing’ (p. 35).
Designing learning activities for engagement
Gee (2003) explores in detail the proposal that deep learning can be fun, with reference to how people learn to play video games. He notes that many of the most popular video games are long, complex and difficult to learn, and argues that in order to support the game business, game designers have found effective methods of getting people to learn and to enjoy learning without having to pay overt attention to the *task* of learning. He identifies 36 principles of learning already established by cognitive scientists that happen to be built into popular video games. Many of the principles proposed by Csikszentmihalyi, Barkley, Biggs and Tang, and Vygotsky, as well as those developed by writers in interactive multimedia theory I have cited below, such as Murray (1997) and Burbules (2004), are evident in Gee's list. For example, the principles include that learning be structured in stages that are each at the outer edge of, but just within, learners' competence; that skills and knowledge be taught as elements of strategies to achieve particular goals, rather than in isolation; that players be able to see clearly when they fail and whether they are making progress, and that this feedback be delivered in a way that is intrinsic to the activity rather than as an external assessment; that players be given a high degree of agency in making things happen and testing their understandings in the game; that they be able to access information when they need it, rather than having it thrust on them out of context; that they be able to experiment safely; that their development of mental models of how the game works be supported in consistent rule-based systems; that knowledge be distributed through networks, tools and the environment; and that players be able to interact with networks of co-learners to help make tacit knowledge explicit as well as broadening the
amount of knowledge available to each and supporting reflection and critical learning.

Gee (2007: 110) asserts that these principles lend themselves to application in a range of discipline areas, and are already highly evident in US military training simulations. I believe many of the principles apply equally to online role plays. Online role plays may not generally offer direct embodiment of participants via avatars in a visually rich environment, but, like video games, they represent an alternate material, social and cultural world in which students can experiment safely, collaboratively and reflectively to learn the rules of a semiotic system designed to simulate authentic professional working environments. Barton, McKellar and Maharg (2007) refer to Gee's (2003) principles as offering considerable potential to change the way professional disciplines are taught and holding the promise of mediating between teacher-based and learner-based educational practices (pp. 157-8). They incorporate many of the principles into their online role play in a civil law subject. Linser, Ree-Lindstad and Vold (2007, 2008), lured by the prospect of their online role play participants achieving the deep kind of engagement that has been observed among video game players, have also started exploring these possibilities, but this research is as yet not richly developed.

The theories of engagement and motivation I have outlined above are useful to my research in providing means to understand and distinguish between various factors in students' engagement with online role plays. A wealth of literature exists on the nature of people's engagement with stories and drama, and literature is also building in the field of engagement with online interactive
dramatic story formats. (I will review a selection of this literature in the next chapter when I discuss the relationships between story, learning and engagement in story-based teaching and learning techniques such as online role plays.)

**Sources of engagement with stories**

Writers dating from Coleridge (1817/2004) have noted that a key feature of people's engagement with stories is that they expect an intrinsic reward of emotional satisfaction from the process of following the fortunes of the characters. Misson and Morgan (2006: 68-88) explore at some depth the ways in which culturally-based genres that provide a recognisable framework for the ways in which stories develop work in helping readers engage with stories in whichever format they occur. They argue that one of the first things a reader (or viewer, or participant) does with a story is identify its genre. This arouses a particular set of expectations about what will happen, based on the reader's prior experience of other texts in that genre. They also argue that as the text then takes the reader on its journey it plays with these expectations, and if the expectations are ultimately fulfilled, it will leave the reader with a sense of satisfaction. Misson and Morgan draw on the theories of Lacan, and Deleuze and Guattari, to argue that the greater the intellectual and imaginative effort a reader invests in this activity, the more fully her or his deeper desires for both the sense of a coherent world and opportunities to exercise creativity may be fulfilled, and hence the greater will be her or his pleasure.

I argue in this thesis that it is possible to view the kind of engagement that students develop when working with stories as providing an 'intrinsic' reward
of emotional satisfaction from the experience—provided the stories meet the conditions for engaging story development, which I will discuss further in Chapter 3.

The idea of students being deeply engaged in their learning activities is seen as an ideal due to the perceived importance of engagement to learning, as I noted above. However, once one recognises the cultural embeddedness of stories, it becomes clear that the type and focus of students' engagement with stories used in an educational setting is critical to the kinds of learning outcomes that may be developed. An unquestioning immersion of the type produced in highly engaging stories may not be the best approach for students to take at all times during a learning activity, depending on the kinds of skills and capacities the teacher is hoping they develop. The rationale, provided by the schools of critical pedagogy and literacy, for helping students develop a critical approach to both the subject matter and the stories that are used to teach it is the fourth theoretical frame I have used in this research.

**Critical pedagogy and critical literacy**

Many stories work to produce a mental state named 'suspension of disbelief' (Coleridge 1817/2004), using a combination of means that I will discuss more fully in the next chapter. It is a state that, as the name suggests, requires readers/viewers/participants to temporarily suspend their critical judgement of the assumptions made within the story world in order to engage fully with the imaginary scenario and its meanings. A critical literacy interpretation of this process is that it involves temporarily submitting to and experiencing the
discourse of the story text 'from the inside', including all of the cultural assumptions that are inscribed in the text (eg Misson & Morgan 2006, Gee 2003). According to this view the process can be dangerous, as in deeply engaging with a cultural text such as a novel, video game or online role play, the ideology that is inscribed in the text can become part of the reader or participant's own view of the world or subjectivity without their realising it.

Misson and Morgan, as secondary English teaching academics, present the argument that encouraging students to engage deeply with texts that are rich in metaphor, ambiguity and aesthetic ways of knowing (such as some story-based teaching and learning techniques including online role plays) is highly desirable. They propose that this kind of engagement can bring aesthetic enjoyment, an understanding of important cultural texts, and the development of literacy skills needed to interpret complex texts. However, they argue that the use of 'aesthetic texts' in education needs to be balanced with developing students' critical literacy skills to enable them to recognise and negotiate ideological agendas in these texts (pp. 68-88).

Gee (2003: 43-44, 139-66) makes a similar argument with reference to video games—that for people to engage with 'good' video games that enable them to embody new experiences and learn to think creatively in a complex semiotic domain, and then to reflect critically on these experiences with others, offers important opportunities for the kinds of learning that are important in our increasingly high-tech, global world. He argues that to learn by developing projective, adaptive identities based partly on a role in the game world and partly on pre-existing identity is a useful skill, and practice in learning any new
complex semiotic systems is valuable in itself, as every subject domain
represents a system that needs to be decoded. However, he also views video
games, like all semiotic systems, as:

human cultural and historical creations that are designed to engage and
manipulate people in certain ways. They attempt through their content
and social practices to recruit people to think, act, interact, value and
feel in certain specific ways (p. 43).

As such, he argues that it is important for people to reflect critically on the
goals, values, feelings and so on that they are encouraged to take on through
adopting a certain character in that system, to become conscious of the 'design
grammar' of that system and be able to critique it in the way that a producer
would.

Bogost (2008) uses the term 'procedural rhetoric' rather than design grammar to
signal the persuasive ways in which claims are made about the world through
the procedures that active agents may use in what he terms 'epistemic worlds'
such as video games. He proposes that to understand the procedural rhetoric of
a video game involves not only multi-modal literacies such as understanding
the effect of certain types of images, sounds and text; but also being able to
recognise and critique the rules programmed into the interactive system that
help to create its meanings. He argues that as non-linear, random-access media
like video games and other interactive software become more and more central
to our culture, we need to become much better critics of interactive systems,
and it is up to educators to foster the necessary skills in their students.
Introducing a critical approach to story-based teaching/learning techniques

Misson and Morgan's assertion of the importance of teaching students to develop a critical understanding of aesthetic texts in secondary school English classes can be applied to the use of stories generally in education. They define 'aesthetic texts' (which include some but not all stories, depending on the aesthetic qualities of the stories; and which include non-story artforms as well, such as sculpture) as involving:

- a way of knowing in which the intellectual is not (necessarily) privileged over the emotional/sensory/affective; and
- the movement is not to abstraction, but to particularisation (p. 26).

Their teaching strategies (pp. 175-211) involve a combination of encouraging students to immerse themselves in the world of the text, to feel and fully appreciate its aesthetic qualities and understand the meanings it suggests; and then intervening to get the students to experiment with re-writings and re-readings of the text to interrupt and question their 'natural' responses. The purpose of this is to highlight the cultural assumptions contained in the text, and to help students recognise the ideological impact of the positioning they will have temporarily adopted in order to engage fully with the text.

Likewise, Gee (2003, 2004) and Bogost (2008) argue that developing a critical approach to the interactive story forms of video games first requires immersion in the game and a playful exploration of the 'possibility spaces' created within it before it is possible to develop a deep understanding of the design grammar or procedural rhetoric by which the epistemic system of the game is governed. To develop a critical awareness of the goals, values and so on promoted in a
game, they argue that it is helpful to reflect together with a network of peers with similar skills, or knowledgeable others such as parents and teachers, on the ways in which meanings are created in the game, and ideally develop programming skill to be able to create or modify games that reflect their own view of the world—to treat video games as expressive media in the same way as writing is an expressive medium.

Gregory and Cahill (2009) review a range of such strategies to develop students' ability not only to read school texts in such a way as to recognise ways in which they represent and promote particular points of view, but to develop a 'sociological perspective' on all forms of reading, writing and speaking. This involves developing an awareness of the cultural expectations, norms, power relations and consequences involved in the production and reading of any text. They argue that to develop this kind of literacy will be to gain a form of 'cultural capital' (p. 8) that will provide students with awareness of their own 'historicity', and also encourage them to question issues of power wherever they find them, and thus ultimately promote social justice and democracy.

Gregory and Cahill suggest that there is no one best way to 'do' critical literacy, but that it should be a part of all education (including higher education). While they note that the strategies used should reflect the students' abilities and needs and the context, they argue that at a minimum, it should involve examining and reforming, and possibly transforming, the texts students interact with, in order to expose them to the hidden agendas and biases within the texts (p. 10).
Developing critical awareness and voice
Giroux (1992: 73) argues that 'Education must be understood as the production of identities in relation to the ordering, representation, and legitimation of specific forms of knowledge and power'. He asserts that critical pedagogy 'must link public education to the imperatives of a critical democracy'. It must be informed by a public philosophy that attempts to 'create the lived experience of empowerment for the vast majority', and be centrally concerned with ethics as a practice that recognises each individual's social responsibility to others.

Giroux is far from alone in linking the development of critical awareness and literacy to a healthy democracy, social justice and freedom. Other proponents of this view include Freire (1970), Kincheloe (2008), Brookfield (2005), Gregory and Cahill (2009), and Fleming (2010). McWilliam (2008) also emphasises the importance of fostering students' critical awareness and skills as part of developing their confidence to be proactive, assertive, creative, self-managing and nomadic adults, who are willing to continually invent themselves and reinvent themselves as they take their place in a highly technically complex and continually changing world.

Gregory and Cahill (2009) adopt a similar view when they argue that teachers at all levels face the tension of whether their purpose is to 'educate' or merely to 'school'. They assert that, in a changing world, to reject this tension and the consequent need to develop students' ability and confidence to critique and challenge the status quo as it is represented in learning texts and elsewhere is a reducive stance. They argue that as it is within classrooms that students learn to position themselves as readers, writers and learners; to deny students agency
to negotiate and construct meanings from their texts is to actively manipulate their construction of subjectivity.

**Developing critical awareness and voice in role plays**

Practitioners of educational drama have developed a range of dramatic strategies to encourage students to actively deconstruct, challenge and re-work the dominant assumptions underlying dramatically represented scenarios (e.g., O'Neill 1995, Neelands & Goode 2000, Cahill 2008). O'Neill (1995) and Cahill (2008) argue that students have a tendency when using purely representative, naturalistic modes of role play to produce a superficial, stereotyped portrayal of characters and events. They advocate using a range of dramatic activities to *interrupt* students' conventional story-building processes to highlight representations that merely replicate dominant cultural views, to interrogate the means by which these views are produced, and to help students review dominant storylines and reshape them to present alternative possibilities. These include choosing or casting characters deliberately to turn stereotypes on their head; getting characters to swap roles and repeat a scene to see it from another point of view; introducing twists in the plot; stopping the action to give students time to consider how ambiguities and contradictions that have arisen will impact on the drama's dramatic and thematic development; and using debriefing discussions and reflection activities within and after the activity to encourage students to imagine and articulate a range of alternative possibilities and readings.

Cahill (2008: 283-4) argues that deconstructive techniques she has used in her own practice can enable the students' enquiry to 'reach beyond the technical to
the transformative' in enabling students to 'catch the discourses at play' and 'engage in critical readings of the patterned nature of the scenarios under investigation'. I have explored methods used by Cahill in my second case study. I have also explored the effects of a device that had the effect of encouraging students to deconstruct the stories students created in an online role play in my first case study.

Chapter summary

In this chapter I have introduced my definitions of the key terms and the interlinked theoretical frameworks I have used in this thesis. I have outlined arguments that have been made relating to the centrality of stories in human society, both as a mode of thinking and as a means of passing on knowledge and values. I have also discussed the social constructivist view of teaching and learning, factors influencing student engagement in higher education, and critical pedagogy/critical literacy approaches. In the next chapter I turn my attention to the place where these frameworks meet in story-based teaching and learning techniques, and present my review of the literature surrounding the relationships between story, engagement and learning, and critical learning, that is relevant to online role plays.
CHAPTER THREE

A focus on story as a engaging, meaning-making structure

Introduction

In this chapter I narrow the focus of the discussion that I started in the previous chapter to review the literature surrounding the relationships between story, learning and engagement in story-based teaching and learning techniques such as online role plays, and ways in which a critical approach to learning can be supported in these techniques.

I have divided my review into four parts. I focus on the function of each of the main story elements (plot, setting and character) under separate headings, although at times it is awkward to maintain a distinction as there is a strong interplay between these elements. Under these headings, I first review literature relating to the function each element may perform in supporting learning. I then review literature relating to the function of this element in supporting engagement. Next, I present various views on how teachers/designers may work with this element to introduce a critical approach to the story form and the subject matter. In each section, my review starts with a focus on the ways in which stories in general may function to support learning and engagement, leading to a focus on how they may function in the specific format of online role plays. I finish the chapter with a brief discussion of how stories work as whole units to support engagement and learning.
The aim of this review is to establish theoretical foundations for my analysis of the case studies and development of my own theoretical insights later in this thesis. Therefore, I conclude each part with a set of broad 'conditions' that have been established in the literature for enabling students to collaboratively develop stories that can engage them and help them learn, and some conditions for using this element to develop a critical approach to the subject matter and the very techniques students have been using.

The first element I will discuss is plot.

**Plot**

**Plot and learning**

The definition of 'story' I provided in chapters 1 and 2 relies on 'events' being arranged in a plot. According to the tradition of literary theory, as a reader/viewer/participant of a story follows or develops sequences of these events for various characters, she or he forms associations between changes in the story world and a transformation on the level of theme—in other words, she or he creates a *meaning* that may be generalised to other similar situations (Culler 1997).

As I noted briefly in Chapter 2, Aristotle as long ago as 350 BCE established many of the principles that still operate for constructing a story that is engaging for its audience and capable of producing meaning. Aristotle's principles relating to plot (Halliwell 1986) can be summarised as follows. The story's chief protagonist should make choices according to her or his predetermined traits. The action should therefore move by necessary or at least probable
stages from the beginning to the end of her or his change in circumstances. All incidents should be necessary to advance the main storyline, with no extraneous events. This is known as the 'principle of unitary action'. With this system, the audience should be able to predict the course the plot will take if they pay close attention to the potential range of actions, given the characters' traits and the parameters of the particular universe of the drama, all of which are laid out from the beginning. However, there should also be strong potential for a contradictory resolution of the problems the protagonist faces, to introduce suspense. Endings should complete the chain of events and hence not only heighten the audience's understanding, but also purge their emotion and create a satisfying feeling of closure. Aristotle also noted that dramas should be long enough to build a whole action with several closely connected incidents, but short enough that an audience will always be able to remember the beginning and perceive the drama as a whole.

Aristotle's principles are still apparent in contemporary writing on how stories function, including in literary theory (Culler 1997), socio-evolutionary theory (Boyd 2009), story-based teaching and learning techniques (Egan 1988: 24-8), educational drama (O'Neill 1995: 48, 101), psychology (Gergen 1994), and interactive multimedia (Laurel 1991; Ryan 2001; Murray 1997; Mateas 2001, 2004). They are also implicit in guidelines for online role play design (Wills, Leigh & Ip 2011: 98-103). Whether or not these old principles represent ways to elicit 'primary' natural responses to forms such as dramatic tragedy or are just conventions, they have underpinned so many of the stories that have entertained and enlightened the Western world over the past 2000 years that
they are deeply embedded in our expectations (Gooch 1984: 17, Gergen 1994: 189).

From an educational point of view, Egan (1988) argues that stories containing probable, coherent plots offer students an opportunity to expand their experience and understanding of the world through giving them the chance to live vicariously in models of the world where people act predictably and actions have reasonable consequences. Through such stories, students can focus on how certain aspects of the world work, and how the system feels from different vantage points. However, as Gee (2004) emphasises, models always represent a perspective and involve choices about what to leave in and out, what to foreground and what to background. White (1980) demonstrates how historians have taken considerable licence in imposing plot sequences and hence a sense of causality over thinly understood events in an effort to recreate the lives of people who lived in a time when not much was written down. He argues that the fashioning of a coherent story plot structure, in focusing the audience on universals (what is probable) rather than particulars (what occurs as a product of random chance), allows the author to 'endow' an experience with meaning', but that an image of life as being coherent can 'only be imaginary' (p. 27).

Thus, stories' function of endowing events with meaning through their arrangement in a plot can be seen as both their strength and a source of problems as a means of helping people learn. Culler (1997: 88) summarises the tension surrounding plot in the question:
is narrative a fundamental form of knowledge (giving knowledge of the world through its sense-making) or is it a rhetorical structure that distorts as much as it reveals? Is narrative a source of knowledge or of illusion?

In overtly narrated stories it is relatively easy to understand how plot functions to help people learn through introducing a sense of causality between events. It is also relatively easy to see where values and beliefs may influence this process by ensuring certain outcomes occur. In interactive stories the processes are more complex and the influence of values and beliefs on interactions that seem controlled by the participant is more subtle and difficult to recognise.

**Plot and learning in interactive stories**

If creating a coherent, probable plot is fundamental to ensuring an overtly narrated story offers a plausible and useful account of how aspects of the world might work, allowing students to co-create these plots opens up the task of supporting predictable meaning-making to considerable complexity and risk—as well as opportunity. The question of the degree of agency to allow students to assume is critical in any learning activity—being able to manipulate things to practise skills and strategies and witness their outcomes has been recognised as important for learning since Dewey (Archambault 1964), and has been a key aspect of learning theories used in higher education for some time. For example, it is a major element of experiential learning (Kolb 1984), problem-based learning (Barrows 1986), situated learning (Lave & Wenger 1991), and authentic learning (Herrington, Reeves & Oliver 2010). Furthermore, the desire to 'learn by doing', especially in technology-mediated environments, is one of
the characteristics recognised among 'neuroscientists, sociologists, psychologists, educators and other experts' as prevalent among the newest generations in higher education (McWilliam 2008: 32-33).

Role playing, whether face-to-face or online, may be seen as 'playing with the possibilities inherent in social situations' (Linser, Ree-Lindstad & Vold 2007). This places the technique in the broad category of a simulation, although this is not inconsistent with the idea of students working towards creating (at least notionally) a sequence of events with an ending that implies a meaningful relationship between causes and effects—which also makes it an interactive dramatic story. Simulations that are toward the more rule-based corner of Wills' (2010: 1089) 'simulation triad' rely on sophisticated and thoughtful programming to cater for students' choices and still provide a realistic representation of how a system might work. Gee (2004: 61) notes that players' ability to manipulate a computer-based simulation such as a video game can give them a sense of their minds and bodies being extended into this virtual world that is akin to being actually embodied in the simulated world, which can provide a powerful aid to learning. However, he describes two major areas of difficulty with using simulations to support learning. One is that all simulations are constructed representations, which necessarily simplify and present a particular perspective of the system for a particular purpose, and thus should be subject to questioning. The other is that students let loose 'amidst the myriad flux of any experience' (p. 117) need to be guided by 'masters' in some form (whether a teacher or in elements of the simulation's design) to be able to pay attention to certain things that will enable them to form useful
generalisations from the simulated experience, to guide their future thought and action.

Writers in the fields of educational drama (eg O'Neill 1995, Bolton & Heathcote 1999) and online role play (Wills, Leigh & Ip 2011) argue that students are unlikely to achieve particular learning goals from a completely unguided role play activity. In order to guide students' activity towards this end, practitioners in both of these fields have developed techniques for 'scaffolding' the plot students can build from the given scenario, introducing complications and otherwise steering its development, and stopping the action periodically to get students to reflect on the meanings that have been suggested. However, a common principle noted in the literature in each of these fields is that it is important to avoid overly controlling the action, to avoid positioning the learners as merely passive recipients of a story rather than as its insightful, playful and creative constructors. I will discuss these techniques below as they also relate to supporting students' engagement with their stories.

**Plot and engagement**

As I noted in the previous chapter, an explanation for the importance of coherent, probable plot development for engagement with stories is that it supports people's ability to satisfy twin desires: to exercise their creativity to puzzle out the ending, and to ultimately gain a sense of a coherent world (Misson & Morgan 2006: 68-88).

Misson and Morgan suggest that the first thing a reader/viewer does with a story is identify its genre. Bruner (1990: 97) proposes that as the themes of
stories are essentially limited to the plight of humans acting out their intentions, the number of available plot structures is limited. Bruner lists the 'canonical human plights' of tragedy, comedy, romance and irony as the key genres, and argues that there is 'a certain psychological or cultural necessity' for the coherent framework of meanings these genres provide. Genre can also refer to broader formats—even interactive story formats such as computer games have genres to guide people's expectations (Gee 2008).

Misson and Morgan suggest that as a story plot unfolds, the text plays with its readers'/viewers' expectations of how things will turn out, based on their previous experience of the genre, until their expectations are finally, satisfyingly, fulfilled—the puzzle is solved. A major difficulty facing writers in interactive story formats such as interactive fiction and video games is how to manage plot development to create a similar sense of satisfaction for their story participants (Phelps 1998, Costikyan 2007, Ryan 2006).

**Plot and engagement in interactive stories**
Striking a balance between on the one hand allowing participants to do a significant portion of the 'design work' in an online interactive story themselves; giving them the satisfaction of being able to control things in the story, and on the other hand ensuring that the engaging and meaning-making qualities of the experience are not completely lost; is a complex task that introduces significant aesthetic, technical and practical challenges (Ryan 1997, 2001, 2006; Murray 1997; Mateas 2001, 2004).

Where the classic Aristotelian 'story arc' of a narrated story or drama involves a gradual building of tension as the reader/viewer follows the plot, preferably
with periodic releases or reversals but working towards a climax and finally a
denouement, this structure is difficult to replicate in an interactive format.
Likewise, building in the requirements of generic plot forms such as tragedies,
comedies and quests relies on a skilful storyteller to build in the hints,
surprises, twists and constraints that make it work, and most ordinary
participants in interactive stories lack the skill, patience and negotiation skill
with any fellow participants in the story to create such a structure (Murray

Phelps (1998), an interactive fiction writer, and Costikyan (2007), a video
game designer, describe several possible 'story shapes' that allow participants
to manipulate plot developments and still have a sense of an interesting
unfolding story, but both suggest that structures where the story creator
maintains some control work best. Phelps suggests a 'braided multi-linear'
structure, in which the participant may choose from several branches leading
from the initial situation, but these subsequently converge upon another
situation that again offers a number of directions to choose from. Costikyan
suggests a similar structure that he names 'beads on a string'. In this structure,
small areas where the participant has some freedom of action are provided until
some event occurs, and then a transition to the next 'bead' is opened. Both
designs involve a linear progression through set points.

In the online role play literature, it is common for designs to include periodic
interventions in the role play by a teacher/facilitator to introduce a new task or
complication in order to maintain or rekindle interest as well as to broaden the
students' learning (eg Vincent 1998; Hirst, Riddle & Young 2005; Genat 2008, Dalziel 2010).

A more subtle method to maintain some control over plot, without seriously damaging students' engagement with the story—a method used in both educational drama (Bolton & Heathcote 1999) and online role play (Wills, Leigh & Ip 2011: 148)—is that of 'teacher-in-role' or 'improvising storyteller'. With this technique, the teacher periodically steps into the story world in a character role to introduce a new development, or guide a negotiation of how the plot should develop from that point.

Thus, plot can have an important function in helping students to engage with and learn from stories. I have summarised three main conditions from the literature that are important for supporting this function in online role plays. Later in the thesis, I analyse ways in which each of these conditions are supported in my three case studies, and the impact of the ways they are treated on students' engagement and learning. The conditions are:

**Causal links between events:** *In an online role play, the participants need to be able to discover probable linkages between character traits, actions and outcomes in the story world, to develop useful mental models that they can use to think and act with in future.*

**Identifiable genre:** *It helps to be able to identify a genre, to build expectations and tension.*

**Agency within bounds:** *A balance needs to be maintained between giving students the opportunity to decide how their character will influence events*
and focusing their attention on the kinds of interactions they should generate to help them manage tension and build useful mental models.

As I noted above, the ways in which events are arranged in a story carries powerful values and beliefs that the reader/viewer/participant might not recognise at first. In the next section I will review literature that addresses the ways this happens, and ways in which students can be encouraged to recognise, critique and resist the cultural assumptions that are promoted through this element.

**Plot and a critical approach**
The literature contains several strategies involving plot that teachers can use to highlight the hidden cultural agendas in a story and empower students to resist and challenge these agendas. Recognising the cultural assumptions contained in the genre to which a story plot belongs is a key element of these.

**Genre and the transmission of cultural values**
Although a recognisable genre may be an important means of enabling students to engage with a story, it can introduce many cultural values and assumptions in a seductive way (Misson & Morgan 2006, Culler 1981: 123, Cohan & Shires 1988: 79). Misson and Morgan explain the process by which readers/viewers/participants of stories become implicated in these values as follows:

We as readers are positioned within these values, if we are reading from within the genre, in two ways. The first is through desiring the completion of the generic structure. We get onto the train of the particular genre, and we want the payoff of reaching the final
destination: love avowed, crime solved. That affective desire for the emotional completion of the journey locks us into the values that permit the emotional payoff. Secondly, since the genre calls us to make implicit connections, fill in those things that the author doesn't need to explain, we are imaginatively called into the world of the text, become creators of that world, and so participate in its implicit values (p. 79).

Misson and Morgan argue further that even temporary acceptance of these values for the sake of gaining the emotional payoff is 'dangerous' (p. 88) because the values become part of the reader/viewer/participant's subjectivity, or the way they see the world.

In role plays, the common unitary, linear plot structure that is described above carries a tendency to heighten a perception of polarisation between opposing views because it focuses attention on the drama and difficulties involved with resolving a central, apparently insoluble dilemma (Cahill 2008). As much of the meaning of a story is crystallised in its ending, where only one ending is produced, an implication may be drawn that there is only one possible outcome to the kinds of situations represented. Leaving students with the impression that there are black and white answers to the kinds of complex social issues that are frequently the subject of role plays may not be the most useful mental model for the students to develop from their experience.

One way around the problem that a classic unitary plot and recognisable genre presents to the object of students developing an openness to multiple perspectives and non-traditional possibilities that is part of developing a critical awareness of their subject matter and the forms of knowledge that are being
employed is to use non-linear plot structures. Although most online role plays described in the literature have a traditional, linear plot sequence, Wills, Leigh and Ip (2011: 102) argue that a non-traditional sequence may also work in some online role plays. For example, history role plays may begin in the middle and then have participants go backwards in time to see how a situation was caused, and then jump forwards to see how solutions they propose work out. However, it should be noted that in some online role plays there is little sense of chronological development, with the main emphasis being on exploring the perspectives of various stakeholders (eg Devonshire 2006, Linser 2008).

**Focusing on the hidden agenda**

A range of methods are described in the literature to highlight the values and assumptions being promoted as a plot develops, to help students to critically assess the validity of these ways of making meaning, and to help them to explore alternative perspectives.

In the field of educational drama, Bolton and Heathcote (1999) describe the teacher-in-role technique being used to introduce twists in the plot to focus attention on a particular perspective or an unexpected outcome of a proposed strategy. Alternatively, the teacher/facilitator may choose to stay out of role and stop the action as a teacher to pose questions relating to the assumptions that are being made in allowing the plot to develop in a certain way, and to encourage students to assume a significant level of responsibility in negotiating and improvising alternative developments based on their own experience and ethical stance (O'Neill 1995). It is argued that stopping the action periodically to highlight the assumptions at play in certain situations, and then having
students actually act out alternative strategies, not just think about them, is a more effective strategy in terms of developing students' understanding of alternative outcomes and sense of what is possible for them to do (Boal 1985; Cahill 2008). It provides an opportunity for students to both reflect-in-action and reflect-on-action (Schon 1987).

In online role plays, the multi-faceted moderator role involves elements of introducing problems and twists to redirect attention and prompt students to consider certain courses of action. While some online role plays introduce questions to challenge cultural assumptions and values throughout the role play (eg Hintjens 2008; Genat, Ip & Fong 2008; Linser 2008), the majority of online role plays described in the literature wait for debriefing/reflection sessions at the end to introduce the kind of deep questioning required to focus students' attention on cultural assumptions in the stories they have developed (eg Wills, Leigh & Ip 2011: 152; Vincent & Shepherd 1998; McLaughlan & Kirkpatrick 2009).

A condition underlying the ability of an online role play plot to support the development of critical awareness and voice suggested by the literature can be summarised as follows: critical learning may be fostered by limiting generic plot development or interrupting and challenging plots that might otherwise carry unquestioned ideological assumptions and values, and encouraging students to rework plots to suggest meanings that are more aligned with a considered stance.

Note that the intent of this condition is to work against students being unquestioningly engaged with the story development they have been
conditioned to expect. Therefore, a balance may need to be struck between allowing them to develop the story and interrupting the role play with activities or questions to encourage them to be aware of the assumptions they are making (Misson & Morgan 2006).

Next, I will review the literature surrounding the ways in which the story element of character works in various story formats to support learning and engagement, and ways in which cultural assumptions and values conveyed through this element may be critiqued in online role plays.

**Character**

Online role plays have been categorised as 'multi-agenda/social-system/social-process simulations' (Wills, Leigh & Ip 2011: 18). That is:

… participants assume roles in a hypothesised social group and experience the complexity of establishing and implementing particular goals within the fabric established by the system. The differences and potential conflicts among the roles set in motion the dynamics … (Gredler 1992: 102).

Thus, the act for students of taking on a role in the story world can be seen as their becoming actors in the semantic system from which they may make meanings that relate to real life. However, human roles are more complex than simple mathematical variables, and the ways in which people relate to these roles are different to the ways they relate to mathematical variables. Faced with a scenario involving people, a reader of a story finds it difficult to separate functional characters from a *human* person, causing her or him to identify with
the characters and become involved with their plight (Bal 1997: 115). The ability for people to engage empathically with characters introduces both a major source of attraction to stories (Bal 1997, Culler 1997), and a major source of their value as educational media (Boal 1985, Bruner 1986, Egan 1997). Despite their apparent humanness, the fact that characters 'always come with a meaning attached' (Misson & Morgan 2006: 84) means that for critical educators, this meaning needs to be recognised and critiqued. In the forthcoming sections I will first review literature surrounding how people's ability to identify with characters in stories can help them learn, before addressing how characters function to help people become engaged with stories, and finally discussing how a critical approach may be used with this element.

Character and learning

Learning through the representation of a social model

The utilitarian view of characters as functions in models of the world that is implied in Gredler's description of social process simulations above dates back to Aristotle. He argued:

Tragedy is a mimesis not of people but of actions and life … It is not the function of the agents' actions to allow the portrayal of their characters; it is, rather, for the sake of their actions that character is included (Halliwell 1986: 138).

According to this view of character, the first quality that characters must have to help create an engaging and intelligible story is that they represent something in terms of the action and theme. From this premise flows
Aristotle's requirement that characters remain consistent throughout, unless the change is for deliberate thematic effect, otherwise the meaning of the story would be confused. This principle underlies the practice that van Ments (1999) and Wills, Leigh and Ip (2011: 83) recommend in the design of face-to-face and online role play character roles (respectively), of first considering 'stakeholder' positions in the story to be developed before fleshing these out into characters. They assert that focusing on the functional value of roles prevents designers becoming distracted with the less important elements of their characterisation and running the risk of weakening the suggestion of the generalisable lessons that may be learnt.

Another of the requirements that Aristotle specified for characters is that of 'likeness'. Halliwell (1986: 160) interprets this to mean that 'the characters should not stand at an ethical extreme, but should be such that an audience can experience a sympathetic moral affinity with them'. This is important so that an audience may develop a feeling that they can project themselves into the characters and see the world through their eyes—a powerful emotional response now known as empathy (Boal 1985: 30-31).

**Learning through empathy**

Boyd (2009) cites a range of empirical evidence indicating that empathy may be an innate capacity in human beings. He refers to studies that found even babies could imitate emotions on faces, which he argues indicates that 'We come preequipped to attend to, relate to, take our lead from, and understand other humans' (p. 132). He proposes that empathy is an important element of the 'theory of mind' that is evident in rudimentary form in many species of birds and animals, and is highly developed in humans. Boyd defines theory of
mind as 'an understanding of others in terms of goals, intentions, and perhaps desires' (p. 141), and argues that an ability to develop this multi-perspectival understanding would have provided a significant evolutionary advantage for social animals such as humans. Being able to track what others might know, believe or feel brings tremendous advantages to our capacity to cooperate and compete (p. 149).

The tendency for people to pay attention to what happens to other people in our world—and by extension to characters in stories—opens up possibilities for people to learn vicariously. One of these is that we can experience something like what the characters experience without actually having the experience ourselves. This experience can evoke strong emotions (depending on the story) and hence a powerful memory that we can store away and refer to for clues as to what might happen in similar situations in future (Schank & Abelson 1995, Gee 2004). McWilliam (2008: 138) argues that the emotional intelligence and moral and ethical capacity that can be developed through empathising with characters is a particularly important benefit of using stories in higher education in a time in which hyper-rational factual and procedural intelligence tends to dominate the working world. She asserts that a capacity for empathy is necessary for effective and less selfish leadership, decision-making and management, to balance these hyper-rational tendencies.

Another even more powerful possibility for learning (Bolton & Heathcote 1999) that is available through interactive stories such as role plays as well as online role-playing formats is to learn through the sense of being embodied in the imagined world, of partly being the character one is playing in the safety of
the make-believe world, and hence learning what the character learns. This is
known in educational drama circles as 'metaxis' (Boal 1985: 43).

O'Neill (1995: 80) proposes that embodied role-playing provides students with
an opportunity not only to discover a different identity within themselves, but
to be an audience to their own demonstration of that identity and observe the
consequences of the actions they take in the role. Objectifying their
understanding of this identity through language and gesture makes it available
for reflection and reconstruction. She views role playing as involving an
ambiguous mix of the participant's own identity and her or his role, which
creates complexity, tension and ambivalence for the whole group as they strive
to discern what is 'real' and what is not. She argues that this can produce
incentives for participants to define roles in their own lives more clearly and to
explore the very concept of identity (pp. 83-91).

Gee (2003, 2007) frames similar arguments about the powerful opportunities
for learning created by playing video games from the 'projective stance' of an
avatar. He proposes that adopting this kind of character role enables players to
explore the possibilities in their pre-existing knowledge and skills, those of
their avatar, and those embedded in the game environment, to take them to a
higher level of knowledge and skill and an implicit understanding of the values
promoted in the game. The reflexive learning that occurs as players interact in
these environments helps players extend their sense of identity, to know and
feel what it is like to operate at a higher level: 'the learner comes to know he or
she has a capacity, at some level, to take on the virtual identity as a real world
identity' (Gee 2003: 66).
Linser, Ree-Lindstad and Vold (2008) refer to a similar important pedagogical opportunity occurring in online role plays, which they refer to as a 'cognitive and emotive resonance' that is set up between what happens in the make-believe world and what students know about reality. Fannon (2003: 112) also recognises a process within her online role play participants of attempting to resolve a disequilibrium between prior world views and those of others as represented in the metaphorical world, providing the conditions for deep learning, metacognition and modifications to their world views.

Whether this phenomenon is known as simply a resonance, or a projective identity, or metaxis, it may be seen as providing a zone of proximal development in which learning takes place (Vygotsky 1978). It provides an incentive for the student to extend—playfully—the boundaries of what she or he already knows, in an environment that is safe and guided by more knowledgeable others.

The benefit of identity play through metaxis in a postmodern context
Writers from both educational drama and interactive multimedia fields have suggested that developing people’s ability to adopt characters in various types of interactive story formats can be particularly useful in a pluralist, postmodern society in which identity is increasingly seen as performative rather than essential (O'Toole 2002; Carroll 2002; Carroll, Anderson & Cameron 2006; Burbules 2002, 2004; Turkle 1995; Lee & Hoadley 2007). Carroll (2002) makes the point that it is important for young people, especially, to develop an adaptive stance towards their identity, to enable them to cope with the frequently changing work environments, careers, locations, social groups, technologies, and so on that are part of 21st-century life. Turkle's (1995) widely
quoted study presents several accounts in which participants in online role-playing games find that this platform enables them to take advantage of the quality of metaxis in this role-playing format to explore and inhabit modes of interaction and perspectives that are less constrained by their real identities than is possible in face-to-face interaction.

**Conditions for metaxis: safety and reflection**

To enable students to experience metaxis takes skill on the part of the designer and facilitator of an interactive dramatic story as it involves finding a balance between maintaining students' sense of safety and challenging them to take risks, as well as encouraging them to reflect seriously on their ways of seeing, thinking and acting, and how these may be extended to better equip them for the world. Carroll, Anderson and Cameron (2006: 129-39) describe a range of non-naturalistic drama and computing conventions that can be used to manage the penalty-free zone that is set up to enable play and risk-taking in interactive online and face-to-face dramas. They argue that while there is a certain amount of what they term 'role protection' when a player enters the frame of the dramatic world in a make-believe role, this may not always be sufficient to maintain her or his feeling of safety, particularly if the distance between the role and a participant's real-world roles is small. Additional layers of protection or what they term 'role distance' may be created by discussing actions with peers 'out of character'.

In online interactions there are further opportunities to increase role distance. Two features of many online role plays that have been noted in the literature as adding to students' sense of safety to experiment are anonymity and
asynchronicity, both of which are products of interaction via asynchronous text discussion (Freeman & Capper 1999; Wills, Leigh & Ip 2011).

Anonymity

The anonymity of text communication (particularly when participants do not know who is playing which roles, as sometimes happens) can increase students' feeling of safety and overcome some of the resistance that many students feel towards role play (van Ments 1999, Freeman & Capper 1999). Turkle (1985: 184-5) and Burbules (2002, 2004) argue that anonymity in online role-playing activities can be a significant advantage in allowing participants to create extended experiments with different identities that can be liberating and instructive, particularly when players are socially disadvantaged. Freeman and Capper (1999: 259) found that anonymity in their online role play enabled students to 'challenge their own stereotypic views of gender, race and age as well as the content of [their subject area] securities market regulation'.

However, some have added qualifications to the benefits of anonymity in online role plays. Cornelius, Gordon and Harris (2009) note that anonymity can limit some students' engagement as it makes non-contributors and the identities of people who have behaved inappropriately invisible. They also argue that anonymity is at best a relative concept and cannot be guaranteed in a higher education online role-playing context. Bell (2001) argues that anonymity can impact negatively on participants' ability to engage genuinely with character roles beyond the level of stereotypes, and this can even result in stereotypes being reinforced rather than questioned.
Asynchronous text

While there is intuitive appeal in the argument that computer-mediated communications are less rich in terms of being able to support multiple cues to convey meaning and emotion, immediate feedback and natural language (Trevino et al. 1990), the asynchronous text that is frequently the main medium of communication in online role plays has been found to add to students' confidence. Freeman and Capper (1999) found that communication via asynchronous text allowed students to research and think through their responses before committing to them, which benefited all students, particularly those who were less confident. Burbules (2002, 2004) argues that when students interact via asynchronous text their ability to use language to create sophisticated nuances of meaning or ambiguity enables them to present a provisional position while they think things through and search for a position they can genuinely support. This is very different to having to come up with an immediate, less nuanced and complex response in a face-to-face interaction. He also argues that this format prompts participants to focus more on the content of what is written than what the other participants look or sound like, which promotes a more thoughtful discussion. However, he notes that there is a downside to the increased distance and impersonality of online communications: they can make people less sensitive to the effects of what they say upon others, and the risk of anti-social behaviour is increased. Freeman and Capper also note this hazard and suggest that facilitators take measures including setting clear expectations and moderating interactions as means to control the risk. McLaughlan and Kirkpatrick (2009: 306) also find that the threaded structure of their online role play's online discussion boards,
along with the large numbers of posts, may not promote closure or consensus building. They suggest face-to-face sessions at critical points where consensus is needed. It may also be possible to achieve a similar outcome using online synchronous audio/messaging/whiteboard software such as Elluminate Live.

**Reflection**

A further important element of metaxis—and of learning—is that students reflect on their experience and actually articulate connections between what may be happening in the story world and their previous understandings and ways of behaving, but this may not happen without prompting (van Ments 1999, O'Neill 1995, Gredler 1992). As I noted under my discussion of plot above, while some educational drama teachers recommend intervening periodically in a role play with reflective activities (eg Cahill 2008), a common element of face-to-face and online role play designs is at least a reflection and debriefing session at the end in which students may be prompted to draw parallels between the ways in which they played their roles and what might happen in real life (van Ments 1999; Bolton & Heathcote 1999; Wills, Leigh & Ip 2011). However, McLaughlan and Kirkpatrick (2009: 306) note that facilitating reflective activities online when cohorts are large is awkward. They have opted for face-to-face sessions supporting students' preparation of individual written reflective reports as a way to support the knowledge synthesis and self-directed learning they see as important elements of experiential learning. Again, it may be effective to hold similar sessions using online synchronous audio/messaging/whiteboard software such as Elluminate Live, in which it is possible to have large group and 'breakout room' discussions. Another point to make here is Wills, Leigh and Ip's observation
that the very use of asynchronous communication and role group discussion of strategies provides an opportunity for 'constant reflection and questioning' (p. 172). Further, Wills and McDougall (2009: 764) note that the long duration of many online role plays in itself provides opportunities for students to reflect on, consolidate and internalise their learning. So while it may be desirable to have guided reflection sessions, students might be able to reflect and make connections to deepen their previous understanding on their own in these activities, particularly when they play in groups and use asynchronous text.

Thus, the element of character can be seen as being closely involved with that of plot in suggesting meanings, as students follow the events of a plot through the eyes of—or in the virtual shoes of—characters with whom they empathise, and in doing so learn the lessons their characters learn at both cognitive and emotional levels. However, being closely involved in the kinds of situations that are designed to teach students about social processes can be risky and so devices to introduce layers of safety are necessary. Online role plays using asynchronous text are able to offer multiple layers of protection, as well as supporting students' ability to reflect on and draw lessons from their experience.

Next, I will review the literature that proposes that the novelty of seeing a make-believe world through the eyes of a character is also key to students' engagement with a story.

**Character and engagement**

As I noted above, the ability to engage empathically with characters is a major attraction of narrative (Bal 1997: 115). The ability to take on a character role
and act as if one is someone else has also been recognised as a major source of engagement in role plays (van Ments 1999, Bolton & Heathcote 1999). In virtual environments, the ability to explore the possibilities from the point of view of an embodied participant in the environment has also been recognised as a major source of engagement (Gee 2003, 2007; Burbules 2004; Murray 1997).

Aristotle's *Poetics* contains suggestions of the important function of empathy in its emphasis on 'the pleasure arising from pity and fear through mimesis' (Halliwell 1986: 65). Colerige's coining of the term 'suspension of disbelief' almost 200 years ago was based on the concept of empathy with characters—he held that audiences willingly pretended the action they were witnessing in a poem was real so they could have the thrill of experiencing the characters' emotional responses as their own, while knowing the action was not real saved them from a true level of pain and fear (Colerige 1817/2004).

Gee (2003) proposes that players of video games feel even more engaged with their activity than people feel when reading a novel because of the rewarding, reflexive way in which character functions in these interactive dramatic stories (which I discussed above under the name of metaxis). He argues that, as their character is partly themselves, the challenges their character faces also serve to directly challenge (and reward) the player.

In the online role play literature, Wills, Leigh and Ip (2011: 123-4) emphasise the importance of participants having a sense of agency as they play their character roles, not only because it enables them to pursue their own lines of enquiry in their own style, but because it helps them to feel ownership and a
sense of personal satisfaction. Linser, Ree-Lindstad and Vold (2007: no page number) state a similar position and add that agency is important as it enables students to engage imaginatively with the scenario:

the more control a player has over what they can and cannot do, objectives to be reached and creative transformations of the real world into the game, the more fun and engaging is the [online role play].

In summary, according to the literature, character has a very important function in helping people not only to learn from stories, but to engage with them. My literature review suggests that the following conditions are important for supporting this function in online role plays:

**Consistent representation:** The roles should represent something within the simulated system—they are not just people. They should be developed consistently, so that they help students learn how things work in the social system that is represented.

**Supports empathy:** It is important for students to be able to empathise with their character roles. This enables them to learn vicariously from their characters' experiences as an extension of themselves playing within the possibilities of the story world, and to care about what happens.

**Agency:** Students should be given agency in their roles so that they feel a sense of challenge and potential reward, control over outcomes and an opportunity to extend themselves beyond normal limitations.
CHAPTER THREE

Safety to experiment: It is important for students to feel safe to experiment in character.

Supports metaxis: Students should be prompted to reflect on their role playing and how it relates to their previous conceptions, experience and behaviour.

Role plays are often used as a technique to help students broaden their perspectives through empathising with and acting out positions that are unfamiliar to them (van Ments 1999, Bolton & Heathcote 1999, O'Neill 1985). Many online role plays have been designed with this purpose in mind (eg Vincent & Shepherd 1998, Linser 2008, McLaughlan & Kirkpatrick 2009, Devonshire 2006). However, the argument that I quoted under 'Plot', that a reader's act of engaging actively with a story will temporarily implicate him or her in the text's values, and that these values should be recognised and critiqued, can also be applied to the way in which a student engages with her or his character role in an online role play. I will next review literature that addresses ways in which students can be encouraged to recognise, critique and resist the cultural assumptions that are promoted through the element of character.

Character and a critical approach
Cahill (2008) argues that with naturalistic role play, students' efforts to represent reality in a believable way commonly result in their replicating stereotypes in their characters unless the facilitator prompts them to think more deeply about the representations they are creating. She describes a range of
techniques that educational drama teachers have developed to enable students to experience an empathic engagement with characters in interactive dramatic stories, but ultimately gain some control over the degree of positioning they are prepared to accept as part of the meaning of their experience. These include intervening in the role play with questioning activities to drill down into cultural assumptions underpinning certain language and behaviour, role swapping, and use of satire and parody.

Educational dramatist Boal (1985) builds on Brecht's (1964) Marxist approach to theatre, based on the argument that beyond a certain point empathy with characters in a drama is a negative, immobilising response because of the cultural positioning it entails. Brecht's solution is for dramatists to produce work that encourages the audience to remain detached or 'alienated', so that audiences will maintain a self-aware and critical stance towards the illusion and question the assumptions it makes. Boal's somewhat different response is to demand that the audience be more involved in drama, to invite them to take the role of a creative, thinking, 'spect-actor' rather than keeping a traditional passive stance and accepting whatever story and ideology is played out for them. His technique of forum theatre, in which the audience makes suggestions about how to play a role to achieve a more acceptable outcome, and segments are then replayed accordingly, sometimes with audience members stepping in, has become a well-known practice in educational drama (eg see Neelands & Goode 2000).

The online role play literature also contains examples designed to encourage students to recognise the limitations of stereotypes in their character roles and
develop an understanding of ways in which certain types of people are commonly positioned in popular discourse. Wills, Leigh and Ip (2011) caution against over-using stereotypes in role descriptions—unless the intent is to sensitise students to stereotyping—but make the point that in order to play their parts well (and receive good marks), students are obliged to research their roles and develop a deep understanding of their character's complex motives and the factors influencing their actions. The fact that online role plays generally extend over several weeks may also work against students playing characters as flat stereotypes for long. Indeed, Freeman and Capper (1999: 110) note that the activity appears to work best when it starts with a natural conflict due to students bringing strong pre-conceptions to their interactions with opposing roles, and then having to explore their positions in order to solve problems.

Hintjens (2008) describes an online role play expressly designed to explore the challenges for social justice and rights in a particular context. It is a role play that highlights issues of gender, class, identity and the role of the media in influencing opinion, and involves students in proposing practical steps to reconstruct more just political systems. In this online role play the roles are chosen carefully to reflect critical players in social justice issues. The pressure of the roles having to work together, including with the media, to organise a conference amidst the tensions introduced via twists in the plot, helps them experience the complexity of their tasks and positions.

Other online role plays expressly designed to help students to explore the ways in which dominant perceptions are created and maintained, and to challenge these in practical ways, through encountering the difficulties of interacting in
their roles to solve complex problems and having guided reflection sessions to highlight these processes, include an online role play in Aboriginal health and history (Genat, Ip & Fong 2009), one in public relations (Demetrious 2007), and several in teacher training, international crisis management and international conflict resolution (Linser 2008).

The condition underlying the ability of the character function in an online role play to support the development of critical awareness and voice suggested by the literature can be summarised as students should be prompted to understand and play their roles as complex, multi-faceted characters rather than as stereotypes. They should also experience the need to understand underlying cultural characteristics of opposing roles in taking action to resolve differences during the role play.

In the next section I will review the literature related to the way in which the third basic component of stories, that of setting (Bruner 1986, Ryan 2001, Bal 1997), works to support learning and engagement; and how a critical approach to setting may be incorporated in online role plays.

**Setting**

The term 'setting' suggests a physical setting, but it need not be richly detailed. Its main purpose is to frame the imaginary world of the story—to create what Ryan (2001) names a 'semantic domain':

> Whether textual worlds function as imaginary counterparts or as models of the real world, they are mentally constructed by the reader as
environments that stretch in space, exist in time, and serve as habitat for a population of animate agents (p. 15).

In computer-based interactive dramatic story formats such as computer games and online role plays the setting has two dimensions, firstly the suggested physical location where the imaginary events take place, and secondly the interface through and with which the player interacts in the virtual world. The literature suggests that the characteristics of both of these dimensions impact on the ways in which players engage with the story, and the kinds of things they may learn. As with plot and character, a critical approach involves recognising the cultural assumptions promoted through the characteristics of a story setting.

**Setting and learning**
Ryan (2001) argues that for a story to be comprehensible to its audience or participants, the 'foreign world' or semantic domain that is created need not be realistic, but must contain a reasonably intelligible set of linkages between objects, people and possibilities. The audience or participant's ability to believe in the *parameters* of this virtual world, to have a sense that important aspects of the created world are plausible within the internal logic that frames this world (even if this logic deviates from the logic of the real world), will strongly affect their ability to accept the story premise. In educational drama, the pretext given to students before they start frames these parameters (O'Neill 1995). In interactive online dramatic story formats, students mostly discover the internal logic through playing within the 'possibility spaces' of the story world (Bogost 2008). The concept of setting becomes dynamic and transactional, and the
means for interaction that are available in the interface determine the extent to which students are able to build coherent and plausible mental simulations that will be useful to guide future action and thought (Gee 2004, Squire 2008). In a complex online interactive story format with many characters and possibilities for action, different students may discover different sets of rules and possibilities within the setting.

An issue that can be contentious in learning activities that aim to represent reality as closely as possible, in order to provide the advantages of situated learning, is the degree of authenticity to aim for. I will review the literature related to this issue first.

**Authenticity in settings**

One of the characteristics of online role plays is that 'participants undertake authentic tasks in an authentic context' (Wills, Leigh & Ip 2011: 6).

Authenticity in learning settings and tasks is seen as desirable as it lends a sense of relevance to students' activities and hence increases motivation; and increases the chances that skills, knowledge, processes and values that are gained are readily applicable to real-world situations (Herrington, Reeves & Oliver 2010; Barton, McKellar & Maharg 2007). In terms of literary theory, a sense of authenticity in the setting adds to the important quality of plausibility (Ryan 2001), although in itself it is not seen as an essential characteristic for an engaging story. Indeed, authenticity can work against reader/viewer/participant engagement if it is at the expense of the development of meaningful, coherent and interesting plots, characters with whom one can empathise and so on.
Barton, McKellar and Maharg acknowledge the impossibility of providing completely authentic settings and tasks in an educational setting, and the problematic nature of the idea of even identifying, let alone recreating, a truly 'authentic' learning situation. Rather than focusing purely on contextual authenticity, they adopt a transactional view of learning and authenticity:

there are many factors that affect authenticity of task such as context, learner motivation, task, feedback, social interaction, and social presence; and it is clear from the literature that they require to be carefully managed in any curriculum that involves e-learning (p. 145).

Despite the difficulties, these writers undertake the challenge of designing an online role play in a civil law subject, using as authentic a selection as possible of materials, roles, tasks, social conditions and so on with the aim of creating a sense among their students of playing an authentic professional role. They argue that well-designed simulations have more to offer a student in a professional field 'in the way of reflection, variation, feedback and negotiated learning' than a mere mirroring of real-life tasks can provide (p. 148).

Herrington, Reeves and Oliver (2010: 90) argue in similar terms that 'the physical reality of the learning situation is of less importance than the characteristics of the task design, and the engagement of students in the learning setting'. They argue that 'cognitive authenticity' is a more practical aim than verisimilitude; and acknowledge the necessity of incorporating elements to motivate and support students to learn. Like Barton, McKellar and Maharg, they propose that the critical characteristics may be represented well enough for educational purposes in a fictional interactive online environment, and
provide several examples. They summarise characteristics of authentic e-
learning tasks to best support construction of 'usable knowledge' as follows.
These tasks:

- Have real-world relevance
- Are ill defined
- Comprise complex tasks investigated over time, using a variety 
of resources
- Provide the opportunity to collaborate
- Provide the opportunity to reflect
- Lead beyond domain-specific outcomes
- Are seamlessly integrated with assessment
- Create polished products valuable in their own right
- Allow competing solutions and diversity of outcome

(Herrington, Reeves & Oliver 2010: 78).

However, they allow that no authentic tasks are perfect, and individual 
characteristics may be present in varying degrees. They propose these 
characteristics as a guide for good design rather than an exacting set of 
requirements (pp. 79-84).

For an online role play where budgets and time to create highly realistic virtual 
settings are often limited, Wills, Leigh and Ip (2011) argue that it is sufficient 
to ensure that 'key factors representing the context of action' are addressed in 
the setting. They suggest limiting the scope of the location that is suggested, 
but choosing carefully the details to include so that the setting is 'a highly
abstracted version of selected, but fully recognizable, aspects of the "total reality" that it claims to represent' (p. 97). They argue that:

Participants will readily accept that there is a wider environment of which the design is a partial representation, as long as the elements within it are logically arranged and presented and have a sufficient degree of "believability" (pp. 97-98).

Barton, McKellar and Maharg's civil law online role play provides an example of the application of this principle, in that the designers carefully prepare materials that are as authentic as they can be, given the educational purpose and platform, to support well a limited number of cases.

McLaughlan and Kirkpatrick (2004, 2009) also describe a design that has many authentic characteristics. The online role play story is set in a real place, the Greater Mekong sub-region of South-East Asia; and students' roles are based on real positions in real organisations in the region, which students can research via the Web. Their forums are modelled on typical public enquiries, and their tasks are typical for the roles they adopt. This use of real resources, tasks and roles minimises the amount of material that needs to be built into an interface while also opening up possibilities to gain the advantages of authenticity described above. Students' comments in an evaluation of this role play include that the activity was 'a spectacular success' and 'the most beneficial task in teaching me ideas that will be useful to me as a professional engineer for years to come' (Baron & Maier 2004: 12).

Thus, the desire to provide as authentic a learning environment as possible presents a dilemma. While authenticity adds to an activity's plausibility, it can
threaten students' ability to stay engaged and learn how to think like an expert in the field, within the constraints of a higher education setting. Therefore, a degree of inauthentic manipulation is necessary in order to gain the benefits of authentic contexts and tasks. All of the writers I have cited in this section propose and/or demonstrate that it is possible to strike a balance between the extremes of controlling the learning environment and allowing it to operate authentically when designing an online role play, and to gain the benefits that students might both learn about reality and feel that they can manipulate the variables in the simulated world and observe a meaningful result. The debate about whether the artificiality that is necessarily created in the representation is useful or misleading goes back to ancient times, as I noted in Chapter 2.

In the next section, I will review literature that is not specifically related to the authentic qualities of settings, but addresses other aspects of settings that can help people to engage with story worlds.

**Setting and engagement**

Ryan (2001) claims that if the conditions of internal coherence and plausibility of a story world's parameters are met, the reader/viewer/participant's consciousness will temporarily 'relocate' to this foreign world to the extent that, while she/he knows the characters are just linguistic constructs, she/he will still react to them as though they were real humans. Using this premise, the notion of 'suspension of disbelief' (Colerige1817/2004) can be seen to apply not just to temporarily adopting the views of one or more characters as if they were one's own, but also to temporarily accepting the story world as if it were at some level real. Thus, with interactive stories, the setting functions to frame the
'penalty-free zone' in which people can play and learn with their roles. It follows when participants are co-creating the stories that it is necessary for all of the participants, or at least a critical mass of them, to agree to share the agreement to suspend their disbelief and play along for the activity to work.

'Suspension of disbelief' has been used to describe the kind of engagement people commonly experience with a wide range of story-based formats, including interactive multimedia (Laurel 1991, Murray 1997), video games (Gee 2003, Mateas 2001), educational drama (O’Neill 1995, Carroll & Cameron 2003), cinema and some visual art (Ryan 2001); even extending to the make-believe worlds created in constructivist learning environments (Dede 1996; Schank 1997); and online role plays (Wills, Leigh & Ip 2011).

Herrington, Reeves and Oliver (2010: 92) argue that:

There is increasing evidence that in order to fully engage with an authentic task or problem-based scenario, students need to engage with a process that is familiar to moviegoers throughout the world—the suspension of disbelief … once the viewer has accepted the fundamental basis for the simulated world in which he or she is immersed, engagement with the story and message of the film is entirely feasible.

Herrington, Reeves and Oliver found that it was necessary to support students in the early stages of 'authentic' activities, in terms of orientating them to the environment and helping them to see the appropriateness of the tasks; and that this was particularly important in online environments where students were
physically isolated. They argue that the authenticity of the settings and tasks ultimately served to help students to overcome their resistance.

Linser, Ree-Lindstad and Vold's (2008) study of online role plays and engagement also found that where there were clear relations to the 'realities' being studied, students seemed more motivated to learn, although they still required the 'magic circle' of the make-believe world to give them licence to explore the possibilities of their make-believe role: 'Perhaps because the more obvious the relations to reality, the more students feel they are engaged in a productive enterprise of learning' (p. 7).

Thus, the literature suggests several conditions that may have a bearing on people's ability to suspend disbelief in interactive story settings such as online role plays. I have already mentioned the importance of providing a coherent model of certain aspects of the world, of providing a sense of authenticity, and of orientating and supporting students in the early stages of the activity. Other factors include the extent of the visual detail and other information that is provided in the interface, the kinds of things it is possible for students to do in the story world, and the strength of the sense of a boundary from reality that is produced. I will discuss each of these in turn next.

**Rich visual detail and information**

Ryan (2001) and Murray (1997) argue that the rich detail it is possible to provide in computer-based representations can intensify people's 'enchantment' with or 'immersion' in computer-based virtual worlds. There is no doubt that colourful, detailed video-based representations can provide a high degree of realism as well as a powerful visual/auditory aesthetic experience. The
potentially infinite amount of information in all sorts of formats that can be embedded in a website to help build a fictional setting can also add to the richness of a representation. However, many teachers using face-to-face and online role plays and simulations have found that it is *not* essential to create a high level of realism or visual detail to generate engagement among participants in the story world (Bolton & Heathcote 1999: 28; Carroll, Anderson & Cameron 2006; Wills & Ip 2002; Vincent & Shepherd 1998; Hays & Singer 1988). The desire to provide rich, beautiful, customised materials to create the setting for an online role play must be balanced against the practical advantages for time- and resource-poor academics in minimising the amount of graphical detail that has to be designed and developed, and information that has to be sourced or created, checked for consistency with other information provided in the website, uploaded into an easily navigable structure and kept up to date. There is also the argument that it is *better* to provide a framework that merely sketches the nature and limits of the dramatic world, implies roles for participants and switches on expectations, than to overload participants with information that takes time to access and could limit students' creativity (O'Neill 1995: 20, 136; Linser, Ree-Lindstad & Vold 2008).

**Agency and interactivity**

I have referred under 'Plot' and 'Character' to arguments made about the importance for engagement and learning with interactive stories of participants having a sense of agency in the story. Agency, in the sense of being able to manipulate the interface in the ways one wants and see the results of one's actions, can also be seen as an important factor in creating a setting for interactive stories that will support users' engagement and learning. Murray
(1997) suggests that any computer interface will better support users' immersion in their tasks if they can interact with it in such a way that it becomes *transparent*, so that all they need to think about is the intent and meaning of their transactions.

Burbules (2004) argues that 'immersion' implies an active or transactional engagement with a virtual world; and of all of the factors that make an experience immersive, interactivity is key. This is because being able to act upon an environment, witness the effects of one's actions and then react to the responses makes a virtual environment more plausible and vivid (p. 167).

**Boundary from reality**
As I noted above, extending the concept of suspension of disbelief to interactive dramatic stories implies that the story world represents a penalty-free zone in which participants can experiment with their role, within the parameters that are set for their role in the story world, with relative impunity. This is related to the concepts of role protection and distance that I discussed under the heading of 'Character'.

Linser, Ree-Lindstad and Vold (2008) argue that the 'magic circle' of an online role play story world is necessary to provide students a sense of safety and licence to experiment with their provisional identity, and to learn from the reflexive activity of expanding their sense of what they can accept. However, as online role plays' educational value also lies in their ability to simulate real-world processes, issues and conditions, the 'magic circle' that surrounds the story world of role plays must in fact be porous. They also note that the activity is more engaging and effective when students are able to see clear parallels
between the story world and the real world (referring to the effect of metaxis that I have discussed above).

In summary, according to the literature, setting has an important function in helping people to engage with and learn from stories. The following conditions are seen as important for supporting this function in online role plays:

**Coherence and plausibility:** There must be a sense of the internal coherence and plausibility of the way things work in the story world, in order to support students' suspension of disbelief and building of useful mental simulations for future reference.

**Authenticity:** Authenticity in key aspects of the tasks and conditions of the real-world setting that is simulated is important to provide a sense of relevance and support application of learning in real situations.

**Rich visual detail and information:** Providing rich visual detail and information can produce a sense of enchantment and presence in the virtual world.

**Transparent, responsive interface:** An interface will better support both engagement and learning if users are orientated to the site and tasks early on, and if the interface enables users to interact with it in exactly the ways they want, and see predictable results.

**Semi-permeable boundary from reality:** It is important for students to have a sense that they are in a make-believe world with a boundary from reality (although a porous one).
The discussion above focuses on students accepting the parameters of a story world in order to gain insights from the ways in which things work there. However, settings are as capable of conveying cultural assumptions and values as plots and characters are. A critical approach involves encouraging students to recognise, critique and resist these assumptions and values, and rework them if they wish.

A critical view of setting
Like Linser, Ree-Lindstad and Vold (2008), Cahill (2008) notes that the parameters of all fictional worlds inevitably reflect the parameters with which we are already familiar. She admits that fiction has been seen as a tool to explore possible worlds, to help extend our understanding of what could be as well as what is, and the illusion of a story world having defined boundaries serves to give the explorer a feeling of added control. However, she argues that to take a fictional dramatic world as operating under separate rules from those of reality can be misleading as this can make invisible the way that discourses, storylines and subject positions from people's day-to-day lives are re-created in the fiction—otherwise people would not even know the rules of play or how to interpret other players' performances. She proposes that, rather than seeing engagement with the stories in interactive drama as suspending—or creating—belief, it may be more useful to see it as an exercise in submission to and building mastery in discourses and the practices of our culture (p. 135).

As I noted above, Burbules (2004) also argues that immersion in a virtual world is active and transactional, rather than something that just happens to people. He proposes that suspension of disbelief is an ongoing agreement to
experience the virtual world as in some ways real and, like Cahill, he sees this as problematic. He argues that while 'any reality we inhabit is to some extent actively filtered, interpreted, constructed or made' (p. 163—italics in original), the whole point of immersion in a virtual world is to forget that we are watching a constructed version of reality, and that this can be abused. 'It is the lack of an ability to ask such questions, to regard the context of any experience as potentially problematic, that is a potential issue' (p. 168).

Misson and Morgan (2006) explore this issue further. They argue that people's acceptance of the parameters of a story world is a prerequisite to their entry to the interplay of expectation and fulfilment of desire that characterises engagement with story-based texts (which I discussed under 'Plot' above). They propose (pp. 85-86) that for many people the sense of 'escaping to' a meaningful, coherent world is attractive and a source of engagement in itself, as long as the meaningful elements are sufficiently aligned with the audience's pre-existing sense of how things work for them to be able to accept the story as a fitting model. However, as such, the setting also works alongside the plot and characters to create or promote a certain meaning. Misson and Morgan argue that in real life, we would bring our own frameworks and value systems (or discourses) to bear on actions we witness and judge them accordingly, but in texts, we are called to see the world according to the parameters provided in the setting. In order to engage with a story, it is necessary to accept (at least temporarily) the way of seeing the world that is implied.

A critical approach requires that students be made aware of the mechanisms by which this occurs in the story world, and be encouraged to not only question
the representation of reality, but remake it in a more authentic form if they wish. As I noted in Chapter 2, Bogost (2008) makes similar arguments about how a critical approach should be taken in the immersive constructed virtual worlds of video games. He suggests that students should be taught to recognise the 'procedural rhetoric' that is employed in interactive environments such as video games to in effect make claims about the world, and be encouraged to play these games critically. He also suggests that students should be taught the programming skills to be able to modify games or construct games of their own that reflect alternative views of the world. A similar argument could be applied to online role plays.

Therefore, a condition underlying the ability of an online role play setting to support the development of critical awareness and voice suggested by the literature can be summarised as the use of some means to help students to recognise and critique the cultural assumptions embedded in the setting and ways in which these influence the meanings that are suggested in the stories; and encouragement of actions to rework elements of the setting to support alternative constructions.

So far in this chapter I have used a taxonomic approach to explore the ways in which various elements of stories support engagement, learning and critical learning. However, an important characteristic of stories is that the interplay of these elements creates whole units that can have effects that are greater than the sum of their parts. I will now review literature that relates to the ways in which stories can work as integrated wholes to support engagement and learning through their suggestion of an instructive and resonant metaphor.
**The story as a metaphorical whole**

Ryan (2006: 124) notes that the elements of stories combine to build a literal, rather than purely symbolic, model of experience. However, an important part of a story's appeal is in the ultimate ambiguity of the representation it proposes—no matter how realistic it might seem. Stories present a metaphorical world and, as metaphors often do, they can produce an enjoyable and lasting resonance as the reader/viewer/participant plays with the potential associations and meanings they suggest (Lakoff & Johnson 1980, Bruner 1986). Metaphors may be evident at various levels in stories, from the language and symbols through to settings, actions and the entire model. Indeed, the extent to which readers/viewers/participants are able to enrich their response by adding their own emotional and imaginary associations to the literal text is often taken as a measure of what makes a narrative work 'literary' (Bruner 1990, Egan 1996, Misson & Morgan 2006). As Bruner puts it:

> To make a story good … you must make it somewhat uncertain, somehow open to variant readings, rather subject to the vagaries of intentional states (Bruner 1990: 54).

In the context of the use of interactive dramatic stories in education, O'Toole and Lepp (2000) argue that 'Drama is a metaphor embodied' (p. 20), and 'At its most effective … it works obliquely—it raises questions, makes analogies and permits people to explore implications and consequences of their lives and attitudes' (p. 24). O'Neill (1995: 5-8) argues similarly that educational drama will be most effective in producing lasting, personally meaningful learning outcomes when the facilitator has a sense of using an artistic medium, working
to suggest meaning through symbolism and metaphor, rather than trying to control the experience to achieve precise ends.

As I have noted under various headings above, writers in interactive multimedia have explored the affordances of online technologies to increase people's ability to play with the possibilities in metaphorical worlds, and to critique and challenge the assumptions that are made within them (eg Ryan 2006, Gee 2004, Squire 2008, Bogost 2008).

Again, it is possible to see the concept of Vygotsky's supported experimental space or zone of proximal development in these explanations of how 'good' stories in various forms enable people to play with possibilities for meaning, opening possibilities to both extend their understanding and enjoy themselves.

**Chapter summary**

In this chapter I have reviewed literature relating to the relationships between engagement with stories and learning, and how online role plays might support the development of critical awareness and abilities. The conditions supporting engagement, learning and critical learning in online, interactive, dramatic stories that I have derived from this literature provide a brief summary of the main points I have taken from this literature to guide my analysis of the students' experience of their role-playing activities in my case studies.

In the next chapter I outline and justify the methodology and methods that I have used to frame and conduct my enquiry.
CHAPTER FOUR

Methodology and methods

Introduction
In this chapter I present the methodologies I have used in this research project, starting with explaining the underlying assumptions I have brought to the project about the nature of knowledge and truth, ways in which one can come to know something, and the ethical implications of taking this position. I then explain how adopting this perspective has impacted on the methods I have used to address my research questions. I describe my methods of data collection and analysis, and how each has helped me to build insights in response to each of my research questions. Finally, I explain the measures I have taken to ensure my processes of data collection, interpretation, analysis, critique and reporting are ethical and trustworthy.

Methodologies

Knowledge and truth as social constructions
In the previous two chapters I have reviewed theories about stories and learning that underpin this thesis, which are based on the premise that knowledge is a virtual construct that is created, shaped, negotiated and shared through language, stories and other cultural tools within communities. These theories hold that knowledge does not exist independently of human activities and values. As such, knowledge is also a relativist concept: what we can know is contingent on the ways of knowing to which we have access within our
communities through our relationships, actions, tools and dialogue with others. Hence, I argue that there are multiple, situated, unstable knowledges but there is no universal Truth—every tradition has its own criteria for what is true, which develop according to the values of its members and are crystallised over time in methods, practices and theories. These assumptions about knowledge and truth sit within the ontological framework known as social constructionism: the proposal that 'what we take to be the world importantly depends on how we approach it, and how we approach it depends on the social relationships of which we are a part' (Gergen 2009: 2).

In this framework, the concept of ontology (the nature of reality and what can be known about it) is inextricably linked with the more dynamic concept of epistemology (the nature of the relationship between the knower and what can be known) (Guba & Lincoln 1998: 206-7). In previous chapters I introduced a theory of learning that is compatible with the premise that knowledge is a construction and a product of social processes: that of social constructivism (Duffy & Cunningham 1996). This theory places the process of learning in the student's 'zone of proximal development' (Vygotsky 1978), where the student develops her or his understanding by working from the base of what she or he already understands and building on it through encounters with the 'other', under the guidance of more 'knowledgeable' people. Therefore, what the student learns will be contingent on the affordances of her or his social, cultural and historical context and interactions. Social constructivism is closely related to, but not the same as, social constructionism. The former is used in the context of the education of individuals, while the latter is used more
generally in relation to the development of shared knowledge in social settings (Papert 1990).

Although for many people it may be confronting to think that there may be no universal truths, only human social constructions, it can also be liberating. If we are not tied to one way of seeing things, one set of theories, principles and practices, then there are possibilities for changing things when we feel they do not seem to be working well. We can perhaps alter the way we see things so that we focus on the aspects that are more useful to us. Alternatively, we can look amongst alternative paradigms for whole different systems of meaning that involve different practices, and change the ways in which things are done.

A further option is to generate new ways of making sense by challenging existing traditions and finding new ways of interpreting the world, even new forms of language. As social constructionist theory does not seek universal truths, it allows multiple positions and theories to be developed and debated, and even held simultaneously if a consensus cannot be reached (Gergen & Gergen 2004: 17-20). The ability to hold multiple possibilities in play begs the question of which tradition, or combination of traditions, is the best to take us forward—and this in turn begs the question of which criteria should be used to judge when comparisons are between paradigms with different frames of reference. Often there are no simple answers to these questions, but in this thesis I demonstrate my support for Gergen’s (2009: 108-28) argument that the multi-perspectival and reflexive dialogue centred on solving specific problems, and deciding on criteria by which to judge the options, that is involved in social constructionist knowledge-building is a vital part of moving together toward a
more democratic and viable future. Hence, a central feature of constructionist research is a commitment to critique all positions (including one's own), to listen to alternative constructions and also, importantly, to grapple with comparative outcomes of holding various views (Gergen 2009: 12-14). Here, social constructionist theory reveals the major areas of theoretical dialogue from which it developed: the ideological critique of critical theory, the critique of Reason as a neutral construct associated with poststructuralism/postmodernism, and the critique of the notion of objective scientific knowledge frequently associated with Kuhn (1962) (Gergen 2009: 14-25).

As I noted in Chapter 1, one of my aims in pursuing this research project has been to explore different possibilities for students to engage with ideological critique, and develop and voice alternative constructions, through studying the various role-playing activities in my case studies. Social constructionist theory may have developed partly out of the dialogues surrounding ideological critique but in itself the theory does not engage deeply with means of identifying and questioning ideology in cultural texts. Therefore, I drew on the critical theory elements underpinning the social constructionist view for a framework by which I might analyse the ways in which this kind of critical learning might have been achieved (or not) in my case studies, and thus find answers to my second supporting research question: *In what ways may online role play support critical learning in higher education?* I will explain the critical approaches I have used in more detail next.
Critical perspectives and methods
Kincheloe and McLaren (2005: 303-4) note that there are many critical theories, spanning many disciplines; that the 'critical' tradition is always evolving; and that the tradition allows for disagreement among theorists rather than specifying a 'universal grammar of revolutionary thought'. However, the critical tradition does represent some common perspectives. One is that the meaning of 'critique' is extended from a modernist style of critique in which arguments are set up as comprised of binary opposites with one true or reasonable way being favoured, to an exploration of multiple points of view and ways of knowing that also takes into account the interests that are served and values that are promoted by certain positions, and the question of who holds the power over maintaining or changing the situation.

Critical theory's intellectual genesis was in Marxism and its priorities are still the critique of dominant ideology and promotion of democracy, freedom and justice (Brookfield 2005: x, 2). However, Kincheloe and McLaren describe critical theory in the early 21st century as having been reconceptualised, not only critiqued but overhauled by the 'post-discourses' of the last quarter of the 20th century (Kincheloe & McLaren 2005: 303). There is strong evidence of the influence of poststructuralist and postmodernist perspectives and methods in their set of contemporary criticalist assumptions, such as:

… that the relationship between concept and object and between signifier and signified is never stable or fixed and is often mediated by the social relations of capitalist production and consumption; that language is central to the formation of subjectivity (conscious and unconscious awareness) … (p. 304).
At the same time, one of the concepts these theorists now reject as fundamental to the tradition is the Marxist notion that economic factors dictate all other aspects of human life: they have broadened to include race and gender among the axes of power and oppression they aim to redress. Kincheloe and McLaren also propose caveats for the use of the Marxist concept of emancipation in contemporary critical research, including that critical researchers should be careful to avoid arrogance in efforts to emancipate others: ‘as critical inquirers who search for those forces that insidiously shape who we are, we respect those who reach different conclusions in their personal journeys’ (p. 308).

Critical theory has provided me with a rich tradition of thinking on the ideology and politics of social structures, communications and institutions such as education. This has imbued the ethical rationale of my research and my methods; it prompted me to pursue a research question that asks in what ways online role plays may support critical learning; and led me to choose a case study that explicitly aimed for critical learning outcomes. In so doing, it has lent a critical focus to a large part of my data collection, analysis and ultimately recommendations. Key theorists who have informed this research, and whose theories I have quoted to justify my critical focus and methods, have been Brookfield (2005), Kincheloe and McLaren (2005), and Murphy and Fleming (2010).

Another branch of critical research from which I have drawn is that of critical pedagogy, which developed from the writings of Paolo Freire (1970), and which is frequently seen as concerned with the application of the tenets of
critical theory to education theory and practice, including methods to support the development of students' critical awareness, agency and voice (Brookfield 2005: vii). I have applied critical insights from educational theorists in this vein including Kincheloe (2008), Giroux (1992), Rowan (2001), Boal (1985), O’Neill (1995) and Cahill (2008) in the theoretical frames I have used and in my literature review; and their theories and methods inform some of the conditions I have used to analyse my case studies, and ultimately my recommendations. I also studied and critiqued the application of some of the techniques that have developed from critical pedagogy principles in the case study I chose that aimed to develop critical learning outcomes.

A further branch on whose theories and methods I have drawn extensively is that of critical literacy. Key theorists have been Misson and Morgan (2006), Gregory and Cahill (2009), Gee (2003, 2004, 2007, 2008) and Bogost (2008). These theorists have provided me with insights into the ways in which texts and language refract reality and offer readers/viewers/participants certain positions in order to engage with and make sense of them; insights that I have also applied in the formation of my theoretical frames, literature review and conditions with which I analyse my case studies. These theorists have in addition suggested methods by which students may be taught to recognise and resist these readings, which have informed my conditions and recommendations.

An open endpoint
Despite the important insights that these critical perspectives and methods have brought to my research, ideological critique in itself is not the endpoint of my
research. Rather than setting myself up in opposition to those who have addressed the task of establishing and disseminating practices and rationales in the young tradition of online role play in higher education, in writing this thesis I have aimed to create a respectful, admiring and open dialogue with those who have gone before in this field. I agree that critique of not only the practices, but also the values, cultural assumptions and power relationships of prevailing traditions is important to the ethical imperative I believe our society faces of working toward a fairer, more democratic and more sustainable way of living. However, in the end I believe that the social constructionist method of dialogue between positions is likely to lead to educational practices that contribute more to this kind of outcome than seeking to set up an alternative one best way. Gergen and Gergen (2004) argue that critique without openness to and respect for the opposing position typically leads to defensive and then hostile behaviour in all social situations. They propose that if one claims no universal truths, then it follows that there are no means of judging between traditions. Therefore, according to social constructionist ideas, to seek to overthrow one regime just to replace it with another will not necessarily lead to a fairer and better outcome overall. Also, most traditions will have something of value to the opposition that may be lost in all-out conflict, and 'if we set all traditions against each other, life will become nasty, brutish and short' (p. 62). Gergen and Gergen propose that the aim of dialogue between people supporting differing knowledge constructions should be to avoid both taking oppositional positions and settling for a 'sluggish relativism', but rather to work collaboratively to find a deep mutuality that has the possibility of transforming traditions and finding new ideas and values. This stance is evident in the tone
CHAPTER FOUR

Ethical underpinnings

As a teacher and instructional designer who aims to use her skill and knowledge to help prepare students for the complex and difficult challenges they will face in the future, I agree with critical theorists including Brookfield (2005), Murphy and Fleming (2010), Giroux (1992) and Kincheloe (2008) that we have a moral obligation to educate our students in ways that will help them to create a fairer, freer and more sustainable world. This means helping them to develop the skills, knowledge and attitudes they will need to work through the limitations of the traditions and structures that exist in our world at the moment as well as solving the new problems they will face in the world of the future. I believe we need to use our educational methods of working with the raw material of these students' pre-existing abilities and using dialogue, negotiation and scaffolding to help them extend their understanding into the world of scholarship across disciplinary and methodological boundaries. As well as helping them to understand traditional knowledge constructions and their accompanying principles, practices, tools, stories and language, we need to help them to develop the skills and confidence to critique these constructions effectively, and think and work beyond their limitations. To help them develop these skills and confidence, we need to help them recognise the assumptions and content of my recommendations, in that I suggest designers draw on the existing literature while they also consider how the conditions I have established in this research may be incorporated into online role plays, and provide examples that are compatible with both traditional and story-based design.
contained in the texts they use both in their subjects and in their day-to-day lives, and encourage them to imagine—and try—different possibilities that might work better to address the problems they face. It will be necessary not only for students to develop an attitude of openness to new systems of thought and an aptitude for dialogue, but for us as researchers and teachers to continually make the same sorts of leaps if we are to continue to help them on their way.

Online role play, as a participative pedagogy that directly engages students’ abilities to empathise with and work from novel perspectives over an extended period, and to communicate and negotiate solutions to problems with other participants, has much potential as a pedagogy for developing these skills, along with relevant knowledge and attitudes. As a teacher-designer-researcher in this field my moral obligation extends to not only developing my own understanding of how more of this potential may be achieved with online role plays, but entering a dialogue with other designers and practitioners in the field so that we may all (designers, teachers and students) work together towards making the world fairer, freer and more sustainable in the future. Thus, while my research has sought ways to optimise the potential of online role plays to engage students in a process designed to help them learn particular things that are to some extent predictable, a parallel aim has been to find ways to incorporate strong critical elements in the activities, to develop students’ abilities to not only understand but critique traditional knowledge constructions, and work with others to negotiate and develop novel solutions to the problems they will face in future. These aims have been reflected
throughout this thesis in the double-threaded structure and content of my literature review, analysis and recommendations.

**Research methods**

In keeping with the social constructionist spirit of openness to multiple perspectives and ways of knowing in order to construct new, more viable forms of understanding, I studied three very different 'cases' of online and face-to-face role-playing activities. I also applied this rationale in choosing multiple data collection methods to gather different types of information and perspectives on each. These methods included questionnaires, focus groups, teacher and student interviews, participant observation and document analysis. Combining the data from each of these cases and methods has given me a rich, layered and yet sometimes confusing and even contradictory view of the kinds of learning experiences that online role plays can support, providing much food for thought as I interpreted students' responses to the activities in light of the conditions for supporting their engagement, learning and critical learning through stories in this format that I gathered from the literature.

The combination of methods I have used are generally associated with a variety of methodological traditions, including positivist empirical research (questionnaires), interpretivist research (interviews) and naturalistic research (participant observation) (Guba & Lincoln 1998, Schwandt 1998). Although positivist empirical methods are not usually recognised as being compatible with social constructionist ontology, as they assume an independent, measurable 'reality' (Gergen 2009), I have used this method as supporting but
one way of knowing among others to help me to construct insights around my research questions. Gergen himself states that he is not prepared to cast away the empirical research tradition as completely lacking in value (p. 62). He asserts that quantitative methods can produce useful information on trends of human behaviour and attitudes—provided one remembers that the information they provide will be framed and refracted by the social context in which the methods are implemented.

It is not uncommon to find a mixed methods approach in educational research. Indeed, Denzin and Lincoln (2005: 4-6) describe all contemporary qualitative research as 'bricolage', adopting Levi-Strauss' (1966) use of the term to provide a metaphor for the idea of making use of the most suitable tools available to complete a task. In research terms, Denzin and Lincoln use the term to mean employing the most appropriate methodologies, methods and strategies across disciplinary and methodological boundaries to address the research questions in the context of the research—as I believe I have done. They endorse the implication that research is 'handywork', and that the result may be likened to a patchwork quilt or montage of different representations that overlap and form a composite and new creation with an emotional unity. However, they caution that the process of combining methods from different methodological traditions in a research project should not be taken as a mingling or synthesis, but rather a working 'between and within competing and overlapping perspectives and paradigms' (p. 6) that respects the underlying philosophical systems of each. I will now outline the approaches I have used with each of my methods to ensure that my techniques and the kinds of knowledge claims I have proposed based on using these methods are in alignment with the over-arching philosophical
system for each. I will start by justifying my choice of the case study method of research and outlining ways I have used this method in order to help me construct knowledge around my research questions using a social constructionist approach.

**Case study method**
Yin (2003: 13) defines case study method as:

an empirical enquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident.

Considering this definition in terms of my research, what happens in an online role play can be seen as depending very much on the student and teacher participants’ idiosyncratic interpretations, responses and interactions. These are heavily influenced by factors such as the characteristics of the university and subject in which the role play is based; the group dynamics; the economic, social and political factors at play in each participant’s life and so on. Indeed, role-playing activities would be dull and of little value without recognisable, memorable contextual details such as these to provide material for the interactions and against which to view the dramatic stories that develop. Given these points, online role plays can be seen as phenomena in which the boundaries between the role play and its context are blurred.

Freebody (2003) proposes that case studies are particularly useful for educational research because they set up a conversation between theory and practice:
… it is only through regular and structured interactions between explanatory principles and particular cases that both educational practitioners and researchers can avoid the restrictive applications that come from, on the one hand, theorizing 'in a vacuum', or, on the other, appreciating the complexity and uniqueness of practice without presenting inspectable procedures for interrogation and explication (p. 81).

My research aims to construct theory to inform the ways in which online role plays are designed and managed in future, but I clearly indicate how I have constructed this theory out of my application of certain methods and analytical frameworks derived from the literature to the complex practice of these techniques in three unique cases. As such, I have aimed to facilitate a conversation between theory and practice in this area. Sharing my findings with online role play practitioners and researchers in parallel contexts will in turn provide a basis for dialogue about design and management principles that may transfer to other settings.

**Case study in a social constructionist ontological frame**

Case study traditionally is an empirical method, in that it seeks to build theory from experiencing or observing 'reality'. To use this method to help me construct knowledge within a social constructionist frame that denies the possibility of describing an independent reality (Gergen 2009: 3-5) may be seen as problematic. I will explain below how I have used the method not to make claims of having discovered independently verifiable and universal truths about online role plays, but to gain an in-depth understanding of three instances
of role-playing activities, recognising that 'we can only know a thing through its representations' (Denzin & Lincoln 2005: 5). Thus, I have used multiple methods to gather and analyse rich, deeply contextual data from multiple perspectives within each, displaying the bases from which I develop my interpretations and presenting my own construction of knowledge about online role plays as a result of my enquiry as but one possible construction among many. As Stake argues:

Ultimately, we may be interested in a general phenomenon or a population of cases more than in the individual case, and we cannot understand a given case without knowing about other cases. But while we are studying it, our meagre resources are concentrated on trying to understand its complexity (Stake 2005: 444).

I have developed my own approach to the case study method by considering how social constructionist theory would respond to several 'common areas of contention' in case study research in social sciences identified by Flyvbjerg (2006). These are the issues of how to build theory from context-based stories, and from a small sample, researcher subjectivity, and use of qualitative and/or quantitative data collection methods. Flyvbjerg responds to criticisms by positivist researchers to defend case study method in these areas largely still from within a positivist framework. While I believe there is merit in Flyvbjerg's arguments, I have proposed ways of using case study method that are consistent with my own social constructionist view of knowledge and how a researcher can come to know things.
Building theory from context-based stories
Flyvbjerg argues that a common criticism of case studies is that it is awkward to build theory from contextual, story-based accounts (rather than seeking to remove contextual factors from the study and create context-independent rules). Flyvbjerg draws on research in cognitive science (in particular Schank and Cleary’s (1995) case-based learning theory) to argue that 'the case study produces the type of context-dependent knowledge that research on learning shows to be necessary to allow people to develop from rule-based beginners to virtuoso experts' (p. 221). He argues that 'case-based' learning in general provides a means to develop a more detailed, nuanced, robust and adaptable form of knowledge than is possible with a rules-based approach, and claims further that 'in the study of human affairs, there appears to exist only context-dependent knowledge' (p. 221).

My own social constructionist view also recognises the importance of context-dependent knowledge, but acknowledges the human activity in seeking, recognising, selecting, interpreting and reporting certain contextual details over others in the formation of theories. It accepts and even embraces the awkwardness of the process of building knowledge from contextual—and also contested, pluralist, uncertain—stories as part of the nature of any knowledge construction process, and as a result emphasises the need for continuing dialogue between researchers that reaches beyond a battle of principles to consider the experiences, assumptions and world views supporting those principles (Gergen 2009: 108-28). Case studies provide a means to furnish rich contextual detail along with decision-making chains that demonstrate how interpretations contributing to theory formation have been made. This enables
others in the field to not only compare contextual details with their own situation to judge whether the case findings might be relevant to them, but to evaluate the decision-making criteria and interpretations used in the cases for themselves.

**Building theory from a small sample**

Another common criticism of case studies that Flyvbjerg addresses is that 'one cannot generalise on the basis of a single case study'. Flyvbjerg (pp. 225-6) counters that important breakthroughs in people's understanding of how things are *have* in fact been due to the illuminating power of single cases. He argues that the history of science contains numerous examples where just one case has been used to question a commonly-held misconception, leading to the development of new ways of thinking.

My own social constructionist response to this issue is to question whether one can generalise *validly* and *meaningfully* about important aspects of human affairs from any data, even quantitative data, when one recognises that such generalisations—and the bases from which they are drawn—are human constructions and hence prone to the limitations of human powers of observation, imagination and interpretation; not to mention economic, social and political structures impacting on research processes. What case studies *can* offer in terms of generalisability is a detailed account complete with details of the context and rationale for theories that are proposed as a result of the study, as I described above. This kind of an account invites others to decide whether and in what ways the theories that have been developed in the study may be relevant and useful to them as they operate in their own context (Elliott 2005: 28, Patton 2002).


**Researcher subjectivity**

Flyvbjerg also addresses the argument that the necessity to be closely involved with the research subjects in case studies introduces a subjectivity that compromises findings. He asserts that being intimately involved with a case allows a greater level of understanding that is less likely to produce misinterpretations than when one attempts to assume an 'objective distance'.

For the social constructionist researcher, this view has some merit but is also problematic, as it still assumes that it is possible to understand a phenomenon objectively. Constructivist researchers Guba and Lincoln's (1989) response to the issue of subjectivity is that:

> If what-there-is-that-can-be-known does not exist independently but only in connection with an inquiry process … then it is not possible to ask the questions, "What is there that can be known?" and "What is the relationship of the knower and the known?" independently (p. 88).

Thus, they argue (as do I, in this thesis) that the enquirer cannot and indeed should not disentangle him or herself from an enquiry process, but must recognise that he or she is an analytical but also creative and inherently biased 'instrument' in the research design, data collection, analysis and reporting processes. Like Guba and Lincoln, I believe it is impossible for anyone to set aside pre-existing knowledge and expectations when trying to form new interpretations of phenomena—meaning lies less in the inert data than in the 'dialogue' between the source and the enquirer (and between the enquirer and her or his own audience). Therefore, the *trustworthiness* of research lies in being open and willing to listen, and representing what one hears and sees as accurately as possible. Riessman (2008: 139) and Chase (2005: 660-6) make
similar arguments. My choice of participant-observation and semi-structured interviews, and the techniques I have used to recognise and note my own responses, to represent my participants' views and words as accurately as possible, and to check my interpretations with them (which I discuss further below), demonstrate my application of this principle.

The problem that is frequently cited with an enquirer becoming immersed in her or his data is that in 'going native', he or she may fail to see things in the data that outsiders might. However, Clandinin and Connelly argue (2000: 80-118) that it is pointless to resist 'going native' as this will happen to some extent anyway, and should not be feared as long as one's data and analysis includes as comprehensive a coverage as possible of alternative explanations and responses, on an equal footing with one's own ideas.

**Qualitative versus quantitative data collection methods**
The fourth of the areas of contention that Flyvbjerg identifies with case study research is the merit of using qualitative data. Lichtman (2010: 5) defines qualitative research as:

> a way of knowing in which a researcher gathers, organizes, and interprets information obtained from humans using his or her eyes and ears as filters ... It can be contrasted with quantitative research, which relies heavily on hypothesis testing, cause and effect, and statistical analyses.

Although case study method allows for both qualitative and quantitative means of collecting and analysing the data that have been chosen to address the research questions, its focus on the importance of factors within the context
and present within the unique instance means that naturalistic and qualitative methods are a common feature, in order to capture a wide range of data that may be subtle and difficult to predict, and a rich depth of data on items of interest within a particular context.

Elliott (2005) argues that there is a strong case for combining quantitative and qualitative methods in social research, to capitalise on the relative strengths of each. She asserts (pp. 171-87) that where variables can sensibly be isolated and measured, the temporal and contextual nature of these variables is noted and taken into account, and the reasoning behind the statistical analysis is thoughtful and reflexive, quantitative methods can be useful in proposing a significant relationship between some variables that may be generalisable to a population beyond the research sample. Qualitative methods may then be applied to gather evidence about possible mechanisms that lie underneath this relationship, with the overall result that the researcher is able to 'tell better stories'.

My research questions involve multiple factors that were impossible to isolate in my case studies, as contextual conditions between cases varied greatly. Also, I needed to explore what people were thinking and feeling during their role-playing activities in order to study the possible 'mechanisms' at play, and these things were difficult to predict. Further, I recognised that the uniqueness of my case studies and my perspective on them would make statistical generalisation of my findings beyond the cases impossible—as well as incompatible with my research methodology and questions. Therefore, this is a predominantly qualitative thesis. However, I also surveyed the students involved in each of
the case studies in order to identify broad trends in students' behaviour and attitudes and access more students' opinions, albeit in an abbreviated form (Gergen 2009: 62).

Research design

My own research within these frames
As I mentioned in Chapter 1, the overall research question for this study is: how may online role plays be designed and managed to support engagement in, learning from and deconstruction of stories in higher education? The supporting questions that have guided my analysis of the literature and case studies have been:

1. What are the relationships between engagement, story and student learning in online role plays in higher education?

2. In what ways may online role play support critical learning in higher education?

3. What implications do my findings have for the design and management of online role plays in higher education?

These research questions have helped me to focus on the ways in which students engage with and learn from the different types of role play I studied, exploring in particular the influence of the cognitive and cultural tool of the make-believe stories that students co-construct as part of their learning experience, with the aim of increasing knowledge of the impact that a range of online role play design and management decisions can have on learning
outcomes. As I noted above, an important element of my enquiry has been to explore means by which students may learn to recognise, critique and reframe the cultural assumptions, norms and rules carried by these stories. These are complex questions and, as is common in teaching and learning contexts, a multitude of factors were involved in my study. Gathering data on the students’ story-building and knowledge-construction processes required a range of methods, which I will describe below.

There were between 24 and 222 students in each case study cohort, each with their own predispositions and particular experience of their role-playing activity that no doubt impacted on the stories they built and knowledge they constructed from the activities. The fact that the role-playing activities were markedly different to one another also added to the undesirability of seeking commonalities in my findings about the impact of the ways in which the main story elements of plot, character and setting were designed and managed across the three techniques. In order to analyse the responses of individual students and recognise similarities and differences between the students’ responses—and cases—to support my construction of theory relevant to my research questions, I used two critical frameworks to guide my data collection and analysis. These were drawn from the fields of literary theory and critical pedagogy/literacy.
Analytical frameworks

Narrative analysis

Theoretical background

Before I describe my analytical procedure I will outline the theoretical background to narrative analysis. Culler (1997: 78) provides a neat summary of theories about the importance of stories in the ways in which people learn and know things:

Literary and cultural theory have increasingly claimed cultural centrality for narrative. Stories, the argument goes, are the main way we make sense of things, whether in thinking of our lives as a progression leading somewhere or in telling ourselves what is happening in the world.

Culler (pp. 79-86) sets out major theories about how the elements of this story-based way of learning and knowing work. Prominent in his discussion are the impact and interrelationships of the three elements of plot, character and setting, as others writing in this field have also argued (e.g. Bruner 1986, Ryan 2001, Herman & Vervaeck 2005). Culler points to the theoretical tradition starting with Aristotle that has recognised the function of plot as a means of playing to people's 'desire to know' (pp. 79-81); the function of characterisation as a means to see things from other vantage points and understand others' motives (pp. 84-86); and the function of decisions made about the 'presentation' of the story, the ways in which it is framed as a particular instance with a logic and defining characteristics of its own, to frame the extrapolations a 'reader' can make about how it relates to other settings (pp. 81-84).
Culler (p. 44) and Herman and Vervaeck (2005: 109-10) note that, just as many disciplines have informed contemporary literary theory, it is common to see practices of analysis used in the tradition of literary theory also applied to non-literary 'texts' such as cultural artefacts, in an effort to understand the processes by which people make meaning from these things. Culler cites White's (1980) analysis of historical chronologies as one example of how narrative analysis can illuminate the power the 'logic of stories' has had on our understanding of history. Another example is Gergen's (1994: 199-202) use of narrative analysis to help him understand how two groups of people, one made up of adolescents and the other made up of elderly people, constructed meaningful 'life stories' out of their experiences, foregrounding some experiences and ignoring others that did not fit a recognisable (or preferred) narrative pattern. In so doing, Gergen provides insightful examples of the powerful effects that people's understanding of narrative form might have on the ways in which they structure their interpretations, memories, goals and sense of identity. I will now explain the way I have applied narrative analysis in this research.

Application of the framework

My first supporting research question is: What are the relationships between engagement, story and student learning in online role plays in higher education? To answer this question, I have analysed the nature of the plots, characters and settings that were evident in the students' own accounts of what happened in the story world (gathered during their interviews and focus groups), and my own observations of the interactions and locations/websites during the activities. I have taken the narrative 'text' in each case to encompass
each of the role-playing activities as a whole, including all of the data I
gathered on the ways in which they were designed, facilitated and performed.

I have used the classic narrative analysis method of studying the ways each of
the main narrative elements of plot, character and setting worked individually
and together to evoke meaning and emotion among the students in each of the
cases (eg Culler 1997, 1981; Bal 1997; Herman & Vervaeck 2005). My
understanding of how these elements may work in interactive, online, dramatic
stories, given certain conditions, has been informed by not only literary theory,
but additionally interactive multimedia theory, educational drama, learning
theory, engagement theory and online role play design theory, as I noted in
Chapter 3. My analysis of the role-playing activities' effectiveness as story
texts, drawing on the multiple fields of knowledge that are relevant to
performing this kind of analysis on contemporary, interactive, online, dramatic
story formats, is to my knowledge a new approach in the area of online role
play research, and has enabled me to develop a rich and multi-layered set of
findings and recommendations.

The conditions I collated from this literature as supporting people's ability to
engage with and draw meaning from these story formats, against which I
analysed the data in each of my cases, are listed in Table 4.1.

Table 4.1: Conditions for supporting engagement and learning in online,
interactive, dramatic story formats

<table>
<thead>
<tr>
<th>Story element</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plot</td>
<td><em>Causal links between events</em>: Participants need to be able to discover probable linkages between character traits, actions and outcomes in the story world, to</td>
</tr>
<tr>
<td>Story element</td>
<td>Conditions</td>
</tr>
<tr>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td></td>
<td>develop useful mental models that they can use to think and act with in future.</td>
</tr>
<tr>
<td><strong>Identifiable genre</strong></td>
<td>It helps to be able to identify a genre, to build expectations and tension.</td>
</tr>
<tr>
<td><strong>Agency within bounds</strong></td>
<td>A balance needs to be maintained between giving students the opportunity to decide how their character will influence events, and focusing their attention on the kinds of interactions that might help them manage tension and build useful mental models.</td>
</tr>
<tr>
<td><strong>Character</strong></td>
<td><strong>Consistent representation</strong>: The roles should represent something within the simulated system—they are not just people. They should be developed consistently, so that they help students learn how things work in the social system that is represented.</td>
</tr>
<tr>
<td></td>
<td><strong>Supports empathy</strong>: It is important for students to be able to empathise with their character roles. This enables them to learn vicariously from their characters' experiences as an extension of themselves playing within the possibilities of the story world, and to care about what happens.</td>
</tr>
<tr>
<td></td>
<td><strong>Agency</strong>: Students should be given agency in their roles so that they feel a sense of challenge and potential reward, control over outcomes and an opportunity to extend themselves beyond normal limitations.</td>
</tr>
<tr>
<td></td>
<td><strong>Safety to experiment</strong>: It is important for students to feel safe to experiment in character.</td>
</tr>
<tr>
<td></td>
<td><strong>Supports metaxis</strong>: Students should be prompted to reflect on their role playing and how it relates to their previous conceptions, experience and behaviour.</td>
</tr>
<tr>
<td><strong>Setting</strong></td>
<td><strong>Coherence and plausibility</strong>: There must be a sense of the internal coherence and plausibility of the way things work in the story world, in order to support students' suspension of disbelief and building of useful mental simulations for future reference.</td>
</tr>
<tr>
<td></td>
<td><strong>Authenticity</strong>: Authenticity in key aspects of the tasks and conditions of the real-world setting that is simulated is important to provide a sense of relevance</td>
</tr>
</tbody>
</table>
The second critical framework I used to guide my data collection and analysis was a combination of critical pedagogy and critical literacy.

**Critical pedagogy and critical literacy**

*Theoretical background*

Culler's (1997: 87) discussion of literary theory also notes that

> Through the knowledge they present, narratives police … In so far as we become who we are through a series of identifications … novels are a powerful device for the internalization of social norms.

As I noted in previous chapters, the uncritical use of stories in education has been viewed as contentious for several reasons. Of relevance to this research is the argument that they can be 'a powerful device for the internalization of social norms'. Critical educators such as Freire (1970), Kincheloe (2008), Giroux (1992), Gregory and Cahill (2009) and Rowan (2001) argue that educators, as powerful players in the shaping of people's attitudes, have a
particular responsibility to not only question the kinds of messages that are promoted in its texts and practices about what are valued characteristics and behaviours in our culture, but to explore the consequences of promoting these messages, and ways in which they can be challenged effectively.

Application of the framework

My second supporting research question asks *In what ways may online role play support critical learning in higher education?* In order to add this layer of enquiry to my analysis of how students' story-building activity might support their engagement and learning, I have drawn on theories and practices by those critical educators I identified above and others including Gee (2003, 2004, 2007, 2008), Bogost (2008), Misson and Morgan (2006), Cahill (2008) and O'Neill (1995). These writers address ways in which particular types of texts work to promote cultural messages, and ways in which people may be taught to recognise, resist and rework these messages. The types of texts on which I have focused are those that share important characteristics with online role plays, including computer games, educational drama and narratives in general. From this literature I collated a set of conditions supporting a critical approach to stories in online, interactive, dramatic story formats against which I might analyse each of my cases. I added this layer of enquiry to my analysis of the ways in which each case supported students' engagement and learning, which I structured according to the three main story elements of plot, character and setting. Table 4.2 lists these conditions.
Table 4.2: Conditions supporting critical learning in online, interactive, dramatic story formats

<table>
<thead>
<tr>
<th>Story element</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plot</td>
<td>Critical learning may be fostered by limiting generic plot development or interrupting and challenging plots that might otherwise carry unquestioned ideological assumptions and values, and encouraging students to rework plots to suggest meanings that are more aligned with a considered stance.</td>
</tr>
<tr>
<td>Character</td>
<td>Students should be prompted to understand and play their roles as complex, multi-faceted characters rather than as stereotypes. They should also experience the need to understand underlying cultural characteristics of opposing roles in taking action to resolve differences during the role play.</td>
</tr>
<tr>
<td>Setting</td>
<td>The use of some means to help students to recognise and critique the cultural assumptions embedded in the setting and ways in which these influence the meanings that are suggested in the stories; and encouragement of actions to rework elements of the setting to support alternative constructions.</td>
</tr>
</tbody>
</table>

I will now explain how I managed the more mechanical aspects of my research design, including my choice of cases, and data collection and analysis methods.

**Multiple cases**
I have used three very different case studies in this project. Two of the cases can be described as 'exemplary' cases (Lichtman 2010: 82): I chose them because the techniques they used had been recognised as representing good practice in their different genres in publications and/or awards (eg Ramsden 2003: 172-3; Wales, Cahill & Sanci 2004). The third case did not fit any established pattern for online role-playing activities so it was in some ways a 'non-example' or 'negative case' (Yin 2003), and it served to add depth to my theory building by potentially highlighting the effects of *not* providing the
conditions for supporting engagement, learning and/or critical learning that I had identified in the literature. The students' experiences of each of these activities would clearly have been influenced by multiple factors in each context, but there were also many indications that the design and management practices used in each case produced impacts that could have been predicted from the literature.

Multiple case studies are often used to compare factors between cases in the search for commonalities (Yin 2003). The three cases I chose involved different cohorts of higher education students, in different discipline areas, using different types of role-playing activities. They were so dissimilar that even though I employed the same set of methods and some of the same questions across all three cases, I found that the common questions revealed more differences than similarities. Thus, my method would more accurately be categorised as three individual case studies than a multiple-case study. However, when I considered the differences between the cases against the analytical frameworks I employed it was possible to form some interpretations about the impact of variations in certain factors in the activities' design and management in the three contexts. I did not aim to 'triangulate' findings across cases as a means to confirm theories, but instead took the opportunity that the multiple cases supplied to add layers of understanding drawn from my study of each individual case.

Thus, the opportunity to study the techniques that were used in these three cases in detail, in their context, using mixed methods and from multiple angles, provided me with rich insights about the relationships between engagement,
story and student learning in these role-playing activities, and ways in which they supported (or did not support) critical learning.

**Characteristics of the study**

Of the three role-playing activities I studied, two were performed in 2009 and the third was performed in 2010. All three cases involved university students in Australian universities, and the second also involved secondary school students, but they were not the main focus of my study. The first and third case study role-playing activities were performed wholly online by some students, however, a majority of students in the third case study interacted in face-to-face format. The second case study role-play was performed entirely face-to-face, and I included it in my study because I wished to examine the techniques it used that were designed to develop students' ability to recognise, challenge and rework cultural stereotypes and assumptions, and to see whether these techniques might be translatable to an online platform. I have described the role-playing activities in more detail in the forthcoming chapters. I used pseudonyms for all of the student and teacher participants in my reporting. My methods were approved by the Deakin University Human Ethics Research Committee. Table 4.3 summarises the data collection methods I used in each case and the numbers and types of participants who were involved.
Table 4.3: Research participants and data collection methods

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Consenting participants/students in cohort</th>
<th>Questionnaire respondents</th>
<th>Focus group participants</th>
<th>Phone/email interview participants</th>
<th>Tutor interview participants</th>
<th>Role play designer interview participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Case study 1: Middle East Politics Simulation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle East Politics (undergraduates)</td>
<td>43/66</td>
<td>14</td>
<td>3</td>
<td>11</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Middle East Politics (Masters-level)</td>
<td>3/26</td>
<td>7</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Journalism (undergraduates)</td>
<td>2/27</td>
<td>n/a</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td><strong>Case study 2: Adolescent psycho-social health screen (HEADSS) workshop</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical students</td>
<td>15/24</td>
<td>11</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>School students</td>
<td>5/19 (with both student and parental consent)</td>
<td>n/a</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td><strong>Case study 3: Professional writing (Bilby scenario activities)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blended online/face-to-face students</td>
<td>61/182</td>
<td>53</td>
<td>3</td>
<td>9</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Wholly online students</td>
<td>12/40</td>
<td>7</td>
<td>-</td>
<td>5</td>
<td>1 (also an on-campus tutor)</td>
<td>-</td>
</tr>
</tbody>
</table>
Data collection methods
My goal in this research project has been to build a richly detailed, nuanced, context-based understanding of ways in which online role plays might be designed and managed to support engagement in and learning from stories, and critical learning, in higher education. I used a mixture of data collection methods to help build this understanding, which I will describe below.

Participant-observation
My own observation as both a participant and observer of others was a major source of data for this project. I took a low-key part in each of the role-playing activities, not contributing to the action but observing from the periphery. I observed all of the face-to-face components of the first two role-playing activities and a sample of the face-to-face components of the third. (It was not physically possible to attend all 72 sessions of the third, which were spread across a city and a country campus and ran over eight weeks, so I attended seven sessions, which were facilitated by four different tutors.) I used a notebook to record events, times and quotes in as much detail as I could, and later transcribed these into my electronic journal, along with my own (clearly marked) comments and preliminary interpretations, making entries within 10 minutes and 24 hours after I had observed each of the sessions. Thus, throughout the project I also observed and recorded my own experience, both of being a low-key participant in each of the role-playing activities and of being a researcher conducting the study.

As a participant-observer, I took care to avoid influencing unduly the action in any of the role-playing activities (Gillham 2000: 45). However, I recognised that some influence from, and on, participants was inevitable, and I sought to
recognise and report any such effects in my journal. I also sought to recognise and report any effects I could identify for participants of the fact that they were conscious of taking a part in a research project (Clandinin & Connelly 2000: 88).

**Journal**
The electronic journal I kept during each of the case study data collection and analysis periods served several purposes. It provided a secure and convenient place to record my observations and preliminary interpretations in electronic form. It provided an intimate space in which I could articulate and reflect on anxieties, emotional responses and methodological concerns—I found the act of writing them down helped clarify my thinking and I found that, as I knew I would treat my entries as data, it prompted me to adopt a professional approach in my decision making (Clandinin & Connelly 2000: 102-4). The journal also provided a useful record of my decision-making processes, in a form that was easy to refer back to as I analysed my data, critiqued my procedures and interpretations and wrote my reports (Lincoln & Guba 1985: 109).

**Questionnaires**
I have discussed above my rationale for using questionnaires to collect some of the data for this research. I distributed voluntary, anonymous questionnaires at the end of each role-playing activity, and received response rates of 23%, 46% and 27% in the first, second and third case studies respectively. Although these response rates were not high, I found the quantitative data did provide some possible indications of trends.

The questions in each of the questionnaires addressed each of my research questions, using both closed questions with Likert-style responses to enable
simple quantitative analysis, and open questions to capture participants' responses in their own words. While I repeated some of the questions in all three case studies, many of the questions differed to better address the different aims and techniques used in the three cases. The questionnaires are included in the appendix.

**Interviews and focus groups**
Gillham (2000: 59) argues that interviews are indispensible in case study research, their major strength being in the 'richness of communication' they can provide. Focus groups are also widely used as they enable the researcher to gather a range of responses in a shorter time, and highlight issues of disagreement and complexity (Gillham 2000: 78). I used a semi-structured format for all of my interviews and focus groups, to enable me to 'drill-down' to explore important issues that arose in more detail (Knobel & Lankshear 1999: 92).

I found that the individual interviews provided an opportunity for students to provide candid responses, which I could explore at some depth. On the other hand, I found in each of the focus group interviews that the interplay of responses between participants produced a synergy and level of refinement that enabled me to explore nuances in the individuals' responses that I doubt I would otherwise have recognised (Gillham 2000: 78). I used both types of interview to check and refine my developing interpretations with participants.

I conducted individual interviews by telephone or exchange of emails during the role play activity period for each of the case studies. For the telephone interviews, I chose students randomly from among those who had provided
their telephone numbers on their consent forms. The interviews lasted for between 10 and 30 minutes and I audio-recorded and transcribed them. The email interviews consisted of my sending the students who had provided their email addresses on their consent form a set of questions, to which they responded by email. I did not ask any follow-up questions.

I invited all of the participants in each case study to take part in an hour-long voluntary focus group shortly after the conclusion of their role-playing activity, providing a range of times and venues and selecting the most popular choice. As the numbers of volunteers for each focus group was small (three, four and three in case studies 1, 2 and 3 respectively), I was aware that the participants would not be representative of the types of students in the group as a whole. However, the first two focus groups in fact contained a mix of gender, age, racial origin characteristics. The third case study focus group was all-female, European race and in the 'generation Y' age-group—but the fact that they came from different tutorial groups provided a useful point of comparison. I audio-recorded and transcribed each of the focus groups, and sent the transcript to the members for them to check and amend if they wished. The focus group and interview questions for each case study are in the appendix.

**Teacher and role play designer discussions and interviews**
I had informal discussions with the online and face-to-face role play facilitators and/or designers from time to time before and during the role-playing activity periods. These helped me understand their perspectives on practical, design and pedagogical issues, as well as on my preliminary interpretations. I included notes from these discussions in my journal within 24 hours of the discussions.
I also interviewed the facilitators/designers associated with each role-playing activity more formally after the focus groups for their role play, to enable me to frame my questions carefully and ensure I covered issues. These interviews also gave me a valuable opportunity to gain their insights on my preliminary interpretations of the data I had collected. I found that as each of my interviewees had had several years' experience in facilitating their activity, they provided a rich source of information on whether what happened in the activities I had witnessed was fairly normal, and on the rationale behind the techniques that had been used.

I again used a semi-structured format, framing my questions around the main research questions, with secondary probing questions when necessary. I audio-recorded and then transcribed the interviews, later asking the designer/facilitators to confirm the transcripts.

I also interviewed the main facilitators/designers associated with each role-playing activity a second time, after they had had a chance to read my preliminary findings from their case study. These interviews were unstructured to allow time to explore issues that the interviewees identified in my findings.

**Online postings and artefacts**
As the online components of the role-playing activities in cases 1 and 3 were conducted mostly via text discussion in the activity websites, it was easy—and vital—to capture this record of the students' interaction. I did not include these postings in my NVivo categorisations as they were voluminous, but after reading them I stored them in a searchable electronic form on my laptop for easy reference.
Document analysis
I included in my data all available documents describing the role-playing activities, including journal articles, curriculum documents, instructions to students, lesson plans and so on. These provided the intended learning outcomes and rationale of each activity, descriptions of assessments, and so on. I also studied the websites that were created for role-playing activities 1 and 3, reading all of the information that was provided and bringing into my analysis the ways in which the websites framed the virtual world of the role-playing activity and positioned the participants.

I also included a sample of 10 portfolios of assessments from the Bilby case study, provided by the tutors and unit chair. The sample contained de-identified portfolios that the teaching/marketing staff judged to be of poor, medium and high quality, to give me an indication of the levels of achievement students attained in their critical analysis and writing and the ways in which they responded to various aspects of the activities.

Data management
I used NVivo software to help collate and categorise my data, creating in advance categories for each factor indicated in my research questions, including plot, character, setting, critical learning, engagement and learning. I then added new categories and sub-categories as the need arose to manage data I had collected around these areas and others that I had not predicted. Using this software has become common practice for qualitative research as it helps researchers manage large amounts of data systematically and flexibly (Lichtman 2010: 202-03). The software helped me categorise the enormous volume of data that I amassed, some of which was relevant to multiple
categories. It also enabled me to check back easily to see pieces of data in their original context, to avoid making assumptions based on isolated snippets of information.

**Criteria for trustworthiness**

An important aspect of research of any kind is its ability to be judged by others as having used valid or trustworthy knowledge-building procedures to construct the claims it makes. While research in the traditional, positivist paradigm typically has used criteria of internal and external validity, reliability and objectivity, these are unworkable for social constructionist enquiries that do not accept the possibility of finding a perfect representation of the world (Gergen 2009: 61). Guba and Lincoln (1989: 235-51) propose an alternative set of criteria by which others may judge constructivist research which, like its close relative social constructionist research, accepts that what we take to be objective knowledge and truth is a product of perspective. Thus, rather than aiming to establish the validity of procedures and claims, these criteria evaluate their **trustworthiness**. I will describe below the procedures I have adopted in my research to address those criteria from Guba and Lincoln's list that are important for my research.

**Credibility (rather than internal validity)**

Instead of looking for internal validity, or a match between findings and an objective reality, the concept of credibility focuses on establishing a match between the constructions of research participants and the ways in which these are represented by the enquirer. Guba and Lincoln (pp. 237-41) set out a
number of techniques to increase the credibility of constructivist enquiries, all of which I have used at different stages of my research.

The first of these techniques is simply prolonged engagement with the site and participants of the research, to build trust, gather a wide range of information and perspectives and immerse oneself in the data and culture (p. 237). I took the role of a participant-observer, alongside the other participants, in each of my case studies, with this aim in mind. I immersed myself as thoroughly as I could in the role-playing activities, reading all of the information provided about and within the activities and keeping up with the online posts that were made. I introduced myself and my research to the participants in person when this was possible, and engaged in a friendly and open way with all participants in order to build trust. I also conducted numerous interviews with teacher and student participants in each case.

Another technique Guba and Lincoln recommend to increase credibility is peer debriefing (p. 237). This means discussing one's issues and tentative findings with a disinterested peer, to help work through problems as well as to test working hypotheses and help uncover one's own posture and values. I have had regular discussions covering these matters with fellow PhD students, work colleagues and supervisors.

Negative case analysis is another means Guba and Lincoln recommend for increasing credibility (pp. 237-8). It means examining cases that don't fit the pattern suggested by the hypothesis and reworking the hypothesis until it accounts for all, or nearly all, cases. In my research, my third case study represented a negative case in many ways, and presented me with numerous
opportunities to add nuances and depth to my understanding of the function of
story-building activity to engagement and learning. As I analysed my data from
this and the other two cases, I made strenuous attempts to account for all of the
data that was relevant to my hypotheses, whether it supported them or not,
partly to strengthen my confidence in my hypotheses and partly to avoid
silencing the voices of those participants whose experience did not fit the
expected or dominant pattern.

A further technique Guba and Lincoln recommend to increase credibility is
'member checks' (pp. 238-41). This means testing hypotheses, data and
preliminary interpretations with participants throughout the enquiry. In each of
my data gathering and analysis periods I had formal and informal discussions
and formal interviews with role play designers, facilitators and students in
which I checked details and tested interpretations. I sent transcripts of my
audio-recorded interviews to interviewees and asked them confirm their
accuracy. I also sent my preliminary findings to the role play designers and
facilitators in each case, and incorporated their feedback in my findings.

Transferability (rather than external validity or generalisability)
In constructivist research, instead of aiming for congruence between the data
set studied and the general population, the researcher's goal is to set out the
processes and steps by which she or he formed interpretations and as much
detail about contextual details impacting on the study as possible, to enable
others to decide to what extent the findings might apply to their own situation
(Lincoln & Guba 1989: 241-2). As I mentioned above, in order to achieve this
quality in my research I have provided detail about the context in my role-
playing activity descriptions, and highlighted where I thought particular
findings were likely to be highly context-dependent in my reporting. I have also been explicit about my reasons for decisions I have made relevant to the research, and about the bases for my interpretations and theories.

**Dependability (rather than reliability)**
The traditional criterion of reliability looks for the likelihood of similar results being achieved again in a similar study. However, Guba and Lincoln (p. 242) assert that in constructivist enquiries it is recognised that it may be desirable to change one's methods over time due to the researcher's and participants' constructions maturing. They argue that these sorts of changes should not render either earlier or later studies incapable of providing an instance to compare with other studies that are similar in other respects. Again, they propose that providing as much detail as possible about changes in methods so that others can explore these changes and grounds for making them should overcome this difficulty. While it is not possible to provide this kind of detail in a thesis—for example, about how my understanding of the area of research and research procedures developed during and between my case studies, prompting changes to some of my questions and data coding changes between cases, I have made clear in my reporting where it is and is not possible to relate findings in one case to another, and for what reasons.

**Confirmability (rather than objectivity)**
'Confirmability' means ensuring that data, interpretations and findings are grounded in the study context and not simply made up by the researcher. However, instead of being founded in the researcher's adherence to 'objective' data-gathering methods, Guba and Lincoln assert that the concept of confirmability acknowledges the subjectivities involved at all stages of the
enquiry process and involves providing others with as much access to the data itself as possible. It also, again, involves making clear the steps by which the researcher formed her or his interpretations, so that others may form their own judgement on the data and processes used (pp. 242-3). A PhD thesis is a public document, and it is not permissible to provide public access to my raw data, which may identify the participants, within this document. However, I have endeavoured to include participants' words in their original, unedited form wherever possible, and to outline the steps I have taken to form interpretations from my data.

I have also adopted several strategies to increase my awareness of my own subjectivity, as proposed by Strauss and Corbin (1998: 43-7). These include searching the literature to find similar examples and to stimulate thinking about ways to interrogate the data; seeking out and checking against alternative interpretations and explanations; checking interpretations and explanations with respondents; re-examining data with a sceptical eye; and comparing different categories of data for similarities and differences.

**Reporting**

In Chapter 1 I mentioned that I wished to achieve an outcome of contributing to knowledge about the design and management of online role plays. However, to conduct research with the purpose of contributing 'knowledge' to a community may be seen as problematic when the nature of knowledge and truth is recognised to be contingent, situated and provisional. As I stated earlier, I do not attempt in my reporting to present a universal truth, a 'one best way' to design and manage all online role plays. Rather, I present my
contribution as a story that is 'partial, particular, and represents a perspective, a way of seeing that is complex and multifaceted rather than universal' (Kamler 2001: 174). In sharing this story with the higher education online role play design community I aim to enter and invite a dialogue with other researchers and practitioners with an attitude of curiosity and respect for others, with the hope that out of the dialogue richer understandings might emerge on both sides.

**Chapter summary**

In this chapter I have described the methodologies and methods I have used to choose, collect, manage, analyse and report on my data in this research project, in order to help me to build insights in response to each of my research questions. I have also outlined the measures I have taken to ensure my research processes have been ethical and trustworthy. In the next chapter I will describe the cases I have studied in detail, before presenting my analysis of the data I gathered in the chapters that follow.
CHAPTER FIVE

Three role-playing activities

Introduction
In this chapter I introduce the three role-playing activities that have provided the context and data for my case studies. The activities gave me an opportunity to explore in depth three very different approaches to role playing. The first, the 'Middle East Politics Simulation' (MEPS), ran entirely online over 13 days, involving politics and journalism students in three universities. In the second, the 'HEADSS workshop', medical students and secondary school drama students collaborated in 90 minutes of face-to-face drama activities. The third was 'Bilby', a fictitious scenario in which professional writing students took roles to develop a series of written and oral pieces over eight weeks, working online and face-to-face.

Middle East Politics Simulation
In the MEPS, politics students from two Australian universities took roles as key players in Middle-Eastern politics and used simulated email to plan or respond to a dramatic mix of bombings, kidnappings, high-level political manoeuvrings and other diplomatic incidents. Journalism students from a third Australian university emailed questions and reported the characters' activities in vivid detail in daily online newspapers. A purpose-built website provided access to the online newspapers and email accounts (images from the website
are in the appendix). On the last day, many of the players attended a face-to-face conference to debate their positions.

The MEPS has the characteristics of an online role play as defined in Chapters 1 and 2 but I will refer to it as a simulation as that was the term the participants used. As I had only two journalism student participants consent to taking part in my research, but 46 politics students, I focused my research on the experience of the politics students.

**Why I chose the MEPS**

I studied the MEPS because I had heard of its reputation as an interesting and effective learning activity, and it had a long track record in higher education. It is regarded as an archetypal online role play, having been the first to be widely used and providing the template for many online role plays currently used in Australia (Wills & McDougall 2009, Alexander 2005). The MEPS was nominated as an exemplar of 'an effective learner-centred teaching strategy for higher education' (Ramsden 2003: 172-3). It was also named as an exemplar of the internationalisation of teaching (Back, Davis & Olsen 1996: 48), and a model of good practice in the use of information technologies in international education (Alexander & Blight 1996). When I emailed an expert in online role play research early in my study to ask for recommendations of online role plays that were well regarded, this was the first on her list.

**How the simulation was structured, what happened**

The lecturers instructed the politics students on university sites 1 and 2 to form themselves into groups of two or three and choose a Middle-Eastern character
from a list of 37 they provided. The groups each prepared a profile of their character and posted it on the simulation website.

On Day 1 a lecturer posted a written ‘Scenario’ on the website. This contained 10 fictional news items, such as that a US helicopter had crashed in Western Syria, there had been an assassination attempt in Lebanon, Israelis had seized a truck that might have been carrying weapons in Palestine, and some Red Cross workers had been kidnapped in Gaza. The students worked in their character groups to prepare responses to whichever of these events concerned their character, and then emailed other groups in character. For example, Syrian leaders sent angry emails to US leaders asking why their helicopter was in Syrian airspace. In addition, the groups emailed press releases to the online newspapers, to try to ensure their side of the stories was told.

On site 3, the journalism lecturer allocated his students to three simulated online newspapers, *Al Jazeera*, the *New York Times* and *The Guardian*. They took on roles as editor, design/layout staff, sub-editors and journalists, switching roles every few days. The daily online papers mimicked the style, content and editorial bias of their real counterparts, and included news, opinion, background pieces, profiles, gossip, photographs, cartoons and so on. The journalists sent the politics characters questions and wrote their articles from the emails the characters sent them and their own research.

The simulation ran continuously for 13 days. An indication of the intensity of the activity was that 5586 emails were sent between the 37 character groups over the period, although participants contributed to varying degrees. The
Barack Obama character sent the highest quantity of 234 emails, ranging down to the Sudanese President Bashir character sending 10 (website statistics).

The simulation rules were minimal. The main one was that participants play in character, which meant promoting the kinds of strategies that were believable for their character and also using the kinds of language and forms of address their character would use. Another was that if participants wished to pursue a strategy that might impact significantly on another character, they were obliged to email their idea to the lecturers playing the role of 'Control' for approval first (Simulation information). Three politics lecturers took the Control role. They monitored all characters' email and responded to queries but kept interventions to a minimum.

The simulation proceeded smoothly until Day 4, when one of the students accidentally sent a phone text message intended for a group-mate to the wrong number. This message was that he had received approval for the fatal bombing of a mosque the next day—and the person who received it, knowing nothing about the simulation, immediately contacted the Federal Police. The police enacted their terrorism response plan and questioned the student and then the Acting Vice-Chancellor of the site 1 university. The simulation was shut down, but after several hours of discussion access was restored, provided students signed, scanned and emailed back a form saying they would use only the simulation interface for communications. This incident caused a ripple among students in lectures that week and a setback for a few days but things soon returned to normal.
On the penultimate day, each character group posted a position paper on the simulation website, outlining their character's stance on the political issues with which they had been involved. Then on the final day, those politics students who could attend on site 1 debated each other in role, face-to-face, in a simulated conference. Site 2 politics and site 3 journalism students had short debriefing sessions on their own university campuses.

**Contextual characteristics**

Table 5.1 summarises some of the key contextual characteristics for this activity and I will discuss these below. The simulation took place around the middle of first semester in 2009, in which time lectures and tutorials for all of the cohorts involved continued as usual.

**Table 5.1: Summary of context and assessment details**

<table>
<thead>
<tr>
<th></th>
<th>Number of students</th>
<th>On-or-off-campus</th>
<th>Overall weighting</th>
<th>Profile</th>
<th>Quantity of posts</th>
<th>Quality of posts</th>
<th>Position paper/conference contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site 1: Undergraduate politics students</td>
<td>64</td>
<td>On- and off-campus</td>
<td>50%</td>
<td>10%</td>
<td>5%</td>
<td>25%</td>
<td>10%</td>
</tr>
<tr>
<td>Site 2: Masters politics students</td>
<td>28</td>
<td>On-campus</td>
<td>40%</td>
<td>10%</td>
<td>10%</td>
<td>20%</td>
<td>-</td>
</tr>
<tr>
<td>Site 3: Journalism students</td>
<td>27</td>
<td>On-campus</td>
<td>50%</td>
<td>Pass/fail based on overall contribution</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Sites 1 and 2: politics students
The site 1 politics students were enrolled in a second-year undergraduate unit, while the site 2 students were studying at Masters level. They all faced the same requirements and conditions, and a small number of character groups contained a mixture of undergraduate and Masters students. The site 2 lecturer said the main differences between the two cohorts related to their being older, on average, and to their being in a smaller class group that had a lot of contact in their Masters program (Masters politics lecturer Terry email 12/6/2009).

The students' performance in the simulation made up 40-50% of the students' marks for the unit, depending on the level at which they were studying. The lecturers gave all members of each political character group the same grade. All politics students had the option of completing a major essay instead of taking part in the simulation but few took this option (lecturer Mia interview).

The politics students were told that an important factor in their assessment was to always act within the role of the real Middle-Eastern character they were representing and the real Middle-Eastern context, with the addition of the fictional events in the scenario they had been given (Simulation information).

Participants included on- and off-campus students. Some character groups contained a mixture of both. All on-campus students had discussions about the simulation in their weekly tutorials. Off-campus students had personal email correspondence with their lecturer in which they received similar information (lecturer Mia interview).
In-group communication was mostly via telephone, personal email and the group diary function in the simulation website, even for on-campus students (Briony, Thierry, Kerry, Jeremy, Sam interviews, Jen, Ciaran focus group).

Site 3: Journalism students
The journalism students were in their final year of an undergraduate degree. For these students the simulation was a compulsory component of a core unit. They were marked on a pass/fail basis (journalism lecturer Cameron email 21/5/2009). However, a student's impression of the criteria for a pass was: 'the only way you would fail would be if you didn't show up and take part' (Cassie interview).

The journalism students worked on campus, in separate rooms for each newspaper, taking shifts to gather news and pictures, research and write articles, and lay out the newspapers to meet the daily deadlines (Cassie interview). The journalism lecturer said he intentionally left the students 'pretty much alone' during the simulation period. He scanned each edition and gave feedback each morning, but otherwise did not see the students (lecturer Cameron email 21/5/2009).

Learning aims
The original creators of the MEPS described the learning aims of the simulation for the politics students as follows:

- to introduce students to the facts of Middle East politics (that is, make them familiar with the major countries, leaders, groups, movements and relationships in the region)
• to give them experience with the complexities of negotiation and decision-making in "real" political systems
• to improve their skills in using computer technology and the Internet as tools for the workplace (Vincent & Shepherd 1998: 2).

The site 1 (undergraduate politics) lecturer, who had facilitated the simulation many times over the past 11 years, reiterated these aims. She said the simulation helped students to see how the current complex sets of issues affecting the Middle East all played out against each other, the ways in which many of them were grounded in history and how they might develop in the future. She said students who completed an essay instead of taking part in the simulation showed a poor level of understanding of this complex field in comparison (lecturer Mia interview).

The journalism lecturer said the things he hoped that his students learned from the simulation were:

Firstly, the buzz of journalism; second, practice at news and feature writing on a daily basis in an exercise that engages them totally and so where they are working to their maximum potential, and, third, the opportunity to work 'around' a paper - from writing to subbing to layout and design to managing it (lecturer Cameron email 21/5/2009).

My second case study was the HEADSS workshop.
HEADSS workshop

In the HEADSS workshop, medical students playing the role of doctors carried out a consultation with secondary school drama students playing the fictional role of a male or female adolescent named Jo. The workshop was in face-to-face mode and lasted 90 minutes.

The 24 doctor characters worked in pairs or threes to consult with the 19 Jo characters, following the recommended HEADSS framework (addressing in turn health, education, alcohol, drugs, sex and self-harm). The doctors aimed to assess Jo's psycho-social wellbeing, which included some sensitive issues and risky behaviours. The medical lecturer and school teacher facilitators interrupted the consultations every few minutes with drama activities designed to stimulate critical thinking about the language, questions and assumptions the medical students were making about young people, and to encourage them to try more effective words and strategies. The school students gave their partners individual feedback and made suggestions for the whole group.

As the context of my study is higher education I focused on the experience of the medical students, although I also gathered information on the learning aims and issues for the school students.

Why I chose the HEADSS workshop

One of the aims of my research has been to explore ways in which online role plays might support a critical approach, to develop students' awareness of cultural assumptions in the subject area and activity and to help them to critique these and develop their own voice. The HEADSS workshop was designed explicitly to use poststructuralist drama techniques to encourage
participants to question and re-frame certain categories that limited young people's possibilities for personal agency and growth (Cahill 2008). As this aim matched my research aim, I wished to see how these techniques worked, and whether they might be able to be adapted for online role plays to support students' development of critical awareness and voice in these activities. After discussing this research aim with a supervisor, she recommended the HEADSS workshop as a potential case study, citing the workshop's long track record and strong theoretical base. The workshop had been embedded as a compulsory component of the curriculum of a university medical school since 2003 (Wales, Cahill & Sanci 2004:12). The design's theoretical base is described in Cahill (2008).

**How the workshop was structured, what happened**
The sequence of activities was as follows.

**Briefing:** As soon as most students had arrived, the medical lecturer briefed the medical students about what to expect. In a separate area the school drama teacher spoke with the school students, ensuring they were familiar with their role of Jo and comfortable with the procedure (they had workshoped the role in previous drama classes).

**Getting to know you:** Participants mingled freely. After about a minute the facilitators asked them to form pairs or threes containing a medical student and a school student, and to find out three things about each other. This was repeated with different partners.
**Naturalistic role play:** Pairs or threes role-played the first segment of the HEADSS consultation sequence (health). That is, the medical students playing the role of doctors asked the school students playing the role of Jo questions about her/his general health and presenting problem. After a few minutes facilitators asked the medical students playing in threes to swap roles to give the other medical student a chance to practise.

**Individual feedback:** The school students came out of role and gave individualised feedback and advice to their medical student partners on their questioning technique and language.

**Fishbowl:** Volunteers played out a particular scene in the centre of a circle of students. The scene was a doctor trying to persuade Jo's mum (played by a school student) to leave the room for a while so she/he could speak with Jo alone. The facilitators then asked all participants, including onlookers and actors, to give suggestions on how a doctor might perform more effectively in this situation, using the third-person voice. Suggestions included words and phrases that should be avoided and other words that worked better, body language tips, and so on.

**Hidden thoughts:** Extra players were asked to stand behind the volunteer characters already in the centre and state the thoughts each of the characters was likely to be thinking but unable to voice in the situation. The facilitators gently probed to help students articulate the multiple and conflicting desires, fears, assumptions and norms that commonly impacted on the kinds of things people were able to say and do in the kind of scenario depicted, and thus brought these forces and their sources into open discussion.
**Change partners, role swap**: Students rotated to different partners. For this section, the medical students played the role of patient while the school students played the doctor. They enacted the doctor giving her/his confidentiality statement and seeking Jo's agreement to proceed.

**Fishbowl**: Volunteers played out another scene in the centre, in which the (medical student) doctor asked the (school student) Jo about her/his alcohol and drug usage.

**Naturalistic role play, individual feedback**: Participants worked in pairs/trios again, this time the (medical student) doctor asking about Jo's sexual behaviour, followed with feedback.

**Acknowledgements and summary**: The medical lecturer made a brief summary of the main points that had been made in the activities, and then all of the participants thanked each other for their contributions. After the school students had left, the medical students had a debrief session with the medical lecturer. The school students had their own debrief some time later (journal 10/10/2009).

**Contextual characteristics**
The workshop took place in the school students’ drama room, in the afternoon of the last day of school for the term, in October 2009. The workshop had to fit into the allotted period in the school timetable. The medical students had to find their way to the room amidst all the sights, sounds and smells of an inner-city Australian government secondary school. The school students came from a mixture of socio-economic groups (school drama teacher Tess interview). They
were in years 9 and 10 and showed a range of physical and emotional maturity, some being quite small and shy while others were tall, fully developed and confident. The students’ clothing ranged between the school uniform and potentially confronting skimpy tops and mini-skirts. The school students had workshopped their role of Jo in drama classes leading up to this workshop and had printed notes on how they should play the role.

The medical students were in the fourth year of their degree and looked to be aged in their early- to mid-twenties (journal 10/10/2009). The workshop was a compulsory component of their adolescent health curriculum, along with lectures, clinical practice and other activities, but was not assessed separately. A large portion of the students were from Asian backgrounds and would probably have had little experience of Australian adolescents (medical lecturer Verity interview).

Learning aims
The workshop’s learning aims for the medical students were firstly to develop knowledge and skills, such as learning and practising useful words, phrases and question types to elicit sensitive information from adolescent patients; and secondly to develop a broader understanding of—and respect for—young people’s culture, issues, attitudes and abilities (Cahill 2005, 2008; Wales, Cahill & Sanci 2004).

Cahill (2008) argues that for the medical students to develop the professional behaviour desired of doctors depends upon more than communication skills:
A poststructuralist perspective raises the possibility that attention will also need to be given to the way in which professional behaviour is moderated by the shaping discourses which both influence perception and pattern behaviour. In this program, I aim not only to provide an opportunity for the medics to develop their interviewing skills, but also to invite them to re-frame the categories of 'adolescent', 'patient' and 'doctor' (Cahill 2008: 198).

Cahill argues that questioning and re-framing categories such as these does not happen easily as their definitions and boundaries are often deeply ingrained in our culture and there are many subtle ways in which they are reinforced. She asserts that using naturalistic role play alone might not provide the necessary rigour to cut through the dominant assumptions surrounding the roles of doctors and adolescent patients that limit the possibility for people to play these roles in ways that depart from the norm. Hence, the workshop also contained the non-naturalistic activities described above.

The third case study was the Bilby scenario activities.

**Bilby**

In the Bilby scenario activities, students adopted roles and stances on local issues in the simulated country town of Bilby, and developed a range of persuasive writing and speaking pieces from those points of view. The activity was part of an undergraduate 'Writing for professional practice' subject in an Australian university and ran during students’ tutorials and online for eight weeks.
A rich, colourful and entertaining website provided all of the resources the students needed to prepare their pieces (images from the website are in the appendix). Students worked in groups to plan their writing strategies. While some students worked entirely online, others attended face-to-face tutorials and only used the Web to access the resources on the Bilby website. There were 222 students in multiple campuses and tutorial groups.

I have used the term 'scenario activity' to describe this technique as this was the term used by the participants, teachers and designer.

**Why I chose Bilby**
In choosing my third case study I was seeking an online role-playing activity that would provide a further contrast to the two I had studied previously, to introduce a further object for comparison. I was aware that the Bilby scenario activities, which were running as part of a popular unit at a university close to me, had received good feedback from students and were very different to both the Middle East Politics Simulation and the HEADSS workshop. The unit in which the activities ran also coincided with the period I had available for data collection. Comparing the ways in which the Bilby students engaged with and learned from their experiences with those of students in the other two cases helped to highlight how different ways of managing the story elements in these sorts of activities could impact on students' engagement, learning and critical learning.

Also, the cohort of students involved in the Bilby activity was so large and diverse that it provided opportunities to study the effects of variations in multiple contextual factors. These included role playing in a wholly online
format in comparison to face-to-face, the facilitation styles of different tutors, and the experience of students from different age-groups and disciplines.

Bilby had a long track record, having been used for the first time in 2000 and twice each year since (designer Justine interview).

**How the scenario activity was structured, what happened**

Bilby was a make-believe Australian town with difficult decisions to make to accommodate its rapid increase in population. It badly needed a new hospital, but the best available site was the town's historic graveyard and adjoining wetland, which contained endangered species. The scenario contained three main lobby groups: Bilby Business Association, the Historical Society and the Landcare Group. The unit chair divided students randomly between these groups so that each lobby group was equally represented in each tutorial cohort, and in the cohort of off-campus students. Students were required to write most of their assessment pieces from the perspective of the lobby group to which they had been allocated. The website resources included an interactive map of the town and region; subsidiary websites for the shire council, tourism authority and each of the main pressure groups; and a media section containing mock newspaper and radio reports, profiles, letters and so on.

On-campus students were given approximately an hour a week of tutorial time over weeks 4 to 11 of the trimester to work on their Bilby activities. They worked in their tutorial lobby groups to explore their group's perspective on local issues and discuss persuasive writing strategies they could use in their individual writing pieces. Sometimes at the end of the tutorial a tutor would
ask students to make a brief presentation to the class summarising the strategies on which their group had decided. The on-campus students also had access to online discussion areas but did not use these for role-playing online.

Off-campus students had separate online asynchronous discussion areas for each of their groups. These were not private, and they were not anonymous. The off-campus tutor posted weekly Bilby activities equivalent to those given to the on-campus students. While the online tutor made numerous encouraging suggestions to stimulate students to post messages, only a handful of students in each group made the bulk of the postings. A combined total of 180 student postings was made in the group discussions for the entire period, of which only five students posted eight times or more (ie once a week during the role-playing period), and 21 students (out of 40) did not post at all (website).

Each week, students studied a different professional writing genre, as outlined in Table 5.2, and were required to produce a piece of writing in this genre for assessment. The perspective from which they were writing shifted slightly each time.

Towards the end of the trimester, each tutorial group of on-campus students took part in a simulated public meeting, in which members of the lobby groups confronted each other in character and argued their cases for or against building the hospital on the proposed site. Each tutor facilitated these meetings in a different way. The online tutor attempted to create a similar experience for the off-campus students using asynchronous discussions, but insufficient students responded so the meeting did not take place (tutor Pascal interview).
Table 5.2: Unit activities and assessments (from Unit guide 2010: 3-4)

<table>
<thead>
<tr>
<th>Week/focus</th>
<th>Activity</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3/Language, essays, research</td>
<td>Lectures, readings, tutorial/online discussion activities, etc.</td>
<td>Research essay (worth 30%)</td>
</tr>
<tr>
<td>4/Speeches</td>
<td>Readings, tutorial/online discussion activities, etc.</td>
<td><em>Bilby mayor's speech: optional folio piece</em> (whole folio of 4 pieces worth 40%)</td>
</tr>
<tr>
<td></td>
<td><strong>Bilby group work: planning mayor's speech</strong></td>
<td></td>
</tr>
<tr>
<td>5/Letters to the editor</td>
<td>Readings, tutorial/online discussion activities, etc.</td>
<td><em>Letter to the editor of a Bilby paper: required folio piece</em></td>
</tr>
<tr>
<td></td>
<td><strong>Bilby group work: planning letters to the editor to support group's perspective</strong></td>
<td></td>
</tr>
<tr>
<td>6/Reports—structure</td>
<td>Readings, tutorial/online discussion activities, etc.</td>
<td>Report: assessed separately (worth 20%)</td>
</tr>
<tr>
<td></td>
<td><strong>Bilby group work: planning reports on Bilby tourism options (promoting group's perspective)</strong></td>
<td></td>
</tr>
<tr>
<td>7/Reports—summarising</td>
<td>Readings, tutorial/online discussion activities, etc.</td>
<td>Report cont'd</td>
</tr>
<tr>
<td></td>
<td><strong>Bilby group work: planning reports continued</strong></td>
<td></td>
</tr>
<tr>
<td>8/Promotional plans</td>
<td>Readings, tutorial/online discussion activities, etc.</td>
<td><em>Promotional plan: required folio piece</em></td>
</tr>
<tr>
<td></td>
<td><strong>Bilby group work: developing promotional plans for an event to promote the group's perspective</strong></td>
<td></td>
</tr>
<tr>
<td>9/Media releases</td>
<td>Readings, tutorial/online discussion activities, etc.</td>
<td><em>Media release: required folio piece</em></td>
</tr>
<tr>
<td></td>
<td><strong>Bilby group work: planning media releases to publicise the group's event</strong></td>
<td></td>
</tr>
<tr>
<td>10/Newsletters/profile interviews</td>
<td>Readings, tutorial/online discussion activities, etc.</td>
<td><em>Newsletter profile: optional folio piece</em></td>
</tr>
<tr>
<td></td>
<td><strong>Bilby group work: planning profiles of group leader for</strong></td>
<td></td>
</tr>
</tbody>
</table>
### Contextual characteristics

The students came from a wide range of disciplines. The unit was an optional core unit in an education stream but was also taken as an elective by students studying public relations, journalism, media and communication, health, business, law and other disciplines. Nearly all (93%) were in their first trimester at university. Their ages ranged from 18 to their forties. Most students were enrolled in on-campus mode and performed their in-role and other activities each week in their tutorials. The 40 off-campus students performed the scenario (and other activities) entirely online, using text discussions in the learning management system to interact with one another both in-role and out-of-role.

The students' in-role writing pieces made up 60% of their assessment, and their oral or written participation in the discussions contributed to a mark out of 10% for their participation in the unit overall. The scenario activities took the bulk of the students' time and assessment weighting for the unit. Other activities included lectures; tutorials on writing styles and skills; reading, discussion and
oral presentations on set readings; and workshopping of student written work. The scenario ran in first trimester, 2010.

**Learning aims**

The Bilby designer said she created the scenario and activities to provide an engaging and realistic context in which students could develop their professional writing skills (designer Justine interview). The broad aim of the unit was to develop students' writing, research and oral presentation skills for use in professional writing fields as well as in other subject areas (Unit guide 2010: 3). These skills were to:

- read critically and report purposefully
- assess a variety of sources—written, oral, visual, aural
- recognise differing interpretations
- synthesise and summarise arguments
- structure answers using appropriate formats
- develop written and oral material in a style appropriate to audience and purpose
- access relevant materials in varying locations including libraries, internet, community and other experts
- undertake self-directed tasks
- engage in critical discourse
- conduct oral interviews
- meet deadlines
• draft and redraft written work
• work collaboratively, with a team
• use technology for range of purposes, including working with others, communicating and accessing sources of research (Unit guide 2010: 3-4).

The scenario activities were distributed among other learning activities and served to integrate, contextualise, motivate and extend learning from these activities rather than introduce new learning aims of their own (designer Justine interview).

Chapter summary
The three role-playing activities I have described above provided three rich and varied contexts for my study. They could hardly have been more different, ranging as they did from face-to-face to almost wholly online formats, with very different aims and subject areas, contrasting cohort characteristics, and different dramatic methods. They also differed in the ways in which they supported students' abilities to co-develop engaging and meaningful stories, and to develop critical perspectives on both the subject matter and the stories. Table 5.3 provides a brief summary of main areas of difference in their design. I explore the impact of these varying factors in the following chapters.

Table 5.3: Summary of role-playing activity characteristics

<table>
<thead>
<tr>
<th></th>
<th>Learning design</th>
<th>Student interaction</th>
<th>Student's character</th>
<th>Other characters</th>
<th>Control over interactions</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEPS</td>
<td>online role play</td>
<td>online interaction</td>
<td>team of 2-3 playing</td>
<td>30 other teams</td>
<td>teacher in 'control' role</td>
<td>3 weeks</td>
</tr>
<tr>
<td>HEADSS</td>
<td>face-to-face role play</td>
<td>face to face interaction between medical students and high school students</td>
<td>doctor (which they are training to become)</td>
<td>Jo the patient played by real adolescents (drama students) with rehearsed script</td>
<td>teacher controls interactions closely</td>
<td>90 minutes</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Bilby</td>
<td>online scenario activities</td>
<td>little online interaction between students in role concluding f2f episode for some</td>
<td>member of a lobby group</td>
<td>members of 2 other lobby groups</td>
<td>no real student interactions till last week</td>
<td>8 weeks</td>
</tr>
</tbody>
</table>
Online role play stories, engagement and learning in higher education

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BA, G DIP ED, G CERT ID, M ED (IT IN ED)

Volume 2 of 2

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Deakin University
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CHAPTER SIX

Learning and engagement in the activities

Introduction
My first supporting research question is: *what are the relationships between engagement, story and student learning in online role plays in higher education?* In order to answer this question with reference to my case studies, it is necessary to establish, as far as possible, the extent and nature of the students' engagement with their role-playing activities in these cases, and what they learned. My second supporting question is: *in what ways may online role play support critical learning in higher education?* An important part of my analysis of what students learned is to establish whether and in what ways they developed a critical approach to their subject matter and the stories they co-developed as part of their activities. These therefore are the foci of the current chapter. In forthcoming chapters I explore further the ways in which the students' ability to build stories in their role-playing activities was managed and the impacts this had on their engagement and learning.

What students learnt
I will present my findings on what the research participant students in each of the cases learnt by discussing the extent to which they achieved the learning aims set out in Chapter 5, and any other learning outcomes, in each of the cases. I will also discuss the ways in which students achieved these outcomes.
As part of my enquiry I will explore critical learning outcomes and ways in which these were achieved.

**Middle East Politics Simulation**

All of the data I collected from my research participants in the MEPS indicates that they thought they had achieved the learning aims for this activity. However, it is necessary to bear in mind that only 20-25% of the group participated in my research (some interviewees may have submitted an (anonymous) questionnaire as well), and that, as my research participants were all volunteers, they may have been predisposed to be positive about their experience.

The university site 1 lecturer reported that the quality of politics students' work overall in the simulation was good, and that most students had demonstrated achieving the learning aims. All but two of the character groups passed (lecturer Mia interview).

**Factual knowledge**

Of the questionnaire respondents, 95% agreed that they had a better understanding of the facts of Middle East politics as a result of the simulation. Comments in the focus group, interviews and questionnaire indicated that students gained this factual knowledge as a result of having to research details about the characters and issues they faced so they could build strong strategic responses for their character. For example:

> The better you play the game depends on what you know—you can’t keep everything generic—you must mention certain things, for
example the UN resolutions leading to the creation of the Israeli borders and so on (Liz interview).

Several students said that while they spent the early stages of the simulation with several Google and Wikipedia windows open at a time, by the end they were surprised at the amount of factual information they had learnt. For example:

The amount of stuff I've learnt in the past week has been just immense… The amount I've learnt about Israel has been more in the past week than in the past five years. The learning has been immense but rewarding (Dan interview).

I feel like I could have any conversation with anyone about the Palestinian position now, I've learnt so much (Liz interview).

Quotes and numbers such as these indicate that the MEPS may have provided the kind of learning activity—at least for my research participants—in which the facts came ‘for free’ as a result of students being motivated and resourced to prepare for action in the story world, rather than having to make special efforts to learn them in a way that was detached from meaningful contexts of action, such as through lectures and readings (Gee 2007: 109-10).

**Generic skills**

In a further questionnaire question on improvement of generic skills (as listed by Deakin University 2009), I asked the students to indicate the skills in which they thought they had improved as a result of the activity. All of the skills were
indicated by at least half of the respondents, and several were indicated by more than 80%. The highest scoring skills were 'identifying, evaluating and using information', 'creative thinking', 'problem solving', 'communicating in a different context', 'working effectively as part of a team' and 'effectively using information and communication technologies'. As most of the students worked in groups and needed to research, collaborate, communicate online and negotiate to some extent these results were not surprising.

Subject-specific procedural skills and overall understanding
Of the questionnaire respondents, 89% agreed that they 'better understand the complexities of negotiation and decision-making in real political systems' as a result of the simulation. The majority of the students with whom I spoke described this type of learning outcome (Liz, Sam, Briony, Dan, Jeremy interviews; Thierry focus group). For example:

There are so many people with an interest, trying to have their say and trying to work things out, trying to get a peace process going. Or there's the other way, there's a ridiculous amount of people trying to cause anarchy ... I got a more thorough idea of the complexity of the region ... I got so many emails from so many people about so many things ... You learn how sort of incestuous the region is, and how everyone's interconnected through some way, shape or form, but it's all different, like you can't go 'I'm friends with him and I'm friends with them, so they must be friends', but they could be enemies (Jeremy interview).
Several of the politics students' comments were extremely enthusiastic overall about their learning from the MEPS, for example:

The sim is the best thing I've ever done in tertiary education. It gives you a real opportunity for creative learning, problem solving, teamwork and so on but also makes you find out about the intricacies of the political situation (Liz interview).

I think the simulation is a unique and creative way in which to learn and engage with the issues of the Middle East. In respect of university learning, I think it is the single most effective learning experience I have ever engaged in. It really is 'a sink or swim' experience, where the student really can dictate the extent and breadth of learning they wish to extract from the experience. I have participated in three of [lecturer Mia's] sims and couldn't recommend it high enough to any student wishing to learn about the Middle East and the politics which drive the region (questionnaire comment).

While I focused more on the experience of the politics students because I had very low numbers of journalism student research participants, the one journalist with whom I spoke said she believed she and her peers had also learnt a lot from the simulation (Cassie interview).

**Journalism students' learning**
The journalism students were also required to act 'in role', as media representatives seeking to produce the best and most appropriate news
coverage of the events in the simulation for their newspaper's readership. Journalism student Cassie indicated that the simulation's level of realism in terms of its tasks, conditions, standards, supports, information sources and so on compared very well with a real newsroom. She stated that the key things she had learnt were:

- Working to deadlines; having to quickly assimilate new information that was completely foreign; learning about a newsroom environment, how it functions, witnessing the whole process; about the Middle East—even though the stories weren't true, I became aware of the background, politics, leaders and so on, none of which formed part of my knowledge beforehand (Cassie interview).

These learning outcomes also represent a combination of facts, skills and more complex understandings.

**Critical learning**

Gregory and Cahill (2009) define critical learning as developing a *sociological perspective* on all forms of reading, writing and speaking. This involves developing a deep awareness of the cultural expectations, norms, power relations and consequences involved in the production and reading of any text. In the context of this research, it also involves developing an awareness of the ways in which cultural expectations, norms and power relations within the actual role-playing activities impacted on the meanings that were produced.

In the MEPS, developing students' critical awareness of cultural assumptions and values in Middle-Eastern politics, and their ability to have a voice and make a difference in this arena, was not mentioned among the learning aims of
the simulation. However, 89% of my questionnaire respondents said they were more likely to question stereotypes, Western assumptions and media representations of players and issues in Middle-Eastern politics as a result of taking part in the MEPS; and these sorts of outcomes were volunteered frequently by students with whom I spoke.

Several commented that when they sent the same press release to the three different online newspapers, the newspapers frequently gave the information contrasting treatments. This indicated to them that each particular newspaper's view of what constituted newsworthiness, and even truth, might differ markedly (Cassie, Jeremy, Thierry interviews).

Two students complained that journalism students had either failed to check facts or had written inaccurate reports on some important issues, and this had impacted on their ability to respond to the simulation events (Kerry, Cassie interviews).

Two remarked that stories with which they had been involved had been given a greater or lesser prominence in the newspapers than they thought had been warranted (Jen focus group, Liz interview).

Several politics students said they had learned skills in managing media to further their characters’ political interests as a result of their interactions with journalists in the simulation (Briony interview; Thierry, Jen focus group). These included developing friendly personal relationships with journalists, wording press releases in such a way as to increase their chances of being used, and timing events to allow for media deadlines.
Both journalism and politics students provided instances in which the actions and representations of the media influenced events in the simulation world (Thierry, Jen focus group; Cassie, Thierry interviews). One example was when journalists published unconfirmed inflammatory remarks that jeopardised fledgling peace processes between rival factions of Palestinian political group Hamas.

The following quote illustrates how one student's view of the world and the concept of truth as represented by news media changed as a result of the experience:

I find myself sympathising with Middle-Eastern countries now when stuff comes out in the news. Because one of the things that I really picked up in the sim was we would make a press release and it would be reported three different ways according to the newspaper ... I think that's fairly realistic because essentially it's the same set of facts but the stories are completely different ... so as I read stuff now I think 'Oh, there's probably a bit more going on than what's reported'. I don't necessarily believe what's on the news, take it at their word (Jeremy interview).

While several of the students I interviewed complained in their interviews about aspects of the simulation that made it awkward for them to interact and build their strategies, there was no formal guided reflection or other activity in which students' attention was overtly drawn to the ways in which meanings were created in the simulation, and how alternative
meanings might have been produced if it had been designed or managed differently. Without activities prompting students to reflect critically on the ways in which meanings were made in the workshop, it is possible that many students did not develop greater critical awareness.

In summary, there were many indications that the MEPS provided conditions for a zone of proximal development (Vygotsky 1979) for the students to learn the intended—and also unintended—skills, knowledge and attitudes outlined above. Students with whom I spoke breached the gap in knowledge that they initially faced in terms of factual and procedural knowledge and generic skills through accessing 'more knowledgeable others' in the form of web-based resources, their group-mates and their lecturers. They also had opportunities to experiment with, refine and consolidate their knowledge through their role playing with feedback from other roles as well as the representations of their actions in the online newspapers. In addition, the simulation provided opportunities for students to learn about the constructedness and fallibility of news reports, how injustices are perpetrated and promoted through the media and how media may be managed to increase the possibility of having their view published. It is notable for my research that these learning outcomes were all achieved as a direct result of the students' story-building activities in their make-believe world.

In comparison to these clear indications of what and how the MEPS students learned, the HEADSS workshop students who participated in my research were considerably less definite about having achieved all of the learning aims of their role-playing activities, and how this had occurred.
HEADSS workshop

All of HEADSS workshop students who submitted a questionnaire or took part in my focus group or email interviews indicated that they found the workshop highly valuable as a learning experience. However, they differed in the extent to which they thought they had achieved some of the learning aims, and they did not endorse the value of all of the activities that were used. As the students' development of critical learning outcomes was a key aim for this workshop, my discussion of their learning outcomes below will include this aspect, rather than treating it separately as above.

My research participants in the HEADSS workshop included around half of the 24 medical students who participated in the activities (there were 11 anonymous questionnaire respondents, who may or may not have included the seven focus group participants or email interviewees). As the medical students' work in the HEADSS workshop was not assessed directly, I relied on my research participants' self-assessment and on their lecturer's comments to identify what they had learnt from the workshop.

My research participants clearly believed they had achieved the learning aim of an improved ability to elicit sensitive information by learning and practising useful words, phrases and question types. Almost all (82%) of the questionnaire respondents agreed they had improved these skills. The students' responses to email interviews and in the focus group showed similar trends. These kinds of learning outcomes were frequently the first to be volunteered in response to open questions on what they had learnt (Holly, Jessie focus group; Jilly, Sarah email interviews).
However, my research participants were less confident as a group about having achieved the critical learning aim of developing a broader understanding of—and respect for—young people’s culture, issues, attitudes and abilities. Only 55% of questionnaire respondents agreed that their assumptions about young people had been challenged, and 27% disagreed with this statement. Also, only 55% agreed that they were more alert to the kinds of issues underlying young people's behaviour that are difficult for them to talk about, while the remainder were neutral on this question. The focus group and email interview participants were also divided on whether they had achieved these outcomes as a result of the workshop. There were some plain statements showing that some thought their assumptions about young people had not been challenged (Sarah, Jilly email interviews; Jessie focus group), for example: 'I wouldn't say it was testing stereotypes, I don't think there were stereotypes being challenged at all' (Jessie focus group). However, others indicated that their categorisation of young people had broadened, or the workshop had helped them to see young people as individual human beings with varied characteristics, rather than as a stereotype (Aaron, Simone focus group; Paul email interview). For example:

I was quite surprised at how I guess out of touch I was with adolescent individuals … I went to a boys' school for high school, and we wore uniforms, and so it was quite different being in a co-ed school with free dress … I was amazed by the maturity, at least sort of socially and in terms of life experience, I feel that their maturity I would have thought was far ahead of what I would have expected … I think there would be 15-16 year olds who weren't at all like that but you've got to acknowledge that there's probably a large population that are very
advanced in their maturity and experiences, and just to be aware that they're out there (Aaron focus group).

These results also reflected the students' responses to questionnaire questions on which parts of the workshop had helped them to learn. All respondents agreed the one-to-one role playing segments with an adolescent had helped them learn, and 91% agreed that the individual feedback provided by their adolescent partners had also helped. These two activities would have contributed the most to developing their basic consulting skills. Respondents were less decided on the success of the non-naturalistic activities that had been specifically designed to highlight and help them critique dominant assumptions. Only 55% agreed the 'hidden thoughts' activity had helped them learn.

When I asked the medical lecturer for her opinion on whether the students' assumptions about young people might have been challenged, and if so what might have contributed to this, she said she thought the students' ambivalent responses to these questions as a group might not provide an accurate indication of what they had learnt. She said in her experience as a medical educator and doctor, she had often found that people could not identify which learning experiences had made a difference in changing their ingrained behaviours. She said ex-students had told her some years after their participation in a workshop that it had been a particularly memorable learning experience, and she suspected it was not just the skill development outcomes...
that caused the experience to resonate, but something deeper (lecturer Verity
interview).

When I asked one of the role play designers for her interpretation of these
findings, she said they reflected her own surveys of past workshops, and she
had also concluded that many students 'lacked the educational literacy' to
identify which teaching/learning strategies made a difference to their thinking
designer Hope phone conversation 4/3/2010). Researchers in the field of
higher education generally (eg Coates 2006: 30-31) and in educational drama
(eg Morgan & Saxton 1987: 198-9) also argue that many important, deeper
learning outcomes can be subtle, difficult to articulate, and contingent on
contextual and personal factors; and may take time to develop as the
experience continues to resonate at the back of students' minds. Another
plausible explanation is that about half of the focus group participants and
email interviewees said they had lots of recent contact with Australian
adolescents, for example in having younger brothers or sisters, so many may
not have held limiting assumptions about young people in the first place.

At the end of the activity there was a short debriefing session in which the
medical lecturer asked students what they had learned and they discussed key
points about how to conduct a medical consultation with an adolescent
effectively. Eighty-one percent of questionnaire respondents agreed this
segment had helped them learn. However, this segment included no discussion
on the ways in which the activities themselves might have supported certain
assumptions and power relations, and how these assumptions and dynamics
might have influenced the meanings that students drew from their experience.
Therefore, while a good proportion of the students might have achieved some critical learning outcomes, their ability to critique the means by which they achieved these outcomes did not appear to be developed as part of their learning experience.

In summary, there were indications that most student participants in my research in the HEADSS workshop achieved the intended learning aims. However, they were more confident as a group about having achieved the skill-related learning aims, largely as a result of naturalistic role playing with individual feedback, than the more complex and longer-term critical learning aims, which were more likely to have come from the non-naturalistic, deconstructive activities. Again, it is notable for my research that the role-playing activities that were based on developing a story (ie the naturalistic one-to-one role plays) produced strong learning outcomes—even though the story development may have been extremely limited, as I will discuss in the forthcoming chapters.

The Bilby scenario activities were very different to the other two cases and presented a different set of problems in terms of establishing what students learnt.

**Bilby scenario activities**

Most of my research participants in the Bilby scenario activities were confident of having achieved significant learning outcomes as a result of the activities, but it was difficult to identify whether these had been achieved just as a result of the role-playing elements or whether other activities in the unit had also played a large part.
In this case study I had around 36% of the 222 students contribute responses to my anonymous questionnaire and/or take part in my focus group or interviews. These participants included both on-campus and off-campus students.

The Bilby scenario activities were designed to help students develop 14 writing, research and oral presentation skills, which I listed in Chapter 5. No students failed their assessments as a result of not demonstrating the required skills (unit chair Aleesha email 18/1/2011).

It was difficult to identify what students might have learnt from the role-playing activities as these were distributed among other learning activities over the eight-week period and served to integrate, contextualise and extend learning from these activities rather than introduce new learning outcomes of their own. For my questionnaire, I selected four skills on which I thought the role-playing activities were likely to have the greatest impact, based on theory in the educational drama and role-play literature (eg Bolton & Heathcote 1999, van Ments 1999), and all of the teaching staff confirmed my choice. These skills were an ability to recognise differing interpretations (81% agreed they had developed this skill), an ability to develop written and oral material in a style appropriate to audience and purpose (80% agreed), an ability to work collaboratively with a team (75% agreed), and an ability to use technology for a range of purposes including working with others, communicating and accessing sources of research (61% agreed).

My focus group, questionnaire and interview participants' comments in response to open questions on what they thought they had learnt from the role-playing activities had several themes. The most common theme was an
enhanced ability to differentiate between and use different writing styles (Sylvie, Marie interviews; Hannah, Kama, Sally focus group). For example:

I've really been able to differentiate between different writing styles, because with this one you don't have to focus on the content, you can just focus on how to write in all these different ways, so that was really helpful (Hannah focus group).

Another theme was an increased readiness and ability to see an issue from a number of points of view (two questionnaire comments; Antonina, Marie, Michael, Jane, Sylvie, Jemima interviews), for example:

I've learnt how a decision affects different people in different ways. Normally when I develop an opinion about something I don't consider the other points of view, but this has shown me that other groups have different ideas. It's opened my eyes to the fact that you probably should pay a little bit more attention to things that are going on in your community (Jane interview).

A third theme was an ability to appreciate the complexity of local political issues (Bonnie, Antonina, Bernard interviews), for example:

With regards to the hospital thing in our different groups, it's made me think what it would be really like for something like that to happen, like all the preparation and all the opposition, and all the different groups that would be worried about different things and stuff (Bonnie interview).
Each of these learning outcomes provides indications of the ways in which the use of the Bilby story helped these students learn. The first reflects the advantages of having a bounded context in the Bilby scenario to help students focus on skill building. The second is an example of how empathising with characters in the story helped students develop a form of emotional intelligence and a moral capacity, as described by McWilliam (2008). The third is an example of the students constructing a mental simulation from a virtual learning experience, as described by Gee (2004, 2007).

**Critical learning**
Almost all of the skills the unit aimed to develop are important underpinning skills for critical learning. A starting point for being able to identify biases and hidden agendas is an ability to critically analyse texts; and a prerequisite for using one's voice to take social action is an ability to use persuasive writing devices. Students were required to produce each assessable piece of persuasive writing by referring to the Bilby scenario and resources to identify key issues and viewpoints both supporting and opposing their given stance, and to use the analytical and rhetorical skills they developed in their non-role-playing activities to construct their pieces. The unit chair asserted that in meeting these requirements, students needed to develop an ability to see issues from multiple perspectives, cut through assumptions and stereotypes, recognise political biases and agendas in texts, and develop their own political voice in the social context (unit chair Aleesha interview).

Students' own responses provide some support for her view: among the research participants' self-assessed learning outcomes, the themes I listed above of seeing issues from multiple perspectives and appreciating the
complexity of local political issues could be classified as critical learning skills or attitudes. These outcomes were echoed to some extent in the questionnaire responses: 69% agreed that as a result of taking part in the role play activities their assumptions about what people who belonged to issues-based groups were like had been challenged; and 68% agreed that their assumptions about the nature of local politics had been challenged. There were indications in five of the ten sample assessment portfolios I had been given that the students had reflected deeply on the nature of the political and social issues the town of Bilby was facing as they had researched and written these pieces. These portfolios included insightful analyses of how communications media could be used to promote their agendas, and they used a variety of persuasive writing genres and techniques to present an informed, inclusive and ethical stance on the issues. However, these results do not provide resounding evidence that a large proportion of students developed strong critical awareness and skills as a result of their activities.

In the tutorials and online discussions I observed, the focus was firmly on writing skills development rather than developing what Gregory and Cahill (2009) might term a 'sociological perspective' through exploring power bases, ideological foundations and the mechanisms used to promote or maintain hegemonic control in society (journal 22/4, 28/4, 25/5, 26/5, 27/5, 28/5/2010; online discussions). A less skills-focused and more critical-sociological emphasis might have produced a higher level of political awareness and confidence among students to use their honed communication skills to make their voices heard in real social contexts.
According to the teaching staff and students I interviewed, there were no reflection/debriefing activities or discussions on the nature of the cultural expectations, norms, power plays and consequent meanings embedded within the Bilby scenario and activities themselves so, as in the MEPS and HEADSS workshop, these students' ability to critique the means by which they achieved their learning outcomes did not appear to be developed as part of their learning experience.

To recap this section, the students who participated in my research in the Bilby activities indicated that these activities had been instrumental in helping them develop their professional writing skills, including to some extent their critical awareness, skills and voice. While the students' story-building activity was limited and cannot be said to have driven their learning in the way that it drove the learning of the MEPS students, there were indications that aspects of the story structure provided key supports to their learning.

**Summary of students' learning in the three cases**

Given the limited sample sizes in each case and the difficulty of measuring many of the learning outcomes for these activities, it is not possible in a quantitative sense to state what the students learned. However, there were indications in the qualitative data that many of my research participant students in all three cases did achieve the aims that had been set, and some other learning outcomes. There were also indications in all three cases that these students' building of stories in the metaphorical world of the role play was directly involved in their learning process.
A further important aspect of the usefulness of stories in a learning context is that they can be engaging. I will discuss the extent and nature of students' engagement in each of the cases next, leading to a detailed exploration of the extent and impact of their engagement with and learning from story building in their activities in forthcoming chapters.

**Students' engagement**

In Chapter 2 I reviewed theories of engagement in learning tasks involving a range of factors. In order to explore the relationships between students' engagement with the stories in their role-playing activities and the learning outcomes they achieved, I have attempted to separate (as far as possible) any engagement that was generated from non-story factors and the engagement that was generated by the stories. I have used Biggs and Tang's (2007) division of extrinsic and intrinsic factors as a starting point, as students' engagement with story building can be seen as source of interest and satisfaction that is intrinsic to the learning tasks. Once again, I will discuss the indications of the extent and various types of student engagement in each of the cases in turn, starting with the MEPS.

**Middle-East Politics Simulation**

Most of the MEPS students who participated in my research indicated they were highly engaged with the activity. Of the questionnaire respondents, 90% said they were either totally immersed or highly engaged. Several of the students with whom I spoke said the simulation had been at the back of their mind throughout the 13 days it ran, and more than one spoke of dreaming
about it (Jen, Ciaran focus group; Dan, Kerry, Jeremy interviews). One of the students said she did not attend lectures for her other subjects throughout the simulation period because she was so immersed in the activity (Ciaran interview). Some of the students described their engagement in similar terms to those commonly used to describe 'flow' (Csikszentmihalyi 1990) and engagement with video games (Gee 2003). For example, Dan said he seemed to have 'tuned out of the real world' and the simulation had become his reality. Another commented:

It draws you in and immerses you very quickly. You certainly don't feel it doesn't matter if things go badly for you in the sim. For example, things have just gone a bit badly for us in the sim and we're feeling pissed off, and want to get the problem fixed as quickly as possible (Sam interview).

Another indication that many participants were engaged with the simulation was that many said they spent a significant amount of time (in their terms) working on it. Of the questionnaire respondents, 65% said it took up 3-5 hours per day or more. This adds up to a large time commitment over a 13-day period, although one student said he would have spent a similar amount of time on an essay worth a comparable proportion of the marks for a unit (Jeremy interview). This student also said that even though he and his group-mate were working on the simulation for an average of three hours each day, 'it didn't feel like three hours a day', and 'it was more interesting than going to the library.
and getting six books and thinking, "OK, what's my position on this" (Jeremy interview).

The large number of emails that were produced in the simulation may have been an indication that many students beyond my group of research participants were also engaged in the activity. The average number of emails politics student groups sent was 137, with the highest number being 234 (website statistics). It is difficult to generalise about the quality of these emails across such a large group, but I was often impressed with the creative, knowledgeable, insightful strategies produced by most of the 11 groups to whose email I had access, and by the professionalism they showed in their written interactions (journal 13/5/2009).

While enjoyment alone may not provide sufficient justification for using a teaching/learning technique in higher education, it provides students with an element of motivation to continue with a task that is challenging. Another reason for taking students' enjoyment into account is that it can be an indicator of deep engagement and learning (Csikszentmihalyi 1990, Barkley 2010, Coates 2006, Biggs & Tang 2007, Gee 2003). All of my questionnaire respondents agreed that they enjoyed taking part in the simulation, and there were numerous comments in the questionnaire responses, focus group and interviews about it being enjoyable or fun (eg Dan, Liz, Kerry, Cassie interviews; Thierry, Ciaran, Jen focus group).
Factors of motivation, engagement and enjoyment
As I foreshadowed above, in order to identify the extent and nature of students' engagement with stories in their role-playing activities, I will first distinguish between extrinsic and intrinsic factors of motivation at play in this case.

Extrinsic motivation
Assessment is widely recognised as an important source of extrinsic motivation to engage in a learning task (Coates 2006, Barkley 2010, Biggs & Tang 2007). One might assume that the large assessment weighting for the MEPS students' performance in the simulation (40-50% of their marks for the unit) provided an important source of motivation for the students to engage with the activity. However, for many of my research participants, assessment was not the most important factor. In the questionnaire I asked: 'What particular factors motivated you to learn during the simulation?' and 'What were your goals during the simulation?'. There were many more comments in response to these questions relating to finding ways to advance their characters' interests in the stories they were developing as a motivating factor (27 comments) than those that referred to achieving a good grade (11 comments). All of the focus group participants said they were more motivated by the desire to advance their characters' interests through creating effective, plausible strategies than by their desire for a high mark. The site 1 lecturer also said she thought that for many students assessment was not the most important driver:

I think for a lot of them the assessment is really neither here nor there, it's something that they do, it's an easy way of getting good marks, it's better than writing an essay, but it's less important than actually what they did (lecturer Mia interview).
Another widely recognised source of extrinsic motivation is a perception of the relevance of an activity to longer term goals (Coates 2006, Biggs & Tang 2007, Csikszentmihalyi 1990, Gee 2003). Of the questionnaire respondents, 75% agreed that the challenges in the simulation were meaningful to them. Several interview participants (Dan, Sam, Ciaran and Jeremy) said they wished to pursue a career in government policy, intelligence or international relations and foresaw that knowledge about how things worked in the Middle East would be useful to them. However, others who intended to pursue careers in psychology and education said they valued the development of generic skills such as communication and negotiation through the simulation, and were only generally interested in learning about the Middle East (Kerry, Briony interviews).

Other main sources of extrinsic engagement in the simulation that the site 1 lecturer proposed were competition between groups and a sense of identity with and responsibility to teammates (lecturer Mia interview).

The focus group participants and several interviewees said they enjoyed the social aspect of being part of a group and being able to share workload, ideas, difficulties and successes with their teammates (Thierry, Jen, Ciaran focus group; Jeremy, Iris, Briony, Dan interviews).

Thierry said that he particularly enjoyed the element of competition in the simulation, and that in structure and feel it was a lot like the computer-based role-playing games he played every week for fun. He said in his interview:

'The whole reason I picked the unit was the sim, and I've been telling all my
friends about it'. He said he brought to the simulation the same kind of motivation to try to win for his character as he brought to his recreational games. According to several questionnaire comments, he was not alone in enjoying the competitive aspect of succeeding vicariously through the successes of his character in the simulation world (Sean, Briony, interviews; Thierry, Jen, Ciaran focus group). The competitive element can be seen as being directly related to the students' engagement with the stories they were co-creating in-role. It is possible that some students found the competitive aspect of the simulation demotivating and damaging to their confidence overall (a hazard with competition noted by Biggs and Tang (2007)). However, I did not find any indications of these outcomes amongst the students who participated in my research.

Intrinsic engagement

As I noted above, many of my research participants commented on the immersive nature of the simulation in terms that suggested the intense intrinsic engagement that is a characteristic of 'flow activities' (Csikszentmihalyi 1990) and intense video game playing (Gee 2003). There are indications that the students' story-building activity was the driving force for a feedback loop to develop for many of these students between active learning and engagement in the activity generally, as described by Barkley (2010). That is, the more these students engaged with developing strategies to advance their character, the more they learned about their character and the Middle-Eastern context, and the more satisfaction they received at seeing their character advance. Then, the more they learned, the more possibilities they discovered for further strategies,
engagement, satisfaction and learning (Dan, Liz, Sam, Briony, Jeremy interviews; Thierry, Jen, Ciaran focus group).

Important conditions for producing deep engagement in an activity are a balance between perceived challenge and ability to achieve eventual success, availability of formative feedback and a safe environment for experimentation (Csikszentmihalyi 1990, Biggs & Tang 2007, Barkley 2010, Gee 2003). There were indications among the MEPS research participants that they experienced a good balance between the level of challenge they faced and their sense of being able to achieve their goals with effort and support. Of the questionnaire respondents, 90% said the level of challenge was high but achievable, and numerous comments described strenuous but rewarding efforts to respond to challenges posed by their peers (Jen, Ciaran, Thierry focus group; Sam, Jeremy, Dan, Lily, Liz, Iris, Briony interviews). Several types of formative feedback were built into the simulation, including feedback from group-mates, responses from other characters to the strategies any character put in place via email, and representations of the strategies in the online newspapers. There were also several aspects of the simulation that should have provided students with a feeling of safety to experiment, including the anonymity of asynchronous text communication, playing as a group rather than an individual, and having time to think and research before posting emails. Several comments also indicated that students enjoyed the novelty and convenience of the online format (questionnaire comments; Sam, Jeremy, Thierry interviews).
In summary, the MEPS provided many factors of engagement, including the extrinsic factors of assessment, relevance to life goals, group membership and competition; and factors supporting intrinsic engagement such as a good challenge-support balance, with feedback built into the interactions and a sense of a convenient, safe environment for experimentation. However, none of these factors operated independently in the activity, but were strongly aligned to supporting the students' performance of their central task of promoting their character's position in the numerous story plots in the simulated setting. Therefore, while it is revealing to explore the impact of each of these factors on students' engagement, it is not possible to separate students' engagement with story building from the other intrinsic or even extrinsic factors. The success of the simulation as a learning activity and the high levels of engagement it produced—at least for my research participants—lend support to Gee's (2003) theories about the effectiveness of aligning students' investment of time, energy, collaborative skill and creativity in a game-like task with the kinds of learning activities that help students achieve the intended learning aims.

The motivation and reward structure in the MEPS, and the nature of students' engagement, was quite different to that of the HEADSS workshop.

**HEADSS workshop**
Most of the students who participated in my research in the HEADSS workshop indicated high levels of engagement overall in their activity. However, the main factors in their engagement were different to those at play in the MEPS case study.
All of the questionnaire respondents said they enjoyed taking part in the workshop. Most (81%) agreed they were highly engaged with it. From my own observation of the workshop, all 24 of the medical students appeared to be actively participating throughout the 90-minute session and amongst those participants I was able to observe closely I saw no evidence of boredom or off-task behaviour, although I was aware of some frustration among students who ran out of time (journal 10/10/2009). The medical lecturer, who had lectured in the field and co-facilitated many HEADSS workshops, said she thought most students engaged with the workshop more intensely than they engaged with lectures (lecturer Verity interview).

Sources of motivation, engagement and enjoyment

Extrinsic motivation

As for my research participants in the MEPS, the spectre of assessment was not a major source of motivation for my HEADSS workshop research participants. Of the questionnaire respondents, 81% disagreed that they were only interested in learning enough to pass their assessment. As their performance in the workshop was not assessed directly this may not be surprising, but the medical lecturer said she emphasised in her lectures that the students would ultimately be assessed on the types of skills and knowledge they might gain in these activities (lecturer Verity interview).

The HEADSS participants' most common responses to my questions about what had helped them to engage with the workshop were related to the workshop's relevance to their longer term goal of becoming good doctors (Jessie, Aaron, Simone, Holly focus group; questionnaire comments). For example:
I was interested in learning exactly how to say things to kids that make them comfortable, because it's very easy to mess up. And I think with adolescents you can blow a whole relationship out of the water very quickly. Yeah, so I think those statements and a little bank of things to say is really important, much more so than with adults (Jessie focus group).

Other common extrinsic motivation factors such as group membership and competition did not figure in HEADSS students' responses to my questions. This was to be expected, as students performed the activities as individuals rather than groups, and at no point were students pitted against each other in a win/lose situation.

*Intrinsic engagement*

As I noted above, factors in people being able to engage with an activity include a good balance between challenge and ability to achieve their goals with effort and support, a safe environment and formative feedback (Csikszentmihalyi 1990, Biggs & Tang 2007, Gee 2003).

Only a small majority of questionnaire respondents (64%) found the workshop intellectually challenging. Factors that students said worked against this were lack of time to complete segments, particularly when medical students had to share time with a school student; and distraction due to the noise and crowdedness of the room (Jessie, Holly, Simone focus group; six questionnaire comments).
However, a larger majority (81%) found the workshop a safe environment for experimentation, and I was aware of many supportive elements in the way the workshop was facilitated, such as modelling positive language and maintaining vigilance over students’ interactions (journal 10/10/2009). I also observed that the medical students were given opportunities to re-work and improve their less successful initial responses, rather than leaving them with a sense of having failed.

Some of the medical students commented that they especially appreciated the opportunity to gain feedback from real adolescents (questionnaire comments, Sarah email interview). For example: 'Interacting with adolescents was a lot more effective than having adults simulating adolescents. Their feedback was invaluable and helped me gain the most out of the role play' (Sarah email interview).

Therefore, while the challenge-support balance in this workshop may not have been ideal, there are some indications that the safety of the environment and the provision of formative feedback at least should have been conducive to these students remaining engaged with their activities.

All four of the focus group members said they enjoyed the workshop. When I probed for more detail, the novelty of the technique and the school setting were the aspects these students singled out. Holly said: 'it was a fun way of learning I guess. You get used to just sort of learning by reading and writing, but if you learn in a different form it makes it more interesting'. Aaron and Simone said they particularly enjoyed being in the school setting, with all the sights, sounds
and smells of adolescent culture. Jessie said she also enjoyed putting into practice things they had learnt in the classroom.

A notable difference between this workshop and the MEPS was that students' engagement with the characters and plots they were developing in their role-playing activities did not figure highly in their engagement. The questionnaire respondents were mixed on whether they were involved in the story of the troubled adolescent Jo, around which the activities were based (45% agreed, 27% were neutral, 27% disagreed). When I pursued this question in the focus group and email interviews, all of the participants said that their engagement with Jo's story was based less on curiosity about the fictional character and possible developments in the plot than a desire simply to practise the professional skills of 'getting the story'. For example:

I was not too interested in the story as I knew it was not real. It would be different in real life as the answers would be most important and require appropriate responses. During the role play, the focus was more on how the questions were asked rather than what the story was (Sarah email interview).

When I asked the medical lecturer her opinion of the importance of the medical students' being able to engage with the unfolding story of Jo to their overall engagement, she said 'Not very'. She said she saw the story as simply 'a scaffolding on which to hang those competency-building elements' (lecturer Verity interview).

As I noted in Chapter 3, educational drama practitioners such as O'Neill (1995) and Cahill (2008) use the kinds of dramatic techniques that are employed in
this workshop with the intent of interrupting conventional story-building processes and engagement to highlight and rework representations that merely replicate dominant cultural views. Therefore, it could have been expected that the medical students' interest in how the story of Jo might develop would be overwhelmed by these interruptions and techniques.

In summary, the HEADSS participants' main source of motivation appears to have been the relevance of the activity to achieving their longer term career goals. All other common extrinsic sources of motivation were barely evident. In terms of intrinsic engagement, the intellectual challenge may not have been optimal for some students, but the HEADSS workshop provided a safe, supportive and novel environment, with formative feedback. Whereas in the MEPS the students' story development activities had a central role in their engagement and learning, in the HEADSS workshop the story was not permitted to develop and provide a source of intrinsic engagement. I will explore the effects of this treatment of the story on the students' learning and engagement further in forthcoming chapters.

In comparison to the MEPS and the HEADSS workshop, the Bilby case study provided a more complex and contradictory set of indications about what might have engaged its participants.

**Bilby scenario activities**
The Bilby scenario was created primarily to provide an engaging and realistic context for students' work (designer Justine interview). A large majority (80%) of questionnaire respondents agreed that they enjoyed the scenario activities. However, only 65% agreed that they were highly engaged with them. Although
it is problematic to compare the three cases as so many different factors were at play in each, these figures compare poorly with the responses to similar questions by MEPS and HEADSS workshop students. (In both of these cases all of the students said they enjoyed the activities, and 90% and 81% respectively said they were highly engaged or totally immersed in them.)

Another indication of comparatively lower levels of engagement in these activities was in the words participants used. Bilby students commonly described the activities as 'fun', 'pleasant' and 'relaxing'. These words were less extremely positive than those used by the MEPS students: none of the Bilby participants described their activities as 'all-engrossing' or 'taking over my sense of reality'.

Sources of motivation, engagement and enjoyment
It was difficult to discern strong patterns in factors of engagement among Bilby participants. The participants in my other two case studies provided far more homogenous sets of responses. This may be because, as I noted in the previous chapter, students in the Bilby case study had many diverse experiences, including on- and off-campus study mode, age, discipline background, and five tutors' differing facilitation styles.

Extrinsic motivation
The Bilby scenario students' in-role writing pieces made up 60% of their assessment for the unit, and the tutors directed students' focus in their tutorials towards developing ideas and writing strategies to use in these pieces (journal 22/4, 28/4, 25/5, 26/5, 27/5, 28/5/2010). In directing the students' attention to the assessment, the teaching staff ensured that this factor provided a source of
motivation for these students to explore the scenario website and complete the in-role writing activities. However, as also occurred in the other two cases, a small majority of the questionnaire respondents (61%) disagreed that they were only interested in learning enough to pass their assessments.

Again as it was in the other two cases, a theme in students’ responses to questions about what had helped to engage them in the Bilby role-playing activities was that they saw the in-role writing tasks and group work associated with them as relevant to their longer term goals, whether these were to become professional writers, or to write better assignments, or just to be able to express themselves better (Kama, Holly, Sally focus group; Jennifer, Roni, Jemima, Bernard, Antonina, Sylvie, Samantha, Michael, Leila interviews). Of the questionnaire respondents, 94% agreed that the role-playing activities seemed relevant to achieving their goal of being competent writers.

As I noted above, the factor of a sense of responsibility to group-mates and enjoyment of a collaborative process has been found to be an important source of motivation and ongoing engagement (Biggs & Tang 2007, Coates 2006). A common comment among on-campus Bilby participants was that they particularly valued the group work, finding it a source of support, ideas, motivation and discussion (Michael, Jane, David, Roni interviews; Hannah, Kama focus group). However, a significant number responded that poor group work (due to low student attendance or participation either online or in face-to-face groups) was a hindrance to their engagement (Sally focus group; Sylvie, Antonina, Marie, Bernard interviews). I noticed each time I attended tutorials that there was a mixture of more and less functional groups in the room, and
within groups some members contributed more than others, with some members being off-task for a significant amount of time (journal 22/4, 28/4, 25/5, 26/5, 27/5, 28/5/2010). All of the off-campus students I interviewed expressed disappointment in the level of activity in the online group discussions (Sylvie, Antonina, Marie, Bernard, Leila interviews).

*Intrinsic engagement*

As I noted above, achieving a challenge-support balance is recognised as an important factor in engagement (Csikszentmihalyi 1990, Gee 2003, Biggs & Tang 2007). There are indications that some of the Bilby participants may not have felt particularly challenged by the activities. Only just over half (56%) of the questionnaire respondents agreed that they felt challenged intellectually, while 85% agreed that they had the ability to complete the activities successfully. Several commented in the interviews and focus group that the scenario activities were less difficult than other units' assessment tasks (Kama, Holly focus group; Bernard, Marie, Samantha, Roni interviews). The unit chair said she was aware that some students perceived the assessments as easier than they were, and as a result their grades were clustered around the high credit-low distinction mark despite some students being capable of achieving more (unit chair Aleesha interview).

Two further important conditions for intrinsic engagement are a feeling of safety to experiment and provision of formative feedback (Csikszentmihalyi 1990, Biggs & Tang 2007). Of the questionnaire respondents, 71% agreed that they felt confident to try out new strategies, and there were many comments that students took advantage of the opportunity to exercise their creativity in
the ideas and opinions they developed in-role (Leila, Marie, Antonina, Viola, Bernard, Jane interviews; LMS discussions). As I noted above, some commented that the small group work provided a sense of safety and also formative feedback on ideas and writing strategies. However, aside from the feedback that some students received in their groups, for many students the opportunities for formative feedback were limited as the students had no real agency in the make-believe world and their in-role written pieces were assessed summatively at the end of the trimester.

Other common responses to my questions on which aspects were most engaging related to the story aspects of the activities. These included that students found it fun to play a character role (Leila, Marie, Antonina, Viola, Bernard, Jane interviews); they liked the scope for creativity in their role-playing tasks (Bernard, Viola, Michael, Marie, Jennifer, Antonina, Bonnie interviews; Sally focus group); and they enjoyed the in-role presentations and debate at the simulated public meeting (questionnaire comments, Hannah focus group). However, the students' response to the questionnaire statement 'I really wanted to do my best for my character and role group, I was caught up in the story' did not indicate a strong pattern: only 61% agreed.

Some interviewees' responses to a converse question on what might have hindered the students' engagement were also related to the stories, including that there was limited scope for the development of characters and arguments (questionnaire comments, Michael interview); and that some became bored with the scenario as a whole towards the end (Kama, Sally focus group). A few said they failed to engage with the make-believe world because they preferred
to study real-world issues (questionnaire comments). Some of the students I interviewed clearly did not engage deeply with the creative possibilities in the scenario activities and focused on the technical objective of improving their writing ability—although they said they enjoyed working within a self-contained and entertaining context (Roni, Samantha, Michael, Jemima interviews).

To recap this section, the diversity of the ways in which students experienced the Bilby scenario activities makes it difficult to identify which factors were most important in students' engagement. Like in the HEADSS and MEPS activities, assessment was less important than it might have been, and students clearly recognised the activities' relevance to their longer term goals. While for some a sense of group membership provided a strong source of motivation, for many students it did not. The perceived challenge-support balance may not have been optimal to motivate some of these students to make their best efforts. In terms of the part that engagement with story development played in this case study, there again seems to have been a diversity of opinion, but there were no indications that this aspect drove their learning in the way that building stories drove the MEPS students' learning.

**Chapter summary**

In this chapter I have established that my research participants in all three cases achieved a range of learning outcomes from their role-playing activities, including some critical learning outcomes. I have also established that the levels and types of engagement with their tasks varied between the cases, with
the MEPS participants indicating the highest levels of engagement and the Bilby research participants indicating the lowest.

In all three cases, there were indications that students' engagement with their learning tasks was supported by extrinsic as well as intrinsic factors. My intention in exploring many of these factors has been to gauge the main features contributing to students' engagement in each of the three cases, and the relative importance of students' development of stories within the mix. Again, I have found that this varied markedly between cases. In the MEPS, the students’ ability to engage with their character and develop plots to promote their interests within the parameters of their setting was central to their learning task and to gaining both intrinsic and extrinsic rewards for engagement. In the HEADSS workshop, the students' engagement with the development of the story was limited in many ways, with the effect that the story served mostly as a framework for skills development and critical activities. The utilitarian focus of the workshop as a means to help the medical students become better doctors appeared to provide the main factor in their engagement. The Bilby scenario had a mix of factors that varied considerably between cohorts and individuals.

I will discuss the relationships between students' learning, engagement and each of the story elements in greater depth in forthcoming chapters, and in so doing report in greater detail my findings relating to my first supporting research question. I start in the next chapter with a discussion of the ways in which settings were managed impacted on these outcomes.
CHAPTER SEVEN

Engagement with settings in the activities

Introduction

In Chapter 6 I concluded that while there were indications that most students who contributed to my research in each of the three cases developed certain learning outcomes as a result of their role-playing activities, and said they were engaged with and enjoyed the activities, their engagement with the development of stories in their activities varied from case to case. In this chapter I begin to explore the relationships between students' engagement with stories they developed during their role-playing activities and the kinds of things they learned, including critical learning outcomes. I start by discussing the ways in which the element of setting was managed in each of the cases and exploring the ways in which this treatment may have impacted on students' engagement and learning.

From my review of literature in Chapter 3 I identified a set of conditions that may help students to engage with and learn from online, interactive story formats, including conditions for supporting critical learning. In this chapter I explore the extent to which the conditions relating to setting were evident in each case, and their impact on students' engagement and learning.
Middle East Politics Simulation

The MEPS setting
The simulation was set in the real-life Middle East as it was on the day the simulation started, with the addition of ten fictional items of 'late breaking news'. The computer interface through which the students interacted contained information about the setting via the character profiles provided by the students and the three almost-daily online newspapers. As this interface was situated online, the students also had easy access via the Web to rich authentic resources, such as real media reports and government websites, to find any detail they needed.

I considered the interface itself an aspect of the setting, as it framed the make-believe world of the simulation and enclosed it (mostly) from the outside world. It was the site in which the students interacted in character with the other characters via email, learnt about the latest developments via the three newspapers, and sometimes collaborated out-of-role on strategies within their groups and national groupings via the Chat function. Images from the interface are provided in the appendix.

I will now discuss the extent to which each of the conditions I identified as supporting students' ability to engage with and learn from a story's setting were provided in each case, and the impact of this treatment on students' engagement and learning.
Management of the setting and effects produced

Coherence and plausibility
The first condition I will discuss in relation to the case studies is 'coherence and plausibility'. I have summarised this condition as that there must be a sense of the internal coherence and plausibility of the way things work in the story world, in order to support students' suspension of disbelief and building of useful mental simulations for future reference.

The parameters governing the ways things worked in MEPS were a combination of what was plausible in the real Middle East and what was permissible within the simulation rules, with some distortion introduced by the online newspapers' representations of events.

The students were assessed on the extent to which they acted according to what was plausible for their character in the real world, and were required to research real information sources to build their character and strategies. They were also obliged to check with Control before enacting strategies that were out of the ordinary, which gave the lecturers a chance to moderate or disallow implausible plans. Hence, the logic of what occurred in the simulation should have reflected fairly closely that of the real world. However, the students also relied on the accuracy of the online newspaper reports to plan their strategies, and as I noted in the previous chapter the fallibility of these reports introduced some confusion.

Of the questionnaire respondents, 80% agreed that they were able to suspend their disbelief and feel like they were facing real Middle-Eastern situations. Indeed, several students said they found the events in the simulation had
become so real to them that it had become confusing to watch the real news (Dan, Thierry, Liz interviews). One said that the real news coverage now had a similar air of unreality to that of the simulation (Liz interview). However, there were also complaints about the incoherence produced by the online newspapers’ inaccurate or biased reporting, which made it difficult for some characters to create strong strategies of their own (Thierry, Jen, Ciaran focus group; Kerry interview). The site 1 lecturer said she allowed confusion to remain on some issues because, although it may have made students’ story building more difficult, it provided a realistic experience of the ways in which news media impacted on real political life (lecturer Mia interview).

Thus, my data indicates that the setting was sufficiently plausible to support most of my student participants’ suspension of disbelief in the story world, and to support their building of mental models of the ways things worked in the real Middle East. The incoherent logic that was introduced by the online newspapers caused frustration, although it supported students’ learning about the important factor of the ways in which news media impacted on politics (as I noted in Chapter 6). The next condition I will discuss is a particular aspect of the plausibility of a setting: its authenticity.

**Authenticity**
The condition I summarised from the literature relating to authenticity is that authenticity in key aspects of the tasks and conditions of the real-world setting that is simulated is important to provide a sense of relevance and support application of learning in real situations.
Almost all of the characteristics of authentic activities named by Herrington, Reeves and Oliver (2010: 46-48) were evident in the MEPS. That is, the MEPS context and tasks were designed to simulate the ways in which politics and journalism worked in real life. The problems that students faced were certainly ill-defined, complex and long term; they involved multi-disciplinary research and consideration of opposing points of view; and were open to multiple original solutions. The group-based roles and structure of national groupings of characters required students to collaborate to produce effective strategies; the consequences the students faced in character and in the online newspapers' representations of their actions gave them in-built opportunities to reflect; and the students' activities were seamlessly integrated with assessment.

The students' requirement to play the roles of key figures in the Middle East as realistically as possible, with only the device of email available to them, but experiencing the consequences of their actions in the online newspapers' reporting of them, should have meant that while students could not physically order a military intervention, terrorist attack or similar action, they were able to gain a taste of what it felt like to make these kinds of decisions. There were indications that the authenticity in the students' tasks, conditions and so on was sufficient to engender among many of my research participants a sense of the relevance for future use of the knowledge they gained in the simulation. Of the questionnaire respondents, 88% said they thought the simulation was 'relevant to learning about Middle-Eastern politics'. When I asked the focus group what supported their learning from the simulation, one response was:
Well, it was sort of like a real life situation. Obviously it was pretend, but if you got wrapped up enough, you'd realise that all these things were really important. Even if they weren't important in the sim, they were important in real life to someone, so it sort of … You might not have noticed it all the time but every now and then you'd think 'All these people just got killed', and even though it's not real, you know this is actually happening, so that sort of encouraged you to think about it more. Because even though it was just a scenario, it was modelled on real events (Thierry focus group).

Hence, there were indications that the high degree of authenticity afforded by the simulation supported students' achievement of 'cognitively authentic' learning outcomes (Herrington, Reeves & Oliver 2010: 60).

Although visual verisimilitude is not a necessary aspect of providing an authentic context (Herrington, Reeves & Oliver 2010), it can also help students to engage with and learn from story worlds.

**Rich visual detail and information**
The condition I identified relating to visual detail and information can be summarised as that providing rich visual detail and information can produce a sense of enchantment and presence in the virtual world.

The MEPS interface was visually plain, as Figure A.1 (in the appendix) shows. Rather than attempting a visual metaphor of the Middle East, it was designed as a nondescript work area, a site for reading the latest news and interacting with others by messaging or email. Thus, the virtual world it supported was
largely a product of the students' imagination and interactions—and the representations in the online newspapers. Students were obliged to research amongst real-world information sources to find information they needed for their strategies. However, the online newspapers that served an important purpose in representing the developing stories in the simulation were anything but plain. Figure A.2 contains a front page with typical style and content.

The newspapers were created using commercial layout software and produced to a high aesthetic standard to mimic the look and feel of their real-life counterparts. The articles were a mix of news, opinion, gossip, weather reports and so on, each written in appropriate journalistic styles. Even though the newspapers were only around six pages long, it was not hard to suspend disbelief that they were real, and that in turn the world they represented was real (journal 7/5/2009). There were several comments from my research participants that they appreciated the journalism students' efforts to source photographs to illustrate their stories; and enjoyed very much the element of humour they introduced in the gossip columns, cartoons, recipes and letters (Jeremy interview; Jen, Ciaran, Thierry focus group).

Thus, although the MEPS interface was bare, students had rich visual illustrations of their world in the online newspapers to help them suspend disbelief in, and enjoy, the setting. The newspapers also provided information—albeit somewhat unreliably—about their world; but students were able to find abundant detail about the real Middle-Eastern setting that they were simulating, to furnish the mental models they were building, on the Web. The next condition, the provision of a transparent, responsive interface, is
related to the condition of having a visually rich and information-packed interface, as they work together to help students create their imaginary story world.

**Transparent, responsive interface**
I have summarised the condition relating to transparency as that an interface will better support both engagement and learning if users are orientated to the site and tasks early on, and if the interface enables users to interact with it in exactly the ways they want and see predictable results.

The original MEPS designers said their aim when designing the interface was to make the technology 'essentially invisible to the students so that they can engage in the primary learning task: role-play simulation of Middle East politics' (Vincent & Shepherd 1998: 23). As I noted above, the interface was flatly functional in style, and there were indications that in most respects it facilitated students' interactions transparently and reliably—no technical glitches were recorded during the activity period. However, some participants complained that the email and synchronous chat tools did not have all the features of commercial systems (Kerry, Jeremy interviews; questionnaire comments). Two of these participants also commented that working out how to interact using the simulation interface took some time and was insufficiently explained beforehand, although once they had worked it out they found it simple and intuitive.

An aspect of the interface that attracted a positive response was the fact that it was available at all times. Several said they appreciated being able to fit their role-playing activity around their work and social engagements (Jeremy, Lily
interviews; questionnaire comments). Whenever I logged on at odd hours there were always other students in the simulation at the same time: one Saturday morning at 3.30 am I found five groups represented (journal 9/5/2009).

Thus, the MEPS interface supported students' ability to act in and learn from their virtual world mostly without distraction. It provided entry to a learning environment that was safely bounded from reality—most of the time—as I will discuss next.

**Semi-permeable boundary from reality**
I have summarised the condition related to a story world's boundary as that it is important for students to have a sense that they are in a make-believe world with a boundary from reality (although a porous one).

My research participants in the MEPS indicated through their willingness to invent kidnappings, bombings, promises of multi-million-dollar grants and so on that they felt safe to experiment within the simulated world without fear of real consequences. However, of the questionnaire respondents, 80% agreed that they were conscious that although the events were fictitious, these had strong parallels to real situations. These results were borne out in many comments, for example in the quotes I have provided above (Jeremy, Sam interviews; Thierry, Jen, Ciaran focus group; questionnaire comments).

However, two incidents occurred in the simulation that blurred boundaries between the fictional and real worlds. Firstly, around day 7, students playing the CIA role hacked into the simulation interface and managed to steal several passwords before they were discovered. Control let them keep the passwords
and continue playing, as long as they did not steal any more passwords, explaining that this kind of espionage was within the bounds of the CIA’s character role (lecturer Mia interview). The incident I described in Chapter 5, in which a student accidentally sent a text message about a bombing to the wrong person and the Federal Police then temporarily shut down the simulation, was also evidence of leakage between the make-believe and real worlds. This event produced a frisson of excitement that was evident in the animated conversations about it at the lecture that week (journal 11/5/2009). There were also indications among my research participants that it produced a ‘reality check’ that prompted them to think more seriously about the horrific impact that the extreme strategies they were playfully simulating had on real people, somewhere in the world (Ciaran, Jen focus group; questionnaire comment).

These examples indicate that there were risks in using the characteristics of the real Middle-Eastern political environment as the ultimate standard for what was acceptable in the MEPS, while attempting to keep control so that what happened was ‘probable’ (in the Aristotelian sense) rather than just ‘possible’. There were indications that the MEPS boundary was strong enough for students to feel safe to engage in their story building, but they were porous to help them learn real details about the real world just beyond this boundary, and possibly to reflect upon the grim realities with which they were playing. For students to go further and consciously reflect on the porosity of their story boundary is an aspect of managing setting to support critical learning.
Critical learning
The condition I identified for supporting critical learning through the management of setting involves the use of some means to help students to recognise and critique the cultural assumptions embedded in the setting and ways in which these influence the meanings that are suggested in the stories; and encouragement of actions to rework elements of the setting to support alternative constructions.

The MEPS student participants developed some critical learning outcomes, as I mentioned in Chapter 6. However, the means used to support critical learning through this activity were not obvious at first, as lecturers did not provide guided critical reflection activities. In my discussions with students, it became evident that the distorting mirror effect provided by the online newspapers prompted them to notice how truth was a spurious notion and how cultural assumptions and values were promoted in these vehicles.

In Chapter 6 I set out how students noticed that inaccurate reporting occurred frequently; and that different newspapers would interpret the same piece of information differently according to their own view of their readership's interests—and that this was particularly marked when national interests differed. They also noticed that the view presented in the newspapers had great influence over events in the simulation world (Cassie, Jeremy, Kerry, Liz, Briony interviews; Thierry, Jen focus group).

Indeed, there were many instances in which the simulated *Al Jazeera, New York Times* and *The Guardian* treated subjects in starkly different ways. For example, *Al-Jazeera's* reporting of the US helicopter crash in Syria represented...
the response of the US Government to the incident as blundering and arrogant, focusing on Obama’s refusal to meet with Syria and repair the diplomatic problem it caused (Al-Jazeera 6/5, 7/5, 8/5, 9/5/2009). The New York Times’ reporting of the same incident focused instead on the American soldiers who were killed or captured in the incident and the desire to bring them home as quickly as possible (New York Times 6/5, 7/5, 9/5, 11/5, 12/5, 13/5/2009).

As the online newspapers served a powerful purpose in informing students of what was going on in the simulated world, so they could take opportunities to get involved in other characters’ strategies and keep up with responses to their own strategies, there were many indications that students found the inaccuracies and bias of the reports became a further factor to reckon with—and a further source of tension as well as insight (Cassie, Jeremy, Kerry, Liz, Briony interviews; Thierry, Jen focus group). For example:

I’m really liking what the media are doing, but they don’t always get things right, and it just messes things up for everyone. For example, Al-Jazeera said Israel had retracted their offer of $30 million, which never actually occurred … but I guess this kind of thing happens in real life as well (Briony interview).

However, the fact that the powerful cultural assumptions contained in the online newspapers that furnished much of the detail for the simulation were not challenged in an organised way at any point means that the opportunity for students to gain critical learning outcomes may have been lost on some.
so powerful that the failure to highlight and question these may have resulted in dominant views even being reinforced among students as a result of the MEPS. For example, the newspapers carried frequent, prominent stories about terrorist attacks such as bombings, rocket attacks and kidnappings, and military intervention and espionage. These actions may have been decried in the opinion pieces and in the reported responses of characters on the opposing side, but they were so common and given such prominence, with graphic pictures to illustrate them, that they came to seem something almost to be expected in the story world. Further, the perpetrators enjoyed an immunity from serious retribution in the simulation because of the rule that no character was allowed to kill or disable another character. This combination of factors may well have left some students thinking that violence, deceit and extreme behaviour were normal and legitimate political strategies in the Middle East.

In summary, the setting of the MEPS appears to have provided many advantages for the development of stories that might engage participants and support their learning. Indications from my research participants were that grounding the simulation in the real Middle East (as far as it can be known from public information sources), with the addition of a few items of late breaking news, a few rules about not disabling or killing other characters and the requirement to act in a way that was plausible for the real character they were playing, provided a relatively authentic, coherent and plausible setting that enabled students to suspend disbelief and frame useful mental simulations. There were indications that their suspension of disbelief was supported by the visual images and realistic style of the online newspapers' representation of the story world. Students' ability to interact with other characters in the world, see
the results of their actions and interact again, in an interface that was reliable and available at all times would also have helped. There are indications that the setting provided the sense of a bounded area in which students could experiment, although the fragility of this boundary was evident. However, it could not be said that the lecturers in this unit took advantage of opportunities to encourage students to recognise and critique the ways in which dominant cultural assumptions were promoted in the MEPS setting.

The face-to-face HEADSS workshop setting looked at first as though it could not have been more different to that of the MEPS. However, on closer analysis, the two had some important similarities. I will discuss the ways in which this alternative approach impacted on students' ability to build engaging stories and learn from their experience next.

**HEADSS workshop**

**The HEADSS workshop setting**
Like in the MEPS, the students in the HEADSS workshop were obliged to use their imagination to create the setting for their story world. The physical setting for the workshop was the school drama room, which the students had to imagine was a doctor's consulting room. Aside from chairs, no props were provided—and they also had to forget that there were 45 other people interacting in the same space. However, the medical students had to find their way to the drama room during the school students' lunch-hour, navigating the diverse groups of teenagers playing sport, relaxing and gossiping, and the aromatic corridors of lockers, posters and tatty school bags that added to this
setting. I will discuss below the various ways in which this setting helped students to engage with their story-building (or not), and learn from the activities. I will use the same set of conditions as I applied to the MEPS to guide my analysis of the ways in which setting was managed, starting with that of coherence and plausibility.

Management of the setting and effects produced

Coherence and plausibility
The story of Jo around which the HEADSS workshop was based provided a plausible context and a coherent thread to link the activities. The scenario of a doctor's consultation with an adolescent was something that the participants clearly had no difficulty recognising; and the HEADSS sequence provided a strong framework to guide the story development, despite the constant interruptions to the naturalistic form of the role play with critical activities and partner changes. The fact that the school students played the same, scripted role also provided some coherence to the medical students' efforts to build an understanding of their patient's wellbeing, even though the actual adolescent with whom they were consulting changed frequently.

None of my research participants commented that they found the workshop incoherent or implausible, and I saw no evidence of confusion on the medical students' part (journal 9/10/2009). However, there were several indications that the constant interruptions to the naturalistic role play, the repetition of scenes in different formats with different rules of discourse, and the deep critique of their performances took their toll on students' engagement with the story as a fiction in its own right (questionnaire results and comments, all focus group
and email interview participants). The manipulation of the parameters of this workshop was one of the many ways in which the designers limited students' engagement with the story in order to emphasise the inaccuracy of its assumptions. A key aspect of the critique of these assumptions in the activities was that not only were real adolescents used in a critical role, and was the consultation task authentic, but the workshop was set in an evocative, authentic adolescent setting.

**Authenticity**
The workshop had nearly all of the characteristics of 'authentic tasks' (Herrington, Reeves & Oliver 2010: 46-48). That is, although the location was the school drama room, the students acted out segments of an authentic interaction in their performance of a doctor-adolescent consultation. The medical students' task to practise their consulting skills with a real adolescent mimicked the way in which this task was performed in real life and hence was relevant to their learning goals. The medical and school students worked collaboratively to construct knowledge about effective consultation strategies. The 'hidden thoughts' activities were designed to make tacit understandings explicit, and support medical students' reflection on their consultation practices and conceptions of adolescents. The participants swapped roles to experience the interaction from the opposite perspective, and the number of adolescents with whom the medical students interacted exposed them to a variety of characteristics.

The fact that the workshop was situated in a real high school in the middle of a school day was an aspect that many of the participants in my research said was valuable for their engagement in and learning from the activities.
Several of the medical students said they appreciated the opportunity to become re-acquainted with the flavour and issues of adolescent life (Simone, Aaron, Jessie, Holly focus group). Some also commented that being in the school setting took them out of their comfort zone, which may have heightened their awareness (lecturer Verity interview, Simone focus group). The lecturer described the choice to situate the role play in a school in the midst of a school day as 'too good an opportunity to miss' to remind the medical students of what young people were like in their own setting. A medical student's comment on the setting supported this view:

it was a fairly enjoyable experience in the sense of seeing all the sights and the smells and the noises of school, and I also went to a girls' private school with uniforms and all, and so it was sort of a bit different, as well. It was a bit like primary school, though I don't remember that very much. Yeah, it was actually good to go there rather than them coming to us. Being in an unfamiliar area, you know, all over again, it was good (Simone focus group).

Thus, the HEADSS workshop provides another example of a high degree of authenticity in the task and setting supporting students' ability to learn about the ways things work in the real world. Locating the workshop in the school also introduced an enjoyable sense of novelty, and rich visual and tacit information about adolescent life.
Rich visual detail and information

As I noted above, the school setting provided multi-sensory contextual detail to help the medical students remind themselves (or learn about) the kind of world that the character of Jo might have inhabited. However, there were aspects of the crowded, minimalist setting of the drama room that evidently worked against the medical students' ability to suspend disbelief in the fictional world of the consultation with Jo. I will discuss these next.

'Transparent, responsive interface'

The HEADSS workshop was performed face-to-face, so obviously the kinds of complexities that arise when using a computer-based interface to interact in an imaginary setting did not occur. However, I have already alluded to certain elements in the physical setting that impacted on students' ability to interact in exactly the ways they would have liked, and it seems appropriate to discuss these here. These elements were the short amount of time available to complete the activities and the noisiness and crowdedness of the room.

Shortness of time

A real HEADSS screen consultation typically takes 45 minutes (lecturer Verity's comment in the workshop). Five of the six elements of this framework were covered in the workshop, some in both naturalistic role play and 'fishbowl' formats. Time was also required for the introductory activities, partner changing, individual feedback and facilitator-led discussion. As the whole sequence had to fit into the 90-minute period in which the school students had their drama class, time was very limited.

Most of the students who participated in my research said lack of time limited their engagement and/or learning from the workshop. Of the questionnaire
respondents, 83% agreed that they felt there was insufficient time to cover everything, and there were numerous comments on this (Paul, Jilly email interviews; Jessie, Simone, Aaron focus group, questionnaire comments). For example:

I think the timing is really limiting. I felt like we were kind of … rushed through some things and didn't really have enough chance to practise. And I think seeing as the medical school has focused on it and has raved about what a good experience it is, and I completely agree with that, it's an excellent experience, I just feel like they didn't give us enough time to do it properly (Jessie focus group).

Another factor that some students mentioned as being a hindrance to their engagement was the crowdedness and noisiness of the room.

Noisiness and crowdedness

One of the students commented that:

One thing that I found was a hindrance was just sitting so close to the person next to me. Like when we were talking I could hear what was going on and it was quite off-putting some of the time (Holly focus group).

However, another student said he thought the noisy conditions made asking the more awkward questions easier because it reduced the level of reality in the situation:
If you were alone in a consultation room, I think that would have been, the potentially awkward moments would have been more awkward. With everyone else in the room at the same point, and all this noise, it's almost jovial. Whereas if you're in a quiet room by yourself and the moment they sort of drop the bomb … that would really have a lot more impact, and it could potentially be a lot more real and awkward (Aaron focus group).

Whether these elements in the physical setting that impacted on the medical students' ability to enact their roles in the story of their consultation with Jo realistically were advantageous to their learning overall, there can be little doubt that the distraction of the noise and of having their activities foreshortened would have had an effect on the students' ability to suspend disbelief in the fiction that they were alone in a quiet consulting room with an adolescent.

The comment from Aaron above, that the feeling of unreality created by the noise and crowdedness of the room provided a certain amount of distance that made him feel more comfortable about discussing highly personal matters with an adolescent, is an indication that, for him at least, the boundary between the make-believe world and reality was very thin. I will discuss the way the boundary was managed next.

**Semi-permeable boundary from reality**

As I noted in the MEPS discussion in this chapter, one of the hazards of aiming for a high level of authenticity in a role-playing activity is that a thin boundary marking the edge of the make-believe world may be easily breached. However,
the fact that 81% of questionnaire respondents agreed that they felt safe to try out new strategies in the HEADSS workshop indicates that devices other than a strong boundary were successful in maintaining students' sense of comfort in this potentially confronting learning situation.

As I noted in Chapter 6, I was aware of many supportive elements in the way the workshop was facilitated. These included that the facilitators modelled positive language, that students used third-person voice when providing feedback in the fishbowl activities, that students rotated partners frequently, and that the facilitators watched over individual interactions to ensure that students treated each other with respect and compassion (journal 10/10/2009).

Thus, although the boundary from reality was thin for this setting, students could still experiment, receive feedback and achieve desired learning outcomes. Recognising the porosity of boundaries such as the story boundary, but also those around the norms and stereotypes that commonly govern the doctor-adolescent consultation, was one of the things that the designers of the workshop aimed for medical students to achieve in this workshop, as I will discuss next.

Critical learning
Several aspects of the setting for the HEADSS workshop worked towards exposing the rules contained in the very language and behaviours that adolescents and doctors used in consultations, helping participants to cross the boundaries between generic and more understanding, compassionate behaviour. Most notably, as I mentioned above, there were indications that locating the workshop amidst the sights, sounds, smells, constraints and
undercurrents of the school, in which the medical students were outsiders, helped to replace any abstracted, stereotyped views the medical students may have had of Australian adolescents with the raw language and behaviours of a real adolescent world.

Secondly, the rules governing the ways participants acted in the story world changed repeatedly as the students moved from naturalistic role play to the surreal soliloquies of the 'hidden thoughts' and the public coaching mode of the 'fishbowl' activities. This blending of modes was designed to open what Cahill (2008) terms a 'pedagogical space' in which the medical students might objectify their initial, generic performance of their roles and hold up to scrutiny the norms, stereotypes and cultural assumptions that governed the ways in which they tended to categorise and position themselves and young people.

Thirdly, the constant interruptions, changes of partners and limited time to develop their stories meant that students were not encouraged to suspend disbelief in the generic form of the consultation as played out in the naturalistic one-to-one role play segments.

As a result of these design decisions, the setting element in this case played a large part in helping students achieve critical learning outcomes.

In summary, there were numerous factors in the way the story element of setting was managed in this workshop that could have contributed to the less than positive responses that my research participants gave to questions about whether they had engaged with the story of the consultation with Jo underlying the activities (which I discussed in Chapter 6). With the minimalist setting and
its distractions of noise, crowdedness and a short time to complete the tasks, it would have taken quite an effort for students to pretend they were in a private doctor's surgery. Even if they had achieved this in their naturalistic role-playing segments, the rules of discourse they had used to interact in this setting were repeatedly exposed and critiqued in the non-naturalistic activities that followed. However, the setting for this workshop in a real school provided tacit and explicit information about the real world in which adolescents lived, and there are many indications that this measure of authenticity, along with the constant questioning and reworking of the medical students' ways of enacting a consultation with them, provided a useful learning opportunity for these students.

The way that the setting was managed in the Bilby scenario activities provided another extreme contrast to that of the HEADSS workshop and the MEPS, providing further insights into the ways in which the conditions relating to setting supported students' engagement and learning.

**Bilby scenario activities**

**The Bilby setting**
The Bilby website didn't so much create a virtual world of the Bilby township, in which students could experiment, as provide a simulated set of resources *about* Bilby such that a journalist or visitor might use to get to know the town and its issues better.

The entry page (Figure A.3) contained a main road sign pointing the way into Bilby, and once you clicked to enter the town you were positioned as a visitor
or returning resident to the town. The home page that then appeared contained a further street sign (pictured in Figure A.4), but this one was metaphorical, pointing to the different sets of information resources students would need to find out what was happening in Bilby. The site contained a multitude of resources, and rather than being arranged in a simple hierarchy, they presented information about Bilby using the structures, media and styles found in real-life communications. They included multi-level websites, technical reports, maps, pictures, audio interviews, press releases, newsletters and five different mock newspapers. A page from one of these newspapers is pictured in Figure A.5.

Thus, the website provided not only a visual representation of the town of Bilby, but a self-contained set of resources about the issues and characters in the town. In the next section I will discuss the ways in which the same conditions relating to setting that I used to guide my analysis of the other two cases were managed in the Bilby scenario, starting with 'coherence and plausibility'.

**Management of the setting and effects produced**

**Coherence and plausibility**

In the tutorials I observed, the students indicated they understood the issues, constraints and important characteristics of the rich and complex Bilby scenario without any trouble, although a few complained about inconsistent details in different media sources (journal 22/4, 28/4/2010). The students' comments in interviews indicated overwhelmingly that they found it a plausible and comprehensible simulation of life in a country town, which they
enjoyed and which provided all of the resources they needed to complete their writing tasks (Bernard, Marie, Viola, Antonina, Leila, Jane, Samantha, Jennifer, Jemima, Bonnie, Sylvie, David, Roni interviews). Hence, the effort that the designer and developer of this website expended in building such a rich and carefully organised website was rewarded in that it supported the students' engagement with the story world and their ability to construct a model of how such an environment worked, to refer to in their writing tasks. I will discuss its plausibility further in the next section; and its coherence further under the heading of 'Transparent, responsive interface'.

**Authenticity**
The scenario designer said her aim in building the Bilby scenario was to provide a 'realistic and engaging' context in which students could develop their professional writing skills (designer Justine interview). It can be seen that she aimed for a high degree of authenticity in each of the resources, in that each newspaper was presented in a font, layout and writing style typical of the kind of newspaper it represented. Likewise, the local radio station website appeared with the kinds of pictures and information typically found on a community radio station site, and the interviewing style was fittingly chatty. Organisational websites likewise were presented with the kinds of graphics, styles and layouts that you might expect; and reports could easily have been mistaken for real ones. There were several comments that these resources provided a good simulation of the kinds of resources professional writers might typically need to sift through to find the information they needed. Some of the students commented that sourcing the content of their arguments from these resources gave them realistic practice in the kinds of research, data management and
analysis skills they would need in the future (Leila, Michael, Samantha interviews).

This provided the first of Herrington, Reeves and Oliver's (2010: 46-48) characteristics of authentic tasks. That is, 'Activities match as nearly as possible the real-world tasks of professionals in practice' (p. 46). The scenario activities provided many of the other characteristics as well. Although the writing tasks were assessed summatively, by the teaching staff, and were in the form of a portfolio of pieces rather than a whole product, the tasks and standards that were used mimicked real-world tasks. The students completed these tasks over a period of time, using a variety of resources to do so. They worked in groups to develop their writing strategies collaboratively. There was the added complexity for students of having to consider multiple roles and perspectives as they completed their tasks. As I noted in Chapter 6, although there were no reflective activities built in, there were many indications that my research participants did reflect on their learning and were able to articulate some of the tacit knowledge they had gained about professional writing.

Thus, the high degree of authenticity in the task and setting for the Bilby activities also contributed to the students' ability to achieve certain learning outcomes. I will discuss next how the rich detail built into the site also supported students' learning.

**Rich visual detail and information**

Many of the students who participated in my research said they found the maps of the township and region with pop-up pictures of key locations to be a particularly valuable resource for helping them to visualise Bilby as a real
When I visited tutorials I saw several students referring to these maps to visualise the position of the proposed new hospital and existing graveyard site and to check whether there might be alternative locations for the hospital (journal 22/4, 28/4/2010). This map is pictured in Figure A.6.

Of the questionnaire respondents, 84.5% agreed they could visualise Bilby as a real town. Many students commented in their interviews that they gained a sense of not only what Bilby looked like from the website, but what its characters were like—and that the characters were drawn in a sufficiently realistic and detailed manner that they added to their sense that Bilby really existed (Jane, Jennifer, Leila, Brendan, Roni, Jemima, Antonina, Sylvie, Marie, David interviews). For example:

I can visualise the town, and … I know where I live, and what my house looks like, I found that really enjoyable … The way the website is so interactive is really good, so you could click on a picture and view a picture of that location, I think that was really good. I mean I understand they're not actually pictures of Bilby but it really helps. Like you see the map and you can imagine driving into town. You click on all the pictures and you can imagine … being at the waterfall, looking through the forest, you see all the same names and things of shops that we’re familiar with, so it's kind of tying into that … and when you hear the radio interviews you can sort of imagine a bit of the characters coming out, you can sort of imagine the lady who's done the fabric business, you can imagine her being a strong character. And
there's a bit of humour in there, like John the Landcare manager fighting with someone from the historical society over a whipper snipper at the graveyard … I've lived in a small country town [and it] rang true to me. I think perhaps some of the characters having really set viewpoints is typical of a small country town. So some of the attitudes that I read through in a paper or comment, I can relate to characters like that (Marie interview).

Thus, there were indications that the rich visual detail and information embedded in the website helped students to suspend disbelief in the story world, as well as providing the raw material for students' learning tasks. As I noted above, the intuitive organisation of the content also added to this effect. I will discuss this aspect further next.

**Transparent, responsive interface**
In the tutorials I attended early in the trimester, I noted that the tutors spent some time orienting students to the Bilby website, explaining the rationale for using the scenario and where to find the resources they would need for their writing activities (journal 22/4, 28/4/2010). The off-campus tutor made his students' first task to find a list of key pieces of information about Bilby, to achieve a similar purpose (tutor Pascal interview).

Of the questionnaire respondents, 82% said they had no difficulty navigating the Bilby site to find what they needed. This trend was reflected in all of my interviews, and several commented that they greatly appreciated the effort and
skill that had gone into creating and organising this detailed setting (Roni, Brendan, Marie interviews).

Thus, the transparent, responsive function of the Bilby website, supported with orientation activities, also supported students' engagement with the story world and their ability to use it in their learning. Unlike the settings for the other two cases, the website created a strongly bounded environment, and I will discuss the effects of this characteristic next.

Semi-permeable boundary from reality
Bilby was represented as a small, independent community with lots of interlinking relationships. It provided a microcosm of the world where the pressures of the economy, the environment and society were not just abstract theories but had a personal impact on the characters. For example, the leader of the Historical Society had ancestors buried in the graveyard on which the proposed hospital was to be located. The small number of characters lent a sense that all of the players in this scenario would be directly affected by the decisions that were made there, and it was up to each of them—and the students in their roles as members of the lobby groups—to make a strong case to protect their interests. Although the students knew that they could not actually impact on the scenario, several comments indicated that some students' feeling of the importance their decisions would have in the make-believe world gave them a sense of what it might be like to have this kind of agency in the real world (Jane, Antonina, Brendan interviews).

At another level, several comments emphasised the advantage of having the world simulated on a small scale in the Bilby website in that this created a
finite set of resources for the students to research within. This allowed students to focus on writing skills rather than having to engage with lengthy library research, which was an aspect of real writing tasks that many of these mainly first-year students found difficult (Hannah focus group; Marie, Samantha, Roni interviews; two questionnaire comments).

Thus, the Bilby scenario activities provide an example of the advantages that can be gained in creating a strongly bounded story world for students to work in. There were indications that it made the construction of mental models about how that world works a more manageable task than when the vagaries of reality also had to be taken into account. There were also indications that the strong focus it placed on the characters and issues encouraged students to become more engaged with their plight. However, there were also indications of a disadvantage of creating strongly bounded story worlds. That is, that the boundary limited students' ability to do a reality check on the representation within which they were working. In strongly bounded environments students need stronger prompts to recognise the culturally-influenced constructedness and ideological content of these story worlds (Cahill 2008). This is the final condition relating to setting that I will discuss.

**Critical learning**

As I noted in Chapter 6, there were indications that the Bilby scenario activities helped students to develop some critical skills. However, the scenario itself contained a number of cultural assumptions that were never challenged, such as that it is only white, middle-class, middle-aged, heterosexual people who take part in public affairs in towns like Bilby. Minority groups such as racial
minorities, homosexuals, people with low socio-economic status or disabilities, and very old or young people, were barely represented in the scenario. There were no indications that students were guided in the activities to recognise, critique and rework the cultural assumptions embedded in the very setting they were using to develop their skills.

Thus, the Bilby setting provided a rich, navigable and bounded learning environment. There were indications among my research participants that the setting supported their learning in providing all of the resources they would need in realistic and colourful formats, in a finite space that limited the amount of research they needed to do. There were indications that the setting as represented in the Bilby website was internally coherent, plausible and easy to use. There were also indications that the high degree of authenticity in the presentation of the resources supported students' learning by giving them examples of professional writing as well as experience in researching diverse materials for information. Several students commented that the rich visual detail and information in the website helped them to feel they could relate to the town and its characters, and that they enjoyed the colour and humour that was provided in the news reports. However, no attempts appeared to have been made to develop students' critical learning through focusing on the setting in these activities.

**Chapter summary**

Thus, in this chapter I have explored the ways in which the story element of setting was managed in each of the cases, and the ways in which this treatment
may have impacted on students' engagement, learning and critical learning. My findings indicate that students' suspension of disbelief in the representation of the story world was supported in several ways in the MEPS and Bilby scenario activities, and it was an important factor in their engagement and learning. Both provided rich, realistic visual and other information to help students to build a mental representation of the story world. The story worlds of both contained a coherent and plausible logic in the way that events were able to develop (in the case of the MEPS) or were narrated (in the case of Bilby). These story worlds were also contained within imaginary boundaries, although this was a leakier boundary in the dynamic MEPS world than the static one of Bilby. In the HEADSS workshop, by contrast, the students' construction of an imaginary world in which they were consulting with an adolescent named Jo received little support in terms of visual and other information, and was undermined by the partner rotations, time pressure and the noisiness and crowdedness of the room. The boundary of the story world was breached constantly by the critical activities that interrupted the flow and introduced different rules of discourse. There were also possibilities within the MEPS and HEADSS workshop to promote critical learning, although these were not developed overtly in the activities. These involved aspects that focused students' attention on the constructedness of the setting, the rules by which it was built and supported, and ways in which the setting could be constructed differently to produce different meanings. Table 7.1 provides a rough summary of the extent to which the conditions relating to setting were provided in each of the cases.
## Table 7.1: Presence of conditions relating to setting in each of the cases

<table>
<thead>
<tr>
<th></th>
<th>MEPS</th>
<th>HEADSS</th>
<th>Bilby</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coherence and plausibility</td>
<td>✓</td>
<td>challenged</td>
<td>✓</td>
</tr>
<tr>
<td>Authenticity</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Rich visual detail and information</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Transparent, responsive interface</td>
<td>✓</td>
<td>challenging physical conditions</td>
<td>✓</td>
</tr>
<tr>
<td>Semi-permeable boundary to reality</td>
<td>✓</td>
<td>very thin</td>
<td>✓</td>
</tr>
</tbody>
</table>

In the next chapter I will present my analysis of the ways in which the element of plot was managed, and the effects of this treatment for students’ engagement and learning.
CHAPTER EIGHT

Engagement with plot in the activities

Introduction

In this chapter I continue my exploration of my supporting research question asking *what are the relationships between engagement, story and student learning in online role plays in higher education?* I focus here on ways in which the story element of plot was managed in each of the cases, and how this treatment may have impacted on students' engagement, learning and critical learning.

Middle East Politics Simulation

MEPS plots

The over-arching plot that the politics students developed collaboratively in the MEPS was that each character engaged in a number of struggles with forbidding opponents and obstacles to promote their own interests.

Numerous concurrent sub-plots also played out within the simulation. Because of the interrelated nature of most Middle-Eastern political issues, these plots had the practical advantage of involving several characters at a time. Many plots were seeded in the 'Scenario breaking news' items posted in the simulation interface on Day 1, and students introduced others themselves by emailing announcements of their own events or opinions to the characters concerned or the online newspapers. The seeded plots included:
**Damascus** (al-Jazeera) Sources close to the Syrian President have revealed that an American helicopter has been shot down and its occupants captured in western Syria. How and why this aircraft was in Syrian airspace is unknown.

**Cairo** (al-Jazeera) A massive explosion has taken place outside a police training facility in Cairo. The MuBarack Security Academy was holding an information day for new recruits when some sort of vehicle bomb was detonated adjacent to the front gates. At least 35 people are feared dead, with more than a hundred wounded.

**West Bank** (AP) Israeli forces announce that they have seized a truck containing a cache of military weapons. These include rifles, mines and portable anti-aircraft missiles of ex-Soviet origin. The truck, with Syrian plates, was seized crossing over the King Hussein Bridge from Jordan into the West Bank (Simulation information).

I will now discuss the extent to which each of the conditions I identified in my literature review as supporting students' ability to engage with and learn from an interactive, online, dramatic story's plot were provided in this case, and the impact of this treatment on students' engagement and learning.

**Management of plots and effects produced**

The first of the conditions I will discuss is that students should be able to discern causal links between events, from which they can construct meaning.
Causal links between events
I have summarised this condition as that participants need to be able to discover probable linkages between character traits, actions and outcomes in the story world, to develop useful mental models that they can use to think and act with in future.

As I noted in previous chapters, a fundamental rule of the MEPS was that participants act within the bounds of credibility for their character in the real Middle-Eastern setting. This rule meant that the plots developed largely within the important constraint of the classic causal Aristotelian plot structure. Therefore, according to this theory, when students reflected on events, they should have been able to construct meanings about how Middle East politics really worked with these characters in this setting.

There were crises and complications in the plots that served to maintain tension, as several of the quotes I included in Chapter 6 indicated. However, most plots departed from the classic Aristotelian model at the end as very few were resolved in a satisfying and meaningful way. Some students expressed disappointment that they had not been able to achieve goals through their characters, such as resolving the differences between Hamas factions, or starting new peace talks between Israel and Palestine (Thierry focus group, Iris interview). However, the site 1 lecturer noted that the lack of resolutions was realistic for the Middle East, where axes of power run in many directions and resolutions are extremely difficult to achieve (lecturer Mia interview).

Despite the lack of meaningful resolutions, many of the students who participated in my research were able to identify lessons they learnt as a direct
result of being involved in the MEPS plots. Some of their questionnaire responses on this are listed in Table 8.1.

Table 8.1: Stories students developed in the MEPS

<table>
<thead>
<tr>
<th>Stories I helped develop</th>
<th>Things I learned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syrian Hostage Crisis</td>
<td>Don't negotiate with rogue states. Reported facts aren't always accurate.</td>
</tr>
<tr>
<td>Hormuz Strait crisis</td>
<td>If armed with enough information you can outmanoeuvre your opponent. The threat of military action beats military action itself.</td>
</tr>
<tr>
<td>The seized truck in the West bank</td>
<td>It is important to have a neutral party investigate tense cases or everyone will just deny.</td>
</tr>
<tr>
<td>Military help to Iran</td>
<td>Military treaties mean less than they look like</td>
</tr>
<tr>
<td>Meeting with Al-Sadr</td>
<td>Even opposing groups/people can agree on some point. Keep your enemies close.</td>
</tr>
<tr>
<td>Attack on E. Murr attempted assassination</td>
<td>Not to rule out all possibilities</td>
</tr>
<tr>
<td>Discussion of pan-Arabism</td>
<td>Difficult to be patient</td>
</tr>
<tr>
<td>The Gulf blockade, US frigate patrols in the Hormuz Strait</td>
<td>International waters means different things for different countries. Acts at defence and protection may be interpreted differently by other players.</td>
</tr>
<tr>
<td>Hamas factional plot</td>
<td>People even within a faction or party have different views.</td>
</tr>
<tr>
<td>Leaked emails</td>
<td>If you do dodgy things in politics, word will get out. This is especially true if one of the informed parties is hard done by. Look after your allies or they will use their position against you. Reputation is very important.</td>
</tr>
<tr>
<td>Cairo bombing</td>
<td>Violent terrorism will not make a country acquiesce to your demands, but negotiation does have a chance.</td>
</tr>
</tbody>
</table>
These lessons, and the engagement that was evident in students' trying to achieve goals for their character through their plots, provide clear indications that students' ability to discern causal connections between events in the MEPS supported both their engagement and their learning. Many of these plots were based on a simple genre, and I will discuss the impact of this condition next.

**Identifiable genre**

I have stated the condition relating to genre as that it helps to be able to identify a genre, to build expectations and tension.

The MEPS plots were clearly in the classic heroic adventure genre, in which each character faced serious obstacles and was obliged to deal with aiding and opposing characters, with the overall aim of promoting their particular interests. This genre is common in video games (Gee 2003, Ryan 2006), and as I noted in Chapter 6, several of my student participants commented on feeling similar kinds of engagement as are found among video game players (Sean, Briony, interviews; Thierry, Jen, Ciaran focus group). For example: 'It was like a game so it was heaps of fun. And there was an element of challenge trying to figure out different strategies and working with partners to, you know, try and win, basically (Thierry focus group).

The extremes of various characters' positions on many issues and the rich history of violent conflict in the Middle East meant there was scope for high drama in the plots students created. Student comments indicated that the complex web of alliances and animosities, economic interests and conflicting ideologies in the Middle East created many obstacles to research and engage with, and a high level of dramatic tension for many of the players with interests
An important aspect of the students’ engagement with these plots was that they were able to influence events themselves, which I will discuss next.

**Agency within bounds**

I have summarised the condition relating to agency as that a balance needs to be maintained between giving students the opportunity to decide how their character will influence events, and focusing their attention on the kinds of interactions that might help them manage tension and build useful mental models.

The politics students were encouraged to exert as much influence over events in the MEPS as they could, and most did not hold back. Their 'Simulation information' handout advised them to work out ways to use the 'breaking news' events to increase their character's visibility in the media and influence in the region, and at the same time ensure that others did not take advantage of the situation to outmanoeuvre them. In the intense jostling for prominence that occurred over the 13 days, characters invented bombings, kidnappings, internal political intrigues, distributions of largesse, overtures for peace talks, and attempts to form regional alliances. Questionnaire respondents all agreed there was either enough going on in the MEPS to keep them interested (56%), or too much to keep up with (44%).

The more central characters such as the United Nations Secretary-General, Obama and Israeli President Netanyahu juggled many plots at the same time. For example, the list of tasks students playing Palestinian President Abbas
confronted one day were to email Netanyahu to start to lay the groundwork for a peace process; to email the King of Jordan to ask him to mediate in this process; to send a press release to the media to inform them of the peace initiative; to think about how to convince Hamas to join them in a united Palestinian front, given that they were not returning emails and had just launched a rocket attack against Israel; and to think about how they could take advantage of the current warm feeling towards Palestine to get the US on side and re-start the US involvement in the Israeli-Palestinian peace process (Iris interview). However, several participants playing less central characters reported that the range of options available to them was limited and it sometimes took considerable thought, imagination, research and consultation among group members to develop an effective strategy (Dan, Jeremy, Liz interviews).

As I noted in Chapter 6, many of my research participants commented that the requirement to develop plausible and successful plots and hence remain prominent in the simulation world provided strong motivation to research the background and factual details they needed—and to execute the strategy quickly, before the situation changed (eg Thierry, Sean interviews). This type of 'just-in-time' learning has been recognised as an effective and motivating way of learning in the literature relating to video games (Gee 2003, 2007) and authentic learning (Herrington, Reeves & Oliver 2010). In addition, all of my participants described creating cooperative work arrangements within their groups and developing their collaborative and negotiation skills as they worked with other character groups, all of which also arose out of their ability to take action to develop strong plots.
Thus, students’ ability to act in the simulation clearly supported their ongoing engagement and learning. However, the educational drama and interactive multimedia literature also emphasises the need for rules and a teacher-in-role/storyteller figure to direct participants’ activities in meaningful ways (eg Bolton & Heathcote 1999, Ryan 2006). I will discuss next the extent to which this requirement was met.

Controlling chaos

The MEPS had an authoritative teacher-in-role figure in the ‘Control’ character, which the lecturers took turns to perform. Participants were required to seek Control’s approval by email before they activated any strategy that affected another player (eg a cross-border raid or document theft), or that might be described as extraordinary (eg a large resource discovery or mobilisation of troops). I noted that Control also intervened periodically to introduce twists in plots by leaking information to the online newspapers, emailing suggestions to players who seemed stuck, and providing technical advice to improve a proposed strategy. Also, if players were confused as to what was and was not going on, due to fabrication by various characters seeking to promote a better image of themselves, or inaccurate or selective reporting, they could email Control for clarification (journal 11/5, 12/5, 14/5/2009).

Despite these measures, several students (Kerry, Liz interviews; Ciaran, Jen focus group) complained that Control was not dominant enough in stepping in to limit confusions that arose. As a result, they indicated that some of the situations that developed in the simulation were neither satisfying nor meaningful. However, the site 1 lecturer explained that her failure to impose
clarity on some situations was intentional, as an important aspect of the simulation was for students to experience the difficulty of establishing truth in this complex and media-driven political environment (lecturer Mia interview). I will discuss this aspect further in the next section.

**Critical learning**
The condition I have identified relating to how critical learning may be supported through the element of plot is that it may be fostered by limiting generic plot development or interrupting and challenging plots that might carry unquestioned ideological assumptions and values, and encouraging students to rework plots to suggest meanings that are more aligned with a considered stance.

As I noted in previous chapters, the lecturers facilitating the MEPS did not interrupt the action to get students to notice and question ideological assumptions and values that were being promoted, and neither was there a strong emphasis on these matters in the students' final conference. However, as I also noted in previous chapters, many of my research participants indicated that the online newspapers were successful in introducing a reflective and critical dimension to their learning in the MEPS.

As I noted above, students relied on their plots gaining mention in the daily online newspaper reports to maintain visibility and ongoing prominence in the MEPS. Many students complained about the injustice and arbitrariness of this system (Briony, Jeremy interviews; Thierry, Jen, Ciaran focus group). I noted myself that plots involving armed conflict, terror, major economic impacts,
powerful figures’ tirades and personal lives routinely gained prominence—especially if dramatic pictures were available to publish—at the expense of plots involving painstaking negotiations towards peace, careful diplomacy and efforts towards justice for silent minorities (journal 12/5, 14/5/2009). In effect, it meant that \textit{newsworthiness} had higher value than other types of worthiness in the public forum of the MEPS.

One student gave an anecdote to show the difficulty of managing the media, and how powerful they were: he asked journalists not to print information they had been given that would probably derail a fragile Israeli-Palestinian peace process he had helped to construct, but they went ahead and ran the story anyway, producing the predicted results for the peace process. His learning from this was: ‘The media don't really care about peace processes, they'd rather have a good story’ (Thierry focus group).

If the success of students' plots had been less important to them in terms of their intrinsic engagement with the activity, as well as in their generation of (assessable) quantity and quality of emails, the distorting effect of the online newspapers' representations of their work might have had less effect on their learning. As it was, there were indications that these representations gave many of my research participants strong prompts to reflect on these lessons about the nature and importance of media representations; the difficulty for less newsworthy, or less popular, characters and actions to achieve useful coverage; and as a consequence the difficulty of being able to effect change in non-newsworthy ways. Thus, the online newspapers provided a built-in and realistic device to enable students to not only experience how it felt to be
ignored, discounted or misrepresented, but to see how this happens: to 'catch the discourses at play' (Butler 2004).

However, as I also noted in Chapter 7, the fact that the lecturers did not take the opportunity to highlight these critical issues, discuss the power relations behind them and prompt students to think what people could do in similar situations to make a difference could mean that some students may not have reflected in this way.

In summary, there were strong indications among my research participants that the task of developing successful plots to advance the interests of their character was central to their engagement with the MEPS and their learning about Middle East politics. All of the conditions I identified in the literature as supporting students' engagement and learning through the element of plot were clearly present. At the same time, the in-built distorting mirror device of the online newspapers provided a means to enhance the awareness of reflective students of the ways in which news media constructed a spurious and powerful representation of reality that advantaged some while disadvantaging others.

The plot element was managed in a very different way in the HEADSS workshop, which I will discuss next.

**HEADSS workshop**

Where the MEPS was full of exciting plots and counter-plots, and it was easy to see how students' involvement in developing these plots might have driven their engagement in and their learning from the simulation, medical students in
the HEADSS workshop achieved their learning by working with a story that had almost no plot development.

**HEADSS plots**
The medical students in the HEADSS workshop had very little scope to develop their story plot in interesting and meaningful ways. They were given the task of enacting a caring doctor using her or his best questioning strategies to build a profile of Jo's psycho-social wellbeing, with very little time for anything else. Only one complication occurred, when the doctor also had to overcome Jo's pushy mother's efforts to be present in the consultation—but whether or not they succeeded in this had no impact on the rest of the sequence.

Although this workshop was explicitly *not* designed to support students' engagement with developing the story of the consultation with Jo in a meaningful way (designer Hope interview), I will discuss this management of plot in terms of the conditions for engaging and meaningful story development I have used with the other case studies in order to better highlight the effects of the lack of these conditions, and to demonstrate how this workshop supported their critical learning by working *against* students' tendencies to create limiting generic plots.

The first of the conditions I will discuss is that students be given some control over significant events.
Management of plot and effects produced

Agency within bounds
Although theoretically the HEADSS workshop was in the format of an interactive, dramatic story, students in fact had very little agency to influence plot development. One factor that limited medical students' ability to develop the central story plot in their own way in their mock consultations was that they had just a short time to cover the lengthy set of issues in the HEADSS screening process. Another was the fact that they were interrupted every few minutes and asked to reflect on words and strategies they had just used. A further factor was that they were required to change partners frequently, so there could be no continuity in the stories they developed collaboratively with individual partners (journal 10/10/09). There were also distractions in the physical setting that impacted on medical students' ability to even engage in the story of Jo, let alone take control of developments, which I mentioned in Chapter 7.

As a desire to see how a plot will develop is central to people's engagement with any story (Misson & Morgan 2006); and as people like to be able to influence an interactive story plot in significant ways (Murray 1997), it was not surprising that all of the participants in my focus group and email interviews indicated that they saw the naturalistic role play's limited and disrupted storyline more as a framework that they could use to practise their consulting skills than a source of meaningful and engaging metaphorical content in itself (Sarah email interview, all focus group participants). For example: 'I wasn't on the edge of my seat trying to work out how this life would turn out, it was really to cope with emotions, to practise' (Holly focus group).
Thus, the plot in the main story of the consultation with Jo may not have served to engage students in thinking how they could best influence events; and nor was it allowed to develop to suggest meaningful links between simulated events. The students' focus was elsewhere, and their engagement and learning outcomes were achieved through different vehicles than the story itself, as I noted in Chapter 6.

Students' lack of agency to develop the plot was no accident, but part of the designers' plan to limit the emergence of a generic plot that might reinforce stereotyped views of adolescents, which I will discuss further below.

**Causal links between events**

As I noted in Chapter 3, Cahill (2008: 100) argues that the Arisotelian plot structure in which events develop out of character traits tends to heighten the differences between types of character and organise them into binaries and stereotypes, and that the same effect tends to be produced with students in naturalistic role plays, because students draw upon the norms and stereotypes that they know. However, the HEADSS workshop was designed to resist reinforcing limiting dominant cultural binaries and storylines, and to encourage students to recognise, critique and rework these as they arose in the mock consultations, in order to create more nuanced, compassionate characterisations and interactions (Cahill 2008: 269).

One of the ways the workshop was constructed to achieve these effects was in limiting students' ability to construct stereotyped plots that reproduced dominant cultural assumptions—indeed, limiting their ability to construct plots at all. When I raised the question with one of the role play designers of how
students may have constructed meanings using a story form without a meaningful plot, she said she hoped that a meaningful story developed around the central plot in this workshop, which was the story of the students' experience of their interactions (designer Hope interview). An example she gave was that the medical students would quickly form trusting relationships with a number of adolescents, who would give a variety of possible responses to their questioning techniques, and demonstrate a variety of levels of acting skill, maturity, confidence and so on. A meaning the medical students might draw from these interactions was that adolescents should not be stereotyped. As I noted in Chapter 6, several comments from students indicate that this was indeed something these students learnt from the experience (Aaron, Simone focus group; Paul email interview).

I will discuss next the pervasiveness of the generic plot that the designers sought to limit, and the techniques they used to do so.

**Identifiable genre**
The genre influencing expectations in the workshop that was most evident to me was that of the stereotyped doctor-adolescent patient consultation, in which the doctor takes control of the conversation, asking the adolescent numerous searching questions about her or his well-being, while the adolescent is positioned as needy, inarticulate and lacking in knowledge (Dwyer & Wyn 2001, quoted in Cahill 2008: 53). The medical and school students reverted to this genre every time they were instructed to role-play a segment of the consultation sequence in naturalistic format (journal 10/10/2009). However, the facilitators used several techniques to ensure the pattern and its attendant assumptions did not prevail.
In the one-to-one feedback and 'fishbowl' advice-giving activities, the school students were asked to come out of their passive, reactive role to volunteer feedback and advice to the medical students about the words, phrases and questioning techniques they had used. They had been coached in this practice and I was struck by how sensitive, insightful, articulate and generous they were in their comments (journal 10/10/2009). Several of the medical students indicated that the adolescents' advice was the most helpful aspect of the whole activity for them (Sarah, Paul email interviews; questionnaire comments).

Another way in which the facilitators worked against the limiting genre was that they encouraged both sets of students to mingle as equals and individual human beings right from the icebreaker activity on. Also, they made frequent comments in the workshop to the effect that all participants should accept as natural that the medical students would make mistakes and that the school students would be giving them helpful, expert advice (journal 10/10/09).

That a small majority of questionnaire respondents (55%) agreed their assumptions about young people had been challenged as a result of the workshop may or may not indicate that these attempts to undermine the generic pattern of the doctor-adolescent relationship was successful, though as I discussed in the previous chapter, some of the medical students may not have held limiting assumptions about young people in the first place, and some may have needed more time to recognise an attitudinal change such as this.

Thus, all of the conditions relating to plot that I have discussed above, which are commonly seen as important for creating stories that are engaging and support learning, were managed in such a way in the HEADSS workshop as to
work against students becoming engaged with and drawing meaning from the story they were developing in the role play of a consultation between a doctor and an adolescent named Jo; and students’ comments indicated that they were successful in this. As I noted above, the reason for treating the plot in the workshop's story in this way was to avoid replicating and reinforcing limiting stereotypes and assumptions, but to leave students instead with a more authentic experience of adolescents. In doing so, the workshop provided to a strong extent the condition for using plot to support critical learning.

**Bilby scenario activities**

Plot development in the Bilby scenario was also very limited, although the rationale for this was more related to creating a manageable task for both students and facilitators than to supporting critical learning.

**Bilby plots**

The Bilby world represented in its website included many colourful pieces of 'back-story' in reports in the simulated newspapers, radio interviews and organisation websites. These provided the students with a sense of the story so far as well as background information that they could build into their own proposed strategies to solve the problems in Bilby in their written pieces. Some items included that the town had provided the setting for a successful television series that had had the effect of boosting population and tourism, that a car accident had claimed the life of a local football player recently, and that the leaders of the three lobby groups in the town had once had romantic connections.
However, only in the last week of the role-playing activity period did some fresh events occur in the Bilby world: the unit chair added a 'Breaking news' item that two official proposals had been made, one to declare the potential hospital site a site of strong historical significance; and the other to develop a specialist health unit at Bilby for road and farm accidents. These events bore little meaningful relation to anything that had happened before in the scenario, but provided students with some fresh information to include in their final pieces. None of the stories in the Bilby scenario developed as a result of students' role-playing activities.

As before, I will discuss the extent to which each of the conditions I identified as supporting students' ability to engage with and learn from an interactive, online, dramatic story's plot were provided in this case, and the impact of this treatment on students' engagement and learning. The first condition I will discuss is that students be able to influence significant events.

Management of plots and effects produced

Agency within bounds
As the small plot developments that occurred in Bilby were controlled entirely by the unit chair, rather than the students, the Bilby activities did not have the critical characteristic of online role plays as defined by Wills, Leigh and Ip (2011: 21) of allowing participants to co-create the developing scenario through their actions. The kind of learning the scenario activities supported may have been more closely aligned to historical case-based learning, which involves 'observing actions as an outsider and vicariously attempting to understand the process, decisions, values and strategies as presented by the
case’ (p. 21); although as I noted in Chapter 6, there were indications that role-playing (albeit without impacting on events) also played a part in students’ learning.

There was a suggestion of students having some agency in that the Breaking news items were written as opportunities for each group to advance its cause, if its members could just write persuasively enough in the required format. But, no matter how well the students wrote any of these pieces, they knew they could not change the scenario—most of the persuasive pieces they wrote were not even submitted until the role-playing period was finished. Some students said they invested considerable effort in creating interesting ideas to promote their lobby group’s cause to present in their written pieces (Bernard, Leila, Antonina, Marie, Viola, Roni, Sylvie interviews). However, when I asked whether they thought they would have been more engaged with the activity if they had been able to make an impact in the Bilby world, there was little evidence that they were disappointed or frustrated by their lack of agency. Rather, they indicated that they just accepted it as a characteristic of the activity. The scenario designer said she had decided not to allow students to develop the Bilby plot in order to make it easier for these mainly first-year students to keep up with the unit requirements (designer Justine interview).

One of the students indicated her support for this decision in saying that while she became bored with the scenario towards the end, she preferred the idea of having a manageable but limited task to having a more interesting but more time-consuming one (Hannah focus group).
However, students' lack of agency in the scenario obviously limited the amount of formative feedback they were able to receive on their work, whether negative or positive, which is recognised as an important factor in generating deep engagement in a task (Csikszentmihalyi 1990), particularly in an online environment (Burbules 2004, Murray 1997); and in supporting learning (Biggs & Tang 2006, Gee 2004).

Students' lack of agency also impacted on the next condition that I will discuss, that of students being able to discern causal links between events.

**Causal links between events**
The lack of plot development while the students were involved with the scenario meant that they could only develop an understanding of how Bilby's issues had arisen and how they might develop in the future—and what parallels could be drawn with the real world—from reading the various pieces of backstory. While there were many indications that students enjoyed piecing together the story in this way (Jane, Jennifer, Leila, Brendan, Roni, Jemima, Antonina, Sylvie, Marie interviews), as I noted above, what learning they were able to achieve from plot developments would have been vicarious rather than gained through the kind of first-hand experiential, experimental process that is more commonly associated with interactive dramatic story-based learning activities (Murray 1997).

**Identifiable genre**
The Bilby story world might have lacked a developing plot, but the activities students were asked to perform did conform to a recognisable genre that may have served to build expectations and tension, and help maintain students'
engagement over the eight weeks. This was the genre of the political campaign in local politics. The students worked in groups representing the Bilby Landcare Group, Historical Society and Business Association each week and completed most of their writing pieces from the perspective of their group. In the tutorials there was evidence of friendly rivalry between the groups and this came to a head for some cohorts in the last week when they stood up in their tutorials and argued their group's case in their simulated public meeting (journal 25/5, 26/5, 27/5, 28/5/2010). However, a significant portion of students did not have this cathartic experience. The off-campus students simply did not respond to their tutor's suggestions to post in the online discussions to prepare the case they would present to the public meeting; and at least two of the on-campus tutorial groups had very small numbers of students attend this session (four out of a usual cohort of twelve and six out of a usual cohort of ten), so their meetings were quiet affairs.

The weak ending to the story for a significant number evidently did not prevent many of the students who participated in my research from gaining the kind of learning outcome that one might expect from working within this genre for eight weeks, that is, an appreciation of the complexity of local political issues. As I noted in the previous chapter, several interviewees (Bonnie, Antonina, Bernard) volunteered this as something they had learned from the Bilby activities, and 68% of questionnaire respondents agreed that their assumptions about the nature of local politics had been challenged as a result of their experience.
As well as providing a framework for students' expectations and goals, and lending students insights into how local political campaigns worked, the genre of the political campaign underlying these activities provided opportunities for critical learning, as I will discuss next.

**Critical learning**

As I noted in the previous chapter, the focus of the Bilby activities was on writing skills development rather than exploring power bases, ideological foundations and the mechanisms used to promote or maintain hegemonic control in our society. However, I witnessed several occasions when teachers took advantage of their students' engagement with the political campaign genre to encourage them to think about the political aspects of the written and spoken communications they were preparing.

For example, the tutors in all of the sessions I observed emphasised the importance of 'knowing your enemy' when writing persuasive pieces, and then suggested students apply this principle when they were preparing their arguments for their Bilby pieces. They supported their students' development of knowledge about the various points of view at play in the Bilby hospital issue by sometimes asking students to summarise their group's arguments and present them to the whole group at the end of their tutorials (journal 24/5, 26/5, 27/5/2010). Thus, although the students' immediate motives in their work in these activities may have been to promote their own cause, they were obliged to try to understand other perspectives as well.

For another example, in a tutorial I observed before the face-to-face public meeting took place, the tutor coached his students to 'avoid beating the
opposition into submission'. He said a more productive approach would be to use all their diplomatic and research skills to establish a genuine discussion and find common ground, with the result that they might all end up winning (journal 24/5/2010). While not all of the tutors encouraged their students to negotiate a workable compromise in their public meetings, I noted that the extra effort it demanded of the groups of students where this did occur, to examine their group's priorities and project themselves into the opposing groups' position in order to evaluate their claims, seemed to stimulate these students to think more deeply and broadly about the issues. In all cases, their arguments eventually became more nuanced and their positions became more clear, yet flexible under cross-examination (journal 24/5, 26/5/2010).

To recap this section, the Bilby scenario contained no coherent plot development suggesting causal links between character traits and events in the scenario, and students had no ability to manipulate significant elements of the scenario to witness their effects and learn from a more dynamic model of the world that might have been represented. These are seen as important conditions for supporting engagement in interactive stories and their absence may have impacted on students' engagement with the scenario and the activities generally. However, there were indications that the students' following of the development of the local political campaign genre in their activities introduced expectations and tension into the interactions; and introduced some opportunities for critical learning.
Chapter summary
In this chapter I have explored the ways in which the story element of plot was managed in each of the cases, and the ways in which these treatments may have impacted on students' engagement, learning and critical learning. My findings indicate that where the conditions relating to plot that I identified from my literature review as being important to support students' engagement and learning from interactive online story formats were strongly evident in the activities, the students participating in my research indicated high levels of engagement with the story elements, and with the activities generally, and of learning from the activities. Where one or more of these conditions were not present, the students participating in my research were more ambivalent about their engagement with the story elements of their activities, and there were some indications that their engagement with the activities as a whole was less intense.

In all three cases, many of the students participating in my research indicated they had developed a degree of critical awareness and a more considered approach and voice in the discourse of the subject area. The means by which this type of learning may have occurred were very different in each case. In the MEPS, critical learning was an integral part of students' engagement with developing stories to promote the interests of their character because of the importance of the online newspapers in the simulation. In the HEADSS workshop, students' critical learning developed out of their interactions around the central story, and their engagement with the story in itself was limited. In the Bilby activities, any critical learning that may have occurred developed out of the students' actions within the genre of the political campaign in local
politics, with the Bilby story serving as a resource for building arguments.

Table 8.2 provides a rough summary of the presence of conditions relating to plot in each of the cases.

Table 8.2: Presence of conditions relating to plot in each of the cases

<table>
<thead>
<tr>
<th></th>
<th>MEPS</th>
<th>HEADSS</th>
<th>Bilby</th>
</tr>
</thead>
<tbody>
<tr>
<td>Causal links between events</td>
<td>√</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Identifiable genre</td>
<td>√</td>
<td>undermined by interruptions</td>
<td>√ (but a weak ending for many)</td>
</tr>
<tr>
<td>Agency within bounds</td>
<td>mixed</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

In the next chapter I will explore the ways in which the final main story element of character was managed in the cases, and the impacts of these treatments on students' engagement, learning and critical learning.
CHAPTER NINE

Engagement with characters in the activities

Introduction
In this chapter I continue my exploration of the relationships between students’
engagement with stories they developed during their role-playing activities,
their engagement generally in the activities and the kinds of things they
learned, including their development of critical abilities. I focus in this chapter
on ways in which the story element of character was managed and how this
treatment may have impacted on students’ engagement, learning and critical
learning.

Middle East Politics Simulation

MEPS characters
The simulation contained 37 political character roles and 27 media roles. A
listing is provided in Figure A.7 in the appendix.

As Figure A.7 shows, the political character roles included Middle-Eastern,
European and United States heads of state; international organisations; foreign
and defence ministers; terrorist groups and intelligence agencies. The lecturers
choose the characters to reflect the main players in Middle-Eastern politics at
the time (lecturer Mia interview). Students played their character roles in
groups of two or three.
The journalism students' lecturer divided his students between simulated online versions of the *New York Times*, *Al-Jazeera* and *The Guardian*, where they played roles that mimicked the usual newspaper roles of editors, sub-editors, journalists and designers. They worked on campus in separate rooms for each paper, and swapped roles periodically.

My research is this case study focused mainly on the experience of the politics students, as I mentioned earlier.

**Management of characters and effects produced**

I will analyse the ways in which students played their character roles in the MEPS, and the effects of this aspect of their experience on their engagement and learning, by focusing in turn on the provision and impact of each of the conditions relating to character in online, interactive, dramatic story formats that I identified in the literature. The first of these conditions is that the roles are developed consistently.

**Consistent representation**

I have summarised this condition as that the roles should represent something within the simulated system—they are not just people. They should be developed consistently, so that they help students learn how things work in the social system that is represented.

The social system represented in the MEPS was that of the real Middle East. In order for students to learn how this system worked, it was important for them all to represent their character in as true-to-life a manner as they could, so that interactions represented the kinds of things that might happen in real life and students could thus build mental simulations of the Middle East that were
relatively realistic. The assessment structure provided a major incentive for students to play their character roles consistently and realistically.

The politics students’ first assessment task was to research their character and post a profile on the simulation website. Students were instructed to focus on their character's aims, both long- and short-term, based on their underlying philosophy and motivations as well as their regional political relationships (Simulation information). All of the MEPS questionnaire respondents agreed this task helped them to understand the background, values and agendas of their character. All students could access these profiles when they needed information about a character with whom they were interacting, which should have helped ensure that all students understood what various characters stood for, and how they might best be approached.

Also, as I have mentioned in previous chapters, the students were assessed on the extent to which they stayed within the bounds of their character's real-world personality in their email interactions, and this should have helped ensure that the students portrayed their characters consistently.

Having characters behaving in consistent as well as realistic ways, according to predefined characteristics, should have helped all players to develop workable strategies, and ultimately realistic mental simulations of how things worked in the Middle East. As I noted in Chapter 6, there were many indications that students achieved these outcomes. The next condition, that students empathise with their character roles, is related to this one in that both require a good understanding of their character.
Supports empathy
I have summarised the condition related to empathy as that it is important for students to be able to empathise with their character roles. This enables them to learn vicariously from their character’s experiences as an extension of themselves playing within the possibilities of the story world, and to care about what happens.

Of the questionnaire respondents, 95% agreed that they were able to empathise with their character. The fact that all of these students felt they understood their character’s motives, values and background (according to the discussion above) should have helped them to project themselves into these roles, as in order to develop empathy people need to have a feeling that they can see the world through the character’s eyes (Boal 1985: 30-31). Another factor that may have played a part is the sheer duration of the simulation: 13 days of intense engagement in a character role on the part of many participants should have provided many opportunities for students to internalise their roles (Wills & McDougall 2009: 764). Indications of students’ empathy for their characters include that most of my research participants said they felt deeply emotionally involved with their role in the simulation (Thierry, Jen, Ciaran focus group; Sean, Iris, Jeremy interviews). A questionnaire comment shows clearly the connections one student made between her or his empathy, engagement and learning:

Engagement with the role/character was a factor which motivated me to do more research about my character, his role and his vision/mission. Other characters were another source of motivation for
me to learn during simulation. I got to learn their actions, reasons and logic behind their actions.

A significant number of students played characters with whom one might think it would be difficult to empathise, such as terrorists and spy organisations. All of those I interviewed who played such characters said although they might not have liked their character, they were able to adopt that character's perspective sufficiently to maintain a consistent, believable persona in their emails. They all said they found that the extra effort they made to research and understand a difficult character helped them learn things they had not expected (Dan, Jeremy, Thierry, Kerry interviews). For example, a student playing a terrorist role made the following comment:

> My goals were to play in my character, do what they would do in real life and think the way they do. Interestingly, I got to think the way they think. ie Zawahiri, a terrorist, has his own ideology which he perpetuates by using force and inciting fear rather than negotiation (questionnaire comment).

This quote provides an example of the kind of educative effect that adopting a 'projective stance' can have when playing a character role in an interactive online story, such as Gee (2003: 139-66) describes. This involves not only experiencing the kinds of interactions and incentives that help students to learn facts about the story world to advance their position, but engaging with the values in the role and story world as well. This outcome can also be seen as a direct result of students having agency in their roles, which I will discuss next.
Agency
The condition related to agency can be summarised as that students should be
given agency in their roles so that they feel a sense of personal challenge and
potential reward, control over outcomes and an opportunity to extend
themselves beyond normal limitations.

Many characters in the MEPS were members of national groupings that had to
present a united front, such as foreign and defence ministers who were obliged
to check with their presidents before announcing important strategies. Gaining
the agreement of all parties to a strategy sometimes took days (Thierry, Kerry
interviews). Others were members of terrorist or spy organisations who
normally would have limited communication with others and few political
strategies available to them. As a result, a large proportion of the students in
the simulation may have experienced some frustration at not being able to
influence events easily. This may have been the reason why 60% of
questionnaire respondents said they felt that the character role they played
actually limited their ability to do very much in the simulation. As visibility in
the online newspapers was important for students to gain a sense of satisfaction
and feedback on their strategies, this inability to respond quickly, publicly and
in their own way may have had a significant effect on the engagement of
students playing such characters. The lack of an ability to execute a variety of
strategies and see the results would also have restricted the experiential
learning opportunities for these students. In fact, frustration due to lack of
agency was a theme among the players with whom I spoke who were playing
these types of characters (Thierry, Jen, Ciaran focus group; Dan interview). It
was also evident in some questionnaire comments, such as: 'Playing a role
based upon an aged politician [who] has been in exile posed many challenges. Took a lot to be noticed/taken seriously'.

However, some seemingly minor players did manage to make themselves noticed in the simulation: for example, the International Red Cross managed to produce 154 emails and had a story in the press nearly every day. The site 1 lecturer said that those playing more minor characters in national groupings should have been able to be quite active despite being limited to communicating and negotiating within their national groupings. She agreed that major players had many opportunities to involve themselves in events, and minor players had to be more proactive in thinking up strategies to generate email traffic, but she tried to counter this disadvantage by providing suggestions to these players when they appeared to be stalling (lecturer Mia interview).

This lecturer also said there were disadvantages in playing more powerful, self-determining roles such as Ban Ki-Moon, Netanyahu, Abbas and Obama, as when students did not perform well in these central roles it was very obvious and they then had to deal with criticism. A student playing the Obama character confirmed this view. He said that just reading the large quantity of emails he and his group-mates received was a major challenge, as was researching and writing an intelligent response on a wide range of international issues (Sam interview).

A further condition that is important for students' engagement and learning from stories in this kind of format and is related to students' agency in their role is their sense of safety to play with the possibilities in their role.
Safety to experiment
I have summarised this condition as that it is important for students to feel safe to experiment in character.

In the MEPS, several features should have helped students to feel safe to experiment. Firstly, the students played characters who were almost all extremely different to the type of identity they normally projected. Thus, they were able to take advantage of what Carroll, Anderson and Cameron (2006: 129-39) term 'role protection'—their peers treated them as though they were playing a role rather than necessarily expressing personal opinions. Students also had several layers of what Carroll, Anderson and Cameron term 'role distance'. Firstly, they interacted mostly via asynchronous text emails. Several indicated that they appreciated the opportunity that this gave them to think, research and choose words and positions carefully (Jen, Ciaran, Thierry focus group). Several also said they thought the anonymity that this mode of communication afforded helped them not only to suspend disbelief, but to feel freer to try things they might not otherwise have tried (Thierry, Jen, Ciaran focus group; questionnaire comments). For example:

I thought it was good online because when you can't see the other person, you only see their words, it's much easier to get into the role and pretend that it's real. So like if you met face to face, it'd be at [university] and be completely unrealistic (Thierry focus group).

While anonymity can lead to people caring less about each other (Cornelius, Gordon & Harris 2009), the tone of the conversations between the groups to whose email I had access was mostly professional and polite, perhaps due to
the requirement for students to act in role when emailing each other, knowing their emails were assessed. Also, the requirement for students to play as a group representing one character obliged them to discuss the role and negotiate strategies out of character, and thus objectify the issues and share responsibility for decisions.

As I noted in Chapter 8, I saw no evidence of students holding back in their strategies, so the levels of role protection and role distance appear to have supported their sense of safety to experiment—thus opening opportunities for experiential learning (Gee 2004) and engagement with active learning (Barkley 2010). The next condition I will discuss addresses whether the step following experimentation in the experiential learning model—that of reflection on how the model relates to reality and previous understanding—was provided in the MEPS.

**Supports metaxis**

I have summarised this condition as that students should be prompted to reflect on their role playing and how it relates to their previous conceptions, experience and behaviour.

As I noted in previous chapters, the MEPS lecturers did not intervene to prompt students to reflect on what they had learnt in the simulation and how this might translate to the real world. However, the assessment requirement to play their role as realistically as possible should have provided strong incentives for them to reflect on whether their role playing provided an accurate representation of social interactions in the real Middle East. Also, the fact that students discussed their characters' strategies and responses with their
group-mates, and in many cases other members of national groupings, should have provided opportunities to reflect on the realism and wisdom of their proposals. Also, again, the sheer duration of the simulation should have provided opportunities for students to reflect on their experience (Wills & McDougall 2009: 764).

Of the questionnaire respondents, 80% agreed that they were conscious that although the events were fictitious, there were strong parallels to real situations. There were also many indications in students' comments, for example in the quotes I have provided above, that my research participants made linkages between the kinds of things their character was learning and the way politics worked in the real Middle East (Jeremy, Sam interviews; Thierry, Jen, Ciaran focus group; questionnaire comments). Students' ability to reflect on their role playing and how it relates to their previous understanding of the world is also a necessary element of their ability to critique their learning experience, which I will discuss next.

**Critical learning**
I have summarised the condition relating to critical learning as that students should be prompted to understand and play their roles as complex, multi-faceted characters rather than as stereotypes. They should also experience the need to understand underlying cultural characteristics of opposing roles in taking action to resolve differences during the role play.

The characters represented in the MEPS included a greater proportion of figures who represented political systems founded on religion, monarchy or dictatorship (24) rather than democracy (15). A large majority were Muslim
Applying Rowan's (2001) theory of the ways in which the representation of difference in texts impacts on students' perception of what is normal and natural, the fact that the patterns of dominance in these characteristics were different to those in Australia, particularly as many of the roles with characteristics that were not dominant in Australia achieved considerable prominence and power in the MEPS, may have challenged students' assumptions about the 'normality' of the status quo in Australia, where power is wielded mostly by non-Muslim Europeans and democracy is assumed to be the only viable political system. Following this theory, the requirement for students to represent these characters' perspectives over an extended period should have broadened the view of any students who had not had close contact with people with these characteristics before.

In the MEPS, as I noted above, students were required to research the character they played and write a profile that explored the character's motives, values and cultural background. They were also assessed on the extent to which they could represent the character's values and allegiances in the volatile simulated world. These criteria, encouraging the students first to understand their character at deeper than a superficial level, and then to respond from this perspective for 13 days to the strategies pursued by others, should have had a considerable impact on their ability to understand and critique the cultural norms, assumptions and stereotypes at play in the simulated world.

Of the questionnaire respondents, 90% agreed they were able to play their character role as a complex human or organisation, rather than just a
stereotype; and 95% agreed that playing their character role forced them to think deeply about what motivates people—their own character as well as others. This indicates that these students at least should have taken from this activity a more complex understanding of the ways in which politics worked in the Middle East, and politics generally. Many also had experience of trying to create change of some kind in this environment in which conflict and mutual intolerance were deeply entrenched. The students may not necessarily have been practising asserting their own view in this endeavour, but as I noted in Chapter 6, there were indications that students developed skills in exercising their voice through their negotiations and their use of the media in this complex political arena.

In summary, there are indications that most of the conditions supporting students' ability to engage with and learn from taking a character role in an online, interactive, dramatic story were provided in the MEPS. There are also indications among my research participants that these conditions indeed impacted on their engagement and learning. The incentives in the assessment structure for students to understand their character role and play it realistically, with the aim of advancing the character’s interests if possible, evidently worked over the extended period to encourage them to empathise with their character and play it consistently and as a complex being or organisation, rather than a stereotype. Students evidently felt safe to experiment and extend themselves in their roles, although a considerable proportion may have felt frustrated about their limited ability to influence significant outcomes in the story world. Despite the lack of formal reflective activities in the MEPS, there are indications that many of the students who participated in my research
developed a deeper and more critical understanding of the processes of political life in the Middle East as a result of playing their character role in the activity.

In the HEADSS workshop also most of the conditions relating to character were provided, although in different ways and with different effects.

**HEADSS workshop**

**HEADSS characters**
As I noted earlier, the HEADSS workshop involved pairing 24 medical students with 19 secondary school drama students to simulate consultations between doctors and adolescents. The medical students played the role of doctors, and the school students all played the scripted role of Jo, a fairly typical adolescent played as either a boy or a girl depending on the gender of the student. Jo suffered from asthma and was a smoker, binge drinker and occasional user of cannabis. She/he had a difficult relationship with her/his overbearing mother, and had had a recent unprotected sexual experience. One other minor character, who appeared in just one activity and was played by a school student, was Jo's mother.

As with the previous case, I will discuss the extent to which each of the conditions relating to character were provided in the workshop, and the effects these produced, starting with whether characters were represented consistently.
Management of characters and effects produced

Consistent representation
Several features of the workshop helped ensure that the two main characters were developed fairly consistently. As I noted in the previous chapter, in the limited time available the medical students had little scope or incentive to move beyond playing the role of a caring doctor working through the HEADSS screen process with their adolescent partners.

The role of Jo had been carefully scripted and workshopped with the school students in their drama classes prior to this workshop (school drama teacher Tess interview). A practical advantage of the adolescents’ adopting a uniform role was that when they changed partners the medical students’ understanding of Jo’s story could continue to build, rather than having to start afresh with each one. However, beyond the characteristics provided in the script, the school students were free to play the role their own way in response to the questions and style of questioning the medical students used. Therefore, medical students who did not question their school students sensitively enough might never find out certain aspects of Jo’s psycho-social wellbeing (designer Hope interview). Also, each adolescent student put her or his individual stamp on the character simply by looking, sounding and responding in her/his own ways, which as I noted in Chapter 5 varied considerably according to levels of maturity, acting ability, preparation and personal style.

There were indications that the relatively consistent character development in the workshop helped the medical students to focus on improving their consulting skills, as many of my research participants agreed they were able to
build a consistent profile of Jo's wellbeing despite the partner changes (Aaron, Simone, Holly focus group; journal 10/10/2009). At the same time, there were indications that the diversity in the representation of Jo among the 19 school students served to emphasise that adolescents should not be stereotyped (Aaron, Simone focus group; questionnaire comments).

The next condition I will discuss is whether students were able to develop the empathy for characters that might support their emotional engagement with the story.

**Supports empathy**
Of the medical student questionnaire respondents, 81% said they were able to identify with their role as a doctor to the extent that they could bring their own personality to the task, rather than just mouth scripts. This was not surprising, as the role was basically the professional role to which they aspired, and they had all performed it in numerous role plays before (Aaron, Jessie, Simone, Holly focus group). However, my research participants were equally split on whether they felt the Jo character was real.

The workshop co-designer said the Jo character had been crafted with care and feedback from school students to ensure she/he was someone they themselves could believe was real, and thus a character they should be able to act fairly easily (designer Hope interview). The school drama teacher said the issues Jo faced were part of the real lives of many of the students in the group—though not all—and so it was not difficult for them to act the role.

As I noted in Chapter 7, many research participants commented that the fact they were role-playing with real adolescents who were acting a role that was
possibly close to their real experience added to the realism of the activities (Sarah, Paul, Jilly email interviews; Aaron, Simone, Holly focus group). However, several also agreed that their ability to suspend disbelief in the character of Jo was dependent on the abilities of individual school students (Aaron, Simone, Holly focus group). Aaron commented that some of the school students clearly had a better grasp of the script for Jo's character than others, and were more comfortable improvising where necessary.

One factor that some medical students said hindered their ability to empathise with the character of Jo was the necessity to sometimes work in trios rather than pairs. Not only did it feel more artificial to take turns questioning their Jo, but it reduced the amount of time they had to build rapport, and to recover from any mistakes they made (Jessie, Simone focus group). I noted in my journal that the students working in pairs seemed to find out more about each other than those in trios (journal 10/10/2009).

Thus, while the medical students who participated in my research clearly had little problem empathising with their doctor role, for some the make-believe role of Jo was not as successful as it could have been, and this limited their engagement with the story and their learning opportunities.

I will discuss next the related condition of the degree of agency students had to influence events.

**Agency**

As I noted above, although the interactive format of this story theoretically gave the medical students agency to influence events, in reality they had little
time or scope for improvisation, particularly when they were working in trios instead of pairs.

Many of my research participants said having to sometimes play in trios not only affected their empathy for Jo, but limited their opportunities to practise their consulting techniques and gain feedback (all focus group participants, questionnaire comments). However, the facilitators said imbalances in the numbers on each side were almost inevitable and they did what they could to ensure all students had a chance to sometimes work in pairs (school drama teacher, medical lecturer interviews).

I heard no complaints about the constraining factor of having to work through a long list of issues in applying the HEADSS screen tool. The main complaint about the workshop was that there was simply insufficient time to explore Jo's issues and practise consultation skills (Jessie, Aaron, Simone focus group; questionnaire comments; Jilly, Paul email interviews). The majority of questionnaire respondents (81%) agreed that there wasn't enough time to cover everything. When I discussed timing with the facilitators, they both said they felt it was important for the students' engagement to maintain a brisk pace. The school drama teacher said it was hard to judge when it was time to move on to the next segment, as some pairs/trios finished well before others and if she waited for them all to finish then some would get bored.

Thus, several factors limited medical students' agency, but these were difficult to avoid in the circumstances. There were indications they caused frustration and decreased learning opportunities for some students.
The next condition I will discuss is the degree of safety students felt to explore in their roles.

**Safety to experiment**

Although students had little time and scope to experiment, maintaining a sense of safety when they did was still an issue. An indication that this was achieved successfully was that the majority (81%) of medical student questionnaire respondents agreed that they felt safe to try out new strategies in the workshop—despite its highly sensitive subject matter.

As I noted above, the role of Jo was close to many of the school students' real experience. Therefore, a critical aspect of the workshop was that the adolescents did take on the fictional role of Jo rather than respond *personally* to the medical students' questioning (designer Hope interview). The fictional role was intended to provide both sets of students with a level of protection, especially as many of the questions were highly personal. Some of the medical students confirmed the success of this feature when they commented that the school students' ability to speak from a role made asking the questions less embarrassing for themselves (Holly, Aaron focus group).

As I noted in previous chapters, other features of the workshop also served to support students' sense of safety. These included the partner changes, the short time allowed for any one activity, and the vigilance and efforts of the facilitators to ensure students treated one another with respect and compassion.

The fictional role and scenario may have served to provide a level of safety for students to experiment, but using the device of fiction introduces the requirement to ensure students notice parallels with reality (eg Bolton &
Heathcote 1999), as I have mentioned in previous chapters. I will discuss this condition next.

**Supports metaxis**
The strongly vocational learning goals the medical students brought to this activity suggest that their sense of the scenario and characters having strong parallels to real life would have been important to their ability to engage. Indications were that they were not disappointed.

As I noted above, the workshop consisted of short segments of naturalistic role play interspersed with non-naturalistic elements including the adolescents giving individual feedback and the 'fishbowl', 'hidden thoughts' and role-swapping activities. These were designed to encourage the students to reflect on the appropriateness of their words and actions in light of suggestions from real adolescents, facilitators and peers—rather than retaining a sense of the happenings only having relevance in the story world. There was also a debrief at the end in which the medical lecturer elicited comments from the students about what they had learnt and emphasised the importance of applying their learning in their forthcoming hospital placements.

There were plentiful indications that my research participants reflected on their initial questioning practices and language in the role play. Not only were they obliged to take part in critical dialogue with their adolescent partners about these things, but many of them acknowledged in their comments the value of this reflective activity for their learning how to be better doctors (questionnaire comments, all focus group members, all email interviewees). For example:

'The adolescents really took on the role and gave valuable feedback. It was
good to break down each component of HEADSS to evaluate techniques’ (questionnaire comment).

Prompting students to reflect on their role playing is also an aspect of supporting students' development of a critical perspective on the assumptions they may have been making in the ways they interacted with adolescents. I will discuss next the ways in which the element of character was used to support students to achieve this outcome.

**Critical learning**

As I noted in previous chapters, the HEADSS workshop was explicitly designed to help the medical students identify, challenge and rework limiting cultural assumptions and categorisations of young people through the role-playing activities. Simply positioning the school students as equals in the workshop and expert advisors on adolescent matters to the medical students in a number of activities was an important device to challenge the norm that adolescents might be inarticulate, needy and lacking in knowledge (Dwyer & Wyn 2001, quoted in Cahill 2008). As I noted above, the workshop designers intended that the adolescents' remarkable diversity in characteristics and behaviours, and their mostly articulate, insightful, sensitive feedback would also help to challenge this norm. The provision of reflective activities to draw attention to limiting assumptions as well as unhelpful language was also intended to achieve this outcome (Cahill 2008).

I have discussed in previous chapters the division among students as to whether or not they achieved this learning aim. As I noted above, it may have been that many of these students already had contact with young people so did
not need to rework their assumptions—as several of my participants told me. Alternatively, it may have been that this type of learning outcome takes time to crystallise, or that students may not have recognised what had produced a change in their categorisations.

In summary, there were indications among my research participants in the HEADSS workshop that the ways in which the element of character was designed and managed meant that most of the conditions I established from the literature as supporting the students' ability to engage with and learn from interactive dramatic stories were provided. Even though the medical students who took part in my research may sometimes have had difficulty believing in the character of Jo, they had little difficulty in empathising with their doctor role and appreciated the high level of realism provided by the fact that the character was played by real adolescents. Despite the frequent reminders of the parallels between the workshop and real life, there were devices designed to make students feel safe to experiment in the workshop, and there are indications that these worked. Among these was the casting of all school students in the same character of Jo. This also served to highlight the diversity of young people, as each adolescent represented the part in her or his own way. The ways in which the medical students and their adolescent partners played their character roles were also central to the medical students' ability to achieve the learning aim of developing a broader understanding of—and respect for—young people's culture, issues, attitudes and abilities.
In the next section I will discuss the very different ways in which the element of character was managed in the Bilby scenario activities, and the different effects that were produced.

**Bilby scenario activities**

**Bilby characters**
Students in the Bilby activities took on the role of lobbyists in the debate on where the new hospital should be sited in the fictional town of Bilby. They worked as members of either the Bilby Business Association, Landcare Group or Historical Society and wrote most of their assessment pieces from this perspective. Most questionnaire respondents (61%) wrote their pieces as simply a member of their lobby group. Some (mainly off-campus) students created individual characters for themselves such as a health food shop proprietor, a beauty salon owner or a librarian, and wrote pieces from these perspectives. Others wrote from the point of view of their group leader, who was a pre-drawn character with a profile, pictures and representation in news reports on the Bilby website. These characters were Myfanwy Fallenby, the Historical Society president and a local textile business owner; 'Chops' Lambert, a local butcher and president of the Bilby Business Association; and John Russell, a nurseryman and president of the Landcare Group.

Again, I will discuss the extent to which each of the conditions relating to character were provided in the Bilby scenario activities, and the effects this treatment produced, starting with whether characters were represented consistently.
Management of characters and effects produced

Consistent representation
As students could not influence events in the scenario, their characters represented static positions on the hospital issue, rather than dynamic variables whose properties could be explored interactively over the eight-week activity period. However, the three main characters had well developed back-stories written into the various reports on the website, and as I noted in Chapter 7 these were developed relatively consistently. Students were required to explore the reasons these characters had taken their positions on the hospital proposal, and take these into account as they constructed and defended their own points of view. All of the students with whom I spoke indicated that they were able to build a coherent understanding of the main characters’ values, background and rationale, and that this helped them to frame their own arguments (all focus group members; all interviewees).

There were indications that students were able to not only understand what the main characters stood for, but empathise with them. I will discuss this condition next.

Supports empathy
The Bilby scenario designer said she had intentionally portrayed the three main characters in such a way as to encourage students to empathise with them and their positions regarding the hospital development, as well as to introduce playfulness into the scenario (designer Justine interview). These characters were passionate, quirky and homely, and several students commented that they were believable (Bernard, Leila, Antonina, Marie interviews). Their profiles are reproduced in Figure A.8. Several of my research participants who wrote
pieces from these points of view commented that adopting these roles in their writing had helped them to identify with the political position they were required to take in these pieces and write convincingly from that perspective (Hannah, Sally, Kama focus group; Sylvie, Jemima interviews).

However, some of the students who chose to write from the perspective of a main character said they eventually became bored with their character and the whole scenario (Hannah, Sally focus group). In contrast, none of the research participants who created their own character in the scenario complained of boredom. They all commented that creating an original character had helped them identify as a Bilby resident and had given them extra motivation to research the website to find arguable points (Bernard, Leila, Antonina, Marie, Viola interviews). Other comments were that it had given them a sense of fun, a sense of safety in that they could hide behind the role, and sympathy for a perspective that had previously been foreign. For example:

I think I've learnt so much because I've had to put a whole new perspective on and it's not only the historical society but I've also found the viewpoint of the business association. You know, you get a sense of empathy, and then you can translate that into the real world as well, you can feel what people are going through. Some of the business people aren't at fault. Like, the town needs a new hospital and where do they put it? If there's no hospital some people might have to move, and some of those people have got families. Like, they're all imaginary people but you feel so sorry for them. And then you have to think about
real places you've heard of where that's happened and sometimes you feel quite sad about it (Antonina interview).

This quote indicates that, even though this student could not actually interact through her character in the scenario and gain the satisfaction and formative feedback of achieving things through that character, she developed a kind of empathy for her character and others in the scenario approaching the 'projective stance' described by Gee (2003). Gee argues that this kind of immersion, found among video game players, provides a way to extend one's understanding through combining one's pre-existing understanding with that gained by the character in the simulated world and reflecting on the experience.

Thus, there were indications that the majority of my research participants developed sufficient empathy for their own and other characters in the scenario to imagine themselves into the make-believe world, which helped them to learn to write convincingly using the resources available. It was also evident that those who made the additional creative investment of inventing an original character were more engaged than those who adopted a pre-drawn or generic group member role. This was despite the fact that none of the students' characters actually did anything in the scenario. I will discuss this aspect of the students' experience of this story next.

Agency
As I noted in Chapter 7, students had no capacity to influence events in the scenario, although they were asked to write their assessment pieces as though they were trying to persuade people to adopt their view. One of the students commented on the lack of agency in the scenario activities:
It's probably not what I'd really call role playing. You're sort of not adding to it or getting involved, like you're using the information that's in there to slant your writing style, but … when I think of role playing I … think of the videogame type thing where you do take on a character and you're that character all the way through ... That's more role play, I guess, not just a website where I'm getting information from (Samantha interview).

However, as I noted in Chapter 7, I heard no complaints about not being able to influence scenario events—students seemed to accept it as an aspect of the activities, even though it may have limited the amount of involvement they felt, and the amount of formative feedback they received.

An advantage of not being able to actually do anything is of course that it is safe, and I will discuss this condition next.

**Safety to experiment**

There appeared to be very little risk associated with the Bilby activities, and I gathered no evidence that students felt unsafe. Most students only performed in-role in their written pieces, which were only seen by their tutor, unless they chose to share them with their peers. The only times when students performed in-role publicly were when the small minority of off-campus students contributed online asynchronous discussion postings in-role, and when some of the on-campus students took parts in the mock public meetings in their final-week tutorials. As I mentioned in the previous chapter, competition was not fostered during these activities and while some commented that a friendly rivalry developed at times, I saw no evidence that the level of competition had a threatening effect on students.
The next condition I will discuss is the extent to which students were encouraged to draw parallels between their role-playing activities and real life.

**Supports metaxis**

As I noted in previous chapters, there were no formal reflection sessions either during or at the end of the Bilby scenario activities, for either on-campus or off-campus students (tutors Jack, Pascal, unit chair Aleesha interviews). However, I saw many instances in the tutorials when the teaching staff made overt efforts to demonstrate connections between the scenario and similar situations in real life (journal 22/4, 25/5, 26/5, 28/5/2010). While the students may not have been prompted to track changes in their understanding and behaviour over the scenario period, as I noted in Chapter 6, there were indications that several of the students who participated in my research were aware of their conceptions broadening over the extended period of the activities, and related these to how they might view real political situations in future (Bonnie, Antonina, Bernard interviews). For example, Antonina's quote above contains indications of how playing a role in the Bilby fiction had prompted her to think sympathetically about similar situations in real life.

As I noted in discussing the previous cases, for students to see parallels between the role they are playing and real life, and recognise changes in their understanding as a result, is an aspect of their ability to think critically about the representation. I will discuss the ways in which students' critical abilities may have been developed in the activities next.
Critical learning
As with the MEPS, students in the Bilby scenario activities were required to research thoroughly the perspective they took in their lobby group role, and also to consider carefully the position and values of opposing characters, in order to create the kinds of strategies and arguments that were likely to be successful. As I noted in Chapter 6, 81% of Bilby questionnaire respondents agreed that as a result of the scenario activities they had developed their ability to recognise differing interpretations; and many of my participants commented that they had developed their ability to see an issue from different points of view as a result of the activities. Several features evidently supported this outcome.

Firstly, as students were allocated randomly to their groups, many found themselves having to present the case for a view they would not normally have supported (David, Antonina, tutor Jack, unit chair interviews). These students immediately faced the challenge of having to embrace and articulate a different set of values, and to maintain and develop their stance over a period of eight weeks.

Secondly, many students said the necessity to predict and accommodate opposing arguments in their writing pieces pushed them to research and consider the opposing arguments carefully (Leila, Brendan, Viola, Michael, Roni, Sylvie interviews). The tutors in all of the sessions I observed promoted this by emphasising the importance of 'knowing your enemy' when writing persuasive pieces (journal 24/5, 26/5, 27/5/2010).
Thirdly, the ways in which the main characters were represented in the scenario may also have impacted on students' assumptions and stereotypes in the arena of local politics. All three were born and bred locals and quirky in some way, whether it was an unusual hair style, smile or way of speaking. However, they each had a strong grasp of the facts on the hospital issue and sufficient seriousness about their character that they were able to lead their group and gain a fair hearing in the Bilby media. None of the main characters conformed to the slick, bland, media-savvy public relations expert stereotype, but used humble resources and campaigned part-time, relying on the strength of their arguments, personal credibility and ability to present their arguments persuasively in the various media. This suggested that all sorts of people could succeed in influencing public opinion on important issues. This representation in turn supported the proposal underpinning the activities that developing and using professional writing and speaking skills was the key to making real changes in communities—and that all sorts of people could develop this skill.

Thus, to recap this section, the conditions for supporting students' engagement and learning through the element of character were provided to varying degrees in the Bilby scenario activities, and there were indications that the extent to which they were supported had predictable effects, according to the literature. All of my research participants were able to understand and empathise with the positions of the main characters to be able to write convincingly from their perspective, and some developed significant degrees of empathy and changes in understanding as a result. The students' inability to influence anything in the Bilby scenario may have limited their need to take risks, and to have to expend energy on keeping up with developments, but it also resulted in reduced
involvement with the scenario and limited possibilities for formative feedback. There were indications that my research participants were able to make connections between the skills and insights they were developing through their extended role-playing and the real world of local politics and professional writing. There were also indications that the abilities of many of my research participants to appreciate multiple perspectives and use news media to present a convincing argument were enhanced as a result of the activities.

**Chapter summary**

In this chapter I have focused on ways in which the element of character was managed in each of the cases and how this treatment may have impacted on students' engagement, learning and critical learning. I have found that in each case there were positive associations between the provision of each of the conditions relating to character that I identified in the literature as important for supporting students' engagement and learning and the extent of the engagement and learning outcomes that were achieved. I have also found that in each case, the element of character was used to help students to achieve critical learning outcomes, although the techniques differed in each case. Table 9.1 provides a rough summary of the extent to which conditions relating to character were provided in each of the cases.
Table 9.1: Presence of conditions relating to character in each of the cases

<table>
<thead>
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<th>MEPS</th>
<th>HEADSS</th>
<th>Bilby</th>
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<tbody>
<tr>
<td>Consistent representation</td>
<td>√</td>
<td>√</td>
<td>√</td>
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<tr>
<td>Supports empathy</td>
<td>√</td>
<td>√</td>
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<tr>
<td>Agency</td>
<td>mixed</td>
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<tr>
<td>Safety to experiment</td>
<td>√</td>
<td>√</td>
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<td>Supports metaxis</td>
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In the next chapter I draw together the findings I have presented in this chapter and the previous three about the relationships between students’ engagement with the stories in their activities and their learning and engagement, and ways in which the activities supported critical learning.
CHAPTER TEN

Insights about stories, engagement, learning and critical learning from the cases

Introduction
In this chapter I draw together my main findings about the relationships between students' engagement, learning and story development in each of the cases I studied. I also combine my findings about the ways in which critical learning was supported in the three different role-playing activities. These findings underpin the recommendations I make for online role play design in the next chapter.

Relationships between engagement, learning and story
My first supporting research question is: what are the relationships between engagement, story and student learning in online role plays in higher education? As I noted in Chapter 2, attempts to form linkages between engagement and learning are complex and problematic, although several prominent writers in each field propose that in ideal situations, engagement and learning augment each other and lead to a more intense experience (Csikszentmihalyi 1990; Coates 2006; Barkley 2010; Vygotsky 1978; Biggs & Tang 2007; Gee 2003, 2008). In this research I have explored the impact of the additional component of interactive story development in the combination of engagement and learning factors at play in online role-playing techniques in higher education.
I noted in Chapter 6 that indications of a positive feedback loop between students' engagement and learning that developed in the highly story-based MEPS lent support to Gee's (2003, 2008) arguments about the effectiveness of aligning students' investment of time, energy, collaborative skill and creativity in a game-like task with the kinds of learning activities that help students achieve the intended learning outcomes. Even though the majority of students in the HEADSS workshop and Bilby scenario activities said they enjoyed and engaged highly with their role-playing activities, they did not provide indications that they were experiencing a similar spiral of engagement and learning, or flow-like state.

Engagement is not the only factor at stake in supporting students' abilities to build stories as part of their learning. The theory relating to interactive story-based learning activities that I outlined in Chapter 3 also holds that these activities can provide opportunities for a variety of learning outcomes that are often otherwise difficult to achieve, through many of the same conditions that support their engagement and which I have used to help analyse the data in my cases. According to indications from many of my student research participants, the stories they either developed collaboratively or simply placed themselves into for a period also supported their ability to learn certain types of things—depending on the conditions that were provided in their activities.

These findings indicate that the answer to the question of the relationships between story, engagement and learning that my study suggests is in the complex interplay of these conditions in each case. I will now summarise the ways in which each of these conditions were supported or not in each of the
cases, and the indications I found of the ways in which these treatments impacted on students’ engagement and learning. From this summary I will propose some general statements on what my study suggests regarding how these conditions may be managed to support engagement and learning in online interactive, dramatic story formats. These statements inform my recommendations for online role play designs in the next chapter. Again, I will divide my discussion according to the main story elements of setting, plot and character, and discuss the various conditions under the relevant headings.

**Setting**

As I noted in Chapter 3, a story's setting serves to frame the imaginary world. In interactive, online, dramatic story formats the setting includes not only what the story world looks like and where it begins and ends, but the rules governing what may be done within the story world and the ways in which the participant is able to interact in the environment. According to the literature, a setting in these formats can support students' engagement and learning best if it is coherent, plausible, authentic, transparent and responsive; and provides a safe but permeable boundary from reality. For the sake of comprehensiveness I will summarise the extent to which these conditions were provided in each of the cases under separate headings although there is some overlap between them.

**Coherence and plausibility**

A sense of internal coherence and plausibility in the way things work in the story world is important to students' ability to suspend disbelief and enables students to build an understanding of the logic governing the way things happen in the story world (Ryan 2001). As such, it is also an important factor
in students' ability to build robust mental simulations from their experience that will be useful in guiding their future actions (Gee 2004). Students in the MEPS and Bilby activities played out their roles within a setting that my research participants in either case found mostly coherent and plausible. However, these qualities were challenged in the HEADSS workshop, and the impact of this served to highlight the ways in which this condition usually worked to support engagement and learning.

The Bilby scenario designer and developer went to extraordinary lengths to create a setting that provided a plausible and coherent representation of a typical (but fictional) Australian country town. My research participant students found the rich mosaic of visual, textual and audio material mostly internally consistent. Any flaws in consistency could be seen as also reflecting the kinds of inaccuracies that are common in reported information. Students provided many indications that they found the setting plausible and coherent enough to frame a world in which they felt confident to gather resources for their authentic writing tasks. (I will discuss the setting's plausibility further under the heading of 'Authenticity' below, and I will discuss its coherence further under the heading of 'Transparent, responsive interface'.)

In the MEPS, the students did not find much of the information they needed in the interface but mainly used the chaotic array of genuine information resources on the World Wide Web to build their stories. However, the assessment criterion that students should act in the simulation according to the traits of the real character they were representing (but in response to the events and conditions that developed in the simulation), and to check with Control
before enacting strategies that might be seen as out of the ordinary, ensured that most of the actions that occurred were both plausible for the Middle-Eastern setting and coherent within the simulation. Some students complained that they were confused about what was happening in the simulation due to inaccurate reporting in the online newspapers and Control allowing some areas of ambiguity to remain, but again these could be seen as creating a plausible representation of the fallibility of news reports in the real world, which were something that real politicians in the Middle East faced as well.

In the HEADSS workshop, students had a plausible scenario and a coherent framework in their naturalistic role-playing segments, in which they adopted well-recognised traditional doctor and patient roles. However, the constant partner changes and interruptions with non-naturalistic, critical activities in which students temporarily adopted different rules of discourse, for example performing revealing soliloquies or coaching other players, took their toll on students' abilities to suspend disbelief in the main scenario and engage in the story of consulting with Jo as a story in its own right. Rather than allowing students to become involved in a scenario that they might fill with stereotyped roles and cultural assumptions, the facilitators constantly directed their attention to how they might move beyond a limited perspective of their subject matter and perform their roles in a more nuanced, compassionate and authentic way.

The different ways in which these three cases supported—or challenged—the students' sense of a coherent and plausible set of parameters governing their story worlds highlights the different ways in which these qualities may be
achieved, and the impact on students' engagement with the story when they are not supported. Where the setting was provided as a richly and carefully built website (as in the Bilby scenario), the designer was able to control these qualities. However, where the visual—and factual—content of the setting was built up by the journalism students as the role play progressed (as in the MEPS), the designer and lecturers needed to use simulation rules and the incentive of assessment criteria to ensure the setting remained coherent and plausible. The HEADSS workshop showed the impact of continually challenging the students' sense of a coherent, predictable story world: their engagement with the story was compromised, although they may have learnt useful things as a result of these critical activities, which I will discuss further below.

**Rich visual detail and information**
If a coherent and plausible setting allows students to build robust mental simulations, a setting that is filled with rich visual detail and information can furnish these simulations with contextual detail that will make the learning experience easier to remember, according to the theory of case-based learning (Schank & Cleary 1995). As well, it can help students achieve a range of factual and process-type learning outcomes just-in-time—at its best, it can provide a sense that 'the facts come for free' (Gee 2007: 109-10). And it can increase students' engagement by helping them to feel enchanted with and present within the story world (Murray 1997). This condition was provided to different extents and in very different ways in the three cases.

As I noted above, the Bilby scenario provided abundant visual detail and information about its subject matter through its specially constructed website.
Although students knew the setting was not real, many of my research participants indicated that they could visualise the town and its people. The website was explicitly designed to support students' engagement by providing a visually appealing, playful but realistic context in which the students could complete their authentic writing tasks. Many of my participants commented that they enjoyed feeling like they could experience Bilby as a real place and that they were able to find all the information they needed to complete their tasks within the website.

The MEPS provided visual detail and information in a very different way. While the interface in which students interacted was almost bare of embellishment and information, the almost daily online newspapers produced by the journalism students provided both rich visual stimulation and vital information on what was going on in the simulated world. The newspapers were highly realistic in aesthetic style and content, and therefore added an element of realism to the simulation. In addition, they provided arresting visual imagery in their authentic photographs of real Middle-Eastern characters and places, and appealing touches of humour in the gossip, letters and cartoons. Unlike the designer of the Bilby scenario, the MEPS designer and lecturers had little control over the actual imagery and information that was used to build the setting for the MEPS stories, but designed the activity to include appropriately skilled journalism students who were also assessed on their ability to act in character by co-developing the scenario with articles and other features that were as authentic as they could make them.
In the HEADSS workshop, the students played out their make-believe consultation in a minimalist setting that contained no attempts at visual realism, and they relied on their imagination to fill in the gaps. However, the medical students were immersed in the novel sights, sounds, smells and undercurrents of adolescent life as they found their way through the lunch-hour gaggles to the drama room. From all accounts, the students found this setting enjoyable and interesting, if a little confronting. They were able to absorb information about what Australian adolescents were like—such as their diversity, their herd behaviours, and the strongly institutional nature of school where they spend so much time—simply from being in their environment.

As their activity was only 90 minutes long, as real consultations are frequently carried out in relatively bare settings, and as the medical students could ask their adolescent partners or facilitator directly for any information about how adolescents viewed the world, they probably did not need a highly furnished and information-rich setting to help them learn. Further, the designers of this role play did not intend for students to suspend disbelief in a make-believe story world for any longer than was necessary to elicit their initial performance, which could then be critiqued. There were no indications that the students missed having a richly detailed setting for their consultations, apart from having to cope with the distractions present in the room, which I will discuss below.

Thus, the cases demonstrated that a range of strategies may be used to provide visual detail and information in an interactive story setting, and confirmed that this can help to produce a feeling of presence in the virtual world. They also
confirmed that providing abundant detail in the setting can support students’ ability to learn what they need to know from their environment, in explicit and implicit ways, and give students a richly contextual experience from which to develop nuanced and memorable mental simulations.

**Transparent, responsive interface**
The online environment introduces a layer of distance, when compared to face-to-face interactions, but if the interface can be made to work as intuitively as possible this distance may be minimised (Murray 1997, Burbules 2004). Thus, a transparent, responsive interface for an online, interactive, dramatic story setting can both help students to suspend disbelief in their virtual experience, and minimise distractions to their learning. An important first hurdle to overcome, for both engagement and learning, is to orientate students effectively to the site and what to do there, and support their early forays (Gee 2003; Herrington, Reeves & Oliver 2010). The HEADSS workshop, being performed face-to-face, did not require students to cope with the artificiality of having to interact via a computer interface, but some of its physical conditions produced a parallel effect of limiting the students’ ability to interact in exactly the ways they wished.

The Bilby website was complex but the teaching staff took care to orientate students to the site, and to their tasks. The website was structured as a mosaic of various types of information, in order to simulate the structure of information resources that professional writers used, but it was sufficiently well organised that most of my student research participants soon found no difficulty using the site to find what they needed.
Although MEPS students received little instruction in how to use their interface and some of my participants were confused about what to do there in the early stages, most of my participants found the basic interface easy to learn to use, and reliable. The fact that students could access it at any time, enabling them to work when it suited them best, added to the appeal of this activity.

While the HEADSS workshop facilitators took care to introduce participants to each other and explain the activities carefully, my student participants complained of being distracted by the noise and close proximity of others due to the large number of people who were crowded into the room. Some students commented that these factors limited both their engagement with the story and the extent of their learning outcomes.

Thus, these cases suggest that interfaces for interactive, online, dramatic stories may be either minimalist or richly developed, but if they operate as intuitively as possible, and if students are orientated effectively to the site and their tasks, the distance introduced by the mediation of the virtual interface or other distractions in the setting can be bridged effectively.

**Semi-permeable boundary from reality**

In order for students to feel safe to experiment within their story world, it is necessary for them to have a sense that the story world is sufficiently separate from reality that no-one (including themselves) will suffer from the potentially harmful effects of their experiments. However, in order for students to be able to draw on authentic detail and later reflect on how their learning may be applied in real life, the boundary needs to be porous (Cahill 2008). This
condition was provided in different ways and at different levels in the three activities, with different effects for students’ learning and engagement.

The Bilby scenario had the most solid boundary of the three. The Bilby community was represented as a self-contained web of interlinking relationships that represented a microcosm of society. This heightened the sense that the issues at play in the story world had realistic bases and consequences but were insulated from reality. While some students may have found the boundary constraining once the novelty of the Bilby world was exhausted towards the end, many commented that they appreciated having a playful setting in which to develop their skills and a finite set of resources to research. This was important for the mainly first-year students—many of my participants said they found research difficult.

In contrast, the boundary to the MEPS world was quite porous. Students researched real-world information sources to create their strategies and learn how to act according to the traits and background of their character. As a result, many experienced confusion separating the events of the simulation from those in the real Middle East. They clearly felt free to invent outrageous actions in the simulation without the fear that anything bad would happen to them or in the real world, but incidents such as the text message telling of a planned bombing being sent to an outsider, resulting in the Federal Police shutting the simulation down, provided an edgy sense of realism that emphasised the thinness of this boundary.

The use of real adolescents in the HEADSS workshop made its boundary from reality very thin. While this had advantages in providing authenticity (which I
will discuss below), it made the task for the medical students of asking their adolescent partners highly personal questions potentially awkward. However, adolescents had some protection due to their fictional 'Jo' role, which I will discuss under 'Character' below. Also, the role-playing segments were short, the facilitators changed the partnerships frequently, and they ensured that participants treated each other with respect and compassion, so that the possibility of negative outcomes for both sets of students was minimised.

These cases show that the porosity of the boundary to a make-believe story world can have a marked effect on students' engagement and learning. The more solid a boundary, the safer will be the environment it provides for experimentation. However, bounded environments may become boring, outdated and irrelevant. In comparison, using authentic resources to supply the context and support the tasks is less laborious and constraining, but riskier due to the boundary between the real and imagined worlds being thinner.

**Authenticity**
For students to experience tasks and conditions that are as authentic as is practicable goes beyond supporting the sense of the story and mental simulation they are developing being plausible to ensuring that it is relevant (Herrington, Reeves & Oliver 2010). A tension frequently exists between the desire for authenticity and the need to ensure that students are able to learn effectively from the experience within the logistical constraints of the higher education context—and within the requirements for coherent, engaging and meaningful story development. All three activities provided most of Herrington, Reeves and Oliver's (2010) characteristics of authentic tasks, but again in different ways and to different effects.
While the HEADSS workshop was too short and its tasks were too defined to provide all of the 'authentic task' criteria, and as the tasks were not assessed in an authentic way, locating the HEADSS workshop in a secondary school in the midst of a school day provided the medical students with much authentic detail about the subject of their study: adolescents. Many important details of their mock consultation tasks were also authentic, being framed in the standard HEADSS format and with real adolescents acting as their patients.

As the Bilby scenario was a self-contained, mocked-up version of a town, the website setting was realistic rather than authentic. However, most aspects of the students' tasks conformed to the 'authentic task' characteristics, and most of the students who participated in my research indicated that they perceived a high degree of cognitive authenticity in many aspects of their tasks.

In the MEPS, almost all of the 'authentic task' characteristics were present. Students' assessment requirement to act in character, as well as the incentive for them to produce the kinds of actions that would gain them visibility in the online newspapers, meant that they had to quickly learn to negotiate, manage conflict, work with their group-mates and manage the media in much the same ways as real politicians did. If they did not manage their tasks well, students faced authentic consequences in terms of criticism in the online newspapers or the invisibility of not being reported on at all, as well as penalisation in their assessment. As such, this simulation provided a further example of students achieving learning outcomes that were cognitively authentic, although they were located a long way from the real Middle East.
While the HEADSS workshop was able to provide an authentic physical setting in the school, the other two activities relied on reconstructions. However, all three were able to provide experiences that were cognitively authentic. Students were not just abandoned to aimless activity within their contexts, no matter how authentic or realistic they might have been, but given complex, authentic tasks that were designed to support their learning how to think and act as an expert would (Herrington, Reeves & Oliver 2010: 72). In all of the cases, story-building provided a framework for completing their (more or less) authentic tasks.

In summary, the findings from these cases highlight the potential benefits and risks attached to the various conditions relating to setting that are important for students' ability to engage with and learn from interactive, dramatic stories in a higher education context. Authenticity in context and tasks is highly valued due to its capacity to support learning that is directly applicable to real situations, and its capacity to support extrinsic motivation as a result. The cases demonstrate that it is possible to design authentic learning activities in story-based formats, and gain the advantages of increased student engagement as a result, although this needs to be done with care to maintain the balance between achieving cognitive authenticity and maintaining suspension of disbelief and safety in the story world. The cases demonstrate that using some means to provide rich visual detail and information about the story world can produce a sense of being present in a fictional world, but that constructed versions and real settings bring different limitations and benefits in this respect. In addition, the cases demonstrate that taking care to orientate students to this environment and their tasks within it, and to support their ability to interact
without irrelevant distractions, can support their engagement and their ability
to learn from the way events develop in that setting.

The way in which events develop is of course the plot, and I will summarise
next the ways in which conditions that I identified in the literature relating to
this element were managed in the cases and impacted on students' engagement
and learning.

**Plot**

To recap from Chapters 2 and 3, a story's plot is the series of events that occur
in the story world. It enables the reader/viewer/participant to create meaning
through generalising from what happens in the story to other similar situations
(Culler 1997). Plot can be used to support engagement by allowing the
reader/viewer/participant to develop expectations about what might happen and
then playing with possibilities until the end, when the reader/viewer/participant
hopes for a satisfying resolution (Misson & Morgan 2006). In interactive,
dramatic stories, participants co-create events. This can produce high levels of
engagement and learning as players experiment with ways to bring about a
satisfying outcome for their character and learn from the results of their actions
(Gee 2003). However, where players are collaborating in developing a story,
their actions generally need to be controlled in some way to ensure that the plot
developments remain engaging and meaningful for all players (Ryan 2006).
Plots in interactive story formats can support engagement and learning best if
they enable students to discover causal links between character traits, actions
and outcomes that may be applied to other situations (Boyd 2009); if students
are able to identify a genre that sets implicit rules for how they should act and
how others might be expected to act (Gee 2003); and if students are given some control over events so they can learn from the consequences of their actions at first hand (Gee 2003). The three role-playing activities provided these conditions to different extents and in very different ways, which again produced different effects for students' learning and engagement.

Causal links between events
In the MEPS, students were free to construct events in the simulated world but, as I noted under ‘Coherence and plausibility’ above, to receive good marks they had to act according to the pre-existing traits of the character they were playing and the real Middle-Eastern setting. Control used the same criteria when deciding whether to allow proposed strategies. Therefore, as I noted above, the plots developed largely according to the classic story structure of actions that were caused by the interaction of characters with certain pre-existing traits within the parameters of the setting. They thus supported the students' abilities to build generalisations based on what was likely to happen given certain character traits in a given situation. Students participating in my research provided many indications that they were able to form useful learning outcomes about Middle East politics—and politics in general—from their experiences in the simulated world, and engaged strongly with the challenge of creating probable events upon which their learning and that of other students hinged.

In the Bilby scenario activities, by contrast, students relied on accounts of what had transpired in the past in the various reports built into the Bilby website to build their understanding of the issues and power plays. Although the back-story may have provided some opportunities for learning about how political
situations developed in country towns, several students complained of becoming bored with the scenario towards the end, and this could have been at least partly due to the lack of plot development and any ability to influence events. However, these students said they preferred that the story had not evolved as it meant they had not had to spend time keeping up with changes—there was enough material in the back-story for them to complete their writing tasks. This may have kept their learning task manageable but can hardly be said to promote strong engagement with puzzling out—or trying out—story endings and meanings.

In the HEADSS workshop, plot development was also extremely limited, even though the interactive format meant students theoretically were free to create their own events. The students' scope to explore the possibilities in the scenario of a consultation between a doctor and an adolescent patient was limited by having only a few minutes to act before a critical activity was inserted and partners were changed. As a result, students could have gained little in terms of engaging with a process of wondering how things would turn out and what it might mean from the way their story developed. As I noted above, these students were ambivalent about their engagement with the story underpinning their role play. While their basic, fractured, consultation stories enabled them to practise their consultation techniques, a good deal of their learning evidently came from elements of the workshop that were external to the story of their consultation with Jo, such as the advice their adolescent partners gave on their questioning techniques and the ways in which the adolescents presented themselves.
Thus, the cases lend support to the theory that where story plots are managed in such a way that their events are causally linked to details in the characterisation and setting, they can indeed provide students with a source of satisfaction and generalisable meanings. The cases suggest that where students are not able to build or follow developing plots, their engagement in and learning from the story will be limited and will need to come from other elements of the activity.

**Genre**
Where the plot of an interactive story develops according to a recognisable genre, it can help the reader/viewer/participant to engage and learn by providing an implicit set of rules for how they should act and how others might be expected to act, and introducing an enjoyable sense of anticipation (Gee 2003). A genre could be recognised in all three role-playing activities although, again, it was treated in different ways and this led to different effects.

Many of my MEPS research participants indicated they saw the activity as a game in the classic heroic adventure genre that is common in action movies and video games, and that they felt a similar kind of immersive engagement to that which these formats are commonly known to produce. With the extreme traits many of the characters had, these plots could be filled with angry and violent confrontations and dramatic intrigues. In addition, many participants indicated that the sense of competition that is common to this genre provided an extra source of motivation to research and work hard as a means to advance their heroic character's interests.

In the Bilby scenario, the students may not have been able to influence events in the fictional world, but the back-story and their writing activities were
framed in the genre of a political campaign. This introduced a friendly rivalry between groups that surfaced periodically in tutorials and lent students many famous examples to provide ideas for writing strategies and styles. Additionally, many students said they learnt about the procedures and nature of real local politics as a result of their activities in this genre.

The HEADSS workshop was dominated by the doctor-adolescent patient consultation genre, in which the doctor is usually all-powerful and the adolescent is needy and inarticulate. This was the pattern that students fell into in the naturalistic role play segments, and no doubt it lent a sense of comfort and form amidst the interruptions and partner changes. However, the critical activities, when the school students gave their medical student partners candid feedback on their performance and expert advice on effective words, phrases and questioning strategies, turned the stereotypes in this genre on their head. The adolescents were shown to be articulate, responsible, knowledgeable and compassionate, while the doctors were shown to be lacking in expertise and confidence. Although the traditional consultation genre may not have introduced exciting possibilities in itself, my medical student participants were evidently surprised when the stereotypes on which it relied were turned upside-down. Many made comments about feeling that their comfort zone was challenged, and that they were impressed by the maturity and helpfulness of some of their adolescent partners.

Thus, the cases showed that allowing an interactive story plot to follow an identifiable genre could be an advantage in helping students to form expectations about how to act and what might happen. They showed that this
could enhance students' engagement, particularly if the generic plot accommodated the possibility for reversals or conflict. In addition, it could introduce learning outcomes about how to perform well where that generic pattern occurred in real life. One of the cases demonstrated that introducing a genre and then working against it could also generate interest and learning outcomes.

Agency
I have touched on the importance of students' agency for their engagement and learning above. While people expect and want to be able to influence things in interactive dramatic story formats (Murray 1997)—particularly online ones (Burbules 2004)—and there are clearly benefits in allowing students to learn from their experiments in fictional worlds (Gee 2004), a balance needs to be maintained between giving them this opportunity and ensuring the story maintains interest and meaning (Ryan 2006). The differences in the ways in which this condition was managed in the three cases led to major differences in the extent of students' engagement with and learning from their stories.

The MEPS students had numerous incentives to create events on their own in their story world. The students were assessed on not only the quality of messages they sent in character but the quantity of their messages, and lecturers provided suggestions for strategies to less active participants. If the politics students could create events that the journalism students thought were newsworthy, they would additionally gain the kudos and flow-on benefits of being reported in the online newspapers. There were many indications that students enjoyed the opportunity to use their creativity to compose these events, that it motivated them to learn to work with their group-mates and to
research many aspects of Middle-Eastern politics. As well, there were many indications that students gained feedback and learned other things from the ways in which their events were reported and the responses of other characters. Students’ wilder ideas were tempered by the requirement to seek the approval of Control for strategies that were out of the ordinary or had a major impact on others, and Control periodically intervened to leak potentially explosive pieces of information to the online newspapers. The downside of agency is that it can introduce confusion, and some students complained that they found not knowing for sure what was happening in some of the stories made them frustrated and restricted their own options. However, ambiguity about where truth lay could also be seen as a realistic feature of political life in the Middle East, as I noted above.

In comparison to the frenetic pace of the MEPS that had some students working through the night and missing other lectures to keep ahead of their political opponents, the Bilby scenario activities were rather slow and tame. Although the Bilby students were placed in the role of activists, they knew that nothing they suggested or did could influence the Bilby scenario: there were very much smaller payoffs for coming up with brilliant writing strategies in terms of kudos from other students. Another disadvantage of their lack of agency in the story world was that it meant they received less feedback on their strategies, except within their groups and at the end of the trimester when they submitted their portfolios of written pieces. My student research participants in this case study described the activity in terms that indicated a much lower level of engagement than that of MEPS participants. While almost all of the students achieved the intended learning outcomes, there were indications from both
teachers and students that many students did not work to the best of their abilities.

As I noted above, the HEADSS workshop similarly allowed students little scope to influence events in their mock consultations. As a result, many of my research participants were ambivalent about their engagement with the story of Jo, and their learning outcomes could only have been achieved through activities that were external to the story plot.

Thus, my cases lend support to the theory that providing students with the opportunity to control significant plot developments can be highly engaging and produce strong learning outcomes, provided effective control mechanisms are used. The cases showed that where students were not able to influence developments, they relied more on non-story elements of the activity to engage them and support their learning.

In summary, the findings from these cases highlight the importance of decisions regarding how conditions relating to plot should be managed in online, interactive, dramatic stories. They demonstrate the impact on students' engagement and learning of allowing students to develop a sense of how the causal factors work in a story, and particularly of allowing them to manipulate these factors and learn from other characters' responses. They additionally demonstrate the usefulness of having a recognisable genre to guide their actions and expectations.

Students' abilities to create interesting and meaningful events, and care about what happens in their fictional worlds, depend also upon their abilities to act
confidently, consistently and knowledgeabley in role. I will now summarise the ways in which each of the conditions relating to character were managed in each of the cases, and the impact that this treatment had on students' engagement and learning.

**Character**
For students to take on a character role in an interactive story world can be seen as them becoming actors in a complex semantic system from which they may make meanings that relate to real life (Squire 2008). People's ability to engage empathically with characters is a major part of the appeal of stories in whatever format they appear (Misson & Morgan 2006). According to the literature, the element of character in online, interactive, dramatic stories can support engagement and learning best if characters are consistently developed, if students are able to empathise with them, if students are given some freedom to act within their role, if they have a sense of safety to experiment, and if they are prompted to make connections between their experience in-role and how it relates to their previous understanding. I have discussed some of these conditions above because they also apply to plot and/or setting, but will focus here on the ways in which they impact on students' engagement with characters in particular. The three cases provided almost all of these conditions to some extent, but again in different ways and with different effects.

**Consistent representation**
Characters in stories don't just represent people, but bring certain qualities, values or positions into play (Misson & Morgan 2006). In interactive, dramatic
stories, characters' actions can be interpreted most easily if they are represented consistently.

In the MEPS, students were responsible for developing their own characters but, as I noted above, the assessment criteria provided incentives for them to portray their character consistently. A further assessment requirement was for students to prepare a profile of their character before the simulation started, and post this on the website. This helped all of the students to understand how each character should act, and what they stood for. Students relied on each other's characters behaving consistently so they could prepare strategies that had a reasonable chance of success.

In the Bilby scenario activities, consistency was not an issue as the characters students adopted could not influence events. The students were able to understand what the main characters in Bilby stood for through reading or listening to the various accounts on the website, which provided a relatively consistent depiction of each.

Consistency did not present a major issue in the HEADSS workshop either. The medical students had little time or incentive to play a role different to that of a caring doctor trying to find out about Jo's psycho-social wellbeing. The school students' role of Jo was scripted, so that character should have been consistently represented as well, but some occasionally forgot details and several of the medical students said this impacted negatively on their suspension of disbelief. Although the school students may have tried to present their Jo role consistently, the fact that they brought a diverse set of
characteristics to their role served to highlight that adolescents should not be stereotyped.

Thus, the cases demonstrated that consistency in character representations could be achieved in different ways. These included using the incentive of assessment criteria, locking important characters away from student improvisations, and scripting the parts. However, the HEADSS case served to remind us that the stereotypes that people habitually use to categorise people before they get to know them are approximations and can be limiting.

**Supports empathy**

Empathy for characters is a major element in people's ability to engage with stories (Misson & Morgan 2006). In interactive dramatic stories, a reader/viewer/participant's capacity to empathise with their character role helps them to learn reflexively through projecting not only a representation of their character, but aspects of themselves, into the learning context (Gee 2003, O'Neill 1995). Students can be encouraged to empathise with characters if they are helped to understand them and relate to them as people like themselves (Aristotle 350 BCE/Halliwell 1986).

The MEPS students were given incentives through their assessment to get to know their characters well, including their values, backgrounds and motivations, as I noted above. Even though many of these characters held extreme views, making them difficult to identify with, almost all of my research participants said they were able to empathise with their roles. There were many indications that they cared a lot about what happened to their characters in the simulation, and that this kind of engagement created a positive
feedback loop with their learning, encouraging them to research more and work harder to achieve success for their character.

By comparison, the main characters who headed each of the Bilby scenario lobby groups should have been fairly easy for students to empathise with. They were depicted as warm and passionate, ordinary—if quirky—community members; and students quickly learnt about them as they browsed the range of short reports and profiles on the website to prepare their writing pieces. However, as time stood still in the scenario, there was no opportunity for students to project themselves into these characters' positions as they proceeded with their campaigns. Those students who invented their own character and used this as their persona for their online discussions and some of their writing pieces indicated that this added to their ability to feel part of the scenario and engage with their writing activities. However, students in the Bilby scenario activities had no reason to worry about what might happen to their characters in the way those in the volatile MEPS did.

The medical students in the HEADSS workshop adopted a role that they had played many times and had taken pains to develop over the course of their study to become doctors, so presumably had little difficulty empathising with it. However, a reasonable proportion of my research participants indicated they had difficulty in believing some of the school students' representations of the Jo character, and therefore developing empathy for that character. They blamed the necessity to share the small amount of time they had with their adolescent partners with another medical student, constant changes in partnerships, and poor preparation on the part of some of the adolescents for this difficulty. They
said this limited their learning opportunities as well as their engagement with
the story.

Thus, the cases all showed that the more students were able to empathise with
characters in their stories, the more they were able to engage with the story and
learn from seeing the world from a different perspective. The cases
demonstrated the benefits of supporting students’ ability to understand their
characters as more than stereotypes, and of enabling them to project
themselves vicariously or at first hand into their situation as the story
developed.

Agency
I have mentioned above the benefits for students’ engagement and learning if
they are allowed some agency in the story world. This also adds to their ability
to gain benefits from their character role as it increases their investment in the
character and gives them an opportunity to extend themselves beyond their
normal limitations, especially where they can gain direct feedback on their
performance in that role (Gee 2003, O’Neill 1995).

Although the MEPS participants theoretically had considerable agency in their
simulated world—far more than those in the other two cases—the extent to
which many of the MEPS participants could create events and interact with
other characters was in fact constrained by the nature of the characters they
were playing. For example, terrorists and spies realistically would have little
direct contact with most politicians, and foreign and defence ministers were
obliged to seek the approval of their president before enacting radical
strategies. On the other hand, students playing central roles such as Obama and
Netanyahu were swamped with so many emails and opportunities that they found it difficult to keep up. A significant number of students who participated in my research said that their character role limited their agency in the simulated world, and that this was frustrating. In addition, it would have limited the strength of the feedback loop these students might have developed between engagement, activity and learning.

Similarly, a significant proportion of the HEADSS workshop participants indicated that their ability to extend themselves in their roles was limited, despite theoretically having some agency as actors in their story, and that this limited their engagement and learning. In this case, participants' agency was limited by the lack of time and the necessity to sometimes work in trios and share their school student, which I noted above.

The Bilby scenario participants had even less agency in their roles, as I also noted above. While this may have been part of the reason for the lower levels of engagement among students in this activity, and would have limited the amount of feedback they could receive, they made no comments about it—possibly because it was the same for all participants and they just accepted it as part of the activity, which was in a format all of its own.

Thus, my cases demonstrated that where students were not able to influence very much in their stories they frequently expressed frustration, or at least achieved a lower level of engagement and learning than those who enjoyed greater influence. Students' frustration may have been worse when they perceived that others had greater agency and they were missing out on opportunities for experimentation and fun.
Safety to experiment
A further condition that is recognised as supporting students' engagement and learning in interactive, dramatic stories is that their role affords them a sense of protection and the format affords them a degree of distance (Carroll, Anderson & Cameron 2006). These layers of protection enable them to experiment with different strategies to the ones they would normally use with their peers and are part of the safety provided by having a boundary between the story world and reality. The cases used various strategies to provide this condition through their character roles.

Students in the MEPS had the protection of a role that was clearly different to their normal identity, and the anonymity and extra time to think and research that came with communicating via asynchronous text, and being part of a group. I saw no indications that students felt inhibited to act in role; indeed, there were indications that many felt free to act outrageously in their roles. Several student comments indicated that they appreciated the various levels of protection and distance afforded by their online, group-based, asynchronous-text-based in-role interactions.

Students in the Bilby scenario activities should have felt very safe in their character roles. Most directly expressed a particular view in the scenario only in their written assessments, which were only seen by their tutor, unless they chose to share them with their peers. The only features that could have introduced personal risk were the public online postings in character that some off-campus students made, and the mock public meeting on the last day, in which a small number of volunteers enacted their character role in their tutorial. Students performed both of these activities with the protection of a
role that was clearly different to their normal identity, and these features were minor elements of the activities overall. I gathered no indications that these students felt their safety had been compromised.

Medical students in the HEADSS workshop had only a thin layer of role protection, as their role as doctors was very close to the identity to which they aspired in real life. However, the fact that the role of Jo that the school students played opposite them was fictional lent a sense that the interaction was hypothetical and hence provided a level of safety to both sets of players. Additionally, as I noted above, the fact that the role-playing segments were very interrupted, partners changed frequently and the facilitators ensured that participants treated each other with respect and compassion would have helped achieve this. None of my research participants indicated that they felt embarrassed during the workshop.

Thus, the cases demonstrated various ways in which students' sense of safety to engage fully with their learning tasks and experiment in-role in the story world was supported. These ranged from providing multiple layers of role protection and distance, limiting the public playing out of roles, and controlling the interactions to limit the risk of students feeling embarrassed.

**Supports metaxis**
The final condition whose presence in the cases I will summarise is the requirement for the students to be prompted to reflect on the role they are playing or have played and how this relates to their previous conceptions, experience and behaviour, in order to translate their experience into general principles (van Ments 1999; Wills, Leigh & Ip 2011). This condition relates
less to students’ ability to engage with their story than to learn from their experience. It was supported in each of the cases to varying degrees.

The HEADSS workshop was designed around helping the medical students to reflect upon, critique and rework their consultation techniques. The individual feedback from the school students, 'fishbowl' and 'hidden thoughts' activities all had this aim. Also, the medical lecturer provided anecdotes from her real practice to illustrate important points, and at the end provided a debrief in which she encouraged students to apply what they had learnt in their forthcoming hospital placements. There were many indications that my research participants appreciated the feedback they received and intended to use it to help them become better doctors.

In the Bilby scenario as well, the teaching staff frequently drew students’ attention to the ways in which the scenario paralleled real life. Indeed, the scenario activities were designed to provide a realistic context in which students might apply the skills they had learnt in the more abstract activities they were taught in the first half of their tutorials. There were indications from many of my research participants that they would not only write better, but think differently about real local political players and issues as a result of their work in the scenario activities.

In the MEPS, although the lecturers provided very little guided reflection, the incentives for students to act according to what was credible for their real character should additionally have prompted them to reflect periodically on how their role playing paralleled reality. Many said they discussed the realism and feasibility of their strategies with their group-mates. Finally, as I have
mentioned above, the online newspapers’ distorting mirror on the simulated world prompted many of my research participants to reflect on the ways in which truth was represented in the simulation and how closely this reflected how the media worked in real life.

Thus, the cases demonstrated the effectiveness of either actively prompting students to reflect on ways in which their role-playing activities mirrored reality, or building in a device (such as the online newspapers) that helped achieve this outcome without extra effort on the facilitators' part.

To recap this section, the findings from these cases highlight the impact of various ways of managing the conditions influencing the ways in which students enact their character roles, and reflect on the process, on their engagement and learning from their experience. The cases demonstrate the benefits of ensuring students understand their roles at a level deeper than a stereotype, that they are given the opportunity to influence events in their roles, that some means is used to ensure they develop their roles consistently and that their sense of safety is protected.

Summary
My discussion above supports not one, but many answers to my supporting research question what are the relationships between engagement, story and student learning in online role plays in higher education? It has summarised the many ways in which students' ability to co-develop engaging and meaningful stories in the case study role-playing activities contributed to their engagement and learning. In addition, it has highlighted the effects of not supporting students' story-building activity for their engagement and learning.
My findings have confirmed the importance of all of the conditions I identified from the literature as impacting on these outcomes, and provided examples of ways in which these conditions may be managed to various effects in role-playing activities.

Briefly, my findings have shown that these activities can best provide a zone of proximal development for students to build robust, memorable mental simulations of chosen real-life social situations that will be helpful in guiding their future actions when attention is paid to the extent and quality of the students' story-building activity in designing the activities. Supporting students' engagement with developing stories in their role plays can enhance their learning simply because it encourages them to stay on-task. If the setting, characters and possible actions are carefully designed and managed then the students' activity can also drive their achievement of intended generic and subject-related knowledge, skill, conceptual and attitudinal learning outcomes.

To this end, my findings have shown the benefits of providing visually detailed and information-rich settings that reflect important authentic details; that are sufficiently intuitive to navigate, and consistent and responsive, that their interface to the story world seems transparent; and that enable students to see clearly the important ways in which this setting mimics reality while being conscious of operating in a safety zone. My findings have also shown the benefits of enabling students to interact within this setting in roles that contain certain traits as well as plausible human characteristics, ensuring that while important principles come into play as the characters interact, students care about what happens to their characters and can learn reflexively through projecting themselves into their roles, and have a measure of anonymity as they
experiment. My findings have shown that a range of methods can be used to encourage or require students to develop their roles consistently and authentically so that their actions are meaningful and correspond to reality. Finally, my findings have shown the benefits of suggesting a recognisable and appropriate genre to help students frame their characters’ aims, introduce expectations about how things will turn out and imply satisfying plotlines.

The relationship between story, engagement and learning is clearly a powerful and complex relationship that is influenced by many factors, and there may well be others that I have missed in this small study.

So far in this chapter I have focused predominantly on ways in which students' opportunities to learn from their role-playing activities increased according to the extent to which they were able to immerse themselves in their story worlds and build useful, robust and rich mental simulations from their experience there. However, I have quoted many educators in this thesis who argue that an unquestioning immersion of the type produced in highly engaging stories may not be the best approach for students to take at all times (Misson & Morgan 2006; Gee 2004, 2008; O’Neill 1995; Cahill 2008; Gregory & Cahill 2009; Giroux 1991, 1992). Story worlds such as the ones created in online and face-to-face role plays inevitably convey a certain view of the world and, as Gee (2008) and Cahill (2008) argue, in order for people to perform well within these simulated environments they need to abide by both explicit and implicit norms, rules and guidelines embedded within the setting, characters and possible actions of these constructions. These norms, rules and guidelines provide a good deal of the content of an interactive learning activity, and may
be reinforced by other players providing feedback, ideas and support, and by facilitators through their interventions and guided reflection activities. Stories generally are not structured to highlight and encourage critique of the norms, rules and guidelines by which they are governed—and to ask whose interests these serve—because this would work against their readers'/viewers'/participants' suspension of disbelief. Therefore, it is usually necessary to introduce a critical element as an overlay to the story in order to help students to become aware of, and critically evaluate the validity of, the ways in which meanings are made in and through these techniques.

Because a critical approach often works against maintaining suspension of disbelief in a story, conditions supporting this kind of learning are not well represented in the discussion above, which summarises the presence of conditions that support this kind of engagement in each of the cases. The absence of many of the conditions that encourage suspension of disbelief in the HEADSS workshop provides an indication of the approach the designers of this workshop have taken to support critical learning—of severely limiting students' ability to suspend disbelief in the story of their consultations—but this is not the only possible approach. I will discuss next how the cases have highlighted or pointed to several ways in which critical learning may be supported in online role plays, and in so doing provide answers to my second supporting research question.
Critical learning

My second supporting research question is: *in what ways may online role play support critical learning in higher education?* While only one of the three role-playing activities was designed with a major intention of helping students to develop critical learning outcomes, there are indications that all three activities supported these outcomes to some extent, and they have provided me with ideas for how this aspect could be extended.

Interrupting story development with deconstructive activities

One way to support students' ability to recognise, deconstruct, challenge and re-work the dominant assumptions underlying represented scenarios is represented in the HEADSS workshop's design. A main aim of this workshop was for the medical students to develop a broader understanding of—and respect for—young people's culture, issues, attitudes and abilities. The techniques chosen to achieve this aim included the non-naturalistic dramatic techniques of the 'hidden thoughts', 'fishbowl' and role-swapping activities; the use of real adolescents as partners in the activity and positioning these adolescents as expert, articulate and compassionate critics and collaborators throughout the session; the frequent re-playing of scenes; and the locating of the activity in the richly evocative environment of the school (Cahill 2008).

Although this workshop was conducted face-to-face, many of these features could be re-created in an online format to similar effect. A simple reconstruction would involve real adolescents being called upon to partner medical students in similar activities on an online platform. A school setting could be simulated in the interface through the use of video, pictures and
audio; and the initial role play, feedback, hidden thoughts, fishbowl and role-swapping activities could be conducted via text messages in an attached discussion forum or by synchronous audio/text/whiteboard-sharing software such as Elluminate Live, or a combination of the two. This kind of interaction might lack some of the authentic detail, immediacy and sense of social presence of the face-to-face workshop, but it would have the benefits of not being so constrained by time, and not having the distractions of noise and crowdedness. It would also provide the advantages of anonymity and (depending on the format chosen) asynchronous text communication, allowing extra time for students to think and compose responses. Additionally, the interface in which the discussions took place could be created to look like a doctor's surgery, participants could be required to upload a photograph of themselves to accompany their postings, and if funding and programming expertise were available some game-like elements such as character 'bots' could be added to take the role of Jo's mother, or to provide extra 'hidden thoughts' if school students did not perform well, or to provide cues to the medical students if they became stuck. This would take the role play further towards the 'rule-based' end of the spectrum of simulations, but it would be advantageous to retain the use of multiple real adolescent partners taking most of the responsibility for the patient role to gain the benefits of the interaction providing a sense of dealing with a variety of authentic adolescents—a quality that is central to the critical process of repositioning and recategorising this group of people.

My findings provide some support for the use of this kind of design to achieve critical learning outcomes, in that a majority of my research participant
medical students said their assumptions about young people had been challenged through the activities, they had developed more empathy for young people and they better understood the issues underlying their behaviour. However, as I noted in Chapter 6, many participants were ambivalent about whether they had achieved this critical learning outcome. It is possible that many of these students already had the kind of contact with young people that gave them a good understanding of and respect for young people's culture, issues, attitudes and abilities. It may also be that this kind of learning outcome takes time to develop, and/or that it might be difficult to recognise. However, I think a further reflective discussion focusing on whether students were conscious of achieving this aim—and what had prompted these changes in their understanding—would add to the critical learning outcomes of this workshop. This discussion could involve jointly deconstructing the techniques employed in all aspects of the workshop to uncover the power relationships, cultural assumptions and norms that were at play, and how these influenced the students' learning outcomes. This should not only help students to translate their experience into general principles that they could apply in their future practice, but deepen their awareness of how meanings may be made through dramatic techniques such as are used in the workshop, and give them an added sense of agency to resist and rework meanings that do not reflect their interests and experience. This discussion could also be held in an online format.

A built-in reflective device
Another more subtle way to support critical learning is to provide a built-in reflective device that gives students a different view of their performance and
prompts them to reflect critically on the strategies and assumptions they have used and the underlying power relationships that influence how perceptions and meanings are made. The online newspapers device in the MEPS provides an example of this approach. Not only is a reflective device such as this relatively subtle and simple, compared to the active interventions required in the design I have described above, but it allows students to become as immersed as they like in their stories, and gain the kinds of benefits to their overall engagement and learning that I have summarised above, rather than being constantly discouraged from suspending their disbelief.

In the MEPS, there were no formal reflective activities to guide students to identify and critique the norms, rules and cultural assumptions in the representation in which they were working, but still there were many indications among my research participants that they developed an awareness of the cultural assumptions and values in Middle East politics and how they might have a voice and make a difference in this arena, as I noted in Chapter 6. If the plots of the stories the students co-developed in this simulation served to provide areas for experimentation to support their building of simulated mental models of how things work in Middle East politics, then the online newspapers, in providing alternative and powerful representations of the events, served to highlight the constructedness of the ways in which the news media—and hence ordinary people—built their realities. The newspapers thus gave the politics students many opportunities to see how the meaning-making process works, and to learn how to use knowledge of the media to their advantage.
There were numerous emotional comments and complaints among my MEPS research participants in their interviews about the impact of the online newspapers on the power relations within the simulated world, and the sense of what was valued and of what was possible there. These responses indicate that these students developed some awareness of the ways in which the technique of the MEPS itself impacted on the meanings that were produced in the experience for them. Thus, there are indications that the emotions produced by students’ intense engagement in this activity supported not only their learning about the Middle East, but their critical learning as well.

The distorting mirror device of the online newspapers is something that could be replicated in other online role plays by having a group of students play media roles. In fact, this is already being done, for example in the Mekong e-Sim (McLaughlan & Kirkpatrick 2009) and Justice in Rwanda (Hintjens 2008). While having real journalism students playing these roles, using real newspaper layout software to present their stories, might provide the added advantage of more realistic representations, there might be advantages in students from other disciplines taking these roles themselves to gain first-hand experience of the ways in which news media construct their messages. If there was time, having students swap between media and protagonist roles should provide further rich learning opportunities. A reflective device could alternatively be constructed with blogs from simulated activist, public relations and lobby groups commenting on the action.

While the critical learning outcomes of the MEPS students in my study may have been achieved largely without guided reflection, the addition of some
guided reflection activities focusing on not only their learning from the simulation but their learning about the simulation's meaning-making features would ensure that all students were encouraged to engage with those ideas and gain a better idea of how meanings were created and promoted through a range of devices. Again, this could be achieved online through text discussion or synchronous audio and messaging, such as provided by Elluminate Live.

**Other critical techniques**
There are further ways to support critical learning in online role plays. There were indications that some of my research participants in the Bilby scenario activities developed some critical learning outcomes as a result of their activities, although these were not stated explicitly among the intended outcomes for the unit, which were focused on communication skills development. The improvement of researching, reading, writing and speaking skills in a variety of genres is a critical learning outcome in itself, as these skills are important to a student's ability to analyse, resist and promote certain points of view. Additionally, there were indications that many of my student research participants developed their ability to reflect on the nature of political and social debates as a result of the activities, and to recognise and appreciate alternative points of view. However, it could not be said that the activities strongly supported what Gregory and Cahill (2009) termed a *sociological perspective* on communication, involving a deep awareness of cultural expectations, norms, power relations and consequences involved in the production and reading of texts. Nor were there indications that the activities involved helping students to recognise and critique cultural assumptions,
norms and power relationships embedded in the Bilby scenario and activities themselves. However, it would be possible to add elements to support critical learning through these role-playing activities.

One approach could be to set students the activity of analysing the scenario in terms of the ways in which the three groups and their points of view were represented, and how this might impact on the success of their campaigns. This would reveal that the Bilby website provided fairly evenly weighted and in-depth information on each of the three main perspectives on the hospital relocation issue. Students would find that the media reports were balanced overall between the three perspectives, and treated the points raised by each of the main lobbyists seriously. In this way, the students might learn that the website setting itself was capable of making powerful suggestions through its representations, such as that it was natural and normal that a range of valid and passionate positions may be taken on important local issues. A further activity could be to ask students to reflect on the impact that a different balance in the media representations of these groups might have on the debate.

Another approach could be to ask students to conduct the kind of analysis advocated by Rowan (2001) to identify how inclusive the 'text' of the scenario was. This analysis would illuminate ways in which the scenario reproduces dominant cultural norms and assumptions. As I noted in the previous chapter, the humble quirkiness of the main characters and the ways in which the students' writing activities are presented promotes an assumption that anyone can take part in political activism, provided they have the professional writing skills to use the media to their advantage. However, in focusing on the features
of the main characters in the scenario, students should quickly realise that all of the characters who led the lobby groups were European-race, middle-class, able-bodied and middle-aged. Although gender balance was evident among the characters, there was a marked lack of representation of non-dominant characteristics such as disability, ethnic or racial minorities, people with low socio-economic status, homosexuals and the young or old.

A further technique could entail asking students to create personae to represent the views of these non-dominant groups as well as those of their lobby group as a means to explore the issues these groups of people might face in a small country town, and the difficulties and options they might have in making these voices heard in the various types of media.

Therefore, my research has shown that it is not necessary to deny students the enjoyment of immersing themselves in make-believe story worlds, and the opportunities these may provide to build robust, rich and memorable mental simulations for how the real world works, in order to support their development of critical learning outcomes. There are various ways to incorporate critical learning into online role plays that also take advantage of the high levels of engagement that taking an active role in events in evocative story worlds can offer. I do not pretend that this approach is new, similar practices have been advocated before in the field of secondary English teaching (Misson & Morgan 2006), as well as in the use of computer games in education (Bogost 2008; Squire 2008; Gee 2007, 2008). However, as yet, this approach is not widely discussed in the online role play literature.
Chapter summary

In this chapter I have described the nature of what I have found to be a complex set of relationships between story, engagement and learning in my three case studies. I have found that these relationships depended on the extent to which and ways in which students were able to co-develop stories from their interactions in their activities, and I have formed some theories about design decisions that can support this type of activity as a result. In addition, I have presented several ways in which online role plays may support students' learning to recognise, critique, challenge and rework cultural norms, assumptions and values, as a result of my analysis of how these sorts of outcomes were achieved—or not—in the cases. In the next chapter I will draw on these findings and examples to propose recommendations for the design of online role plays to maximise the pedagogical benefits of these techniques.
CHAPTER ELEVEN

Conclusion

Introduction
In this chapter, I revisit the original aims of this study and the methods and approaches I have used to achieve them. I then draw upon the findings I summarised in the previous chapter to propose recommendations for the design and management of online role plays in higher education. Finally, I point to potentially fruitful areas for further research in this field.

Revisiting my aims
This thesis has explored the relationships between students’ engagement in the stories they develop jointly in online role plays and their learning, including their learning of skills and approaches to help them critically assess the validity of the knowledge claims that are made in these stories and the learning experience as a whole. Its overall purpose has been to make a significant contribution to the body of knowledge about online role play design, to help optimise the effectiveness of this teaching and learning technique as a means to prepare future students to take their place in a highly complex and rapidly changing world.

To achieve this aim and purpose, I have reviewed literature in several fields that are relevant to the enquiry, including literary theory, educational drama, engagement theory, learning theory, critical pedagogy and literacy, and interactive multimedia theory. I have distilled from this review a set of
conditions that may be designed into online, interactive dramatic story formats such as online role plays to support students’ engagement in, learning from and learning about these stories.

I have analysed three case studies that represent a range of existing practices in the design and management of online role plays and deconstructive drama activities in the Australian higher education context, examining the extent to which and ways in which each of the cases supported each of the conditions for engagement, learning and critical learning that I derived from my literature review. I have focused on the students’ responses to these practices, using qualitative and quantitative methods to collect data and a critical, multi-perspectival and reflexive approach to analyse and interpret that data.

In the previous chapter I presented a summary of my findings and an analysis of techniques the cases suggested for incorporating critical learning in online role plays. In this chapter I propose ways in which others may benefit from my research by making recommendations for the design of online role plays based on my findings. In so doing, I provide an answer to my third supporting research question: what implications do my findings have for the design and management of online role plays in higher education?

**Recommendations for the design of online role plays**

As has been argued extensively throughout, this thesis has been based on the premise, established in Chapters 1 and 2, that an online role play is a form of story: students adopt roles in a make-believe world and interact there to create events from which they draw meaning. This premise is based in turn upon my

As I noted in Chapter 1, the online role play literature thus far has implicitly recognised the presence of the story form in online role plays, in discussing the importance of the main story elements of character roles, a sequence of events and a setting operating in an integrated way in these activities. However, I have also argued that online role plays are viewed first as a learning design (eg Wills & Ip 2002, Dalziel 2010), and more specifically as a type of problem-based learning activity with a focus on roles (Wills, Leigh & Ip 2011: 27). Where the concept of a 'story' has arisen in this literature the authors have assigned it a limited function, such as providing a framing scenario or a plotline for students' activities (eg Wills, Leigh & Ip 2011: 98-101). My research has shown that reconceptualising an online role play as a story—a story that is co-created by designers and students in an online, interactive, dramatic format—introduces several advantages.

Firstly, as I noted in Chapter 3, treating an online role play as a story form places this relatively new learning and teaching technique in a centuries-old literature that abounds with knowledge on how people become engaged in, and create meanings from, these structures. Secondly, an important characteristic of stories is that they work as integrated wholes towards the ultimate aims of
engaging people and creating meaning. Therefore, for teachers/designers to see an online role play as a story form should support their taking a strongly integrated approach to designing the activities. This should ensure that design options that do not work towards these aims for any particular online role play story are not used, or are reworked so that they do contribute to the overall effect of being engaged with building a meaningful story, which should then increase the effectiveness of these techniques. Thirdly, treating an online role play as a story makes it more obvious that it is a cultural text and artefact. As such (after Squire 2008), particularly as online role plays are used to educate people in the culturally powerful higher education institutions, the necessity to analyse and critique the ways in which meanings are made in these texts, and support students’ abilities to understand these processes—and resist them if they wish—becomes clearer.

An integrated approach to designing online role plays that is based on story structures and criteria for engagement and meaning-making need not conflict with the requirement that they help students achieve certain learning outcomes. As my research has shown, explicitly providing conditions to support students' ability to co-develop engaging stories in online role plays can also support their ability to achieve a range of generic and sophisticated subject-related knowledge, skill, conceptual and attitudinal intended learning outcomes. I have also shown that supporting story development need not conflict with the requirements of authentic learning designs; and that the overall approach can—indeed should—incorporate a strong critical learning element.
Designing online role play stories has many layers of complexity: the story must work in a variety of learning modes and for many students, each with different backgrounds, strengths and preferences. Developing the story must produce assessable learning outcomes in complex subject areas, using technologies that may be sophisticated. Wills, Leigh and Ip (2011) provide much useful advice on many of the decisions involved in developing the structure within which students will make their co-contributions to their online role play stories. However, in order to achieve an integrated approach to online role play design that is based on story structures and criteria for engagement and meaning-making, it is necessary to treat every decision in terms of how it will impact on the students' ability to co-create a story that they will find engaging and meaningful. This introduces a different emphasis to those that have gone before in this field in that it shifts the focus from the utilitarian endpoint of ensuring certain learning outcomes are achieved, to considering more fully how the students will engage with the meaning-making process emotionally, cognitively and critically through the vehicle of the story that frames their activity.

As with any instructional design process, the starting point should still be to identify the intended learning outcomes and frame these in terms of how students will be able to apply their learning meaningfully (Biggs & Tang 2006). Just thinking about the scenarios in which students might apply their learning should produce ideas for authentic story settings, characters and plotlines. Wills, Leigh and Ip (2011: 98-106) provide useful advice for making these basic decisions. But then, as the teacher/designer develops the idea, framing tasks, assessments, choosing software, resources, supports and so on,
every decision she or he makes should first take into account how it will impact on the students' ability to build meaningful and engaging stories. An important consideration should also be how she/he will incorporate elements to support students' ability to critique the stories that are created.

The conditions whose importance for supporting students' ability to engage with and learn from stories in online, interactive, dramatic formats I have proposed in this research provide a guide as to how many of these decisions could be made. Table 11.1 provides a list of key questions an online role play designer could ask herself or himself to ensure she or he addresses each of these conditions, along with some examples of how they may be achieved. It also includes questions and examples relating to students' development of critical learning outcomes as a part of the activity.

Table 11.1: Conditions to support engaging and meaningful story development and critical learning outcomes in online role plays

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plot</strong></td>
<td></td>
</tr>
<tr>
<td><em>Causal links between events:</em> Will students be able to find causal links between the events that take place that reflect causality in the real world?*</td>
<td>Give students the ability to influence events and incentives to make them plausible. For example, assess them on whether they act consistently with their character's pre-determined traits within the setting.</td>
</tr>
<tr>
<td><em>Identifiable genre:</em> Is an appropriate genre recognisable, to guide developments?</td>
<td>Frame the setting, roles, possible events and tasks within an appropriate and recognisable genre. Build in rewards for performing well in this genre such as in assessment or the regard of other students.</td>
</tr>
<tr>
<td><em>Agency within bounds:</em> Can students decide how their character will influence events—but are there effective controls to ensure their*</td>
<td>Give students as much power as possible to build the story through their interactions in character, but set boundaries such as rules and</td>
</tr>
<tr>
<td>decisions will not jeopardise plausible and interesting story development?</td>
<td>assessment requirements to act 'in-character', and be prepared to step in and take control if necessary.</td>
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<tr>
<td>---</td>
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<tr>
<td>Critical learning: Are students prompted to critique generic plots and consider alternative developments that carry different ideological assumptions and values?</td>
<td>Interrupt the role play periodically with deconstructive activities to focus on stereotyped plots and their limited meanings. Use a reflective device such as media reports to which students must respond in-role as they proceed.</td>
</tr>
</tbody>
</table>

### Character

<table>
<thead>
<tr>
<th>Consistent representation: Are the roles chosen to represent stakeholder positions within the simulated system, rather than just personalities, and are students given incentives to play them consistently?</th>
<th>Have students prepare character profiles before they start, including values, cultural background, sources of motivation. Alternatively, provide scripts describing the roles, including values, etc. Make profiles/scripts available to all. Assess the extent to which students play their roles consistently with their profiles or scripts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supports empathy: Is students’ ability to empathise with their character roles and other positions supported?</td>
<td>Have students research their character roles to understand their complexities and human characteristics (eg prepare a profile). Allow students to influence events through their character, so they can explore the character's world and options at first hand, and gain greater involvement in the character's actions.</td>
</tr>
<tr>
<td>Agency: Can students respond meaningfully to challenges in the story through their role?</td>
<td>Give students agency to influence events through their character. When choosing roles, ensure that all characters have scope to act. Ensure students’ interactions are not constrained by time or other irrelevant factors.</td>
</tr>
<tr>
<td>Safety to experiment: Are students protected by a character role that is</td>
<td>Choose roles that are different to students' normal roles.</td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>different to their usual persona, and/or other means?</strong></td>
<td>Have students play in group-based roles. Use asynchronous text communication and allow time for students to think through their responses. Moderate interactions closely to ensure students treat each other with respect and maintain the fiction of their roles.</td>
</tr>
<tr>
<td><strong>Supports metaxis</strong>: Are students prompted to reflect on their role playing and how it relates to their previous conceptions, experience and behaviour?</td>
<td>Include guided reflection activities during and/or after the role play to prompt students to make connections with reality and reflect on what they have learnt. Assess students on the plausibility and likely success of the decisions they make in role. Integrate a reflective device such as media reports on events, to which students must respond.</td>
</tr>
<tr>
<td><strong>Critical learning</strong>: Are students prompted to play their roles as complex, multi-faceted characters rather than as stereotypes, and to understand underlying cultural characteristics of opposing roles in taking action to resolve differences during the role play?</td>
<td>Choose roles to reflect a diverse range of characteristics. Have students prepare character profiles before they start, including values, cultural background and sources of motivation. Have students swap roles at the mid-point. Set the goal of reaching a resolution to a problem involving characters with deep differences in worldview and values. Make the role play last a long enough time and involve sufficiently challenging interactions that students are obliged to develop their character beyond a stereotype.</td>
</tr>
<tr>
<td><strong>Setting</strong></td>
<td><strong>Coherence and plausibility</strong>: Is the way things work in the story world</td>
</tr>
</tbody>
</table>
plausible and coherent?

consistent.
Set rules governing the ways students interact to reflect rules governing real life.
Use assessment criteria to encourage students to act plausibly and consistently.

Authenticity: Are students able to complete tasks in the context in a way that is cognitively authentic?

Use a real setting (but note that this may conflict with the need for a boundary from reality), or a reconstruction that is authentic in key aspects.
Choose authentic character roles, tasks and assessments and provide communication and support conditions that are as authentic as possible in the setting.

Rich visual detail and information: Is the setting filled with rich visual detail and information about the context?

Build the setting to contain rich visual detail and embed information students will need to complete their tasks.
Use a real setting (but note that this may conflict with the need for a boundary from reality).
Have media/comment roles provide a flow of visual detail and information—assess these roles on the realism, aesthetic appeal and coherence of the reports.

Transparent, responsive interface: Are users orientated to the site and tasks effectively, and does the interface enable users to interact with it in exactly the ways they want and see predictable results?

Provide a tutorial to orientate students to the site and tasks (preferably one they can revisit).
Build and user-test the interface carefully to ensure it is as intuitive and responsive as possible.

Semi-permeable boundary from reality: Does the story world have a boundary from reality (although a porous one)?

Choose a setting that the outside world cannot access, but that has a boundary that students can cross to gather current, relevant information; ideas; etc.

Critical learning: Are students prompted to recognise and challenge

Provide deconstructive activities focusing on assumptions embedded
the cultural assumptions embedded in the setting, and ways in which these influence the meanings that are suggested in the stories?

| in the setting and how different assumptions and structures promote different interactions and meanings. |

It may not be possible to incorporate all of these conditions into every online role play. However, my research has shown that where most of the conditions were present in one of my cases (the MEPS), my student research participants' story-building activity drove their engagement and learning—and their critical learning—and made a major contribution to their high enjoyment and engagement levels in the activity. Where many of these conditions were not provided (as in the HEADSS workshop and Bilby scenario activities), my student research participants were more ambivalent about the importance of the stories underlying their role-playing activities to their engagement and learning; and the question arises whether the treatment of the stories in these two activities was a reason for these students' comparatively lower levels of engagement—both with the stories and with the activities as a whole.

**Contribution to knowledge**

I believe this research is the first to explore the importance of the stories in online role plays to students' engagement and learning, and how these techniques can be designed and managed to support critical learning. As such, my analysis, findings and recommendations provide a strong basis for extending the dialogue surrounding online role play design in the higher education community into these two areas.
My research has made an original and significant contribution to the knowledge of the potential of story as a substantial methodology for learning in higher education, in providing a detailed analysis of how students' story-building activity in three contemporary case studies impacted on their engagement and learning. In so doing, it has supported the proposal that the conditions I identified in the literature as supporting engagement and learning with online, interactive, dramatic story-based teaching and learning techniques are important to these processes. It has also provided examples of how these conditions may be designed into online role plays, and of the compromises for student engagement and learning that can be introduced when they are omitted. As I noted above, it may not be possible to provide all of these conditions in every online role play, but each condition has the potential to support a particular kind of learning that often is not easy to support in traditional teaching and learning techniques. In Chapter 2 I reviewed arguments that student engagement in learning activities in general was a product of many factors, and thus that providing many of these factors could have a cumulative effect to increase engagement (Coates 2006, Barkley 2010, Biggs & Tang 2006). There may be a cumulative and synergistic effect in increasing levels of engagement and enjoyment—and learning—as more of these conditions are built into the story-developing capabilities of an online role play, although my research thus far does not explicitly support this proposal.

Another of the premises on which my research has rested, and which I also argued in Chapters 1 and 2, is that it is important to develop students' ability to recognise and critique the norms, stereotypes, cultural assumptions, values and power relationships of prevailing traditions as they manifest themselves in the
stories the students co-create. In promoting students' critical abilities and confidence to question and challenge accepted norms and beliefs at many levels, I believe higher education teachers can make a strong contribution to helping our society work toward a fairer, more democratic and more sustainable way of living. My contribution in this area is to provide examples of ways in which this kind of critical work may be incorporated into role-playing activities, and an analysis of their effectiveness. Critical techniques I have addressed include non-naturalistic dramatic activities commonly used in educational drama; and also the device that to my knowledge was introduced by pioneers in the online role-playing format, of the 'distorting mirror' provided by ongoing media reports on the action. I have also drawn on the critical literacy and critical pedagogy literature to suggest ways to encourage students to critique the meaning-making stories of the role plays themselves. These include directing students' attention to the ways in which certain meanings were promoted through textual deconstruction activities; the use of guided reflection activities to focus on the authenticity of representations; and the use of 'what if' scenarios to highlight the ways in which power plays and consequences are impacted by changing some of the rules, character representations or other elements in a situation.

Therefore, in conclusion, this thesis has made several significant contributions to knowledge. Firstly, in focusing on online role plays it has addressed the need for greater knowledge about the design of a learning and teaching technique that is well regarded and increasingly popular in higher education. It has added to the knowledge about how story may be used as a methodology for learning in higher education, and the benefits this can bring for students' engagement...
and learning. And it has included in the analysis ways in which critical learning outcomes may be achieved in immersive, culturally laden, online story-based activities, providing examples of how critical pedagogy techniques can work in a participative online platform.

**Areas for future research**

My research has addressed literature in a range of fields in which knowledge is evolving rapidly, and in the time it has taken to complete this project and publish this thesis it may already contain further useful findings and ideas to lend additional insights into the questions I have explored. This study also has several important delimitations and limitations and further research is needed to address these. In particular, given the focus on engagement as a key to learning in higher education in Australia and the increasing popularity of online role plays, further study is warranted in a larger number of online role plays to explore more deeply the impact of the conditions I identified from the literature as supporting engagement and learning from the story component. A longitudinal study involving interviewing participants several months later to ascertain whether the role plays were effective in helping them to achieve certain learning outcomes would make these findings stronger. Other purposes of wider and longer studies would be to confirm whether the conditions I identified for engagement, learning and critical learning were in fact important, to explore how the conditions manifest differently in different contexts, and also to consider whether other conditions should be added to the list.
Another area warranting further research is how critical learning activities might be integrated into existing and new online role plays. The majority of the online role plays described in the literature do not address these learning outcomes overtly, and many critical educators would no doubt see this as a flaw, particularly given the highly immersive quality of some role plays. Following Squire (2008), like computer games, if online role plays are playing an important part in shaping meanings then they should be treated as a cultural text, like any other, and subjected to the same methods of analysis and critique.

Ongoing research is also necessary to identify opportunities created by further changes in technology to enhance the possibilities for students to suspend their disbelief and experiment in interactive story worlds produced via an online platform, and build their understanding of the procedural rhetoric (Bogost 2008) that is used in these environments. Wills, Leigh and Ip (2011: 221-6) identify several new technologies and trends that will no doubt impact on the ways in which some online role plays are designed in the future. These include the increasing use of Second Life, various social media, mobile technologies, gesture-based computing, augmented reality and data visualisation tools. Many of these have the potential to increase students’ abilities to empathise with characters, learn from rich visual detail, build dynamic mental simulations from their interactions with other characters and elements in the setting, and interact in ways that make the interface seem transparent.
Chapter summary

In this chapter, I have concluded this thesis with recommendations for the design of online role plays in future that should better enable higher education teachers to take advantage of the rich potential of the online interactive, dramatic story form to engage students, help them learn and help them recognise and challenge limiting assumptions in the form and content of their activities. I have also suggested some areas for research to further strengthen the potential use and effectiveness of these techniques.

I believe that now, when many exciting new technologies with potential to enhance students' visual and kinaesthetic experience of story worlds presented via computer interfaces are starting to enter higher education, it is timely to remind educators of the age-old principles that my research has shown still underpin many of the conditions for supporting students' engagement and learning in interactive, online, dramatic story-based techniques such as online role plays. Remembering these principles, but being willing to adapt or add to them, as I have done, should help educators to make good decisions about which technologies they might use, and in what ways, to continue to support students' ability to build engaging and meaningful stories as a way of learning. As the platforms on which stories are built become more technically sophisticated and immersive, it will be even more important in the future to build into these techniques effective means to educate students in the powerful rhetoric of whatever devices are used to create these stories.

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Appendices

Images from the interfaces

Figure A.1: The MEPS home page
AL-JAZEERA
THE VOICE OF THE MIDDLE EASTERN WORLD

AL-QAEDA LOSES WEAPONS, GAINS POLITICAL PRISONER

Exclusive: By Liam Kirby

AL-QAEDA may have lost a supply of weapons to Syria, but attempted to make political gains by kidnapping a senior Afghan politician.

Azza Jafari, the first female mayor of Nili, the capital of the Daykundi Province, was kidnapped on Monday afternoon.

"These infidels such as Azz Jafari and her husband are enemies of Islam; they must die," said al-Qaeda leader, Dr. Ayman al-Zawahri.

The Taliban stopped Jafari on Monday in the province of Maidan Wardak, an al-Qaeda stronghold. Her husband and bodyguard were injured in a brief struggle before she was kidnapped along with two female employees.

The abduction is another al-Qaeda attempt to enforce Sharia law in Afghanistan. Dr. al-Zawahri yesterday lashed out at the people of Afghanistan, condemning them for allowing "infidels" such as Jafari to attain political power.

"If we do not stop infidels such as Azz Jafari, they will lead people astray," Dr. al-Zawahri said.

Made in Lebanon, sold out to Israel

By Jack Board

HEZBOLLAH leader, Sheik. It is alleged that 28-year-old Nizar al-Moutahar has been working in the Leba-

Figure A.2: A MEPS online newspaper front page
Figure A.3: Bilby website entry page

Figure A.4: Bilby website home page
Fern Moorhouse

Growth in Bilby has become the norm – we delight in seeing the new shops, the shopping mall, a sense of history being created as we watch. But what is the potential cost of this growth? And who is in charge of it?

It is nothing new to have decisions made by our Bilby Shire Council – it is a part of their job to provide infrastructure and make decisions to match the growth of our town.

Hospital plans... potentially a threat to the fabric of our community

However, there has been no consultation about the new hospital and where it should be built. The potential building on the graveyard site is an issue which threatens to split the community of Bilby and is a threat to the fabric of our community.

The current plans provide for a new three storey hospital to be built to replace our ageing and overcrowded Bush Nursing Hospital. That’s necessary, without doubt. Bilby’s population is now at approximately 19,000, and there are many new families and other settlers moving to the district. In fact, it’s very good to see a lot of the old shops in Main Street getting a facelift, and to see young families enjoying the lifestyle of Bilby.

However, our history is enshrined in that graveyard. The primary school conducted explorations there every term. The principal Marilyn Putman stated, ‘the children read the gravestones, imagining what it felt like to have a family devastated by typhoid or little babies not surviving. It makes a story that they identify with, it shows them Bilby’s difficult early times.’

Did you know the famous bushranger Ben Town is buried in Bilby? Or that our well-known local identity, Myfarne Fallomy (who has five generations of Welsh ancestors in that graveyard) It is even more problematic to consider how a building can be constructed over a graveyard site anyway.

What about toxic soils issues?

Where will the graves be relocated? There are just too many questions. The Bilby Shire Council has stated quite clearly that the funding needs to be allocated quickly. Benalla has already expressed interest in redeveloping the old hospital. The funds of Bilby can’t agree on a site. But it would be a disaster to rush into a decision on such a complex issue without further consultation with the key groups in our town. There have been no public meetings to explore alternatives, no investigations into different sites. It is simply not good enough – our civic leaders need to communicate properly and involve us all in such a major change for this community.
Figure A.6: Bilby street map with pop-up pictures

Figure A.7: Characters in the MEPS
Myfanwy Fallenby

Myfanwy Fallenby is the owner of the small specialist fabric dyeing factory called Material Design started in 1991. It produces fabrics designed by a local artist, Myfanwy Fallenby. Her work is highly original and is much in demand in Melbourne and Sydney, where several craftspeople use the fabrics to make scarves, coats and shirts to sell through exclusive outlets at Southbank and Double Bay.

John Russell

John Russell owns a nursery specialising in native flora, established in 1993, the Russell Native Nursery. He completed a degree in environmental management. Check his interview on 3BBR for some perspective on his life in Bilby. John is a member of the local branch of the Greens. He is keen to record and protect the local flora and fauna, particularly in the forests and grasslands up the valley, where he has made sightings of several threatened species.
Frank (Chops) Lambert

Frank (Chops) Lambert has lived in Bilby all his life. He is the third generation of Lamberts — his brother Chris (Beefy) still works with him in Bilby, and his sister Marjorie married a farmer from the neighbouring district. Chops is married to Jenny (another long term Bilby community member), with three sons — all of whom play for the local football team! Check out his interview recently on 3BBR, where he told a couple of stories about his father, a legend in the town of Bilby.

Figure A.8: Main Bilby character profiles

Questionnaires

Middle East Politics Simulation questionnaire

General section

Age-group
1. My age-group is:
   - 29 years or less
   - 30 years or more

Overall enjoyment and engagement
2. I enjoyed taking part in the simulation.
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree

3. My level of engagement with the simulation was:
   - total immersion
   - high engagement
   - moderate engagement
   - low engagement
   - I was 'present but absent'

4. The simulation was just a waste of time.
5. The amount of time I spent working on the sim each day was (on average):
   <1 hour  1-3 hours  3-5 hours  5-7 hours  >7 hours

Learning
6. As a result of taking part in the simulation, I have a better understanding of the facts of Middle East politics (ie the countries, leaders, groups, movements, issues and relationships).
   strongly agree   agree   neutral   disagree   strongly disagree

7. As a result of taking part in the simulation, I better understand the complexities of negotiation and decision-making in real political systems.
   strongly agree   agree   neutral   disagree   strongly disagree

8. As a result of taking part in the simulation, my skills in the following have improved:
   (Please circle all that apply, eg: red, blue, green, yellow)
   a. critical analysis, problem solving and creative thinking
   b. identifying, gathering, evaluating and using information
   c. communicating effectively and appropriately in a different context
   d. developing, planning and managing independent work
   e. working effectively as part of a team
   f. effectively using information and communication technologies
   g. applying knowledge learned in the subject to new situations

9. As a result of taking part in the simulation, I am more likely to question stereotypes, Western assumptions and media representations of players and issues in Middle-Eastern politics.
   strongly agree  agree  neutral  disagree  strongly disagree

10. I don't think I learnt anything valuable from the simulation.
    strongly agree    agree    neutral   disagree    strongly disagree

Motivation
11. I was highly motivated to learn during the simulation.
    strongly agree     agree     neutral   disagree     strongly disagree

12. The simulation made me feel more motivated to learn than I normally feel when learning from lectures/tutorials/readings.
    strongly agree     agree     neutral   disagree     strongly disagree

13. I believe I worked with a high degree of professionalism in the simulation.
    strongly agree     agree     neutral   disagree     strongly disagree

14. The degree of challenge to learn what I needed to do well in the simulation was:
    too high    high, but achievable    not particularly high, but enough    too low

15. The challenges I faced in the simulation were meaningful to me.
    strongly agree     agree     neutral   disagree     strongly disagree

16. What particular factors motivated you to learn during the simulation?

17. What were your goals during the simulation?

Simulation story elements section
18. In the table below, please would you outline the main storylines you took an
active part in developing in the simulation, and what you learned from each.

<table>
<thead>
<tr>
<th>Stories I helped develop</th>
<th>Things I learned</th>
</tr>
</thead>
</table>
| Eg: Abbas tried really hard to create a united Palestinian front as a first step in re-opening peace talks with Israel | Eg:  
- You need allies who are willing to mediate, to get parties talking.  
- It's important to stay 'on message' so when people are ready to listen, they know what you stand for. |

19. Can you identify anything that helped you learn the things you noted above?

20. Was there anything that hindered or limited your learning?

21. Did you learn other things (positive or negative) that haven't been covered so far in this questionnaire? If so, what were they?

Plot
22. I thought the way the plots of these stories (ie the sequences of events) developed was:
   
   (Please tick all that apply)
   - interesting: always mostly sometimes never
   - coherent: always mostly sometimes never
   - confusing: always mostly sometimes never
   - realistic: always mostly sometimes never
   - playful: always mostly sometimes never
   - creative: always mostly sometimes never
   - relevant to learning about ME politics: always mostly sometimes never
   - suspenseful: always mostly sometimes never
   - too slow: always mostly sometimes never
   - satisfying: always mostly sometimes never
   - meaningful: always mostly sometimes never
   - unsettling: always mostly sometimes never
   - thought-provoking: always mostly sometimes never
   - challenging: always mostly sometimes never

23. The amount of action going on was:
   - too much to keep up with
   - enough to keep me interested
   - not enough to keep me interested

24. Do you have any comments about how the plots of these stories (ie the sequences of events) might have impacted on your ability to engage with the simulation, and your learning?

Character
25. I was able to play my character role as a complex human or organisation, rather than just a stereotype.
   - strongly agree  agree  neutral  disagree  strongly disagree

26. I was able to empathise with my character role.
   - strongly agree  agree  neutral  disagree  strongly disagree

27. Playing my character role forced me to think deeply about what motivates people
– my own character as well as others.
strongly agree  agree  neutral  disagree  strongly disagree

28. Playing my character role forced me to try strategies that felt **risky**.
strongly agree  agree  neutral  disagree  strongly disagree

29. I felt what happened to my character depended on me.
strongly agree  agree  neutral  disagree  strongly disagree

30. I felt that the character role I played **limited** my ability to do very much in the simulation.
strongly agree  agree  neutral  disagree  strongly disagree

31. The task of preparing a **profile** first helped me understand the background, values and agendas of my character role.
strongly agree  agree  neutral  disagree  strongly disagree

32. Do you have any comments on whether playing your character role impacted on your ability to engage with the simulation, and your learning?

**Setting and pretext**
During the simulation I was conscious that although the events, etc. were fictitious, there were strong parallels to real situations.
strongly agree  agree  neutral  disagree  strongly disagree

33. The scenario 'breaking news' items for the simulation were:

- realistic: all  some  none
- far-fetched: all  some  none
- relevant: all  some  none
- interesting: all  some  none
- challenging: all  some  none
- unclear: all  some  none

34. When I was in the sim I was able to 'suspend my disbelief' and feel like I was facing real Middle-Eastern situations.
strongly agree  agree  neutral  disagree  strongly disagree

Do you have any comments on how the scenario of working in the real life Middle East, but with invented breaking news items, might have impacted on your ability to engage with the simulation, and your learning?

**Non-story factors section**
35. In the first column, please rate how **important** you think each factor was to your learning. In the second column, please indicate how **effectively** you think it was managed.
Add comments if you wish.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Importance (5=high, 1=low) Mean=</th>
<th>Effectiveness of the way this was managed (5=high, 1=low) Mean=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good explanatory material so that roles and expectations were clear</td>
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<tr>
<td>Good facilitation so I could focus on my learning, not processes</td>
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</tr>
<tr>
<td>Factor</td>
<td>Importance (5=high, 1=low) Mean=</td>
<td>Effectiveness of the way this was managed (5=high, 1=low) Mean=</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
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<td>---------------------------------------------------------------</td>
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<tr>
<td>Provision of good theoretical literature on the subject</td>
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<tr>
<td>Easy access to information to help me perform my tasks in role</td>
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<tr>
<td>Assessment that reflects the amount and types of effort required.</td>
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<tr>
<td>Clear assessment criteria.</td>
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<tr>
<td>Face-to-face contact (ie in the final conference)</td>
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<tr>
<td>Ability to use the simulation 24/7</td>
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<tr>
<td>An interface that is easy to navigate and use, stable and clear</td>
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<tr>
<td>Adequate means of communication between team members and teams</td>
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<tr>
<td>A feeling of safety to take risks and make mistakes</td>
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<tr>
<td>Adequate feedback on my performance from peers and/or facilitators</td>
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<td>An effective reflection/ debriefing session</td>
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<td>Other factors or comments on the above?</td>
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36. Is there anything that might have helped you engage in the simulation better?
HEADSS workshop questionnaire

General section
1. My age is:
2. My gender is: female  male
3. My previous experience of role-playing (recreational or educational) is:
   - non-existent
   - limited
   - some
   - plentiful

Overall enjoyment and engagement

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
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<tbody>
<tr>
<td>4.</td>
<td>I enjoyed taking part in the role play.</td>
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<tr>
<td>5.</td>
<td>I was highly engaged with the role play activity.</td>
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</table>

Learning
As a result of taking part in the role play, I:

<table>
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<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>have a better understanding of how to apply the HEADSS screening tool</td>
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<td>7.</td>
<td>am able to deliver the confidentiality statement more effectively</td>
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<td>8.</td>
<td>am more aware of the linkages between physical, social and mental health issues</td>
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<td>9.</td>
<td>have a set of effective words and phrases to use when screening young people</td>
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<td>10.</td>
<td>recognize my own areas of discomfort when communicating with young people</td>
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<td>11.</td>
<td>am more alert to the kinds of issues underlying young people's behavior that are difficult for them to talk about</td>
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<td>12.</td>
<td>will be able to empathise better with young people</td>
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<td>13.</td>
<td>feel my assumptions about young people have been challenged</td>
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<tr>
<td>14.</td>
<td>don't think I learnt anything valuable</td>
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</tbody>
</table>
14. Is there anything else that you learnt from the role play?

Which activities helped you learn?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
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<tbody>
<tr>
<td>15. Role playing 1:1</td>
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<td>16. Individual feedback from my young person</td>
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<td>17. Watching others in the 'fishbowl' activity trying techniques and being coached</td>
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<tr>
<td>18. When other participants suggested the fishbowl actors' 'hidden thoughts'</td>
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<tr>
<td>19. Feedback and advice from the young people to the whole group</td>
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<td>20. Comments from my peers</td>
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<td>21. Discussion and debriefing by the facilitator afterwards</td>
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</table>

22. Was there anything that hindered or limited your learning?

**Motivation**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>23. I was highly motivated to learn during the role play.</td>
<td></td>
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<tr>
<td>24. The role play made me feel more motivated to learn than I normally feel when learning from lectures/tutorials/reading.</td>
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<tr>
<td>25. I really wanted to find out what Jo's issues were, I was caught up in the story.</td>
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<tr>
<td>26. I was really only interested in learning enough to pass my assessment.</td>
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</tbody>
</table>

27. What particular factors motivated you to learn during the role play?
### Character, setting

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>28. During the role play I was able to <strong>suspend disbelief</strong> and pretend I was in a consulting room with a real patient.</td>
<td></td>
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<tr>
<td>29. I was able to bring my own personality and experience to my role, rather than just mouthing scripts.</td>
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<tr>
<td>30. I felt like the Jo character was real, not just make believe.</td>
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### Conditions

<table>
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<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
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</thead>
<tbody>
<tr>
<td>31. I felt challenged <strong>intellectually</strong> by the role play.</td>
<td></td>
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<tr>
<td>32. I felt challenged <strong>emotionally</strong> by the role play.</td>
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<tr>
<td>33. I felt <strong>safe</strong> to try out new strategies in the role play.</td>
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<tr>
<td>34. There wasn’t enough <strong>time</strong> to cover everything.</td>
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<tr>
<td>35. <strong>Instructions</strong> were clear and easy to follow.</td>
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<tr>
<td>36. The <strong>facilitator</strong> helped things run smoothly.</td>
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<tr>
<td>37. The <strong>resources</strong> provided prior to the role play prepared me adequately.</td>
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</table>

38. **How valuable was the role play for you as a learning experience?**  
   - highly valuable  
   - useful  
   - of limited value  
   - a waste of time

39. **Do you have any other comments about the role play?**
Bilby questionnaire

General section
1. I am an: on-campus  off-campus student
2. I am studying at: 1st year level  other year level
3. My age is:
4. My gender is: female  male
5. My previous experience of role-playing is (including educational or recreational, eg computer games):
   non-existent  limited  some  plentiful

6. Overall enjoyment and engagement

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoyed taking part in the role play.</td>
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<tr>
<td>I was highly engaged with the role play activities.</td>
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</table>

7. Learning
As a result of taking part in the role play

<table>
<thead>
<tr>
<th>I have developed my ability to:</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>- recognise differing interpretations</td>
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<tr>
<td>- develop written and oral material in a style appropriate to audience and purpose</td>
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<td>- work collaboratively with a team</td>
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<tr>
<td>- use technology for a range of purposes, including working with others, communicating and accessing sources of research</td>
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<table>
<thead>
<tr>
<th>I feel my assumptions have been challenged relating to:</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
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<tbody>
<tr>
<td>- qualities that are required to be an effective communicator in a professional context</td>
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<td>– what people who belong to issues-based groups are like</td>
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<tr>
<td>- the nature of local politics</td>
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<tr>
<td>I don't think I learnt anything valuable</td>
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</table>

8. Is there anything else that you have learnt from the role play?
9. Which of the following helped you learn while you were doing role play activities?

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face-to-face role group discussions</td>
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<tr>
<td>Online role group discussions</td>
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<td>Reading/viewing/listening to material on the Bilby website</td>
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<tr>
<td>Reading the study guide, readings and samples on the website</td>
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<tr>
<td>Individual folio writing activities</td>
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<tr>
<td>Discussion about the role play/debriefing by the tutor</td>
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<tr>
<td>Other? (please describe)</td>
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10. Was there anything that hindered or limited your learning from the role play?

**Motivation**

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playing a role made me feel more motivated to learn than I normally feel when learning from tutorials/reading/writing.</td>
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<tr>
<td>I really wanted to do my best for my character and role group, I was caught up in the story.</td>
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<tr>
<td>I enjoyed the creative aspect of developing strategies to promote my group.</td>
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<tr>
<td>I want to be a competent writer and the role play seemed relevant to achieving that goal.</td>
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<tr>
<td>I was really only interested in learning enough to pass my assessments.</td>
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</table>

11. What particular aspects of the role play were most engaging for you?
<table>
<thead>
<tr>
<th>12. Character</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
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<tbody>
<tr>
<td>My persona in the role play was just a member of one of the groups.</td>
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<td>I took the opportunity to <strong>experiment</strong> with a role that was different to my normal identity.</td>
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<tr>
<td>Adopting my persona helped me think more deeply about what motivates people.</td>
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<table>
<thead>
<tr>
<th>13. Setting</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
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<tbody>
<tr>
<td>I could visualise Bilby as a real town</td>
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<tr>
<td>The website helped me feel Bilby was real</td>
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<tr>
<th>14. Conditions</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>N/A</th>
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<tbody>
<tr>
<td>I felt challenged <strong>intellectually</strong> by the role play activities.</td>
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<tr>
<td>The challenges I faced were <strong>meaningful</strong> to me.</td>
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<tr>
<td>I felt I had the <strong>ability</strong> to complete the role play activities satisfactorily.</td>
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<tr>
<td>I felt <strong>confident</strong> to try out new strategies in the role play.</td>
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<tr>
<td>The <strong>group</strong> I was in worked productively.</td>
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<tr>
<td><strong>Instructions</strong> were clear and easy to follow.</td>
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<tr>
<td>The <strong>tutor</strong> helped things run smoothly.</td>
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<tr>
<td>The <strong>resources</strong> provided on the website were sufficient.</td>
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</table>
The time delay between postings in my group on DSO made things difficult.

16. What do you think you will remember from the role play?

17. Do you have any other comments about the role play?
Focus group and interview questions

Middle East Politics Simulation focus group questions

1. How did you enjoy the sim? And if you did enjoy it, why did you?
2. What did you learn from the sim?
3. Did you feel more motivated to learn in the sim than you normally feel when you are learning from lectures, tutorials, readings?
4. Did you work to the best of your ability, would you say? And if so, what motivated you to work hard?
5. What stories did you develop in the simulation, and what did you learn from them?
6. This might be a difficult question: can you pinpoint a moment or interaction, or particular activity that actually produced a particular learning outcome?
7. What supported your learning? That is, what factors helped you stay engaged or help you realize something was important?
8. And what got in the way, or limited your engagement or learning?
9. How was it, working online: could you see any advantages in communicating in character just by text, asynchronously, or any disadvantages?
10. How involved did you feel in the stories – did you wake up thinking about them, spend a lot of time talking about them with your group and so on – did they become important to you personally?
11. How important was getting a satisfying ending for your character in these stories for you? I mean, was that a major motivator or were you really just conscious that you were being assessed on how well you knew how things were in the Middle East?
12. There were a few things that weren't realistic, eg things happened faster than they would in real life, and some people had communication with characters they wouldn't talk to in reality. Did that matter in the end, I mean did it mess up your engagement or mean that what you learnt wasn't any use beyond the simulation?
13. Was there anything that you would call surreal about the sim?
14. What else did you learn from the simulation, and how did you learn it?
15. How do you think you will be able to apply what you have learnt from the sim?
16. Are there any other comments you'd like to make about the sim?

HEADSS Workshop focus group questions

1. How did you enjoy the role play? What did you enjoy about it?
2. What happened in your version of the role play, and what did you learn from what happened or what the young person said or didn't say?
3. Did you learn anything useful from the fishbowl activities? Can you pinpoint what you learnt?
4. Did you notice that your assumptions about young people changed during or after the role play? What prompted these changes? (Did the hidden thoughts activity help with this?)
5. What about the other activities, the getting to know you, and debriefing discussion, and the advice from the students and your peers, can you pinpoint things that you will take away from those activities too?
6. Did you work to the best of your ability, would you say? And if so, what motivated you?
7. What supported your learning? That is, what factors helped you stay engaged or help you realize something was important?
8. And what got in the way, or limited your engagement or learning?
9. How important to you was finding out what Jo's issues were? I mean, was finding out what was special about him or her a major motivator or were you really just trying to practise some consulting skills, and it didn't matter much what Jo was
10. Did you feel like the young people really were Jo? Were they convincing as actors?
11. Do you feel like you were able to explore and take a few risks, or wasn't there time and scope for that – was it more a question of learning what works as quickly as possible?
12. Do you have any comments on the facilitation, timing, conditions surrounding the role play?
13. How will you apply what you have learnt?
14. Are there any other comments you'd like to make about the role play?

**Bilby focus group questions**

1. Are you studying at 1st year or a later level?
2. How did you enjoy the role play (including the group discussions in class, the public meeting last week, researching the Bilby website and writing pieces from a Bilby person's point of view)?
   a. What did you enjoy about it?
3. Which groups were you in and what characters did you create for yourself?
4. To what extent did you take on that character when you were doing the role play activities like discussing in your groups, writing your reports, etc?
   a. Why did you choose/choose not to develop the character?
5. Was that character very different to your usual character?
6. What did you learn about the kind of perspective a character such as yours might have?
7. Did it make the work you were doing, writing reports and letters and so on different, because you were writing from a different character's point of view? (Did you find it more interesting, easy/hard, motivating, fun?)
8. Have you noticed that your assumptions about local politics, or life in a small town, or even what it would be like to be a professional writer, have changed since the role play?
   a. In what ways?
   b. What prompted these changes?
   c. Did the dialogue in the public meeting or in other class discussions when you were in your Bilby groups help you to see things from different perspectives?
9. What are the main things you learnt from all of the role play activities combined?
10. Have you had any reflection activities to get you to think about these things?
11. Can you pinpoint what activities or aspects of the role play helped you learn certain things?
12. Did you work to the best of your ability, would you say? If so, what motivated you?
   a. Were you really wanting to explore your character and the scenario and have some fun, or
   b. were you focusing on developing your skill as a writer, or
   c. were you just focused on passing the assessments?
13. Are any of you planning to use professional writing skills in your career?
   a. Did you visualize yourself as a real writer when you were doing the role play activities?
14. What factors helped you engage and stay engaged with the make-believe scenario?
   a. Did the website help you to visualize Bilby as a real place?
   b. What aspects of the website helped?
   c. were the website and the DSO site easy to navigate?
   d. Was it realistic having multiple sources of information to sift through?
15. And what hindered, or limited your engagement or learning?
   a. Did it matter that the timing of some developments was a bit off – that the Grassington report was on the website from day 1 but was supposed to have been released only at the public meeting?
16. Do you have any comments on the facilitation, timing, conditions surrounding the role play?
17. How will you apply what you have learnt?
18. Are there any other comments you’d like to make about the role play?

**Middle East Politics Simulation student interview questions**
1. How are you feeling about the sim?
2. What are you learning?
3. How are you learning those things?
4. What are you planning at the moment for your character?
5. How do you feel about your character?
6. Is your character a limiting role to play or is there enough scope to try new strategies, perhaps if the first one you try isn’t working?
7. Is there enough happening in the sim to keep you interested?
8. Does it feel realistic?
9. How challenged do you feel?
10. Are you learning anything about how the media works?
11. Do you have any frustrations about the sim?

**HEADSS student email interview questions**
1. What did you learn from the role play?
2. What helped you learn and what hindered you, if anything?
3. Do you feel your assumptions about young people have been challenged as a result of the role play, and if so, in what ways?
4. How deeply were you immersed in the story of Jo? (That is, were you really interested in finding out what was wrong with her and what her life was like?)

**Bilby student interview questions**
1. Are you studying at 1st or 2nd year level (ie is this your first trimester at xxx university?)
2. How are you enjoying the Bilby role play?
3. Which group are you in and what character have you created for yourself?
4. How different is your character to your normal character?
5. How conscious are you of playing a role in the work you are doing based on the Bilby scenario? That is, does it feel different to normal group work activities because you're playing a role?
6. Does it have any effect at all to be thinking about your work on Bilby from your character's point of view? Do you feel it gives you extra motivation to research the site and do a good job because you want your character to do well?
7. What have you learnt from the role playing activities?
8. What helped you to learn those things?
9. Is there anything hindering your engagement with the role play?
10. What effect does it have that your participation in the role play is assessed?
11. What plans have you developed for Bilby (briefly)?
12. How does developing these plans on behalf of your group make you feel – does it add a feeling of excitement or interest to the report-writing task?
13. Have you had any interaction with other groups, either in or outside class, where you've represented your group and character's point of view?
14. How believable is the Bilby setting – can you visualise the town? If it is believable, what has helped you feel like you know the town?

15. Are you planning to be a professional writer?

16. Has the role play given you an insight into what life might be like as a professional writer? In what way?

17. Have any of your assumptions been tested through the role play? For example, have any assumptions you had about what certain types of people are like, what country towns are like, what professional writing is like, or what it's for, been tested and perhaps changed? In what way?