Converging conventions: Digital games and applied drama

A thesis submitted to Charles Sturt University for the Doctor of Philosophy

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2011
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Certificate of authorship

I, David Cameron, hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma at Charles Sturt University or any other educational institution, except where due acknowledgment is made in the thesis. Any contribution made to the research by colleagues with whom I have worked at Charles Sturt University or elsewhere during my candidature is fully acknowledged.

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David Cameron                                    Date
Acknowledgements

This thesis would not have been written without the generous input and participation of a whole bunch of folk. I hope I’ve recognised all of these collaborators at the appropriate moments in the research narrative.

Thank you to the many friends and colleagues that have supplied encouragement, questions, answers and advice over the years. You deserve medals for letting me yammer about new ideas and crazy possibilities.

A special knuffel to Rebecca Wotzko for staying fun and funny, and for sharing marathon LittleBigPlanet sessions as ‘research’.

Extra love and thanks to my family, especially Nola and Roy for welcoming me home after 25 years. I’ll move out soon, I promise.

And none of this would have happened without my supervisor and chief collaborator, Professor John Carroll. An inspirational colleague, a gifted mentor, and a great friend. This thesis reflects the thinking, reflecting, plotting and dreaming that has taken us from the red chairs in John’s office to some wonderful places: real and imagined. Molte grazie, Professore.
Publications

The following publications are directly related to the research work undertaken for this study, and all co-authors have granted permission for their use in this thesis:


Cameron, D., & Carroll, J. (2004). The story so far... The researcher as a player in games analysis. Media International Australia, 110, 62-72.


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Abstract

Converging conventions: Digital games and applied drama

This thesis explores the connections between two distinct but converging fields of educational theory and practice — digital games and applied drama. Both are rich in promise and possibilities when applied to the pedagogical problems facing those educators attempting to engage learners in a world that is shaped and mediated by rapidly emerging digital technologies. In particular, the study centres on how technology can be combined with game and drama conventions to extend learning and performance beyond solely a physical environment, and into virtual spaces such as Websites, online games, virtual worlds, mobile devices and social media applications. These non-traditional learning environments have been termed ‘affinity spaces’.

This study used a modified action research approach that consisted of three interconnected phases: thesis research, the core action research fieldwork, and thesis writing. This methodology was chosen to reflect the iterative nature of change and development in digital media technology, and to sit within a participatory inquiry paradigm that focused on practical, collaborative and transformative research. A number of collaborators were engaged in fieldwork cycles of research, reflection and publication over a six-year period. This core action research project adopted a range of data collection and interpretation methods including participant observation, reflexive interviewing, field notes on events and procedures, scholarly publication as reflexive practice, and the collection of project outputs and artefacts in a range of media forms. One outcome of this study is the creation of a model for an action research thesis that incorporates a compilation of publications as the fieldwork. The blending of the thesis and core action components in this compilation model, formed around an autoethnographic approach that recognises academic writing as a form of scholarly self-narrative, offers a useful model for other social science researchers.

The study found similar conventions operating in digital games and applied drama, and the thesis describes the nature of the affinity spaces for authentic learning that
can be created through a convergence of these forms. Three new hybrid conventions are proposed: digital pre-text, situated role and mediated learning communities. These combine well-known conventions and strategies from applied drama with the mechanics of digital media forms such as video games. The study found that these new hybrid forms can work to extend applied drama beyond the confines of traditional education settings. They make use of performance and role conventions to enable the ‘as if’ exploration of authentic problems and issues, and safely engage learners with real communities of professional practice. The study also identifies some potential issues that arise when working with these digital media forms including the exponential nature of technological change, the meta-information conveyed by content, concerns over privacy, and the shifting nature of identity.

The thesis identifies areas for further study, clustered around young people’s concepts of performance, role, social health and individual identity in an increasingly mediated world. Developing further understanding of the conventions that operate in this space will become a vital part of the strategies employed by educators and practitioners seeking to engage these young people.
1. CHAPTER ONE

Introduction to the study

1.1 Introduction: Dramatis personae
This thesis features a zombie-hunting college student, gun-toting career criminals, murderous 17th century castaways, and a sword-wielding Elvis Presley impersonator on a quest to find some new boots. This thesis also features academics, educators, researchers, practitioners, students, performers and players. You will find that at times these roles may shift, merge and blur as we journey through the story of this project, which intertwines educational research and scholarly publications with accounts of time travel experiments, shipwrecks and a looming natural disaster. There is even a touch of Shakespeare’s *Twelfth Night*, re-imagined as a tale of school bullies, mobile phones and teenage romance.

All of these adventures take place within the context of a research journey exploring the connections between two distinct but converging fields of educational theory and practice — digital games and applied drama. Both fields are rich in promise and possibilities when applied to the pedagogical problems facing those educators attempting to engage learners in a world that is shaped and mediated by rapidly emerging digital technologies. In particular, I am interested in how technology can be combined with game and drama conventions to extend learning and performance beyond solely a physical environment, and into what Gee calls *affinity spaces* (2004). These spaces might include Websites, online games, virtual worlds, mobile applications or social media forms. I will discuss the concepts of applied drama, digital games and affinity spaces within the context of this study in more detail below.

This thesis reports on an action research project that engaged a number of participants in collaborative cycles of research, reflection and publication over a six-year period. However, the motivation for the research began several years earlier in my own work as an educator and journalism practitioner.

1.1.1 The pre-text for this research
One of the core conventions of the applied drama and digital game forms discussed in this thesis is that of the *pre-text*, which determines ‘the first moments of the
action, establishing location, atmosphere, roles and situations’ (O’Neill, 1995, p. 22). The pre-text implies a history, or in narrative terms a ‘back story’, to the events that are taking place in the world of the drama or game, and serves to immerse the participant quickly in that world. Like any story or drama, this study does not simply appear out of thin air, and I will now provide some of the background. Although by necessity it will be more explicit than a typical pre-text, I am mindful of O’Neill’s advice that success depends largely on ‘its essential simplicity, its minimal character, and its implications for action’ (O’Neill, 1995, p. 22).

In the late 1990’s I was working as a journalism trainer at Charles Sturt University (CSU), a campus located in the town of Bathurst, Australia. In conjunction with community radio station 2MCE-FM, the university operates a working radio newsroom as a training resource for its undergraduate Communication students. My job at the time was to provide editorial control over the news output of the radio station, and to supervise and train the students as they gained practical experience in the newsroom. One afternoon in August 1998 I received a telephone call in the newsroom from an officer of the State Emergency Service, advising me that major flooding was expected in the region after a period of consistent and often heavy rain. The local emergency plan had been implemented, and media organisations were being informed. Having experienced similar events in 1988 and 1992, I knew the flooding presented an excellent learning opportunity for those journalism students who would be on hand to provide radio coverage of the event.

A couple of days later, as the flood waters began to recede and the newsroom returned to a less hectic pace, I began to reflect on the experience that had been afforded to these students, and the large amount of potential training resources that had been collected during the flooding emergency. In the newsroom we had files bulging with media releases and news stories, and we even had video footage of the flood that staff and students had recorded on behalf of local and national media outlets. It struck me that these materials could form the basis of a training resource that might allow future students to experience some of the pace and pressure of covering a breaking story, without the need for a real emergency.
Exercises, mock media conferences and hypothetical reporting scenarios are commonplace in journalism training. At the time I felt it might be useful to develop a training resource that could be delivered electronically, using the World Wide Web. This was for a number of reasons, including a desire to explore the potential for providing a training resource for a cohort of students studying journalism via distance education. I was also aware of a growing debate among educators about the perceived changes that growing up in a world of digital media such as the Internet and video games was creating among learners. This debate is best typified by the wide adoption around that time of Prensky’s ‘digital native’ metaphor for learners (2001b), though educators had for some time been expressing anxiety about the ‘aliens in the classroom’ (Green & Bigum, 1993) emerging from the Net Generation (Tapscott, 1998). Prensky’s book Digital game-based learning (2001a) was in part the inspiration for developing a Web-based journalism training scenario, dubbed simply Flood, which became the basis for my Master of Arts (Honours) dissertation.

While working on the Flood project in late 2002, I was invited to participate in an applied drama project that a colleague was undertaking in the Netherlands. I should mention that this colleague is Professor John Carroll, who is also a co-researcher in parts of this action research project and my PhD supervisor — dual roles that are a characteristic of thesis-oriented action research projects (Zuber-Skerritt & Perry, 2002, p. 175). Further details of the project undertaken with the Dutch students are outlined in Chapter Six, but critically in terms of the background to this research it was the beginning of our collaborative research into the possible connections between forms of applied drama and interactive media. In writing a paper about the Dutch project for the 2003 Digital Arts and Culture (DAC) conference in Melbourne, we noted with irony that:

‘the city of Bergen provided the venue for both the 2000 DAC and the 2001 International Drama/Theatre and Education Association (IDEA) conference, occurring within some months of each other. If there had been some overlap between the conferences it may have produced new forms of creative hybridism for both fields’ (Carroll & Cameron, 2003, p. 1).

From 2004 I continued to consider the possible forms such ‘creative hybridism’ might take within the context of undertaking a PhD, and that part of this journey will now be taken up again as I begin to detail this study and the thesis writing
process. The ‘implications for action’ that emerged from my early thoughts on what direction this project might take have been refined into a research question and key objectives, which I will outline after first providing some definitions of the terms used.

1.1.2 Applied drama

Using the term applied drama requires entry into a contested area among practitioners and researchers, though like many such debates there is often common ground to be found in adopting a working definition that suits the given context, while acknowledging the difficulty of providing a universal description. In the setting of this research, applied drama is used in a wide sense to describe the use of dramatic conventions for non-entertainment, and therefore mostly non-theatrical, purposes. That is not to suggest that fun, play and entertainment are not concerns or possibilities when drama is used in this way but rather it places the purpose of the use of drama principles, techniques and conventions more firmly in the parameters of educational, transformative or, in action research terms, ‘emancipatory’ applications. My intention is not to suggest that these forms are in binary opposition to traditional or ‘pure’ forms of theatre and drama but rather, as Nicholson suggests, that applied theatre or applied drama can be seen as a set of cultural and theatrical practices ‘that are motivated by the desire to make a difference to the lives of others’ (Nicholson, 2005, p. 16). Although this study largely operates within educational settings — primarily because of my own role as a tertiary educator during the period of the study — I have generally used applied drama in preference to terms such as drama-in-education or theatre-in-education. This acknowledges that the application of drama and game conventions in mediated spaces has implications and possibilities for performance and entertainment purposes, although these are not central to this study.

It should also be noted that throughout this thesis applied drama is expressed through a variety of methods, principles and sets of conventions which themselves are collected under a variety of terms. In particular, role-based improvisational forms known as process drama, Mantle of the Expert, and the Commission Model are used, drawing heavily on the work of Heathcote (1991), Bolton (1999) and others. The links that my co-researchers and I see between these forms and the applied use of digital games technology form the core of this study.
1.1.3 Digital games

This study uses the term *digital games* to broadly describe the applied use of video and computer game conventions, design principles and technologies — particularly in educational or training settings. As with applied drama, there are historical difficulties in defining this field of study and practice. I use the term here as a descriptor that acknowledges the blurring of digital and video games, simulations, virtual worlds, and the use of everyday digital and networked technologies for role-play within an emerging pedagogy known as digital game-based learning.

Within the contemporary global computer and video game industry, the use of games for learning and other overtly non-entertainment purposes (for example, advertising or social commentary) now often falls under the term *serious games*. Squire notes that although this is often used by game developers to describe a potential new market for their products (2007, p. 51), it does not broadly represent the field of games and learning. *Gameification* (or *gamification*) has recently emerged as a term to describe the application of game-like conventions or ‘game mechanics’ to non-game activities, especially for marketing purposes (Brodie, 2011). Examples range from airline frequent flyer schemes, to the collection of virtual merit badges for visiting certain commercial locations.

Digital game production is now a significant global commercial industry, and many of the conventions and principles discussed here are increasingly applied beyond games products for other commercial or persuasive purposes, including advertising, public relations and even military recruitment. When considering the use of digital game conventions in educational contexts it is not my intention to ignore the potential ethical considerations that practitioners and educators face when drawing on the tools and techniques of this industry. Rather, throughout this thesis I will emphasise that these conventions — like those of applied drama — are essentially a content-free framework for action, and they can be applied or adapted using freely available technology as required. Just as applied drama practitioners might use the conventions of theatre to foster social change or education, so too can they co-opt the mechanics underlying digital media forms like games for non-commercial or educational purposes. There are now many
examples of digital game conventions being applied to produce socially aware non-entertainment products, particularly in educational settings.

Shaffer has used the term *epistemic games* to describe the use of games to model professional practice (Shaffer, 2004), and although this study finds this a useful term to consider in specific contexts (see Chapter Seven), it does not capture the wider definitional aspects. Some serious and epistemic games move into territory that educational designers might normally label as simulation. Gredler notes that both games and simulations can be referred to as ‘experiential exercises’ that provide students with unique opportunities to interact with a knowledge domain. However she makes a clear distinction between the two forms, arguing that:

- games are competitive exercises in which the aim is to win against other players, while simulations require students to solve problems in functional roles;
- game sequences are often linear and consistent for different players, while simulations branch out depending on individual responses to different problems; and
- games are generally constrained by rules, though these need not relate to real-world events, and this determines the consequences of student actions. Simulations tend to be based on a set of dynamic relationships among variables which may change over time, and reflect real-world processes (Gredler, 1996).

However I believe that while still useful, Gredler’s criteria for distinguishing between games and simulations are now less definitive than they may have been in 1996, due to the evolution of games technology and digital media forms more generally. Some games products have become more like simulations, and vice versa. 3D online environments and powerful computer generated multiplayer spaces are now commonly associated with video and computer games. In particular, the creation of mediated spaces in which people come together to share practice and interests has rapidly blurred the distinctions between computer-based simulation and digital game.
1.1.4 Affinity spaces

This study is about the development of creative learning spaces infused with technology. In schools, the antiquated design features of the physical space in many cases militates against the collaborative integrated and flexible demands of our current syllabuses not to mention the possibilities that future curriculum holds. In his critique of traditional schooling, James Gee (2004) uses the term **affinity space** to describe the real and virtual places where people come together to share common interests and endeavours. Gee sees a need to make the distinction between a focus on the space and the activities within it, rather than a concentration on the existence of the group itself common to the concept of ‘communities of practice’ (Wenger, 1998b). He suggests:

> ‘an affinity space is a place (physical, virtual, or a mixture of the two) wherein people interact with each other, often at a distance (that is, not necessarily face-to-face, though face to face interactions can also be involved), primarily through shared practices or a common endeavour (which entails shared practices), and only secondarily through shared culture, gender, ethnicity, or face-to-face relationships’ (Gee, 2004, p. 98).

Researchers for the MacArthur Foundation’s Digital Youth project have highlighted that the lives of young people are now experienced within a number of physical and virtual spaces: homes and neighbourhoods, institutionalized spaces, online sites, and interest groups (Ito, Horst, et al., 2008). The emergence of new — sometimes non-physical, non-institutionalized and digitally mediated — spaces in which learning could occur is central to this study. One obvious impact of digital technology on education is the ability to extend the learning beyond the boundaries of the physical space in which it may originally, or ultimately, be enacted. The adoption and adaption of the participants’ everyday technologies such as online social network sites and mobile phones, especially when combined with drama and game conventions, provides opportunities for explorations beyond the physical and temporal constraints of the classroom. Many are exhibiting features of what are now being called ‘blended learning’ approaches (Garrison & Vaughan, 2007) where the most appropriate affordances of physical and virtual presence and participation are combined.

1.2 Research question and objectives

This inquiry seeks to bridge the gap between applied drama and digital games as fields within education research and practice. Its aim is to investigate the shared
and/or converging conventions emerging from these fields, and to develop a critical understanding of the opportunities and obstacles surrounding their application. The sharing of research outcomes through publication and reflection on the research process is also seen as an important aspect of a participatory approach to the research.

One central research question forms the basis for this study: *What are the conventions of applied drama and digital games that lend themselves to affinity spaces?*

Taking into account the broader aims of the study, three specific research objectives are then drawn from this question. They are to:

1. explore the similarities and differences between the conventions of digital games and applied drama;
2. seek to understand the opportunities and constraints for their application in affinity spaces; and
3. report and critically reflect on the story of the action research process for this project.

The key research question and objectives of this study will be revisited in Chapter Three, in the context of defining the central and consistent thematic concern around which the action research revolves.

**1.3 ‘Rip. Mix. Burn’: The researcher as bricoleur in the digital age**

Denzin and Lincoln observe that qualitative inquiry comprises a bundle of skills, assumptions and practices that the researcher employs to ‘put paradigms of interpretation into motion’ (2008, p. 34). They argue that this approach adds rigor and depth to qualitative research, using the metaphor of the researcher as bricoleur — someone who, like a quilt maker, ‘uses the aesthetic and material tools of his or her craft, deploying whatever strategies, methods, and empirical materials are at hand’ (Denzin & Lincoln, 2005a, p. 4) to create a rich and complex inquiry.

For educators applying drama and game conventions in learning contexts, these tools of the craft have inevitably included reflection on their own varied examples
of practice. Stenhouse argues that this is vital, as even though theorising practice is complex and the ‘methodology is subtle and debatable, generalization and summary difficult’ (1975, p. 151), each resulting study is a vivid account that speaks directly to educators. In political terms, Taylor argues that failing to theorise their own practice risks rendering drama educators powerless to shape a curriculum dictated by external agents, because:

’in this instance, the practitioners are not the authorities because they have seemingly avoided a theoretical framework. The theoreticians become those who are removed from the workplace’ (P. Taylor, 1996a, p. 5).

The multi-tasking nature of the qualitative researcher is evident in this thesis. In the collated articles that form the fieldwork phase of this study, a range of methodological practices and strategies are used throughout the investigation and subsequent reflection and publication phases. Also, as described later in this thesis, this multi-tasking nature is reflected in the fact that the projects discussed often overlap, or coincide with other projects not directly part of this study. Like the quilt maker, it is hoped that when viewed as a whole this approach produces a coherent and complete product that moves beyond the different elements used along the way. The central theme of the action research project, described in the research aim and objectives, provides the unifying pattern for my approach to the research over a period of six years.

The bricoleur concept has its roots in cultural studies, for example the works of Simmel (Weinstein & Weinstein, 1991) and Levi-Strauss (1966), and Denzin and Lincoln’s use of the term does not go uncontested (Hammersley, 1992). However, the metaphor of the bricoleur is particularly apt in the digital age, in which the idea of appropriation has become central to many emerging art forms. Apple Computer’s use of the slogan ‘Rip. Mix. Burn’ to promote its iTunes software in 2001 reflects this practice, and the resulting outcry from the recorded music industry also illustrates the way in which it is often problematised as a disregard for intellectual property. Nonetheless, the ability to adapt, remix and repackag digital content is increasingly central to the cultures of participation and creation arising from digital technology, and in particular in the ways in which young or otherwise disempowered people might choose to express themselves through increasingly ubiquitous distributed media channels. In reworking Walter

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1 The television commercial can be seen at http://www.youtube.com/watch?v=4ECN4ZE9-Mo
Benjamin’s analysis of the impact of mechanical reproduction on art forms, Carroll (2005) observes that drama educators and practitioners are well-placed inside the cultural world of learners to observe, adapt to and shape the hybrid forms of live drama and digital expression emerging at the intersections of drama, technology and education.

1.4 Approaching the study

One of the reasons I adopted a bricoleur approach for this study was to address the problem of finding a strategy that could keep pace with changes to and resulting from digital technology. One of the difficulties in conducting a research project that examines the effects of digital technology on theory and practice is that the landscape can shift rapidly. In 1965, Intel co-founder Gordon E. Moore projected that computer processing power was doubling each year, and would continue to do so indefinitely (Wayt Gibbs, 1997). US inventor Ray Kurzweil argues that this exponential nature of change, expressed by what became known as ‘Moore’s Law’, has clear implications for any industry or activity that becomes dependant on these computing technologies, as:

‘most long range forecasts of technical feasibility in future time periods dramatically underestimate the power of future technology because they are based on what I call the ‘intuitive linear’ view of technological progress rather than the ‘historical exponential view.’ To express this another way, it is not the case that we will experience a hundred years of progress in the twenty-first century; rather we will witness on the order of twenty thousand years of progress (at today’s rate of progress, that is)’ (Kurzweil, 2001).

Many aspects of modern life in modern industrialised societies — including drama, play and learning — are now heavily influenced or disrupted by networked digital technology, and Kurzweil’s ‘Law of accelerating returns’ explains the difficulties in attempting to predict or even perceive the rapid changes these will bring.

1.4.1 Agile software development and ‘perpetual beta’

With this difficulty of keeping pace with technological change in mind, while considering a research approach for this study I was initially drawn to some of the ways in which the software development industry has tried to address this issue. In a reaction to what was seen as the unwieldy approach of ‘heavy’ software development at the time, with an emphasis on testing and documentation throughout the process, a number of software developers came together in 2001
and conceived a strategy they dubbed ‘agile software development’, and which they expressed in the following manifesto\(^2\):

> ‘We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

- **Individuals and interactions** over processes and tools
- **Working software** over comprehensive documentation
- **Customer collaboration** over contract negotiation
- **Responding to change** over following a plan

That is, while there is value in the items on the right, we value the items on the left more.’

Two core principles of agile software development are collaboration (within the team, and with the customer) and an iterative approach that encourages measuring progress by continuously rolling out working versions of the product during the life of the project. Agile development is sometimes criticised for being an ideal, rather than a practical method for software development. By placing less emphasis on documentation in favour of a working outcome, it is open to criticisms within the industry regarding its rigor and the ability to share developments more generally. The potential benefits of the agile approach, and some of the criticisms levelled at it, began to sound familiar when I tried to frame this industrial method within common qualitative research strategies in more theoretical circumstances. In particular, there were similarities with critiques of action research methodology that an iterative approach sometimes favours timely addressing of a particular localised problem over more rigorous and generalisable approaches.

A more recent variation of the agile approach is that applied to the continuous development of online media applications, and now sometimes described as a state of ‘perpetual beta’. This notion is borrowed from the term 'beta version', which is used to describe new software that has been disseminated for evaluation or real-world testing prior to final release. Anything that exists in a state of perpetual beta, so the accepted wisdom goes, is ‘developed in the open, with new features slipstreamed in on a monthly, weekly, or even daily basis’ (O’Reilly, 2005). Perpetual beta is a product development approach applied to online technology companies with rapid product research, development and release cycles, such as

\(^2\) Taken from http://agilemanifesto.org/
Google, and suggests that digital content creation and delivery is now a constantly iterative process. While not a research strategy in itself, the concept of perpetual beta was a conceptual link between practice and theory that reinforced my leaning towards a strategy that would incorporate an iterative and adaptive response to reflections on emerging data.

1.4.2 Reflective practice

Moving beyond software and digital development towards more general research approaches I considered Schön's view of the 'reflective practitioner' (Schön, 1983). This is based on the concept of a professional as someone who exhibits 'knowing-in-action' and 'reflecting-in-action', and it has been highly influential in the field of professional education. It is also an important conceptual foundation in some of the applied drama and digital game forms being explored in this study. Knowing-in-action refers to the 'tacit knowledge' that practitioners possess and use, but often cannot express (Schön, 1983, p. 49). This process is underpinned by reflecting-in-action, which is characterised as an ability to spontaneously reflect on action either consciously or unconsciously and adjust practice for the better (Hager, 1996, p. 236). Schön himself realises that reflective practice, when applied to the way in which professionals go about solving technical problems, can at times be 'nonrigorous inquiry' (Schön, 1987, p. 3) when compared to more general demands of a research process in which there is more time to reflect. There is also the question of reflection on action, and how that equates to the seemingly intuitive 'artistry' exhibited by many professionals and characterised by their ability to explain how they do something that is not easily replicated by others.

The solution posed by Schön and others is a research process founded in action, which provides a rigorous means to collect, analyse and interpret data. In short, he believes that action research is the form of research that makes room for the practitioner’s reflection in and on action, as it can:

‘account for and legitimize not only the use of knowledge produced in the academy, but the practitioner's generation of actionable knowledge in the form of models or prototypes that can be carried over, by reflective transfer, to new practice situations’ (Schön, 1995, p. 34).

1.4.3 Action research

Despite developing breadth as a field of research practice and depth as a discourse of theoretical insight over more than half a century since Lewin's early work
(1946), action research ‘does not have one neat, widely accepted definition’ (Altrichter, Kemmis, McTaggart, & Zuber-Skerritt, 2002, p. 125). However, for this study I used the following working definition to describe the strategy of inquiry:

- action research is about people reflecting upon and improving their own practice;
- by tightly interlinking their reflection and action; and
- making their experiences public to other people concerned by and interested in the respective practice (Altrichter, et al., 2002, p. 128).

Despite the definitional problems, action research can be seen as a family of methodologies (Dick, 1991) which simultaneously pursue action (change) and research (understanding), primarily through this cycle of action and critical reflection that leads to a refinement of process and a deeper conceptual understanding of the problem or theme. It is generally agreed that Lewin’s work provides the central pillar of action research — a cyclical process of planning, action, evaluation, re-planning, re-action and so on which, as shown in Figure 1.1, is often represented in a diagram that depicts action research as a self-reflective spiral.

Figure 1.1: The action research spiral (from Kemmis & McTaggart, 1988, p. 11)
However, presentation as a mechanical sequence in this way does not capture the reality of an often fluid process in which the steps may overlap or initial plans are quickly rendered obsolete, and in which success is measured not by participants’ adherence to the model but:

‘rather whether they have a strong and authentic sense of development and evolution in their practices, their understandings of their practices, and the situations in which they practice’ (Kemmis & McTaggart, 2005, p. 563).

Thus it is also important that action research not be seen simply as a way of implementing prescribed objectives, but that it is self-reflective inquiry with a developmental or emancipatory element (Kemmis & McTaggart, 1988, p. 5).

**1.4.4 The CRASP model of action research**

Zuber-Skerritt (1992) proposes the CRASP model for action research, which is:

- **Critical** (and self-critical) collaborative enquiry by
- **Reflective** practitioners being
- **Accountable** and making the results of their enquiry public,
- **Self-evaluating** their practice and engaged in
- **Participative** problem solving and continuing professional development.

Chapter Three examines the CRASP model in detail, and describes the manner in which it has been applied to this study. CRASP operates within the six core action research cycles that form the fieldwork phase of this study, and that structure will now be described.

**1.4.5 Thesis action research and core action research**

One of the attractions to using action research for this thesis is also one of its potential dilemmas. While it enables a collaborative and participatory approach to the research, it can be difficult at times to distinguish between the collaborative project work, and the individual and original contributions to knowledge required of the university thesis (Zuber-Skerritt & Perry, 2002, p. 171). Leitch and Day (2000, p. 185) discuss two forms of action research where the key difference ‘remains their respective starting points — within one, the system, within the other, the individual’. Davis suggests that the systemic form is often clearer to the researcher as it is the focus of the inquiry, while the individual transformations can remain hidden, perhaps up until the personal journey of critical reflection is made more explicit in the thesis writing phase (2004, p. 7). In this study I acknowledge
that there are both systemic and personal aspects to the action research approach, in that it is both outwardly directed toward the social or educational systems surrounding the applied use of drama and game conventions, as well as being focused upon my individual practice as an academic.

To recognise and account for this duality I have adopted Perry and Zuber-Skerritt’s (1992, p. 204) conceptual model of an action research thesis, as shown in Figure 1.2, which accommodates thesis research, fieldwork, and thesis writing as cycles.

![Figure 1.2: The relationship between thesis research, core action research and thesis writing (from Zuber-Skerritt & Perry, 2002, p. 177).](image)

As illustrated in Figure 1.2, the fieldwork phase of this study can be examined more closely as a sequence of action research (AR) cycles that contribute theoretical understanding of practice through an iterative process. In this study, six cycles were completed for the core AR project, each of which used the CRASP model (Zuber-Skerritt, 1992) as a framework for collaborative inquiry leading to scholarly publication and reflection. The application of that model is described more fully in Chapter Three.

Figure 1.2 shows how distinction is made in this study between the independent thesis aspects of the project, and the collaborative and participative core action research elements that comprise the bulk of the fieldwork. The fieldwork consists of a series of publications that draw on a range of contexts and partners, and which
can be grouped together as part of a self-reflective spiral of action and reflection that informs and is informed by the thesis process. Specific elements of this process will now be described as a conceptual outline for how this study was conceived, implemented, and documented.

1.5 Conducting the study

As outlined in Figure 1.2, an action research study conducted as part of a university thesis can usefully be seen as consisting of three interconnected phases: thesis research, the core action research fieldwork, and thesis writing. Table 1.1 provides a map of this study using those stages as a guide. It begins with a thesis-planning stage, which as noted above includes earlier studies I had been involved with, including an applied drama project and my MA (Honours) dissertation work which are discussed in more detail in later chapters.

The core action research project is the fieldwork component of this study, and consists of six cycles of action research. These cycles can be grouped in several ways but I have chosen to represent them as defined by both a time period matching article publication dates from 2004 to 2009, and then also by the topical focus of the research and publication outputs. Other elements of the fieldwork process shown in Table 1.1 are the general research techniques used, and some of the topical literature and theoretical concepts introduced as part of contextualising my evolving understanding of the blend of theory and practice emerging from the work.


<table>
<thead>
<tr>
<th>Thesis research</th>
<th>Core action research project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning:</td>
<td>Conducting preliminary research and publication in the field; preparing initial proposal.</td>
</tr>
<tr>
<td>Fieldwork:</td>
<td>Action/observation elements</td>
</tr>
<tr>
<td>Cycle</td>
<td>Year</td>
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<td>-------</td>
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| 1     | 2004 | Initial investigation into learning discourses in video games begins, using researchers as players. The use of participant observation approach to game play highlights emerging methodological issues for game studies. Observations continue, with examination of both learning discourses and methodological issues. Reflection occurs through scholarly publication of a journal article. | • Participant observation  
• Performance ethnography  
• Reflexive interview  
• Reflection and publication | • Crisis of representation (Denzin, 1997b)  
• Digital natives (Prensky, 2001b)  
• Ergodic texts (Aarseth, 1997)  
• Flow (Csikszentmihalyi, 1990)  
• Frames (Goffman, 1974)  
• Learning discourses (Gee, 2003)  
• Pre-text (O’Neill, 1995)  
• Role conventions (Carroll, 1986) |
| 2     | 2005 | Reflection and re-planning shifts focus to examination of links between role conventions in live and mediated performance. Project continues to explore participatory research methodology for studying digital games. Reflection occurs through scholarly publication of a journal article. | • Participant observation  
• Performance ethnography  
• Reflexive interview  
• Reflection and publication | • Literacy (Eskelinen, 2001; Goleman, 1995; Kress, 2003)  
• Enacted role/identity (Boal, 1995)  
• Interactive drama (Laurel, 1991; Mateas, 2004; Ryan, 1997)  
• Learning spaces (Gee, 2003)  
• Open text (Eco, 1989)  
• Process drama (Bolton, 1999; Bowell & Heap, 2001; Haseman, 1991; Heathcote, 1991)  
• Attitudinal role (Carroll, 1988) |
| 3     | 2006 | Reflection and re-planning shifts focus to digital pre-text. The project moves to a conceptual re-examination of two existing applied case studies of digitally transformed pre-text and role-based engagement with professional practice. Reflection occurs through scholarly publication of a book chapter. | • Case study analysis  
• Critical reflection and theoretical conceptual analysis  
• Collection and analysis of project artefacts  
• Reflection and publication | • Applied drama/theatre (Ackroyd, 2000; Nicholson, 2005)  
• Dramatic property (Sutton, 2009)  
• Liveness (Auslander, 1999)  
• Mediated learning communities (Carroll, Anderson, & Cameron, 2006)  
• Pre-text conventions (P. Taylor, 1995)  
• Situated role (Carroll, et al., 2006)  
• Virtual characters (Murray, 1997; Perlin, 2004) |
| 4     | 2007 | Reflection and re-planning shifts focus to specific links between representative applied drama and game forms of Mantle of the Expert and epistemic games. The project notes the creation of authentic situated learning opportunities through engagement with communities of practice. Reflection occurs through scholarly publication of a refereed conference paper. | • Theoretical conceptual analysis  
• Reflection and publication | • Commission Model (Heathcote, 2003)  
• Communities of practice (Wenger, 1998b)  
• Epistemic games (Shaffer, 2006)  
• Mantle of the Expert (Heathcote & Bolton, 1995)  
• Situated learning (Lave & Wenger, 1991) |
1.6 Data collection, analysis and interpretation

As this study consists of a series of academic articles produced in cycles over the course of six years, it was necessary to find a general method that would provide a structure for using writing and publication as a means of exploring and creating theory and practice. As acknowledged above, an action research thesis by its nature shifts between individual reflection and collaborative interaction throughout the planning, fieldwork and writing stages. The individual chapters in this thesis will describe a range of data collection and interpretation methods used in the context of the cycles of action research. These include participant observation, reflexive interviewing, field notes on events and procedures, scholarly publication as reflexive practice, and the collection of project outputs and artefacts in a range of media forms. However, as a general method for combining data collection, analysis and the presentation of interpretation through publication I have adopted autoethnography as a means for ‘setting the scene, telling a story,
weaving intricate connections among life and art, experience and theory, evocation and explanation’ (Holman Jones, 2005, p. 208).

Although autoethnography can take many forms under many labels, at its heart is the notion of a ‘self-narrative that critiques the situatedness of self with others in social contexts’ (Spry, 2006). Although self-narratives may tend to focus on genres relating to often powerful and deeply autobiographical storytelling, Chang observes that autoethnography is a broad method that does include work of an ‘analytical and interpretive’ rather than descriptive nature (2008, p. 31), and that it does not have to be concerned with the emotive personal contexts of the ‘sensitive realm of private life’ (2008, p. 51). In arguing that autoethnography must be ‘good writing’, Spry does not exclude writing in an academic genre, though she does emphasise the potentially transformative power of literature over the production of generalisable findings (Spry, 2006, p. 191).

The potential benefits and pitfalls of autoethnography as an overall method for this study are discussed further in Chapter Three.

1.7 Significance of the study

One of the significant outcomes of this study is the creation of a model for an action research thesis that incorporates a compilation of publications as the fieldwork. The blending of thesis and core action components in this compilation model, formed around an autoethnographic approach that recognises academic writing as a form of scholarly self-narrative offers a useful model for other social science researchers.

The study also has significance in its transformation of my own understanding and practice as an educational practitioner, which I believe also could be transferred to the work of other practitioners in the fields of education, drama and digital games.

1.8 Thesis structure

In his analysis of academic thesis and dissertation structures Paltridge (2001) finds a gap between published advice and actual practice, heightened by considerable variation in expectations across disciplines, fields of study and
supervisors. Moreover, practice in fields such as the humanities and social research is dynamic, and thus:

‘in some areas of study, theses and dissertations may be theorised, researched, and written up, in quite different ways from how they might have been in the past’ (Paltridge, 2001, p. 126).

This thesis builds on a the ‘traditional-complex’ model described by Paltridge (2001), which combines the ‘IMRAD’ (introduction - methods - results - discussion) approach described by Dudley-Evans (1999) with the complex macro-structure identified by Thompson (1999) which typically features an introduction, a review of the literature, a general methods section, a series of sections reporting on individual studies, and a general conclusion.

However, this thesis also utilises Dong’s (1998) compilation model, by substituting a series of published research articles for the individual studies. I feel this best fits the context of this thesis as a reflection on the inquiry and practice I have been involved in for more than a decade, written as much for an audience of my peers as ‘for admission to the academy’ (Paltridge, 2001, p. 132). This structure presents individual articles with their own literature reviews and framed with their own introductions and concluding sections, and thus overall they contain ‘much less writing that seems to serve the purpose of merely displaying the author’s knowledge’ (Boote & Beile, 2005, p. 10).

While observing that this structure is more common in the ‘hard’ sciences than in the humanities and social sciences, Duke and Beck (1999) argue that educational research could benefit from an approach to dissertations built on sharing knowledge with a wider audience (beyond an examination panel), and the development of more generalized writing and research skills beyond the traditional dissertation genre.

Using such a compilation model, this thesis features an introduction to the topic and context of this study (Chapter One), a literature review to provide a theoretical base for the thesis topic and questions (Chapter Two), and a general methodology discussion to provide a theoretical framework for the conduct of this study (Chapter Three). It then contains an exegesis section that presents a series of self-contained scholarly articles produced during a sequence of six action research
cycles, and linked through a central research question and objectives (Chapters Four to Nine). The thesis ends with a general conclusion section (Chapter Ten).

1.9 Summary of the chapter
In the introductory chapter to the thesis I have established the pre-text for conducting a study that explores the connections between forms of digital games and applied drama, and the development of new affinity spaces for creative learning. I have established the specific research questions to be investigated in the study, and described the bricoleur approach to an iterative publication-based model of research that attempts to keep pace with the perpetual beta nature of technological change. I have established the need for a reflective action research methodology, and described the particular CRASP model I will use in this study. I have also considered how thesis research, the core action research project, and thesis writing operate as three phases in this study. At Table 1.1 I have provided a map of these phases, with reference to the action and observation elements, the research strategies used, and the theoretical concepts introduced in each publication. Finally, I have provided an argument for adopting a thesis structure that is based on critical review of publications produced during the action research cycles.

In Chapter Two, I will provide a brief review of the literature that provides a theoretical foundation for this study.
2. CHAPTER TWO

Literature Review

2.1 Introduction

As described in Chapter One, the structure of this thesis presents individual scholarly publications with their own literature reviews, and framed with their own introductions and concluding sections. The peer-reviewed publication forms represented are journal articles, a conference paper included in published proceedings, and book chapters. As will be detailed in the exegesis section of this thesis comprising Chapters Four to Nine, these publications trace the research I was engaged in around the central theme of combining digital games and applied drama conventions to facilitate learning. These articles share common connections to the relevant research literature, and these are described and explicated through the individual literature reviews contained within each chapter of the exegesis. Therefore, the purpose of the general literature review in this chapter is to provide a brief overview of the key areas covered by the research topic, and to illustrate the gaps in the literature I intend to address in this study.

2.2 Digital games for learning

*Digital games* is an umbrella term used to describe the range of interactive digital media applications broadly known as computer and video games. This study is concerned with the conventions that operate in examples of these products, and their application in settings beyond entertainment — particularly in educational contexts. At times the term is expanded to encompass digital media forms exhibiting or affording game-like activities, such as online or social media and mobile technology, because many of the conventions described are common to these digital media platforms whether they are used for entertainment or educational purposes. The development of social gaming through online connectivity, and the creation of fan communities for sharing player-generated content places digital games within what might be called the ‘participatory media’ (Jenkins, et al., 2006) cultural forms enabled by networked digital technology.

The use of computer and video games for learning and other overtly non-entertainment purposes is now often placed under the paradoxical term *serious*
games. Squire notes that although this is often used by game developers to describe a potential new market for their products (2007, p. 51), it does not necessarily represent the field of games and learning. Prensky uses the term *digital game-based learning* as the title of his influential book (Prensky, 2001a), though many of the products he describes are very much at the expensive end of corporate training and business simulation. Shaffer has used the term *epistemic games* to describe the use of games to model professional practice (Shaffer, 2004), and this study explores this form in depth. Shaffer (2005), Gee (2005) and others discuss epistemic games as part of a discourse surrounding computer and video games, and although the principles they describe are not necessarily limited to these digital forms, they see computer technology as opening up much wider possibilities for authentic learning experiences through their ability to model real-world processes (Shaffer, 2006). Beyond these representational aspects, they see the potential to create learning environments that situate students within a virtual professional community of practice. This places serious and epistemic games into territory that educational designers might normally label as simulation. (Gredler, 1996), though the technical distinctions are less clear after some 15 years of evolution in digital technology. In particular, the creation of 3D virtual worlds and other mediated spaces in which people come together to share practice has rapidly blurred the distinctions between computer-based simulation and digital game.

### 2.3 Applied drama

*Applied drama* is also a broad classification, though it is a contested term among practitioners and researchers. Nicholson argues that the terms ‘applied drama’ and ‘applied theatre’ should not be viewed in opposition to the concept of ‘pure’ drama as an art form or the theatre as a specialized performance space, but rather as a set of cultural and theatrical practices ‘...that are motivated by the desire to make a difference to the lives of others’ (Nicholson, 2005, p. 16). Ackroyd raises concern at the ‘evangelical frame’ (2007) of this shared ‘belief in the power of the theatre form to address something beyond the form itself’ (Ackroyd, 2000), and especially a marginalisation of educational drama within the discourse. The ‘intention to transformation’ (P. Taylor, 2003, p. 37) implied in the applied theatre discourse ‘risks being evangelical: the participants in applied theatre become objects’ in the process, and this raises ethical concerns (Shaughnessy, 2005, p. 209).
In the setting of this research, applied drama is used to describe the use of dramatic conventions for non-entertainment, and therefore mostly non-theatrical, purposes — and, most directly, those grounded in the educational field. I have also used the term because of an early tendency in the emerging games studies discipline to confuse the principles and aesthetics of drama and theatre. Seminal works on digital interactivity considered the ‘computer as theatre’ (Laurel, 1991), such that ‘computers are providing us with a new stage for the creation of participatory theatre’ (Murray, 1997, p. 12). However, a difficulty in creating a conceptual link to the theatre at that time was that the digital technology was not able to replicate the theatrical experience. Games researchers dismissed most attempts to generate ‘interactive drama’ and virtual actors, and instead turned to more superficially similar screen-based narrative forms such as cinema, and so ‘the videogame industry became closer to Hollywood and not to Broadway’ (Frasca, 2001, p. 17). This study seeks to bridge the remaining conceptual gap between the conventions of digital games and those of non-theatrical drama forms, particularly when both fields are applied to non-entertainment settings.

2.4 Forms and conventions

In these educational contexts, applied drama is expressed through a variety of methods, principles and sets of conventions which themselves are collected under an assortment of terms. This thesis focuses on the role-based improvisational forms known as process drama, Mantle of the Expert, and the Commission Model. Firstly, process drama is a form of non-theatrical role-based drama with a history that goes back to the middle of the twentieth century and emerges from the educational drama work of Haseman (1991), Heathcote (1991), O’Neill (1995), Bolton (1999), Bowell and Heap (2001) and many others. As the name implies, it sees the process of performance as being the learning objective rather than the actual product. It is a form of improvised drama, situated in a specific context, which develops a performed dramatic narrative without a script or an external audience. It is lived at life-rate and operates from a discovery-at-this-moment basis rather than being memory-based (Bowell & Heap, 2001, p. 7), such that participants interact in role but do not have to act in character. The narrative, tensions and drama unfold in time and space through action, reaction and interaction without the use of a pre-written textual script. A characteristic of this
and related forms is that the teacher moves in and out of role as required, ‘bestriding the two worlds of fiction and reality’ (Heathcote & Bolton, 1995, p. 30).

Mantle of the Expert (Heathcote & Bolton, 1995, p. 15) extends process drama into a dramatic form in which the participants assume a role of professional expertise to run an imagined enterprise for a client. Heathcote argues that this process takes time in both the real and imagined worlds of the learner, and feels the term expresses the dual layers in which:

‘expert means opportunity to work at knowledge and master the skills. Mantle means I declare my calling and live up to what is expected of me in the community’ (Heathcote, 2002, p. 3).

Using the term ‘enactment of the expert’, Hughes (1992) seeks to emphasise the teacher’s role in providing scaffolding and contexts for the students to create and sustain their own expertise, rather than transferring the mantle of expertise as a ‘gift’ to the student. Ideally, the application of Mantle of the Expert as a drama strategy will allow students to become characters endowed with specialist knowledge that is relevant to the situation; that situation will usually be task-oriented; the power and responsibility moves from teacher to student; and the learners feel respected by having expert status (Neelands & Goode, 2000, p. 34).

A further development of this technique is now occurring in applied drama where the dramatic conventions of Mantle of the Expert are combined with online communities of practice (Wenger, 1998b) and situated learning (Lave & Wenger, 1991) to provide participants with access to professional areas of expertise. It is an approach which emphasizes ‘involvement, participation and engagement’ (Nicholson, 2005) in the dramatic context. A more recent extension of Mantle of the Expert’s principles to include real clients can be seen in Heathcote’s description of what she calls the Commission Model:

‘It will work like this. The work of the staff and students will be that of responders to commissions sent to them from the community. The commissions will make precise demands and will have a built-in time structure so that on the commission being accepted an allowance of time and resources will be decided. The work and results of the commissions will always be brought to a publication which can vary according to the nature of the commission’ (Heathcote, 2002, p. 9).
In a case study recorded in *A Vision Possible: The Commission Model of Teaching* (Heathcote, 2003) a community of students was charged (commissioned) with the responsibility of designing a real garden of a newly completed hospital in the UK. The Commission Model provides a sense of authenticity and responsibility precisely because although it is dramatically framed there are real clients with real requirements, and the final work is ‘published’ and hopefully acted on to produce ‘rigour, responsibility and realisation’ (Heathcote, 2002, p. 9).

These applied drama forms, and digital game forms such as epistemic games, share common ground with attempts to provide learning that is situated in real-world practice, with authentic activities (Brown, Collins, & Duguid, 1989) and problems for the learners to engage with. The focus on professional problem-solving links these forms with educational strategies such as cognitive apprenticeship (Collins, Brown, & Newman, 1989), which attempts to make visible to the novice the invisible cognitive processes of the expert. There has been some exploration of using technology with that model in ways that make use of games or simulations (Parkes & Muldoon, 2010). One of the aims of this study is to examine the role that digital technology and game conventions might play in helping educators achieve the goals of these drama strategies within or beyond the parameters of traditional education settings.

This study is about the adoption, adaptation and application of *conventions*. I use this term to broadly describe indicative models or examples based on common practice within the disciplines being discussed, primarily applied drama and digital game development. I do not mean to imply that conventions are prescriptive standards, and as Heathcote and Bolton suggest drama practitioners often draw upon a series of guidelines ‘rather than “steps” because they are not meant to suggest a particular order of doing things’ (1995, p. 28). Bowell and Heap use the term ‘drama strategies’ to include ‘focus, metaphor, tension, symbol, contrast, role, time and space’ (2001, p. 85), which they emphasise are shared by all forms of theatre. Neelands and Goode suggest that ‘conventions are indicators of the way in which time, space and presence can interact and be imaginatively shaped to create different kinds of meaning in theatre’ (2000, p. 4).

One of the drama conventions that helps shape the imaginative interactions considered in this study is that of *pre-text* (O’Neill, 1995), which serves to activate
the meanings that are inherent in the dramatic content and helps to establish the
location, roles and situation of the drama. The imaginative power of the dramatic
pre-text is that it can provide infinite imagined roles and places for exploration,
even within the physical context of a classroom (Bowell & Heap, 2001, p. 28). Pre-
text builds a ‘past, present and future’ (Heathcote & Bolton, 1995, p. 30) which
helps to frame the participants in a clear relationship with the potential action of
the drama, and defines the nature and extent of the dramatic world. In digital
games, a range of conventions operate to perform a similar function, even
including the promotional and packaging materials, with ‘a story on the package, in
the manual, or somewhere else, placing the game in a larger story’ (Juul, 1999, p.
40). One of the intentions in this study is to consider how pre-text can be enhanced
through the use of digital media forms, and especially by connecting learners with
real communities of practice, and thus begin to explore some of the gaps in the
literature of applied drama created by the rapid emergence of networked digital
technologies. Conversely, the field of digital game studies could benefit from an
understanding of the concept of pre-text as a process in which players are rapidly
immersed into the dramatic frame of the game.

The use of a performance frame is another dramatic convention in which the
participant is operating as if the situation is real. This creates a ‘doubled reality’ in
which the ‘as if’ frame of the drama or game takes place in the ‘as is’ frame of
reality, making it possible to hold multiple 'IS+IF' frames simultaneously and move
between them (Edmiston, 2003, p. 223). Gee also notes that we all exist in a
‘lifeworld domain’ in which we act as ‘everyday’ people and not as ‘specialists’ in a
domain of knowledge, including video games (Gee, 2003, p. 36). The concept of
adopting a dramatic role and a separate identity has also been widely incorporated
into everyday culture, from Goffman’s use of frame analysis (1974) to Goleman’s
notion of emotional intelligence (1995). It has been adopted for education and
training, as well as computer studies (Turkle, 1995). It is also a central concept in
the analysis of digital environments such as virtual reality spaces, online chat
rooms and video games (Ryan, 2001). Similarly, framing becomes a crucial
convention in epistemic games, which distil the ‘as if’ quality to give students an
appropriate and authentic worldview with which to view, explore, define and solve
problems, for:
'an epistemic game is a game that deliberately creates the epistemic frame of a socially valued community by re-creating the process by which individuals develop the skills, knowledge, identities, values, and epistemology of that community’ (Shaffer, 2006, p. 164).

The performance frame for both drama and video games allows for a structure that protects the participants in their dramatic involvement with and within the emerging narrative. The concept of penalty-free behaviour reflects what psychologist Eric Erikson (1968) has called a psychosocial moratorium, and which James Gee (2003, p. 62) sums up as ‘a learning space in which the learner can take risks where real-world consequences are lowered’. The role conventions operating in the performance frame are discussed in this study using the terms role protection and role distance (Carroll & Cameron, 2005), which describe the degree to which this penalty-free role position is created and maintained in relation to an emotional distance from the heart of the drama or game. At one end there is full role with minimal protection, at the other there is complete protection by dropping the role completely and stepping away from the game or drama. This in-role/out-of-role episodic nature of applied drama and digital game play is another convention operating within the performance frame, and this thesis aims to more fully document the connections between live role-based performance in applied drama and mediated performance in digital games.

Game designers often use the term ‘game mechanics’ to describe conventions or elements common to many digital games, though the term describes the interactions made possible, not just mechanical actions (Crawford, 1982). These conventions are essential, as:

‘a game’s core mechanic contains the experiential building blocks of player interactivity ... The core mechanic is the essential nugget of game activity, the mechanism through which players make meaningful choices and arrive at a meaningful play experience’ (Salen & Zimmerman, 2004, p. 317).

Game mechanics transfer the formal system of computer codes and rules into an experiential system for the player. As games are a complex and subjective experience there is no universally accepted taxonomy of these game conventions; they are ‘the core of what a game truly is. They are the interactions and relationships that remain when all of the aesthetics, technology, and story are stripped away’ (Schell, 2008, p. 130). He lists six game mechanics as:
1. space, the mathematically constructed abstract place(s) than can exist in a digital game;
2. objects, the ‘nouns’ within the space such as props, tokens, characters. Objects will have attributes, which are categories of information about the objects, and states, which are the current values of those attributes. For example, a game might include a car object, with a speed attribute, and a current state of 100kph.
3. Actions are the ‘verbs’ that define what players can do in the game;
4. Rules define the above mechanics and establish goals for the player; and
5. Skill is a mechanic focused on the player rather than the game, and which provides the challenge that makes the game interesting. One goal is to create ‘optimal experience’, or ‘flow’ (Csikszentmihalyi, 1990). Flow in the design of digital games is the convention of matching increasing skill levels with progressive challenges, ideally so that the player doesn’t feel too anxious about failure, or too bored with success.
6. Chance is Schell’s final game mechanic, which draws on both mathematical models of probability and the unpredictability of human interaction, to introduce a challenging uncertainty into the operation of these mechanics (Schell, 2008, pp. 130 - 169).

As noted earlier, this study’s use of digital games as a category sometimes extends to include digital media forms based on online and mobile technology, many of which exhibit game-like behaviours or integrate play into a range of otherwise non-entertainment activities. Sutton (in Shaughnessy, 2005, p. 208) notes that the appropriation of the ‘conventions, techniques and technologies’ of media to create drama, and vice versa, is now part of working with a hybrid literacy form familiar to young people. When discussing digital game conventions in this study, the conventions of digital media more generally also apply. Feldman (1997) argues that all digital information is manipulable, in that the data can be changed and adapted from the moment it is created or captured. Manovich relates this to the programmable and infinitely variable nature of the digital content produced in these new media forms, and also notes that this manipulation can be automated to occur without human action (2001, pp. 27-31). Boyd notes that a combination of mediatisation and online networking creates additional properties of persistence
and searchability, as digital content can be archived for posterity and discovered through search tools (Boyd, 2008a, p. 126)

Digital content is also networkable, as it can be shared and exchanged by large numbers of users simultaneously (Feldman, 1997). This creates ‘invisible audiences’, as it can be impossible to know who will access distributed content (Boyd, 2008a, p. 126). Its modular nature also allows it to be aggregated or assembled into larger objects (Manovich, 2001). Digital data is dense, as large amounts of information can be stored in a small physical space such as a DVD or hard drive, and compressible, in that information can be made to fit into narrow distribution channels and then decompressed (Feldman, 1997). Digital media content is also impartial, as computer systems don’t care what the ones and zeroes actually represent and thus content can be multimedia (Feldman, 1997, pp. 3-8). Manovich argues that this content is also transcoded from human cultural forms, to forms that are more readily organised and understood by computers (Manovich, 2001). Boyd notes that networked content is replicable, to the point where it is impossible to distinguish original from copy (Boyd, 2008a, p. 126).

All of these digital media conventions have implications for the creation of hybrid forms of applied drama and digital games in order to take into account the everyday technologies embedded in the lives of today’s learners. The conceptual and practical issues of developing digitally enhanced pre-texts for drama, or using role-based conventions in educational games, form a gap in the literature that this thesis will address.

2.5 Affinity spaces

This study is about the application of conventions and the development of creative learning spaces infused with or generated through technology. Gee (2004) uses the term *affinity space* to describe the real and virtual places where people come together to share common interests and endeavours. This relates to the concept of virtual or distributed ‘communities of practice’ (Wenger, 1998b) though Gee sees a need to make the distinction between a focus on the space and the activities within it, rather than a concentration on the existence of the group itself:

‘an affinity space is a place (physical, virtual, or a mixture of the two) wherein people interact with each other, often at a distance (that is, not necessarily face-to-face, though face to face interactions can also be
involved), primarily through shared practices or a common endeavour (which entails shared practices), and only secondarily through shared culture, gender, ethnicity, or face-to-face relationships' (Gee, 2004, p. 98).

Flew (2002, p. 98) suggests that the development of home-based games consoles like PlayStation and Xbox ‘has drawn attention to the importance of developing media forms based around engagement and distraction, that draw the user away from “reality” into a new thoroughly “mediatised” space’. These ‘media-liminal spaces’ become places where ‘differences can be played out that could not be played out in normal social routines’ (Balnaves, Hemelryk Donald, & Shoesmith, 2009, p. 271), allowing young people to explore roles and identities in ways not possible in real life. Researchers for the MacArthur Foundation's Digital Youth project have also highlighted that life is now experienced within a number of physical and virtual spaces: homes and neighbourhoods, institutionalized spaces, online sites, and interest groups (Ito, Horst, et al., 2008).

The emergence of new — sometimes non-physical, non-institutionalized and digitally mediated — spaces in which learning could occur is central to this study. One obvious impact of digital technology on education is the ability to extend the learning beyond the boundaries of the physical space in which it may originally, or ultimately, be enacted. Computers are capable of representing real or fictional worlds through video games and virtual reality software, and give learners:

‘access to new worlds: to parts of the real world that are too expensive, complicated, or dangerous for them except through computer simulations, and to worlds of imagination where they can play with social and physical reality in new ways’ (Shaffer, 2006, p. 11).

The distinction between real and imagined is an important consideration. Edmiston observes that while process drama creates a shared fictional space ‘the imagined world does not replace the everyday classroom world, but rather begins to be created alongside the everyday world’ (2003, p. 222) and participants move between them as needed. Ahdell and Andresen (2001, p. 68) also identify the ‘drama effect’ of educational software, by which users are still engaged in the learning experience, regardless of how ‘real’ the elements are, because they are aware of the distinction between computer-generated and real spaces. This representational power of computers is apparent on many levels in these affinity spaces.
However, it is important to note that these affinity spaces are not limited to graphically rich virtual worlds. Some of the digital media forms considered as spaces for drama in this study include email and other text-based publication and communication channels for example. Although concentrating his analysis on 3D game spaces, Nitsche notes that a game is experienced in a ‘fictional space that lives in the imagination’ of the player as well as in mediated and physical spaces (Nitsche, 2008, p. 16). The history of digital games and virtual worlds includes popular text-based spaces such as Multi-User Dungeons (MUDs). The adoption and adaptation of the participants’ everyday technologies such as online social network sites and mobile phones, especially when combined with drama and game conventions, also provides opportunities for explorations beyond the physical and temporal constraints of the classroom. Many affinity spaces are exhibiting features of what are now being called ‘blended learning’ approaches (Garrison & Vaughan, 2007) where the most appropriate affordances of physical and virtual presence and participation are combined. How the conventions of applied drama and digital games merge with real communities of practice to create affinity spaces is one of the new areas of understanding to be developed in this study.

2.6 Summary of the chapter
The general literature review in this chapter has provided a brief overview of the key areas covered by the research topic, particularly digital games and applied drama in learning contexts, and the concept of affinity spaces. It has illustrated the gaps in the literature to be addressed by this study.

In Chapter Three I will describe the methodology for this study, which takes a participatory inquiry approach to social science research.
3. CHAPTER THREE
Methodology

3.1 Introduction
In this chapter I detail the conceptual framework for this study. Creswell (2003, p. 6) describes five characteristics of social science inquiry through which:

‘philosophically, researchers make claims about what is knowledge (ontology), how we know about it (epistemology), what values go into it (axiology), how we write about it (rhetoric), and the processes for studying it (methodology)’.

Accordingly, in this chapter I describe the participatory inquiry qualitative research paradigm for this study based on ontological, epistemological, methodological and axiological questions. Although the study consists of a series of research cycles that produce separate outcomes and publications, the underlying paradigm describes the beliefs and principles that give shape and unity to the study overall. This frames deeper consideration of the strategy of inquiry directing the conduct of this research, which is discussed in the context of action research principles. This leads to discussion of the overarching autoethnography data collection method used in this study. Finally, the chapter examines the use of an exegesis as a rhetorical form to disseminate the findings of social science research as a self-narrative. The exegesis is positioned within the boundaries of an action research project conducted in the context of a university thesis.

3.1.1 Research question and objectives
As I outlined in Chapter One, my central research question for this study is:

What are the conventions of applied drama and digital games that lend themselves to affinity spaces?

The three specific research objectives I set for this study are to:

1. explore the similarities and differences between the conventions of digital games and applied drama;
2. seek to understand the opportunities and constraints for their application in affinity spaces; and
3. report and critically reflect on the story of the action research process for this project.

3.2 A qualitative research paradigm of participatory inquiry

References to a paradigm in scientific inquiry stem from Kuhn's (1962) assertion that any scientific community will share a set of beliefs, values or techniques that will guide the types of problems explored and the solutions that are accepted. Five key paradigms shaping inquiry can be characterized as positivism, postpositivism, critical theory, constructivism (Guba & Lincoln, 1994, 2005) and participatory inquiry (Guba & Lincoln, 2005; Heron & Reason, 1997). Guba observes that paradigms are everywhere in our daily lives as 'a basic set of beliefs that guides action, whether of the everyday garden variety or action taken in connection with a disciplined inquiry' (1990, p. 17).

Qualitative paradigms in applied drama research may be distinguished from everyday assumptions through a reflexive and self-conscious decision ‘to intentionally place our attention and bring assumptions to the foreground instead of keeping them in the background’ (Grady, 1996, p. 60). Similarly, in the relatively new field of digital game studies Aarseth argues that while a game scholar may have a number of reasons for undertaking analysis, ‘critical self-awareness, in whatever form, should always be practiced’ (2003, p. 7).

For this study, I was primarily operating within the highly self-reflective worldview of a participatory inquiry model in which:

‘the participative mind … articulates reality within a paradigm, articulates the paradigm itself, and can in principle reach out to the wider context of the paradigm to reframe it’ (Heron & Reason, 1997).

The paradigm for this study is formed from my conscious decision not to follow the positivist and postpositivist ‘preoccupation with the measurable’ (Greene, 1996, p. xv) that has driven discussion and policy decisions about the place of drama in the curriculum in many Western countries, and which has arguably hampered the emergence of a research culture in educational fields more generally considered artistic or practice-based. My adoption of a participatory paradigm also pushes back against what I see as a heavy positivist critique of digital game-based learning, typified by demands for tests under controlled conditions and a disregard
for qualitative research methods, and which persists in learning design research despite being a short-term view ‘that has long been critiqued for how it privileges certain perspectives while missing others — and also failing to explain why particular findings are so’ (Squire, 2007, p. 51).

Although it is somewhat arbitrary to view their development as a ‘progress narrative’ (Denzin & Lincoln, 2005a, p. 20), the history of qualitative paradigms in both game-based learning and applied drama research can be traced as part of a trend towards greater awareness of the need for self-reflexivity in the positioning of the researcher, and increased attention to the social dynamics operating within the research process. This parallels broader adoption of qualitative fieldwork methods derived from anthropology to explore the cultures of social groups and behaviours of individuals within educational settings, growing from ‘the professional realisation that human endeavours such as the arts, or teaching and learning, stretch well beyond the reach of technocratic yardsticks’ (Tickle, 1987, p. 11).

Taylor’s description of what he calls the rebellious and revolutionary turn away from ‘scientism’ in drama and arts educational research points to the growing adoption of critical theory and constructivist positions to acknowledge and accommodate ‘the transformatory capacity of the artform to release us into new forms of experiencing, new modes of rendering’ (1996a, p. 11). Part of the ‘release’ possible in these approaches is from the power relationships in positivist models that require objectification of the research subject. Carroll argues that critical and transformative research in drama education can expose and modify these relationships and accommodate the tensions, contradictions and conflicts between the dualist view of an objective ‘reality’ and the relativist view of a subjectively constructed world (Carroll, 1996, p. 76).

This research is about the possibilities and opportunities that digital game and applied drama conventions bring to educational contexts. I have adopted a self-reflexive paradigm of participatory inquiry underpinning a practice-based research model to explore the application of drama and digital game conventions in educational settings.
3.2.1 The ‘paradigmatic baggage’ of this study

As Grady notes in relation to the conceptual frameworks used in drama education research:

‘obviously some theories come with a good deal of ‘paradigmatic baggage’ and some are fluid enough to be read through several different filters and/or in tandem with other theories’ (Grady, 1996, p. 65).

In game studies, Aarseth notes that the multi-disciplinary nature of a relatively new field also brings a blend of different paradigms to the research as:

‘we all enter this field from somewhere else, from anthropology, sociology, narratology, semiotics, film studies, etc, and the political and ideological baggage we bring from our old field inevitably determines and motivates our approaches’ (Aarseth, 2001).

The blurring of genres and the application of several theoretical filters in this study is considered later in this chapter at section 3.4, but the participatory inquiry paradigm shaping this research is now discussed in terms of its ‘baggage’, or taxonomical features. Guba has suggested that the claims to legitimacy of any research paradigm can be characterised by its proponents’ responses to three basic questions regarding ontology, epistemology and methodology:

**Ontological**
What is the nature of the ‘knowable’? Or, what is the nature of ‘reality’?

**Epistemological**
What is the relationship between the knower (the inquirer) and the known (or knowable)?

**Methodological**
How should the inquirer go about finding out knowledge? (1990, p. 18).

In later work, Guba and Lincoln consider the need for a fourth philosophical dimension to account for the role of ethics and human spirituality in research paradigms. Features they had originally outlined as values are now brought forward as ‘more correctly, axiology (the branch of philosophy dealing with ethics, aesthetics, and religion)’ (2005, p. 200). Their revision is influenced by the emergence of the participatory inquiry paradigm which seeks to account for those richer and ‘more pervasive influences on cognition and perception: moods, myths,
and metaphors’ (Ogilvy, 2002, p. 120) that drive the human desire for knowledge. As a result, an additional question can thus be posed when considering an appropriate research paradigm:

_Axiological_

What is the intrinsic value of knowledge?

I will now examine each of those four questions in terms of the participatory inquiry paradigm, and its relationship to this study.

### 3.2.1.1 Ontology: subjective-objective co-creation

Table 3.1 shows the ontological positions of the five basic research paradigms according to Guba and Lincoln’s taxonomy (2005). Claims about knowledge in the application of both digital games and applied drama in educational settings have traditionally been interrogated from a positivist view of what constitutes scientific research. This paradigm became so broadly accepted as the valid filter for disciplined inquiry that ‘in fact, most people assume that the positivist approach is science’ (Neuman, 2006, p. 81). The positivist and postpositivist paradigms therefore provide the backdrop against which alternative perspectives operate (Denzin & Lincoln, 2005b, p. 184) and it is useful and relevant to begin the process of describing this study by setting out some similarities and differences in ontology.

Table 3.1: Ontology of research paradigms (after Guba, 1990; Guba & Lincoln, 2005, p. 195; Heron & Reason, 1997).

<table>
<thead>
<tr>
<th>Positivism</th>
<th>Postpositivism</th>
<th>Critical Theory</th>
<th>Constructivism</th>
<th>Participatory</th>
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</thead>
<tbody>
<tr>
<td>Reality consists of knowable &amp; universal natural laws.</td>
<td>Reality consists of universal natural laws that may be unknowable.</td>
<td>Reality consists of universal laws which may be unknowable, and which are seen through the lens of values that can change over time.</td>
<td>Reality exists as multiple individual and social constructions that are relative and ever changing.</td>
<td>Reality is a subjective-objective co-creation, generated by the interaction of the mind and the cosmos.</td>
</tr>
</tbody>
</table>

Although in this research I focus on the conventions of digital games and applied drama, these are not put forward as universal truths and nor are they seen solely as the product of my internalised values or mental constructs. Carroll argues that ‘in drama research the participants are knowing subjects within their cultural context and they can construct dramatic narratives about the world drawn from their personal experience and imagination’ (1996, p. 76). Although arguing for a
critical studies approach, Carroll’s call for a paradigm shift in drama education parallels Heron’s proposal for a participatory subject-objective ontology, in which ‘worlds and people are what we meet, but the meeting is shaped by our own terms of reference’ (1996, p. 11).

Drama theorist Augusto Boal uses the term *metaxis* to describe how an artist may simultaneously belong to the worlds of ‘her reality and the image of her reality, which she herself has created’ (1995, p. 43), and this also describes the applied drama forms discussed in this study in which teacher and students are engaged in constructing as well as experiencing the dramatic frame (Carroll, 1996, p. 76). Participatory inquiry infuses the subjectivism of critical and constructivist paradigms with a sense that the mind and an objective cosmos actively perform a ‘co-creative dance’ (Heron, 1996, p. 11). Manovich discusses the creation of digitally composited spaces in film and games as ‘an *ontological montage*: the coexistence of ontologically incompatible elements within the same time and space’ (2001, p. 159). The cosmos generated in a digital game environment does not necessarily have to operate in the same way as the cosmos experienced as the ‘real’ world by the participant. Thus, as discussed later in Chapter Four, a participant can learn how to perform actions in a video game world such as battling zombies or stealing cars, without the risk of real death or imprisonment. This notion of protection is significant in the application of drama and digital game conventions in educational contexts, and the ability to self-reflexively move between subjective and objective perceptions of experience is central to both.

Like the participant in a drama or digital game, as a participant in research I am able to operate simultaneously in two ontological frames: a subjective position in which the world can only be known through the mental form that is constructed (Heron, 1996), and an objective position in which the ‘cosmos’ exists as the raw data from which the ‘world’ is constructed and in turn shaped through the active participation of the mind (Skolimowski, 1994). Having adopted a worldview in which reality is a subjective-objective co-creation, the relationship between the known and the knowable takes the epistemological form of a critical subjectivity.

### 3.2.1.2 Epistemology: Critical subjectivism

Table 3.2 outlines the epistemological stances indicative of the five research paradigms. Positivism and postpositivism are both objectivist models that view
knowledge as reducible to identifiable components and a singular truth. Subjectivist views see knowledge as localised and transformable. Arguably there has been a shift in applied drama research towards these subjectivist alternatives, which many drama educators and practitioners see as more accommodating of ‘the possibilities open to people as they interact with arts works’ (P. Taylor, 1996a, p. 8) than the objectivist epistemologies described in Table 3.2.

Table 3.2: Epistemology of research paradigms (after Guba, 1990; Guba & Lincoln, 2005, p. 195; Heron & Reason, 1997).

<table>
<thead>
<tr>
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<th>Critical Theory</th>
<th>Constructivism</th>
<th>Participatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual/objectivist: the inquirer manipulates the experiment to achieve an objective observation of the truth.</td>
<td>Modified objectivist: An approximation of the truth can be observed, acknowledging the presence of the inquirer.</td>
<td>Subjectivist: Inquiries are shaped by the values of the inquirer, and transformation of the subject is possible through knowing and controlling identifiable truths.</td>
<td>Subjectivist: Interaction between inquirer and the inquirer is required to access individual realities.</td>
<td>Critical subjectivist: Interaction is a participatory transaction with the cosmos; experiential, propositional, presentational, and practical knowing.</td>
</tr>
</tbody>
</table>

Heron and Reason argue that subjectivist epistemologies can be considered naive and restricted, in that they do not adequately address that knowledge comes from ‘the experiential articulation of being in a world’ (1997). Critical subjectivity seeks to address this omission by arguing that the knowable can be discovered through:

- **experiential** knowing that stems from a direct encounter with beings and/or the world;
- **presentational** knowing that uses images and symbols to represent experiences;
- **propositional** knowing that is carried in presentational forms grounded in experience and which conceptualize that something is the case, and can be expressed in descriptions, theories and statements; and
- **practical** knowing demonstrated as a skill or competence in doing something (Heron & Reason, 1997).

Of these four relationships with knowledge, practical knowing is in at least one sense primary to the critical subjectivity of participatory inquiry — it presupposes a conceptual grasp, presentational elegance, and experiential grounding that ‘fulfils the three prior forms of knowing, brings them to fruition in purposive deeds, and consummates them with its autonomous celebration of excellent accomplishment’ (Heron & Reason, 1997). In this study, practice and accomplishment are at the
heart of the epistemological approaches considered in the application of digital game and applied drama conventions to learning contexts. For example, the epistemic games model (Shaffer, 2005) and the drama form of Mantle of the Expert (Heathcote & Bolton, 1995) discussed in Chapter Seven both focus on the nature of professional practice, and ways in which novices might accomplish a sense of mastery of subject knowledge through engagement with practice. Gee argues that digital games can produce powerful and effective learning when they embody situated opportunities for reflective practice, in which the player can test hypotheses through action and see the effects upon the ‘world’ of the game (Gee, 2003, p. 90).

It is attention to this blending of forms of knowing, with an emphasis on practice, which makes participatory inquiry attractive as the paradigm underlying this study, over the alternative worldviews. The epistemology of participatory inquiry is a good fit for my explorations of learning through games and applied drama, as:

‘ideally, research should be a process symbiotically linked to our practice, thinking, and reflections on both. Sometimes our focus may be on analysis, at other times on practice, but there should always exist a dialectical relationship between theorizing and practice’ (Grady, 1996, p. 61).

Practical knowing equates to some extent directly to a methodological response that is founded on action, in which the actor is situated in the action, not just as an external observer reflecting on the action taken. Thus a wide range of action inquiry methods can be seen as closely aligned to this epistemological view.

3.2.1.3 Methodology: Collaborative action and shared experience

The specific methods of inquiry used for this research project are discussed in greater depth in this chapter at section 3.4. However, as part of the process of establishing the conceptual framework for this research, it is important to note the summary of the methodological characteristics of the five research paradigms as shown in Table 3.3. Specifically, it can be noted that participatory inquiry is based in two principles founded on notions of co-operative knowledge gathering: epistemic participation that grounds theory in practice and experience, and political participation that removes a researcher-subject hierarchy in favour of a shared experience (Heron & Reason, 1997).
Table 3.3: Methodology of research paradigms (after Guba, 1990; Guba & Lincoln, 2005, p. 195; Heron & Reason, 1997).

<table>
<thead>
<tr>
<th>Positivism</th>
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<th>Critical Theory</th>
<th>Constructivism</th>
<th>Participatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empirical: seeks controlled testing of hypotheses through quantitative methods.</td>
<td>Triangulated: seeks to account for bias through addition of qualitative methods and use of natural settings.</td>
<td>Dialogic / Transformative: seeks to use dialog to transform participants from a false consciousness to the truth.</td>
<td>Hermeneutic / Dialectic: seeks to approximate the whole from a reading of multiple constructions, and generate a shared construction through comparison and contrast.</td>
<td>Political participation in collaborative action inquiry; primacy of the practical; use of language grounded in shared experiential context.</td>
</tr>
</tbody>
</table>

The first principle of this participatory model is that any propositional knowledge formed from the research outcomes is grounded in the experiential knowledge of the co-researchers. The experiential nature of this research project is acknowledged through the cyclical and collaborative approach to research design outlined later in this chapter. There is a commitment to action-based methods that afford primacy to the practical as the basis for theorizing the application of drama and digital game conventions to learning.

The second principle is that the subjects of the research have a basic right to participate fully in the research process that is gathering knowledge about them, and thus a model of researcher-as-subject and subject-as-researcher is at the heart of the methodological approach. In applied drama inquiry this has become evident in collaborative inquiries whereby ‘the research process deliberately refutes the dichotomy of researcher and researched by classifying all those involved in the drama process as researchers’ (Carroll, 1996, p. 73). It is also apparent in the specific methods discussed in section 3.4, and further outlined and enacted in the research outcomes detailed in Chapters Four to Nine, that attention is given to the shifting roles of the researcher and the researched in this project.

This research is founded on an iterative, co-operative model that places the researcher within the research process, and provides scope for the narrative of that experience to emerge as part of the data and analysis. The specific case studies discussed in this research project are based on applied drama models that desire to transform and overturn the traditional power-relationships in the classroom, as might be embodied in the language of school-based learning, and replace them with the co-operative relationships of professional practice. Applied drama practitioners (for example Carroll, 1988; Heathcote, 2003; Heathcote &
Bolton, 1995) and digital game based learning advocates (Gee, 2003; Shaffer, 2006) discuss the benefits of empowering students. Such a political act is at the heart of this research project, and presents a much clearer path than the broader transformative ideals of critical theory or constructivism.

3.2.1.4 Axiology: The intrinsic value of ‘practical knowing’

Table 3.4 illustrates the axiology, or value placed on knowledge, of the five key research paradigms. Heron and Reason argued clearly for an axiological question to be asked of any research paradigm: what is intrinsically worthwhile? While questions of ontology, epistemology and methodology might address the nature of reality, the questioning of axiology seeks to address and value the purpose of inquiry as an end in itself. The participatory inquiry paradigm places an intrinsic value on the richness of ‘human flourishing’. To some extent that encompasses both the value of knowing about the world, and the value of knowing enough to be able to change one’s place in it, that emerge as the intrinsic values in the alternative paradigms.

| Axiology of research paradigms (after Guba & Lincoln, 2005, p. 198; Heron & Reason, 1997). |
|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|
| Positivism                                  | Postpositivism                              | Critical Theory                             | Constructivism                             | Participatory                               |
| Propositional knowing about the world is an end in itself, is intrinsically valuable. | Propositional, transactional knowing is instrumentally valuable as a means to social emancipation, which is an end in itself, is intrinsically valuable | Practical knowing about how to flourish with a balance of autonomy, cooperation and hierarchy in a culture is an end in itself, is intrinsically valuable. |

What aligns this research project with the axiology of participatory inquiry is the notion that being able to flourish through practical knowing is expressed through hierarchy, collaboration and autonomy. This is perhaps best summed up in the concept of a community of practice (Wenger, 1998b), a model of experiential social learning that is discussed as a linking factor between applied drama and digital game-based learning models in Chapter Seven. A community of shared practice or interest is the means by which participatory inquiry accumulates and shares knowledge (Guba & Lincoln, 2005, p. 196). Such a community exhibits a hierarchy in which novices may engage with experts, while collaboration is fostered through a peer-based learning environment in which participation at any level is legitimised. Although based in social learning principles, the identity of each participant is shaped through individual experiences and represented through creative self-expression.
Heron and Reason conclude that ultimately the axiology of participatory inquiry is practical — it is action in the service of human flourishing. This places the transformative aspects of participatory inquiry at the centre of the study.

3.3 Strategy of inquiry: Action research

The co-operative inquiry methodology that is central to participatory inquiry can take many forms (Heron & Reason, 1997). Kemmis and McTaggart call it a ‘somewhat eclectic mix — participatory research, classroom action research, action learning, action science, soft systems approaches, and industrial action research’ to name a few (2005, p. 559). This study uses an action research approach to apply the participatory inquiry paradigm to the collection of data. As noted in Chapter One, the difficulty in defining action research inquiry can be attributed to its contested historical roots. McKernan (1996, p. 8) argues that its antecedents can be found in the application of scientific method to education in the Science in Education movement of the late 1800s (Bain, 1879) and early 1900s (B. R. Buckingham, 1926), the experimental work of Dewey examining the stages of reflective thinking (1938), and the post-war community-oriented work of social psychiatrist Kurt Lewin (1946). Other early practitioners of action-based inquiry such as Corey (1953) point to Collier’s work with native Americans between 1933 and 1945 as the beginnings of fieldwork ‘evoked by the needs of action’, and typified in a cyclical process of ‘action-research, research-action’ (Collier, 1945).

This first phase in the development of the action research strategy can be seen to falter with the development of education research laboratories in the 1950s, particularly in the USA, which began to separate theory and practice and diminish the use of fieldwork to examine problems and innovative practice (McKernan, 1996, p. 10). A resurgence of interest in teacher-as-researcher in the 1970s marks the beginning of a second phase of action research, for example in the work of Stenhouse (1975). An initiative for a more critical research position with emancipatory goals emerged as a third generation of action research in Australia and Europe in the 1980s, while the activist approaches of social movements in the 1990s, particular in developing nations in Latin America is marked as the fourth generation of action research.
Altrichter et al. propose that a working definition of action research requires consideration of two parts: a relatively static axiomatic part that indicates clearly and concisely what is meant by action research, and a more dynamic empirical part that collects ‘rules of thumb’ from researchers about how to conduct it (2002, p. 128). This inquiry uses the following working definition to describe the strategy of inquiry:

- action research is about people reflecting upon and improving their own practice;
- by tightly interlinking their reflection and action; and
- making their experiences public to other people concerned by and interested in the respective practice (Altrichter, et al., 2002, p. 128).

3.3.1 The CRASP model of action research for this study

This inquiry adopts the principles of the CRASP model for effective action research proposed by Zuber-Skerritt (1992), which proposes that action research is:

- Critical (and self-critical) collaborative enquiry by
- Reflective practitioners being
- Accountable and making the results of their enquiry public,
- Self-evaluating their practice and engaged in
- Participative problem solving and continuing professional development.

Action research is inherently critical: people deliberately set out to contest and reconstitute inefficient, unjust or unsatisfying ways of working (Kemmis & McTaggart, 2005, p. 567). This inquiry sets out to transform the limitations of traditional educational settings, to create learning experiences that account for generational expectations of learners in a digital age. It addresses for example, the central place of mobile and online social media technologies in the lives of many young people. It provides opportunities to extend the possibilities of learning beyond the time, space and other resources limitations of for example the timetable for a typical school day. In Chapter Six it shows how geographical barriers might be overcome in the form of a joint Dutch-Australian project, involving primary school pupils and university drama students.
Action research is both critical and self-critical in the sense that it is a social process: it involves people — individually or collectively — deliberately exploring the relationship between the realms of the individual and the social (Kemmis & McTaggart, 2005, p. 566). In this study, the research focuses on the socially embedded approaches to learning made possible in certain forms of applied drama and digital games. Chapter Five for example examines the shifting dramatically framed role positions possible in online games that allow both individual and collective action and goal setting. The approaches outlined in Chapters Seven, Eight and Nine also place learning as a socially embedded activity.

Action research is reflexive and self-evaluating: it takes the form of a deliberate process through which people aim to transform practices through cycles of critical and self-critical action (Kemmis & McTaggart, 2005, p. 567). This inquiry represents a six-year reflective cycle of applied research activity, in which practice and theory are used to generate, implement, observe and reflect upon the use of drama and game conventions in education.

Accountability, particularly through publication, is connected to the emancipatory nature of action research: it focuses on self-development and self-determination, in which people explore ways to overcome social structures that contribute to irrational, inefficient, unjust or unsatisfying ways of working. In this study, the relationship between identity and power is examined through the dramatic concept of role. In Chapter Five for example, the conventions of role and identity in applied drama and games are considered as a means through which participants can experience agency and social relationships in settings and configurations that might otherwise not be possible or safe to explore.

Action research aims to transform both theory and practice through self-evaluation: it reaches out from specific practice in local contexts to inform wider theories and perspectives, and reaches in from the global to provide practitioners with a critical grasp of local problems and issues (Kemmis & McTaggart, 2005, p. 568). This inquiry is based on practical application of theories drawn from drama and game research to educational contexts. Simultaneously, it draws new theory from specific projects in localised contexts.
Action research is participatory: it engages people in examining their own knowledge and actions in the social and material worlds, through research ‘on’ themselves, not others (Kemmis & McTaggart, 2005, p. 567). The participatory inquiry paradigm of this study recognises that inquiry is a subjective-objective process in which the researcher is a participant, and the participants are researchers. In Chapter Four for example, the ‘crisis of representation’ is noted in considering a method for examining the learning discourses at work in video games — a process in which the researcher must also become a player. Chapter Eight presents a stage of the inquiry in which students, teachers and researchers are co-creators of a classroom and online dramatic pre-text to explore the work of Shakespeare using mobile and Web-based media.

Action research is practical and collaborative: it focuses people on examinations of the social practices that link people together (Kemmis & McTaggart, 2005, p. 567). In this study the concept of communities of practice is used to consider the potential application of drama and games conventions to develop a social and self-directed form of education based on professional practice and real-world problem solving. In Chapter Seven, the overlaps between a drama technique known as Mantle of the Expert and a games-based learning approach known as epistemic games are outlined.

3.4 Method: Autoethnography as research design

Typical of the bricoleur approach to qualitative research (Denzin & Lincoln, 2008), as discussed in Chapter One, autoethnography makes use of:

‘research and writing practices in anthropology, sociology, psychology, literary criticism, journalism, and communication ... to say nothing of our favourite storytellers, poets, and musicians’ (Holman Jones, 2005, p. 765).

Denzin and Lincoln note a blurring of genres in qualitative research from the 1970s onwards, such that ‘researchers have never before had so many paradigms, strategies of inquiry, and methods of analysis to draw upon and utilize’ (2005a, p. 20). The notion that research can be viewed through multiple lenses is common to critical theory strategies, and can also be seen in participatory inquiry strategies that seek to investigate and transform theory and practice. In drama education research, Grady suggests there is a way to view the world by ‘fragmenting the general theoretical lens’ whereby:
'employing a variety of practical methods as additional research tools or as research destination points in their own right can provide a tangible way of illustrating the connectedness between theory and practice' (Grady, 1996, p. 61).

In the emerging field of video game studies the bricoleur approach is also evident, as:

‘researchers wanted to widen the field of inquiry, asking new questions, trying new methods. Of course this ignited further debates — was the study of games something unique? Could the use of old(er) theories and methods — those drawn from other disciplines, be helpful? Like it or not, they have been used, adapted, and expanded. Some are very useful, others needed modification’ (Consalvo, 2009).

This study adopts a federated strategy that draws upon multiple interpretive practices at a micro level, for example interpretive ethnography in Chapter Four or interpretive case study in Chapter Eight, but brings these together under the broader autoethnographic model of writing and publication as a means of exploring theory and practice within social science research. As with the bricoleur the individual approaches outlined in each of the following chapters are just the tools at hand within the broader qualitative methodology of action research that binds the study together. As noted in Chapter One, this strategy of inquiry draws upon several areas such as reflective practice (Schön, 1983) and an iterative development model used by the software industry that is colloquially referred to as perpetual beta testing (O’Reilly, 2005, p. 4).

3.5 Rhetorical approach: Exegesis as a research self-narrative

Writing and publication are at the heart of the autoethnographic approach to the action research thesis modelled in this study, as it recognises a method in which

‘theory lies in enactment and writing strategies, not simply in the citation and analysis of canonical texts’ (Kondo, 1990, p. 61).

The action research cycles that form the fieldwork phase of this study utilise a model in which theoretical conceptual research is shared through scholarly publication as a form of reflective practice. The outputs of these cycles are presented in this thesis as an exegesis section consisting of Chapters Four to Nine, and each chapter contains within it the contextual information that will enable the reader to see this process as contributing to a thematically linked research self-narrative.
Chapter Two also presented a more traditional thesis element in the form of a literature review, in order to provide a theoretical foundation for the overall project. This is consistent with the compilation thesis model discussed in Chapter One, in which a general review of relevant literature is included as part of the modified traditional-complex structure, which adopts a compilation of individual publications as a way of reporting on individual but related studies.

Denzin and Lincoln note that the emergence of more participatory action-based research methods in qualitative research was reflected in a trend in which ‘theories were read as tales from the field’, and that ultimately ‘the search for grand narratives was being replaced by more local, small-scale theories fitted to specific problems and specific situations’ (2005b, p. 20). Geertz argues that the observer has no privileged voice, and that the central task of theory was to make sense out of a local situation. He calls for ‘thick description’ of particular events, and to a certain extent that is the approach taken in this research in the form of an exegesis that accounts for a cyclic and iterative research approach to the application of digital game and applied drama conventions in educational contexts.

Chapters Four to Nine form the exegesis component of the thesis, presented as a sequence of articles linked by the autoethnographic self-narrative approach to the study. Each cycle is further identified by the year in which the related article was published, for example ‘Cycle 1 (2004)’, however the nature of the action research is that the boundaries between the cycles are blurry, reflecting lived processes rather than a controlled laboratory experiment. As it unfolds, the autoethnographic narrative will explain the timelines involved in the fieldwork and publication stages.

Each chapter in the exegesis will combine the basic plan-act-observe-reflect strategy of action research with Zuber-Skerritt’s CRASP model (1992). Table 3.5 outlines how this begins with the planning stage of the action research cycle, which sets the scene for the research and describes the parameters of the study including aims and participants. In terms of the CRASP model this section provides a context for the inquiry, and establishes the critical attitude towards theory and practice by defining the status quo and describing the motivation for seeking change. Each chapter in the exegesis section of this thesis will therefore begin with an autoethnographic narrative that accounts for the planning stage of that cycle.
Table 3.5: Individual chapter structure in the exegesis section.

<table>
<thead>
<tr>
<th>Action research phase</th>
<th>CRASP element</th>
<th>Chapter section</th>
</tr>
</thead>
</table>
| Plan                  | Critical attitude    | 1. Introduction  
2. Context for the inquiry |
| Act & Observe         | Research             | 3. Scholarly publication                                            |
|                       | Accountability       |                                                                     |
| Reflect               | Self-evaluation      | 4. Critical reflection                                              |
|                       | Professionalism      | 5. Summary of the chapter                                           |

As shown in Table 3.5 the action and observation stage of the cycle is then presented in the form of a published scholarly article, with light editing to enhance clarity and continuity within this structure. This represents the research and accountability elements in the CRASP model, and in each chapter of the exegesis this will take the form of an edited version of a published peer-reviewed journal article, book chapter or conference paper. Table 3.5 illustrates how in this model each chapter of the exegesis section of the thesis concludes with a reflection on the action research cycle, providing the self-evaluation and professional development elements of the CRASP model. A summary of the chapter’s position within the thesis is also provided, linking it to the overall structure of the thesis.

3.6 Boundaries of this study

Heron and Reason acknowledge it is rare to find any collaborative research that fully involves the subjects in the design process — while the content may be democratized, the methodology is often still designed and enacted by the researcher upon the subject. To a degree that is the case with this study, as the thesis design process is by its nature a largely individual process, albeit under supervision, as required by the expectations of the academy.

The action research strategy and autoethnographic method used to provide a conceptual consistency to this project can be problematic to present as ‘findings’ in the research sense, though the epistemological basis for the study does not place expectations on the development of a universal truth. For educators, the examinations of the application of drama and game conventions presented here must be seen as localised to specific settings, and are intended as a guide only.

Taylor (1996b, p. ix) notes that in reacting against positivist research, self-reflexive researchers in drama education ‘have not positioned themselves naturally within the conventional boundaries of the research club’, and thus may have:
‘unwittingly contributed to a distrust of research given their own value-laden prejudices about what researchers do and the meaningful application of research in practice’ (P. Taylor, 1996b, p. x).

It is acknowledged that proposing a model for a thesis study that moves beyond traditional structures requires justification, and the rationale for my approach was given in Chapter One, and developed in this chapter.

3.7 Chapter summary
This chapter has detailed the conceptual framework for this study.

Chapter Four now marks the start of the exegesis section of this thesis, which contextualizes and reports on the publications produced during the core action research cycles undertaken as the fieldwork for this study.
4. CHAPTER FOUR
Cycle 1 (2004)
The researcher as a player in game analysis

4.1 Introduction
This chapter marks the start of the exegesis component of the thesis, which presents a sequence of six articles linked by an autoethnographic self-narrative. As illustrated earlier in Figure 1.2 (Chapter One) and detailed further in section 3.5 (Chapter Three), each chapter in the exegesis will describe one of the six core action research cycles that were the fieldwork stage of the project. Each cycle was modelled on the basic plan-act-observe-reflect strategy of action research (Kemmis & McTaggart, 1988), shaped by Zuber-Skerritt’s CRASP model (1992) to incorporate the accompanying autoethnographic account of the research. Each chapter title includes a reference to the year in which the embedded scholarly journal article, book chapter or journal article was published or submitted for publication. However, the research activities described throughout the exegesis tended to flow across cycle boundaries more than the methodological models presented in earlier chapters may suggest. An attempt is made in the exegesis to account for activities occurring at both the macro level of the thesis fieldwork cycles and the micro level of collaborative research activities leading up to each publication.

Table 4.1 outlines how this field research model transfers to the thesis structure in Chapter Four, beginning with the planning stage of the core action research cycle. This is described in the autoethnographic narrative at section 4.2 of this chapter, which provides the context for the inquiry outlined in this cycle, and establishes the critical attitude towards theory and practice. The action and observation stage of the core action research cycle is then presented at section 4.3 in the form of an edited version of a peer-reviewed journal article. This represents the research and accountability elements in the CRASP model. The chapter concludes with reflections on this action research cycle at section 4.4, providing the self-evaluation and professional development elements of the CRASP model. A summary of the chapter at 4.5 leads to the phase of re-planning that marks the
beginning of Cycle 2 of the core action research fieldwork for this study as set out in Chapter Five.

Table 4.1: The structure of Chapter Four in the CRASP model used for this thesis.

<table>
<thead>
<tr>
<th>AR phase</th>
<th>CRASP element</th>
<th>Chapter section</th>
<th>Autoethnography</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>Critical attitude</td>
<td>4.1 Introduction</td>
<td>An international collaborative drama research project led me to the 2003 Digital Arts &amp; Culture conference. Papers on game research methodology and alternative reality gaming renewed my interest in the links between drama, education and digital games. The action research fieldwork for this thesis began with an exploration of the learning discourses in games, and the ‘crisis of representation’ in ethnographic games research methodology.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.2 Context for the inquiry</td>
<td></td>
</tr>
<tr>
<td>Act &amp; Observe</td>
<td>Research</td>
<td>4.3 Scholarly publication</td>
<td>This research results in a peer-reviewed journal article: Cameron, D., &amp; Carroll, J. (2004). The story so far... The researcher as a player in games analysis. Media International Australia, 110, 62-72.</td>
</tr>
<tr>
<td></td>
<td>Accountability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflect</td>
<td>Self-evaluation</td>
<td>4.4 Critical reflection</td>
<td>Reflection on this fieldwork notes the dangers of accepting arguments about the ‘digital native’ generation. Some initial observations are made of the links between applied drama and game-based conventions in affinity spaces. Three conventions: pre-text, role distance and role protection are flagged for examination in the next action research cycle.</td>
</tr>
<tr>
<td></td>
<td>Professionalism</td>
<td>4.5 Summary of the chapter</td>
<td></td>
</tr>
</tbody>
</table>

4.2 Context for the inquiry

As I noted in Chapter One, the impetus for my PhD thesis was an interest in the possible synergies between the conventions of applied drama and digital game-based learning. This grew from my Master of Arts (Honours) project, which was grounded on a Web-based training scenario for tertiary journalism students. A research collaboration with a colleague, also interested in technology and role-based performance, became the basis for a mediated applied drama project undertaken in late 2002 and which we eventually called To the Spice Islands (Carroll & Cameron, 2003). This project is discussed in much greater detail in Chapter Six, though its significance to my personal research journey is evident in the many references to this work throughout the thesis. Having decided in late 2003 to pursue my PhD candidature, the collaborative research that had flowed on from To the Spice Islands then began to serve as the initial fieldwork for this study.

To the Spice Islands first started to take shape in early 2002 with the decision made to conduct a research project in drama and technology, based on work in the Netherlands with final year university drama students studying at Noordelijke
Hogeschool Leeuwarden (NHL). We decided to form a collaborative project team that would involve staff from both Charles Sturt University in Australia and NHL, working through online technologies to create an applied drama. The Charles Sturt University members of the team were John Carroll, Lachlan Simond (a media producer) and myself. The Dutch component of the team comprised Lidwine Janssens and Froujke van Houten from NHL, along with a small group of final year secondary teaching students. The initial plan was to facilitate an applied drama and technology project, which would form the basis of a keynote presentation for a Digital Drama Conference to be hosted by NHL at Leeuwarden in October 2002. Following some initial planning discussions, it was decided to base the case study project around a teaching activity with a class of 29 pupils from a primary school in Leeuwarden.

The Dutch pupils were studying the topic of ‘boats’, and so prior to John Carroll’s departure to the Netherlands we held a brainstorming session in Australia to suggest possible approaches to the drama. It was raised that early Dutch exploration of the Australian coast would provide an interesting basis for drama, and John had recently been reading about the notorious wreck of a Dutch East India Company (VOC) ship, the Batavia, off the coast of Western Australia in 1629. From there we developed a draft of the drama scenario: the pupils would be asked to design a museum exhibition about the VOC, and specifically about the last voyage of the Batavia. The teaching students from NHL would be placed in role as marine archaeologists, and also passengers and crew on the Batavia. The school pupils would be placed in role (enroled) as trainee archaeologists in a dramatic construct we decided to call the Australian/Nederland Maritime Research Centre (ANMRC). We planned to start the drama in the present, and then use video and Web-based performances to move to a setting in the past — 1629 to be more precise. The school pupils would interact with the university students in their dramatic roles through Web pages initially, then through video and live performance. The final result would be a museum-style exhibition by the school children for their school and or parents — a common technique in process drama forms of applied drama — which would incorporate online, video and live performances. Finally, parts of the work would be presented for an international audience at the conference to be held on October 10, 2002 in the Netherlands.
Approximately two months before the start of the classroom drama work, we provided the Dutch university students with some research tasks to complete as preparation for the research. These included research on:

- curriculum aims and objectives, to ensure the project would meet the needs of the primary school;
- Dutch shipwrecks off the Australian coast, especially the Batavia, maritime archaeology, and the history of Dutch shipbuilding and the VOC;
- Dutch life in the 17th century, especially maritime life and the spice trade; and
- the current location of a replica of the Batavia, which we felt could be the backdrop for some activities.

To start the drama, a number of basic Web pages were created for the fictional ANMRC, and the NHL students were requested to provide initial content, using these basic guidelines:

- keep text very short, and suitable for primary students;
- send text in Dutch and English; and
- send images as email attachments.

While John was collaborating face-to-face with the Dutch staff, students and pupils I was working in a virtual collaboration with them via online communication. My main role was to oversee the digital content being created, and to work with Lachlan Simond to produce additional Web content as required. For example, John recorded videos with the drama students working in role, which were sent to me electronically, and which Lachlan and I then edited and re-published online for the primary school students to view via a project Website. I also created a free Web-based email account that could be used by the NHL students to contact the school pupils while in role as marine archaeologists (anmrc@hotmail.com), and two free weblogs — one for the ANMRC and one for the dramatic output of the fictional timescope experiment that would enable the pupils to communicate with the passengers and crew on board the Batavia.

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3 This blog is still accessible more than 8 years later at http://anmrc.blogspot.com/ demonstrating the surprisingly 'persistent' nature of online media forms.
Overall, the process of working in a distributed collaborative environment went quite smoothly. There were some organisational problems, one being an initial lack of communication from the NHL students to confirm they were receiving our instructions and getting underway with the research, but this was soon sorted out. There were some language considerations, though most of the Dutch staff and students were able to work very competently in English for the benefit of the Australian team members when required. Lidwine had made some practical suggestions for this cross-language communication, such as using concrete examples and allowing time for people to grasp the context of what was being expressed. John later noted that when working with the university students in person they would sometimes slip into Dutch or even the regional Friese language when they became excited, but as they were talking about the drama he realised he was often able to follow much of what was being said. During the project I found I was sometimes able to guess the basic meaning of sections of the electronic communication written in Dutch, such as weblog posts, as I also knew how the dramatic content was unfolding.

As was to be expected in a collaborative project of this type, the participants had different personal objectives and differing levels of involvement. Although I planned to become more familiar with the principles of applied drama, my involvement primarily drew upon my practical skills, which include Web design and online media production. The university students and staff were involved to gain skills and experience in applied drama forms. For the primary pupils and teachers it was an opportunity to explore an interesting part of Dutch colonial history, while engaging in drama and media production activities. For John, it was an opportunity to explore how applied drama forms might operate in a framework of digital media technology, leading up to a conference presentation as part of his overseas research consultancy. Despite these differing aims, the project allowed opportunities for input from all participants to shape and create the drama as it unfolded in real life and through online publications.

Several months after John returned from the Netherlands at the conclusion of the project we began to reflect upon the possible links that had emerged between drama and games, and to consider how this might shape our own collaborative research and publication interests. The project had been an interesting and
stimulating experience for us both, and we were enthusiastic about how we might reflect on it intrinsically to shape our own professional development as teachers and practitioners, and also extrinsically by sharing details of the work with a wider audience of researchers and practitioners. *To the Spice Islands* then formed the basis of a co-authored paper we presented at the Digital Arts and Culture (DAC) conference held in Melbourne in 2003 (Carroll & Cameron, 2003).

One of the attractions of DAC was an opportunity to introduce some of the applied drama concepts to an audience likely to come from other disciplines. DAC was first convened in 1998 and is a now roughly biennial conference that gathers together researchers, practitioners and artists working with digital media. I felt there were parallels between the conventions of unscripted role-based process drama of the type we had explored with the Dutch students, and the conventions of interactivity and role-based performance that were being discussed in the field of *interactive drama* (for example Laurel, 1991; Ryan, 1997). The forms of drama discussed in relation to digital media had a definite blindspot when it came to applied forms, particularly those improvised role-based forms such as process drama. In fact, these discussions about interactive drama in the literature have to some extent been superseded by a focus on the nature of performance in computer and video games and virtual worlds, which have developed the levels of sophisticated aesthetics and technical functionality that only a decade or so ago seemed likely to be developed only in specialised research settings, rather than as part of a global mass entertainment industry.

The 2003 DAC conference was therefore a significant starting point for this research journey as it introduced me to a number of key researchers, issues and projects in the emerging field of game studies. Two presentations in particular greatly influenced this thesis and provided the foundations for the first core action research cycle of this study, and they are thus worth outlining in greater detail in this exegesis chapter. The first was Espen Aarseth’s *Playing research: methodological approaches to game analysis* (Aarseth, 2003), which examines the need for the ‘methodology of play’ to become explicit in research about video game aesthetics. Aarseth outlines some of the methodological problems facing game researchers, such as the need to choose an appropriate critical position (for example, observer or player — or both) and the need to combine a wide range of
sources of ‘non-playing’ information about the game being studied so that the collection of research data extends beyond the highly subjective personal experience of the player. This is crucial, as:

‘games are performance-oriented, and our own performance might not be the best source, especially when we are analysing it ourselves’ (Aarseth, 2003, p. 7).

Aarseth (2003, p. 6) suggests that the sources of non-playing analysis that researchers can turn to include:

- previous knowledge of genre;
- previous knowledge of game system;
- other player’s reports;
- reviews;
- walkthroughs;
- discussions;
- observing others play;
- interviewing players;
- game documentation;
- playtesting reports; and
- interviews with game developers.

Aarseth’s work suggested some of the challenges that might be encountered in pursuing research that explored interactive digital media forms in which the narrative is formed by the actions of the player. It also drew my attention to the need to consider the materials that accompany or support a game, and which may serve to introduce the player to the game world. With To the Spice Islands we had been very conscious of the applied drama convention of a pre-text (Carroll & Cameron, 2003, p. 2) which, as discussed earlier in this thesis serves to activate the drama and establish the world in which the dramatic encounters will occur (O’Neill, 1995, p. 20). Pre-text had been a guiding principle in the project, and we had set out from the beginning to use the digital and online technology as a means to generate it. Aarseth’s DAC paper (2003) suggested to us that non-playing content and physical ephemera such as artwork and manuals might serve a similar function for digital games, and this was an idea we expanded into the examination
of the learning discourses in games that also formed Cycle 1 of the action research fieldwork for this thesis.

A second paper presented at the 2003 DAC which resonated strongly with the initial planning phase of this thesis was Jane McGonigal's *This is not a game*: *Immersive aesthetics and collective play* (McGonigal, 2003). In this paper she describes what is now more widely recognised as alternative reality gaming (ARG), which combines physical (real-world) and virtual (online) elements in a form of gameplay that is highly collaborative, and framed around collective problem-solving and social interaction between players. In particular, I was struck by the use of everyday media such as telephones, emails, faxes and Websites to integrate the game into the lives of the players, rather than using the types of specialised equipment previously associated with virtual or augmented reality such as goggles, gloves and helmets. McGonigal's paper introduced us to the concept of the 'interfaceless interface' (2003, p. 119), which Bolter and Grusin (1999, p. 23) discuss as a key to immersion in media practice by which the interface seeks to:

'erase itself so that the user is no longer aware of confronting a medium, but instead stands in an immediate relationship to the contents of that medium'.

Although we had been unaware of the ARG genre at the time of our work on *To the Spice Islands*, John and I soon noticed the similarity in our approach to the development of the digital framework supporting the live in-role applied drama. We had chosen to use everyday online technology such as weblogs and QuickTime video clips because it was within our skill set and available resources, and it was a way of collaborating on the research despite being in different parts of the world. However, we also now realised that in following applied drama conventions and principles we had also taken an approach similar to the ARG principles outlined by McGonigal (2003). For example we had deliberately not identified the Web content produced for the applied drama as fictional content, and we had combined live and mediated content as part of the world of the drama. The apparent similarities we were seeing excited me as a researcher and practitioner, as I could see how the different fields of applied drama, game design, digital technology and education were merging to form new opportunities for exploration and discovery. I could also see how these fields were taking similar approaches, but that there was not necessarily a great awareness across the disciplines. A desire to look for possible
links and bridges between drama, education and technology became a key personal motivation for the research.

Based on my experiences with *To the Spice Islands*, combined with reflections on the issues raised at 2003 DAC, I began to consider several avenues of inquiry for Cycle 1 of the action research project. The first was related to digital game-based learning, and the learning discourses evident in computer and video games. This was influenced by the blending of drama, gameplay and technology evident in Alternate Reality Gaming. While we had already considered some of the applied drama conventions operating in our first collaborative project, this suggested an immediate need to further investigate some of the conventions that might be emerging from digital games and similar applied uses of technology. This line of inquiry was also influenced directly by James Gee’s *What video games have to teach us about learning and literacy* (2003), which prompted further consideration of what conventions might be operating in digital games that could be compared with those of applied drama, particularly in educational settings.

As John and I started to develop a research design, a second potential area of inquiry emerged which was methodological in nature, and centred on how we might best analyse the conventions of video games, particularly when as researchers we were also part of the playing process. Aarseth’s (2003) DAC paper had clearly suggested some of the theoretical and practical issues to be considered, and it seemed timely that such methodological issues could be included in the initial core action research cycle for my thesis project.

The motivation to turn these early thoughts into a research case study emerged shortly following the 2003 DAC conference, when John and I were invited to contribute an article to a themed edition of the journal *Media Information Australia*. Based on our reflections on the Dutch project, influenced by the serendipitous connections we had found at DAC, and shaped by the emerging direction of my PhD thesis research, we decided to address two elements in our next collaborative project. Firstly, we wanted to dip our toe into the game studies world by looking at the learning discourses in games. Secondly, we wanted to tackle some of the methodological questions in games analysis raised by Aarseth (2003) and others at DAC. In addressing these two elements we also wanted to continue our broader thinking about the possible connections between applied
drama and digital game conventions in educational settings, and the contributions that each discipline could make to the other if appropriate connections could be found.

As such, we planned to choose some game titles we had not played before, and conduct some simple ethnographic research involving observation and participation in gameplay. We were interested in the 'crisis of representation' in ethnographic research (Denzin, 1997b), in particular the dual role of player and researcher. We were also influenced by Gee’s observation of the Darwinian nature of the commercial video games industry, which suggests that design evolution will tend to favour principles, features and conventions that make it easy for consumers to start playing a new game (2003, p. 114). In effect, video games designers seem to have found ways of rapidly immersing players into a problem-solving mode that educators can only dream of. We were also influenced by the significance of game ephemera, such as instruction booklets, cover art and guides which as Aarseth suggested could add depth to a study, and account for individual game playing styles among researchers (Aarseth, 2003).

This then became the initial focus of the first action research cycle undertaken for this project. The next section of this chapter presents the scholarly journal article produced through the enactment and observation of this collaborative research project. It outlines how my research journey begins with some preliminary research into the learning discourses of computer and video games, as expressed through the printed materials that accompany games, and the instructional elements built into game narratives. This leads to discussion of an interesting methodological dilemma — how does the interpretative ethnographic researcher analyse this content when he or she becomes part of the playing process? How do you analyse the learning mechanisms of games when you are being reflexively engaged in the training materials and systems mapped into the text by the games designers? This article examines this ‘crisis of representation’ in interpretive ethnographic research approaches to games research (Cameron & Carroll, 2004).
4.3 Scholarly publication

This section is based on an article originally published as:


**Introduction**

To borrow a sporting truism, this is a paper of two halves. Our initial project was to examine the nature of learning discourses evident in computer and video games, and we start by discussing our preliminary observations in this area. As we progressed in that work we became aware of a fundamental methodological issue — how best to analyse the content of computer and video games when we were part of the playing process? This apparent dilemma in the interpretive ethnographic research approach to games forms the second half of this article.

**Challenge versus failure**

The ability of computer and video games to capture and maintain player interest — their special ‘holding power or addictive quality’ (Haddon, 1999, p. 319) — seems to stem from a mix of challenge and ability that can easily tip towards boredom and dissatisfaction if the game becomes too hard. Some psychologists refer to ‘optimal experience’, or more commonly ‘flow’, as that moment when skill levels allow players to engage with a challenge without feeling too anxious about failure, or too bored with success (Csikszentmihalyi, 1990).

Clearly an entertainment product like a computer or video game that gets the balance wrong, that frustrates and challenges too much or too early, runs the risk of putting players off. In a multi-billion dollar industry that relies heavily on word-of-mouth to generate sales this could be a disaster. The designers of computer and video games are therefore faced with a fundamental problem: ‘if no one can learn their games, no one will buy them’ (Gee, 2003, p. 114). As a result these products incorporate a range of teaching and information strategies to ensure new players can quickly engage with the game content.

These can include:

- printed documentation;
- in-game help screens;
• tutorial modes of play separate to the game itself;
• episodic gameplay with simplified or instructive early stages; and
• game characters that coach (or inveigle) the player.

In addition, sources of information external to the game package itself may be available such as telephone support lines, printed or online player guides, cheat lists and walkthroughs. In many cases this supplementary help material is produced or collated by players rather than publishers, and is then distributed via fan networks, specialist magazines, or online games forums and Websites.

Going (digital) native
Katz argues that new forms of popular culture, mostly involving computers, have developed so quickly that there has evolved ‘perhaps the widest gap — informational, cultural and factual — between the young and the old in human history’ (Katz, 2000). Evidence of these changes surfaces in the literature as an expression of frustration from educators about how students use technology. Laird (2003, p. 42) describes how her online students prefer to randomly access course components rather than follow a sequential order, expect fast information delivery, and demand immediate feedback — all characteristics of the cognitive changes evident in the ‘games generation’ (Prensky, 2001a).

Prensky (2002) also talks of a chasm between a younger generation of ‘digital natives’ who have not known a world without computer games, and an older generation of ‘digital immigrants’ forced to adapt to rapid changes in digital technology. This raises a fundamental problem for would-be games researchers — are you a digital native or a digital immigrant? Prensky carries the metaphor further to suggest that many educators (and by implication, researchers) are digital immigrants who speak with an ‘accent’ that some natives find difficult to understand. Examples of this accent include not using the Internet at all, or printing out emails before reading them. Prensky claims that this generational chasm manifests itself in education via ten basic cognitive changes as illustrated in Table 4.2.
Table 4.2: Ten learning preferences of Prensky’s ‘digital natives’ (summarised in Cameron, 2003).

<table>
<thead>
<tr>
<th>Digital natives prefer:</th>
<th>Traditional training provides:</th>
<th>Learning implications:</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Twitch’ speed</td>
<td>Conventional speed</td>
<td>Students desire faster interaction with information (game speed).</td>
</tr>
<tr>
<td>Parallel processing</td>
<td>Linear processing</td>
<td>Students desire multitasking, processing multiple data simultaneously.</td>
</tr>
<tr>
<td>Graphics first</td>
<td>Text first</td>
<td>Students desire graphic information with a text backup.</td>
</tr>
<tr>
<td>Random access</td>
<td>Step-by-step</td>
<td>Students prefer hyperlinking through materials, rather than reading from beginning to end.</td>
</tr>
<tr>
<td>Connectivity</td>
<td>Stand alone</td>
<td>Students prefer networking, and high level of electronic communication.</td>
</tr>
<tr>
<td>Activity</td>
<td>Passivity</td>
<td>Less tolerance for passive instructional situations — learn by doing.</td>
</tr>
<tr>
<td>Play</td>
<td>Work</td>
<td>Students see computers as toys as well as tools; prefer to learn in a fun environment.</td>
</tr>
<tr>
<td>Payoff</td>
<td>Patience</td>
<td>Expect immediate and clear feedback or reward in return for efforts.</td>
</tr>
<tr>
<td>Fantasy</td>
<td>Reality</td>
<td>Fantasy and play elements are an accepted part of ‘serious’ work, e.g. informal work settings.</td>
</tr>
<tr>
<td>Technology-as-friend</td>
<td>Technology-as-foe</td>
<td>See technology as empowering and necessary.</td>
</tr>
</tbody>
</table>

This summary of the generational differences between the teaching and learning generations is supported by Fromme (2003, p. 2), who also argues that ‘parents and teachers tend to address the media cultures of the younger from their own generational perspective’ while ignoring the digital media literacy of children and young adults. Table 4.2 also clearly illustrates potential pitfalls for games researchers who do not account for generational differences in changing media cultures.

From manuals to manga

Traditionally, most computer and video game products are shipped with an external player guide or manual. These can range in complexity from a brief printed insert designed to slip into a CD-ROM jewel case, to an expanded version with gameplay tips and background narrative, perhaps reaching the level of a substantial book with dozens of pages explaining complex controls and screen features (Hendrick, 1999). Some budget-conscious titles dispense with printed material completely, but provide an electronic version of the document that can be viewed or printed by the user. Possibly like most software support products, these instruction manuals ‘are frequently given short shrift by just about everybody associated with computer games’ (Crawford, 1982). Hendrick (1999) suggests that
manuals written too early or too late in the production process, or produced by inexperienced writers, result in texts that are ‘frequently reviled as overblown, badly worded, uninformative dross that provide little or no help.’

However part of the reason instruction manuals may be ignored until a problem arises is that ‘they do not make a lot of sense unless one has already experienced and lived in the game world for a while’ (Gee, 2003, p. 102). Experienced players may be able to recognise or make educated guesses about controls and goals, particularly if the game falls into a familiar genre. In this way many players prefer to start playing after only a cursory glance at the instructions, and then return to a manual or help system only when they become stuck, frustrated or want to see if they’ve missed any game features. The tendency for people to jump into new software before reading the instructions is reflected in a common acronym found in responses to new users’ questions posted to online message boards and forums — ‘RTFM’ (‘Read The Fucking Manual’).

Printed materials that accompany games can stretch beyond technical instructions to be narrative texts in their own right. Hendrick (1999) notes that this can simply be the result of a lazy writer opting to produce ‘bad fiction’ instead of a useful manual. Yet most games have a suggested narrative frame: ‘a story on the package, in the manual, or somewhere else, placing the game in a larger story’ (Juul, 1999, p. 40). Some of these texts are an interesting narrative supplement to the games they support, moving beyond a simple ‘the story so far’ account of narrative background.

The PlayStation 2 version of Konami’s Metal Gear Solid 2: Sons of Liberty for example eschews the model of a training manual, and explicitly adopts the title of ‘Training Manga’. Game controls and tactics are described in the Japanese manga comic-book form. Interestingly although generally thought of by Western observers as entertainment, nearly one in every three books published in Japan is a manga and titles can cover a broad spectrum including technical manuals and educational content (Sales, 2003). Nevertheless, the images within the ‘Training Manga’ produce an emotional orientation to the game and its stealth strategy rather than providing explicit instructions.
Clearly, a games researcher must decide whether to consider the accompanying instructions as part of the game being studied. Our interest in the instructional elements of games suggested that the manuals should be part of the research subject, but should we read them before, during, or after tackling the software itself? How would this impact on our understanding of the game? For example, one of the authors starting playing Rockstar Games’ Grand Theft Auto: Vice City without reference to the paper manual. Although familiar with the game milieu (organised crime in a Miami-like city) from reviews, word-of-mouth and the opening credits of the game itself, he had not seen or played the game before. He was able to determine by trial and error the basic mechanics of moving his character around and interacting with the game world (primarily fighting and driving skills). Within a few minutes he was armed with a handgun and on the prowl, as illustrated in Figure 4.1. Soon he was involved in street fights, shootouts with criminal gangs and police, car theft, and even a joyflight in a stolen helicopter.

![Figure 4.1: Loud guns, and even louder shirts, are basic tools of the trade in Grand Theft Auto — Vice City.]

He spent the best part of two hours enjoying a chaotic rampage through Vice City before even realising there were specific goals and missions built into the game. At that point the manual, framed as a tourist pamphlet and blending game instructions with ‘facts’ about the world within the game, became required reading.

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Learn to play / play to learn

Learning strategies are often an implicit part of the game narrative. Non-player characters may be positioned as coaches. There may be a ‘boot camp’ or training scenario separate to the game, or early levels of a game can be designed to introduce players to basic skills and functions within the game realm. For example, the authors starting playing Capcom’s Resident Evil — Code: Veronica X without recourse to the manual. After a lengthy cinematic introductory sequence the player character, named Claire Redfield, regained consciousness in a darkened cellblock. The following text appeared on the screen:

‘If I were equipped with a lighter, I could see outside…’

Taking that internal monologue as a clue to our next step, an experimental press of control buttons soon brought up a control screen that indicated that Claire was in possession of a lighter, and this was quickly brought into use. The control screen also included a rudimentary help system to describe basic functions, a map to show the location of key game features as we progressed, and tactics for solving puzzles in the games. The internal monologue cue system appeared again as we progressed into the next room of the game maze and discovered a manual typewriter:

‘An old typewriter. I could save my progress if I had an ink ribbon.’

Thus we were introduced to the game’s mechanism for saving progress at key checkpoints in the game maze. The language of the monologue also illustrates the curious blend between story and game mechanics that occurs when instructive elements are introduced into a narrative. Not only is the Claire character describing her surroundings (‘an old typewriter’), but also she is explicitly aware of progressing through a game maze (‘I could save my progress’).

Clearly there is learning happening here, but just what is being learnt is the issue if players are ignoring the manuals designed to introduce them to the game. Obviously there is learning based on the computer game concept of mastery of the interface, such as the onscreen help and the internal monologue clues in Resident Evil. But by initially ignoring the manuals most players appear to have a learning experience that closely mirrors the process of experiential learning that occurs in role-based process drama (Carroll & Cameron, 2003). Of particular interest is how
the learning concepts drawn from process drama such as understanding role
distance and dramatic protection (Carroll, 1986) apply to games learning.

For example, while under the control of novice researchers/players the main
character in *Resident Evil* was continually being killed before they worked out how
to defend against the zombie attackers; yet their avatar Claire Redfield existed in a
penalty-free learning zone with nothing to lose. This allows the players to indulge
in high-risk behaviour while at the same time being protected by their role
distance from deep identification with the character, so that her potential danger
becomes a learning experience. Describing her experience playing the same game,
Tosca notes:

> ‘actual gameplay is full of trial and error actions, specially at the beginning
> of the game when we are not familiar with the interface or the story’ (Tosca,

Drawing on Goffman’s (1974) explication of Frame Analysis — this concept of the
dramatic frame, where the player is operating as if the situation is real — there are
a range of conventions that can be engaged that vary the levels of protection
required within the game. In the initial stages of playing *Resident Evil* the role
distance for the player is a long way from being an involved participant in the
event. It is distanced from identification with the central character, and instead
becomes the observer/learner who needs to know how to navigate within the new
environment. The one obvious way to discover the resources of the environment
is to push the limits. Within *Resident Evil* this may frequently involve unpleasant
deaths for Claire, the character representation of the player. The authors were
quite willing to repeatedly send Claire, shown in Figure 4.2, into flaming wreckage
or zombie-infested corridors to discover how to find useful objects and overcome
obstacles.
In learning terms, Eskelinen (2001) makes a critical distinction between this sort of risk-based learning and that of engaging in traditional text based learning. He makes the point that the dominant mode of learning in literature, mainstream theatre, and film is interpretative, while in games and process drama it is configurative. He says:

‘…. in art we might have to configure in order to able to interpret whereas in games we have to interpret in order to configure, and proceed from the beginning to the winning of some other situation’ (Eskelinen, 2001, p. 2).

This type of learning is directly applicable to the ergodic learning pathway that Aarseth describes in Cybertext (1997). During the process of playing Resident Evil the researchers/players were engaged in the construction of an individual and unique screen-based semiotic structure. This consisted of a selective configuration of the game elements and their own player choices. The wide-ranging variable expression of meaning built into a non-linear game text should not be confused with the semantic ambiguity of a linear print-based text. The game world of Resident Evil is constructed through an individual player’s work and hence is an ergodic text as Aarseth defines it.

The playing of Resident Evil demanded strategy and experiential repetition that was based on the frustration of a difficult interface and a deliberately confusing scenario. This led to extreme levels of high-risk experiential learning that exploited

the ‘no penalty’ learning zone that death and rebirth of player characters can provide. Of course, applications of this successful learning strategy outside the dramatic frame can have far more serious consequences. There is no penalty-free zone in real life social interaction, and the results are often worse than a bite on the neck from a zombie (although sometimes that’s what it feels like).

A performance narrative approach to games research

Our research approach was based on playing games in order to observe the learning mechanisms and discourses in these texts. A fundamental problem is apparent when the researcher becomes a participant in the process being observed. The indeterminacy that Heisenberg\(^6\) so clearly articulated in relation to quantum physics also applies to the world of games research.

Norman Denzin asserts that researchers in the human disciplines face a crisis in both representation and legitimation when it comes to qualitative studies (1997b, p. 350). The crisis of representation reflects the inherent misrepresentation of experience that can occur when a lived experience (e.g. learning to play a video game) is interpreted through research. Researchers that stand outside the process itself will have vastly inferior understanding of the research material, compared to the learner/player. This is the digital native/digital immigrant gap described earlier. One obvious way to deal with this is to place the researcher within the learning environment and creatively interpret this experience as a performance narrative, while interpreting observation and interview data as a performance text.

For our initial examination of game learning mechanisms we adopted a process of recording both the onscreen gameplay and the researcher/player motivations and observations in real-time. This was afforded by the simple step of connecting the games console hardware to a video tape recorder to record the screen action, while an audio tape recorder recorded a spoken commentary. While one researcher played the game, the other was able to prompt observations by asking questions about the motivation behind player actions. The observations, assumptions, strategies, and experiences of both researchers were recorded as a direct stream of consciousness response to the game. In this manner the authors

\(^6\) see for example http://www.aip.org/history/heisenberg/p01.htm
were creating a performance narrative (the gameplay) while generating an audiovisual record that could later be interrogated as a performance text itself (a commentary on the gameplay).

Within video game research based on the performance text model, two forms of textual product can be distinguished. One is the complex interpretive product or the original text produced by the player as they learn to play the game and attempt to articulate a set of understandings about a particular cultural product and social process. This text then becomes the site for new interpretive work by the researcher. The second form is the researchers' text, (also a critical/interpretive text) which now inserts itself inside the original process, offering new interpretations and readings of what has been presented. When playing *Resident Evil* as a specific textual video game experience this produces a multileveled, multi-method approach to interpretation. The favouring of such an interpretive ethnographic writing style requires that the project simultaneously question/establish the credibility of its use of facts and fictions in the story that is both told and played/performed (Denzin, 1997b).

The audiovisual text generated during our first encounter with *Resident Evil* demonstrated the multi-level data generated when considering a new game text. The video of the gameplay shows in real-time how awkward the gameplay was at first, as the player continually struggled to find the right button to complete actions. This problem decreases as the controls are learnt, but then the viewer is struck by the amount of backtracking and aimless wandering as the researcher/player discovered how to progress through the game maze by trial and error. If playing the game was at times frustrating and awkward, watching the video reveals a deeper tedium and a tendency to repeat actions that have already proven fruitless or fatal. On the other hand, the video recording of a first attempt at *Grand Theft Auto — Vice City* illustrates the speed with which game controls were learnt, and the freedom afforded the researcher/player to explore the game world. This video reveals the cinematic quality of the gameplay, and is at times more like watching an action TV show than a game.

The audio commentary adds several layers to the research narrative. Comments recorded include observations on the design aesthetics, the genre, the difficulty of gameplay, and the motivations for player actions. The narrative position
constantly toggles between observing researcher and participatory game player, providing different levels of understanding to be teased out by later reflection. Watching the gameplay video while listening to the audio narrative (like listening to a director’s commentary on a DVD movie) provides yet another level of critical interpretation of the experience.

Reading the social sciences dramaturgically (Carlson, 2001; Denzin, 2001) involves understanding that playing video games exists as a continuum of performance modes that exhibit constantly shifting dramatic role positions between being a participant through to spectator. Fieldwork can then be seen as a collaborative undertaking that revolves around the meanings brought to the videotext, performers and performances (Silko, 1981). By moving back and forth through a narrative collage of gaming experience an unstable relationship is generated between the investigator, cultural text, ethnographic text and electronic and archival representations. Rather than turning a story told into a story analysed (using traditional functionalist narrative methods) the goal becomes hearing and reading the gameplay as it happens (Trinh, 1989, 1991, p. 143).

If video games are performed as ergodic texts then according to Denzin (2001) this calls for new forms of qualitative research that embrace the performance interview, performative writing and ethnodrama. Building on the concepts of the cinematic society (Denzin, 1995), where accounts of lived experience are based on cinematic/televisual/ethnographic representations and an interview society of spectacle and professional confession, Denzin (2001) re-theorises a cinematic-interview game society where lived experience is turned into narrative. Video game narrative is also part of this lived experience; the personal becomes public, and experience is made a consumable commodity that can be bought and sold in the media and academic marketplace (Carroll, 2002b).

The idea of the reflexive interview in video game research also requires a shift from a functionalist theoretical perspective to ethnoperformance. For Denzin the interview is not a mirror of the external world or a window into the inner life of the gamer, but it functions as a narrative device that allows the researchers to tell stories about themselves. Reflexive interview texts about video games selectively reconstruct that world by telling and performing a story according to their own version of narrative logic (Denzin, 2001, p. 26; Trinh, 1989, 1992) built into the
ergodic game structure. In these ways both visual and narrative collage and montage allow the writer/interviewer/performer to create a meaningful examination of the text.

By going digital native, the reflexive interviews on learning to play video games reflect the postmodern and post-experimental moments of qualitative research (Denzin & Lincoln, 2000). Writing up interviews as game descriptions allows for pauses, repetitions, narrative strategies and the rhythms of twitch and run. By moving between the game role positions of participant and spectator the players and their projects are located within a newly developing digital culture (as a set of interpretive practices) as performers within it.

An equally important consideration, and one that follows the crisis of representation, is one of legitimacy. Denzin (1997a) argues that the validity of a research project does not rely on a set of external rules and procedures imposed from the world beyond the research subject, but rather that the text being studied can assert its own authority over the reader. Thus, use of the training manuals themselves and the initial experience of playing the game will shape any study of the learning discourses of video games.

In reading contemporary game texts in this way the new ethnography radically subverts the functionalist agenda, because the real world is no longer the referent for analysis. Gaming is simultaneously an ergodic text and an interpretative process (Strine, Long, & Hopkins, 1990, p. 84). The original textual product, the unique gameplay becomes the site for new interpretative work, and the researcher as gamer is now inserted into the ergodic nature of the text and becomes part of it. Objectivity is never an option; you kill the zombies because you must — the world is just structured that way.

4.4. Critical reflection

Following Zuber-Skerrit’s CRASP model (1992) for action research, the reflection phase of Cycle 1 of my thesis study is a self-evaluation of the research conducted and the scholarly publication produced. In this way the combined critical, research, accountability and self-evaluation elements contribute to the professional development that occurs when a reflective practitioner engages in action research.
I found that the incorporation of the scholarly publication into the action research cycle in this way provided an opportunity to reflect on the action and observation phase in terms of both the internal audience of project participants, and the possible external audience of researchers and practitioners in a broad range of disciplines. This demonstrates the effectiveness of the reflection-in-action/reflection-on-action approach intrinsic to the action research methodology. In the case of Cycle 1, although we had started the research with a focus on the learning discourses of computer and video games, we were able to engage with and reflect upon the broader methodological challenges that emerged when combining the dual roles of researcher and player in games analysis.

The first part of the publication links the experiential nature of the learning discourse in games to the types of learning we had seen occurring in the digital media-supported process drama of *To the Spice Islands*. Although Cycle 1 was focused on video game conventions, the published article expressly connects with applied drama conventions, as in:

‘by initially ignoring the manuals most players appear to have a learning experience that closely mirrors the process of experiential learning that occurs in role based process drama (Carroll & Cameron, 2003). Of particular interest is how the learning concepts drawn from process drama such as understanding role distance and dramatic protection (Carroll, 1986, p. 2) apply to games learning’ (Cameron & Carroll, 2004).

For example, we noted the ways in which game players simply enter the game world with little or no explicit instructions. In the examples we viewed, printed game manuals and other ephemera contributed to the backstory, providing an emotional orientation to the game as well as mechanical instruction about game controls. We saw this as being similar to the notion of pre-text in applied drama, and this in turn drew our attention to other similarities with applied drama forms and conventions. We then began to consider how the dramatic conventions of role distance and role protection familiar to practitioners in the applied drama field could also be a significant factor of video game play and game-based learning. As we became more aware of the ‘penalty-free’ nature of exploring the game worlds in our research project, so these conventions of pre-text, role distance and role protection were highlighted for further examination in the ongoing research journey outlined in this thesis.
The article discussed in this chapter is also significant to that process in that it attempts to define the then widely accepted but largely uncontested and under-researched concept of a technology-based generational gap between learners and teachers. Prensky succinctly describes this as the digital native/digital immigrant divide, and Table 4.2 in this chapter was my attempt to summarise Prensky’s assertions into a list of key factors that teachers and trainers should consider when designing learning for digital native students. The digital native concept became a justification in itself for seeking ways to add technology to the field of applied drama, or to pursue a digital game-based learning strategy in order to account for the supposed learning preferences of students.

On reflection, the supposed digital native/digital immigrant dichotomy is also embedded in the crisis of representation observed in Cycle 1. The argument that it is necessary to play a video game in order to study it risks reinforcement of cultural stereotypes based on perceptions of ‘gamers’, particularly those stereotypes that equate age with technical competency. It would be wrong to assume that the best games researchers are automatically those in the closest demographic to the game designers’ target market, in the same way that it is wrong to assume that video games are the sole domain of young people. For example, one 2010 U.S. industry report found that the average age of computer and video game players was 34 years, and that 26 percent of players were over the age of 50 (Entertainment Software Association, 2010, p. 2).

It is clear that there are a lot of assumptions made about video games, and in turn the field of games studies. In reflecting on the article presented in this chapter I can now see that these assumptions can easily extend to digital game-based learning and other educational technologies, and that attributing digital native attributes to an entire generation of learners is unwise and open to criticism. Recent studies have concluded that there is a mix of skills and knowledge among learners (for example, see Kennedy, Judd, Churchward, & Gray, 2008). Prensky has himself recently shifted away from his original generational arguments, acknowledging that the age of learners is less relevant than the ‘digital wisdom’ apparent in their engagement with the world through digital technology (Prensky, 2009). The growing realisation of the risks of adopting Prensky’s argument too readily subsequently shaped my own future research, practice and writing as I became
more aware of the potential dangers of technology *boosterism*, particularly when dealing with fields that focus on interpersonal and real life interaction such as drama and education.

The first cycle of research for this study also drew my attention to some of the similarities and differences between the conventions of applied drama and digital games, and some of the opportunities and constraints for their application in affinity spaces. Firstly, John and I had noticed what I would now describe as the ‘narrative plasticity’ apparent in improvised drama forms and ergodic digital texts. The ‘story’ of the drama or game is often told in hindsight, but in both forms the lived moments of drama or game can be forms of experiential learning. The drama facilitator or game designer can provide elements to create the pre-text for the drama or play, but the narrative is then produced through configurative exploration, rather than fully interpretive engagement with a complete text.

Secondly, both applied drama and digital games rely on a willing suspension of disbelief on the part of the participants or players, and this in turn implies that slipping into the fictional world will be a relatively smooth process. Concepts such as the dramatic frame, pre-text, and the ‘interfaceless interface’ point to some of the conventions operating in these forms. The challenge for teachers and practitioners is how to provide an affinity space that has the minimum level of fidelity required to encourage immersion, while not creating a barrier to engagement with a clumsy or difficult to use interface. With games that might mean illogical or complex controller movements to control an on-screen character, while in drama terms the equivalent might be a requirement for too much acting ability from participants, which leaves them feeling exposed or vulnerable. The rewards for getting it right however can be flow, or powerful immersion and engagement within the affinity space.

Cycle 1 of my fieldwork therefore suggested to me that although the intersection of drama, technology and education was something that needed to be approached with some caution, the impact of mediated communication and entertainment forms such as games on young people’s concepts of role, identity and performance was a significant area worthy of further investigation.
4.5 Summary of the chapter

This chapter illustrates the application of the CRASP model to produce the exegesis component of the thesis, which consists of a sequence of articles to form the autoethnographic self-narrative approach to the study. In Chapter Four I have outlined how my earlier postgraduate research led to involvement in an applied drama project in 2002 that explored the use of everyday digital technology as a framework for a dramatic encounter in an educational setting. Following reflection on this project, and on issues drawn from the emerging world of digital game studies discussed at the 2003 Digital Arts and Culture gathering in Melbourne, the development of a small research case study on the learning discourses in video games in late 2003 provided the impetus for the planning stage of the first core action research cycle of this project. This led to a journal article, which was published in early 2004.

The action and reflection phases of Cycle 1 have been presented in this chapter in the form of the resulting scholarly publication. This journal article detailed our exploration of the intrinsic motivations apparent in some game experiences, and the learning discourses present in game conventions such as printed manuals and in-game prompts. Our research examined commercial game titles such as Grand Theft Auto — Vice City, Metal Gear Solid 2: Sons of Liberty, and Resident Evil — Code: Veronica X. This article also considers the crisis of representation that arises when the researcher becomes a participant in the activity being observed, and the inherent difficulties of pursuing the flow of real-time game play despite the researchers’ need for a ‘pause button’ to enable reflection in and on action.

In this chapter, three key applied drama conventions have been identified as important possible bridges between that discipline and the work being done in the digital game-based learning field. They are:

- **pre-text**, which was seen mirrored in the use of game manuals and other ephemera to generate emotional orientation to the game beyond mechanical instructions; and
- **role distance** and **role protection**, which were seen as operating within the drama frame to allow penalty-free exploration of possibilities for action.
The emerging concept of *digital pre-text* is explored throughout the following cycles of action research. However, in Chapter Five the nature of role conventions in both applied drama and digital games is central to the ongoing inquiry.
5. CHAPTER FIVE

Cycle 2 (2005)

Playing the Game: Role distance and digital performance

5.1 Introduction

This chapter describes the second cycle of core action research undertaken for this study. As shown in Table 5.1 it repeats the structure established for the exegesis component in the previous chapter, and continues the autoethnographic self-narrative of the context for Cycle 2 at section 5.2. This describes the settings, aims and participants and establishes the motivation for this phase of the inquiry. The action and observation stage of the core action research project is then presented at section 5.3 as an edited version of a scholarly journal article published in 2005. The chapter continues with my critical reflection on Cycle 2 at section 5.4 and concludes with summary at 5.5 leading to the re-planning phase for the third cycle of fieldwork to be discussed in Chapter Six.

Table 5.1: The structure of Chapter Five in the CRASP model used for this thesis.

<table>
<thead>
<tr>
<th>AR phase</th>
<th>CRASP element</th>
<th>Chapter section</th>
<th>Autoethnography</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>Critical attitude</td>
<td>5.1 Introduction</td>
<td>The AR fieldwork for this thesis continues with a focus on role distance and role protection operating within a performance convention. Participant observation research using the online game EverQuest explores the operation of these role conventions in applied drama and digital games.</td>
</tr>
<tr>
<td>Act &amp; Observe</td>
<td>Research</td>
<td>5.2 Context for the inquiry</td>
<td></td>
</tr>
<tr>
<td>Reflect</td>
<td>Self-evaluation</td>
<td>5.4 Critical reflection</td>
<td>Reflection on this fieldwork notes similarities and differences in role distance and role protection operating in live and mediated performances. Observations are made of the importance of performance conventions in creating a dramatic frame for experiential learning, and this is linked to the affinity space concept. Pre-text is then flagged for examination in the next AR cycle.</td>
</tr>
<tr>
<td></td>
<td>Professionalism</td>
<td>5.5 Summary of the chapter</td>
<td></td>
</tr>
</tbody>
</table>

5.2 Context for the inquiry

The autoethnographic nature of this exegesis section is such that the story of my research is shaped by a retroactive re-ordering of lived moments into a coherent narrative. This thesis is therefore ordered as accurately as possible into
representative cycles of fieldwork to describe the iterative or ‘perpetual beta’ style of the methodology as it was applied. However, like any lived experience the personal research journey being described is not a singular or linear trajectory, and the research process did not stop during the writing and publication stages within each cycle. For example, while awaiting publication of the journal article developed in Cycle 1 in early 2004 I was already engaged in some of the re-planning that marks the start of the next cycle of the core action research fieldwork undertaken for this thesis. While progressing through the first cycle, attention had been drawn to three conventions that appeared to be operating in some forms of both applied drama and digital games, particularly as applied to learning situations. Those three conventions were:

1. pre-text, which provides entry into the world of the drama or game;
2. role distance, which allows participants or players to move nearer to or further from the action; and which contributes to
3. role protection, which describes the degree to which fictional and real-world consequences are kept apart.

All three conventions appeared to provide a theoretical connection between the live role-based performances that were enacted in the applied drama forms, and in the mediated performance forms being observed in some role-playing video games. For the next core action research cycle, which would once again be a collaborative project with John Carroll, we wanted to focus more on these converging issues of identity and role in drama and video games, as they seemed central to the experience of the drama participant/game player engaging with the world of the drama/game as established by the pre-text.

The conventions of role distance and protection also appeared to be a crucial element to understand in terms of the efficacy of the applied drama form as applied in educational settings, as it was these conventions that allowed participants to enter the drama world quickly and safely with minimal dramatic training, and focus on the content rather than the form that was being used to explore it. More than 50 years of work in applied drama in education, such as through the form known as process drama, would be a useful starting point for exploring the similarities between these conventions and the parallel conventions that seemed to be operating in some digital game forms.
Once again I reflected on the DAC conference in April 2003, when a number of papers had considered the then very popular massively multiplayer online role-playing game *EverQuest*. In fact, one presenter had joked that most of the players were probably researchers and PhD students conducting social research anonymously in the online game world. When considering a game title to use as the basis for the next case study during the action research cycle, we decided that it would be interesting to explore the emerging phenomena of these 3D first-person online role-playing spaces. The games offered a mix of pre-designed narrative quests, and an ability to freely explore the game environment and interact with other players as well as software controlled non-player characters (NPCs). This matched the open or ergodic text concepts outlined in Chapter Four, through which there is an element of plasticity in the narratives that can be created within the parameters initially established by game designers. As detailed later in this chapter, *EverQuest* has a fantasy theme that incorporates characters from 16 so-called races within the game such as human warriors, dwarves, ogres, and a range of other fantasy creatures with varying abilities. Players also select a ‘class’ for their character, such as a wizard, ranger, cleric or warrior. The game takes place within the fictional world of Norrath, which is plagued by monsters but rich in treasure for the questing adventurer. Players can also seek to master trade skills, and build up experience points by battling monsters, exploring the world, and completing quests. It is possible to play solo, or team up with other players to complete tasks.

During early work on this next phase of my core action research fieldwork, a further motivation for settling on an exploration of role conventions in *EverQuest* was a conference hosted by the Institute of Education, University of London, in July 2004. Titled *Digital generations: Children, young people and new media*, this international conference aimed to present new research drawing from a range of academic disciplines, and to promote dialogue across research traditions. The conference included at least three themes that seemed relevant to the direction that my own work was taking, these being described in the call for papers as:

- new media, schools and informal learning;
- play, games and interactivity; and
- children and young people as media producers.
With this conference in mind, and with the desire to continue to explore the role conventions in applied drama and video games started in Cycle 1, I entered the next research cycle from late 2003 and into early 2004. I would once again collaborate with John Carroll, who was developing his own understanding of the similarities between applied drama and video game conventions. The key area we identified for exploration was to be the connection between the conventions of live role-based performance typical in the applied drama form of process drama, and the mediated performance of online role-playing in video games such as EverQuest. Cycle 2 would consider the identity formation evident as a dominant theme in cybertulture studies concerned with virtual environments. Similarly, the adoption of alternate identities through performance was seen to be a key concept in process drama.

This stage of the fieldwork would also continue to explore some of the methodological issues we had identified in Cycle 1, notably the positioning of a game researcher in the dual roles of player and observer. I decided to once again adopt a participant observation position, and Cycle 2 would be based upon my attempt to play EverQuest as an ‘out of the box’ experience. Although I had seen screenshots of the game at conferences, I had not observed or experienced real-time gameplay. To that end we purchased a copy of the game from a retailer, and I set about installing it on my office computer. I then set aside several hours over the course of a week to play EverQuest, and to take notes and digitally record screenshots of the action. In creating my character, exploring the world, and embarking on quests (both within the game, and of my own devising) I tried to remain open to the simple goal of exploring the 3D online world of the game as a novice player, despite my other role as a researcher. The narratives and explanations I would later give John during a reflexive interview process as we discussed my gameplay would then become part of the data to be analysed.

It was through this process of participation and reflexive interview that we began to see some of the elements of pre-text, role distance and role protection at work in the online game space. We also began to develop our presentation titled Playing the game: process drama, digital role and identity for the conference to be held in London in July 2004. The accompanying slideshow drew upon lurid artwork and my own screenshots taken from EverQuest, with an emphasis on sword-wielding
warrior princesses, wizards and dragons. We consciously wanted to use the fantasy aesthetic obvious in the imagery to engage people with an explicit connection between process drama and digital games through the shared ‘as if’ nature of the imagined worlds present in both forms, and in the imagined identities and relationships that can take place within them.

The conference featured participants from a mix of disciplines including media and cultural studies, drama, anthropology, sociology, psychology and education. Once again we were struck by the seemingly parallel developments between the game-based learning being discussed and applied drama forms. For example, during his keynote address about the claimed effects of violent video games, Henry Jenkins noted that games might also allow players to safely experience or explore dangerous or potentially disturbing scenarios. This clearly echoes the drama conventions of role distance and role protection that John and I had drawn upon in our reflections on applied drama.

Following Digital Generations we unsuccessfully submitted our paper for consideration as a chapter in a book based on a selection of presentations from the conference (see D. Buckingham & Willett, 2006). We then identified the journal Applied Theatre Researcher (ATR) as a suitable international publication due to its focus on theatre and drama in non-traditional contexts. Although Cycle 2 of my research fieldwork was exploring the links between applied drama and digital games, we felt that the discussion of process drama and role conventions in an educational sense would be well suited to a drama-oriented journal. According to its editorial information published online, ATR focuses on performance practices in a range of social contexts such as drama and theatre in education, theatre for development, theatre in therapeutic settings, theatre in business, theatre in political debate and social action, theatre in life-long education, theatre in prisons, theatre in health education and awareness, theatre in aged care, theatre in hospitals, and youth theatre. This journal article then became the means of completing the action and observation stages of Cycle 2 through scholarly publication based on the core action research fieldwork. My research journey continues with this exploration of

the connection between the conventions of the live role-based performance of process drama and the mediated performance of online role-playing video games. Both activities allow participants to ‘become somebody else’. Both deal with the identity shifts possible within imagined environments. This mutability of identity provides a metaphor for considering the episodic nature of in-role performance and out-of-role reflection in both drama and video games. Using the massively multiplayer online role-playing (MMORP) game *EverQuest* (Sony Online Entertainment, 1999) as a case study, this article carries forward my examination of digital performance and its relationship to the dramatic conventions of role distance and role protection. It also examines the common learning outcomes that could usefully be explored between process drama and video games.

5.3 Scholarly publication

This section is based on an article originally published as:


*Introduction to process drama and digital role*

Process drama is a form of improvised role-based drama with a history that goes back to the middle of the twentieth century. It draws on the earlier educational drama work of Haseman (1991), Heathcote (1991), O’Neill (1995), Bolton (1999), Bowell and Heap (2001) and many others. It is a form of improvised drama, situated in a specific context, which develops a performed dramatic narrative without a script or an external audience. It is lived at life-rate and operates from a discovery-at-this-moment basis rather than being memory-based (Bowell & Heap, 2001, p. 7) The narrative, tensions and drama unfold in time and space through action, reaction and interaction without the use of a pre-written textual script.

This dramatic form has parallels with the developing digital ‘interactive drama’ within the field of gaming described by Ryan (1997), McGonigal (2003), Laurel (1991) and Mateas (2004). In this computer game-based dramatic form, the player assumes the role of a first-person character in a dramatic story that becomes part of and influences the narrative action through interaction with virtual characters. Both process drama, with its role-based performance conventions, and digital
game-based performance, with its filmic conventions, depend on the assumption of a form of role identification for success.

The concept of adopting a dramatic role and a separate identity has also been widely incorporated into everyday culture, from Goffman’s use of frame analysis (1974) to Goleman’s notion of emotional intelligence (1995). It has been picked up by education, management training and business, as well as computer studies (Turkle, 1995). It is also a central concept in the analysis of digital environments such as virtual reality spaces, online chat rooms and video games (Ryan, 2001).

There appears to be some similarity between the conventions of the live role-based performance of process drama and the mediated performance within role-playing video games that could usefully be explored in terms of identity and learning outcomes. This focus on role-taking and ambiguous or multiple identities is a staple of cybertulture debates, postmodernist thought, popular visual culture and the current theoretical fascination with ‘the body’. Ryan (2001, p. 306) notes the popularisation of the view that we own not simply a physical body, but also virtual bodies — or body images — which either ‘clothe, expand, interpret, hide, or replace the physical body, and which we constantly create, project, animate, and present to others’ through the developing digital culture.

Consider the following two statements by influential exponents from the fields of educational drama and video game-based learning respectively. First, Dorothy Heathcote:

I am concerned in my teaching, with the difference in reality between the real world where we seem to “really exist” and the “as if” world where we can exist at will. I do live but I may also say, “If it were like this, this is how I would live”. It is the nature of my teaching to create reflective elements within the existence of reality’ (Heathcote, 1991, p. 104).

Second, James Paul Gee:

‘they [video games] situate meaning in a multimodal space through embodied experience to solve problems that reflect on the intricacies of design of imagined worlds and the design of both real and imagined worlds and the design of both real and imagined social relationships and identities in the modern world’ (Gee, 2003, p. 48).

As these practitioners point out, both process drama and video games deal with the shifts in identity formations that are possible within an imagined or virtual
environment. This playing with identity is particularly evident in the way that the presentation of the self in the online environment is presented as mutable and capable of growth and increase in status. In process drama, the exploration of the relationship between identity and power is a defining characteristic of the form (Carroll, 1988). This experimentation with identity and power expressed within the parameters of a video game or a process drama session may challenge traditional notions of a central or essential identity — especially in the context of race, class and gender through the adoption of alternative dramatic roles.

The mutability or ‘morphing’ of a constantly reinvented identity provides a new metaphor for connecting the episodic nature of in-role performance and out-of-role reflection in both drama and video games. These social constructivist notions emphasise the spatial and temporal locatedness of identity (Hall, 2000). Rather than being fixed, identities are seen as ‘necessary fictions’ (Weeks, 1995), or as ‘points of temporary attachment to the subject positions which discursive practices construct for us’ (Hall, 2000).

**Role and identity**

The concept of enacted role and temporary identity, so thoroughly explored within the process drama field by Heathcote (1991), Boal (1995), Bolton (1999) and many others, could usefully be applied here to provide an analysis of the dramatic role possibilities of multiple identity play within the drama and the interactive games environments. The closeness of performance elements within both fields can be seen as an adaptation of dramatic role to the changing cultural forms being generated by gaming platforms, interactive networks and developing online digital media.

The field of identity formation that both drama and video games encompass means they are uniquely positioned to grapple with this issue in a cultural climate of increasing openness and identity relativism. Process drama is able to provide a positive idea of the place of the individual in poststructuralist thought by providing drama conventions that negotiate constantly shifting identities. Within process drama, the participant can be seen as a subject-in-process, capable of agency, role differentiation and integration within a range of environments, both digital and
dramatically enacted, that in some way replicate the multi-modal discourse of that long-standing semiotic signing system, the theatre.

As Heathcote (1991, p. 169) says: The theatre is the art form that is totally based in sign’. In the past, a single mode (usually text or icon) of communication was the only form available in the digital world (Carroll, 2002a). However, digital technology has now made it possible for one person to be engaged in all aspects of multimodal immersion and production. In the past, this character immersion was usually the preserve of the trained actor or the participants in role-based process drama.

As a number of authors have argued (for example Turkle, 1995, p. 184), such role-based digital involvement may not be all fun and games — there may also be important identity work going on as there is within process drama role-taking. In the past such role immersion was preceded by extensive training, in the case of actors, to clarify the distinctions between identity and role. In the case of untrained individuals, directors or skilled teacher/facilitators provided guidance in process drama. Within video games, the induction may be limited to the cinematic cut-scenes and introductory narrative.

Turkle’s argument suggests that while some individuals may use cyberspace to express dysfunctional offline selves, most use the digital domain to exercise and experiment with what might be considered truer identities. Maybe it is here that the first collaborations of the digital world and drama classroom could occur.

However, other cybercultural critics have been less optimistic. Rather than any kind of radical performance, Nakamura (2000) suggests that this identity tourism involves the act of playing the fantasy Other, which reaffirms rather than challenges real life (RL) stereotypes. This seems to be the case with the gender boundaries in EverQuest, Diablo and other online games.

**Open texts: A case study of EverQuest**

Whatever the pros and cons of this more radical ‘stepping into another’s shoes’ (Heathcote, 1969), the connection between the conventions of process drama and immersive digital role-playing is even stronger when considered in terms of semiotic production. Because both forms exhibit the multimodal ‘open text’ that
Eco (1989) describes as characteristic of contemporary communication, they are both oriented towards the semiotic action of production. As Kress (2003) points out, the screen is now the dominant site of texts; it is the site which shapes the imagination of the current generation around communication.

As Eco (1989, p. 20) puts it, the author (or composer, artist, playwright, instructor, game designer) offers a work to be completed by the reader (or listener, viewer, performer, student, player), such that ‘the common factor is a mutability which is always deployed within the specific limits of a given taste, or of predetermined formal tendencies’. In this manner, a work can be offered as a ‘plastic artefact’ which can be shaped and manipulated by its audience, but which still operates within the world intended by the author. In particular, Eco defines a subcategory of open work — the ‘work in movement’ — which Aarseth (1997, p. 51) suggests is the closest link to interactive media forms because it is built upon unplanned or incomplete structural elements, allowing a process of mutual construction to occur.

An environment where the conventions of the open text forms of both process drama and video games can be compared is Sony Online’s *EverQuest*\(^8\). This is a massively multiplayer online role-playing game (MMORPG). Thousands of players can be active at the same time, and they can share the same game world in real time. The world of *EverQuest* is a 3D graphical environment populated by players’ avatars in the form of various races (humans, elves, gnomes) or even beasts. These characters take on roles such as ranger, druid, wizard or warrior. The combinations of races and roles produce game characters with different skills in a range of areas from combat to magic, and healing to crafts. Players may simply explore the vast game world and deal with the events and characters that they encounter, or they can engage with various quests or missions that are part of the game design. Players can communicate via text-based chat tools built into the game interface, and they may form alliances to tackle a quest as a group by pooling specialist skills and abilities. Social interaction, either as ad hoc encounters or more formally structured as questing parties or guilds, is part of the game’s appeal.

\(^8\) Now eclipsed in this genre by *World of Warcraft* (Blizzard Entertainment, 2004), but still operating at http://everquest.station.sony.com/
The texts of both process drama and video games demand constant interpretation and articulation. As Gee (2003, p. 11) points out, in role-playing games you can design your own character, and the same is true for process drama. Both forms exhibit the episodic form that alternates in-role behaviour with out-of-role activity. For example, within the video game *Diablo*, after completing a task in character role, the player as player returns to the armoury to buy upgraded weapons before returning to role performance with enhanced powers.

Within drama, there is the alternation of in-role enactment and out-of-role negotiation along with research, discussion and planning. Table 5.2 matches some of the obvious similarities that exist between these two forms.

### Table 5.2: Comparison of process drama and video games

<table>
<thead>
<tr>
<th>Process drama</th>
<th>Video games</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group narrative orientation</td>
<td>Video intro/cinematic cut-scenes</td>
</tr>
<tr>
<td>Teacher-in-role</td>
<td>Instructions from superior, helper, etc.</td>
</tr>
<tr>
<td>Discussion of role attributes</td>
<td>Selecting role attributes</td>
</tr>
<tr>
<td>In-role, attitudinal drama</td>
<td>In-role, playing</td>
</tr>
<tr>
<td>Out-of-role research</td>
<td>Handbook, cheats, history</td>
</tr>
<tr>
<td>Exercise focus</td>
<td>Speed challenges, custom games</td>
</tr>
<tr>
<td>Building role via costume, props</td>
<td>Inventory and attribute-building</td>
</tr>
<tr>
<td>In-role, character</td>
<td>In-role, experienced character</td>
</tr>
<tr>
<td>Discussion, debrief</td>
<td>Online chat, web user groups</td>
</tr>
</tbody>
</table>

When entering the dramatic frame in both process drama and video games, ‘a willing suspension of disbelief’ (Coleridge, 1907) is established. In the case of drama, this is through the negotiated agreement of the participants and the formalising of this agreement by the facilitator, often using narrative as a focus. Video games have a similar formal narrative expressed in cut-scenes and narrative overlay, which establish the dramatic world. Often instruction or guidance is provided by characters within the narrative and dramatic frame of the game. This function operates as teacher-in-role in drama, and commonly as a superior (as in rank or status) or helper in video games. There are also out-of-role tasks that occur that are nevertheless part of the activity, such as selecting role attributes or engaging in research. As well as these activities, there are different levels of playing involvement in both dramatic forms as well as out-of-frame discussion.

**Role distance and role protection**

Clearly, the concept of the dramatic frame is operating in video games such as *EverQuest*, where the player is engaging ‘as if’ the situation is real (Goffman, 1974),
but where a range of conventions vary levels of protection for the player. The player can ‘toggle’ between a close identification with their character and a observer/learner perspective that is more distant and willing to experiment at extreme levels in order to discover how to operate within the game environment. Often, as is the case with *EverQuest*, novice players suffer little or no penalty for failure in the early stages of a game.

This penalty-free behaviour reflects what psychologist Eric Erikson (1968) has called a psychosocial moratorium, which James Gee (2003, p. 62) succinctly sums up as ‘a learning space in which the learner can take risks where real-world consequences are lowered’. Within *EverQuest*, high-risk behaviour is sometimes rewarded at the early skill levels. For example, one of the authors learnt to take advantage of the ‘respawning’ that occurs when a character dies, such that if he got lost or trapped in a difficult location he would deliberately kill off his character (e.g. by drowning or attacking a much stronger foe). His character would then be returned to a familiar location without major penalty — that is, without loss of treasure and equipment. Similarly, he learnt that attacking creatures of similar or higher skill level was a risky enterprise, but even if only occasionally successful in these battles, the player can accumulate experience points much more quickly as a reward for defeating a strong foe. While learning to play, ‘death’ is an inconvenient but acceptable penalty for pushing the boundaries of the game.

In process drama, this concept has come to be known independently as ‘role protection’, where the personal distance from the consequences of actually being in the event have been elaborated and structured for different learning outcomes. This role protection or psychosocial moratorium can be seen in a metaphorical way as an interface that frames the dramatic and performative event. In earlier times, this ‘frame’ was seen as a picture frame or proscenium arch framing the action. More commonly today, it is the screen frame of the computer that performs such a function.

This frame acts as a border separating the images and events from those in real life. The participant enters this framed world with a mutable identity based on parameters of the performance role available to them. By focusing attention on the performative actions within the frame, it clearly delineates the difference between real life and the representation of reality we call role-based video games or
process drama. This is the ‘as if’ device which provides the dramatic role protection that allows the participants to enter the space of enactment.

This performance form is composed of two elements: first, there is the nature of the conventions operating on the screen or within the drama; second, there is a level of role protection or role distance present that allows the adoption of a new identity within the penalty-free area of the dramatic frame. Figure 5.1 shows these elements in a less metaphorical way.

The conventions operate as creative forms for both video games and process drama by developing non-naturalistic ways of presenting material and adapting roles within the performance frame. Within process drama, this covers a range of positions including attitudinal role, signed role and character performance, as well as more abstract forms such as effigy, portrait, statue and narrative voice (Neelands, 1990). Within video games, the player has a similar range of positions from first-person shooter to central character, controller and interactive performer. These conventions are built into the performance frame and provide the structure for the fictional social world to exist.

There is also the protection of role distance that allows the psychosocial moratorium to operate for the participants within the performance frame. Within stand-alone video games, it is the penalty-free nature of the interaction that allows the character to constantly learn by mistakes. However, while providing high levels of role distance and role protection, stand-alone video games are still able to allow participants to experience the performance frame from alternate positions. For example, within the real-time strategy game Starcraft (Blizzard Entertainment, 1998), the player can control any of three different species — Terran, Protos or Zerg — each with its own unique goals, technologies and abilities. Within massively multiplayer online games like EverQuest, the penalties associated with
avatar death may be much closer to those of interactive process drama than non-networked or single-player games.

In a more metaphorical way, the ‘performance laptop’ in Figure 5.2 illustrates these points. The laptop frame provides the space and performance conventions for a distanced performance, and operates for both drama and video games.

![Figure 5.2: The ‘performance laptop’, illustrating role distance and role protection](image)

The player/performer always has the option to select from a range of distance and protection conventions. The most obvious position is immersion in the action of unstructured first-person participation. This full role, ‘first-person shooter’ (FPS) position, while providing high levels of involvement and activity, is one that provides minimal levels of protection for the participants. Within video games, FPS game forms are often based on reflex action and physical controller skills, and depend on an ever-growing body count of increasingly ferocious adversaries for success. In other, more quest-based video games such as Nintendo’s Zelda series (starting in 1986), the first-person view is more open and problem-based, and much closer to the drama concept of full role.

Within process drama, first-person full role and immersion in the event are usually the culmination rather than the starting point of any improvisational drama. First-person ‘in-the-event’ drama requires a background understanding of the context and high levels of group trust to operate in a situation with minimal role protection.
If this minimal role distance is overly confronting, then within both drama and video games the participant/player can choose a greater role distance and stand back from the action by the assumption of an attitudinal role. This maximally distanced role requires only the agreement of the player to take on an attitude of a character in the drama for it to operate. An *EverQuest* player could choose to ignore the ‘connected’ aspects of the game, avoiding communication with other players and pursuing their own intra-game pursuits, such as mapping the game world. They could imbue their character with a desire to observe the game world, rather than interact with it.

At a role distance closer to the action, the player can become a central character by ‘signing’ the role they have adopted through costume, name, career path or some other attribute. They can actively engage other human players, adopting a particular tone in their text-based ‘conversations’ in order to convey a deeper sense of their role. At the role distance level closest to being-in-the-event the player can assume a full role and become part of the unfolding narrative action. The role distance chosen is always variable, and the player can ‘toggle’ between levels of involvement in a video game through changes of camera perspective. Sometimes this is for strategic reasons to get a larger picture of what is happening but sometimes it is because the emotional closeness of the action becomes overwhelming.

As noted earlier, in terms of role protection, this first-person full role is the most emotionally exposed position. However the player may choose to maintain a full role but stand back somewhat from the moment of unstructured participation by becoming a guide for the character, or an author of the narrative. In *EverQuest*, a player can choose to ‘hire’ other players to complete a difficult or dangerous task, rather than attempting it themselves. Similarly, a player can choose to develop their character as a service provider (for example healer, tailor, fletcher, blacksmith, and minstrel) to other players rather than participating in the game’s pre-designed quests. These roles are often presented as non-player characters (software-controlled agents), but human players can take on these roles if they desire.
Similarly, within process drama the teacher/facilitator may shift the role distance of the participants in a group enactment if the level of role protection does not provide enough artistic distance from the dramatic intensity of the event.

Both performance forms, unlike real life, mean that the participants are not trapped in the present moment of unstructured participation. The performance frame for both drama and video games allows the participants to structure the protection of role distance that is appropriate for their needs.

The performance frame, the conventions and the levels of protection are shown in a metaphorical way in Figure 5.2. All the levels of protection and varieties of convention are available in any piece of work.

Of course, the ultimate protection for both drama and video games is to exit the performance frame altogether, and this episodic quality is part of the dramatic form — most games feature a pause function. However, the combination of role protection and role distance from the focus event provides the dramatic structure that protects the participants in their dramatic involvement with the narrative.

All varieties of role distance are performative — and distanced roles are often used in drama though less so in video games. With drama, participants feel more protected and work with more conviction if they are framed at some distance from the moment of real-time enactment. If too much is at stake, the role distance is often too close for an exploration of the situation, and the performance frame becomes blurred while the belief in the convention and protection of the role is lost. Within video game genres, role distance varies. In first-person shooter forms, the visual rush of imminent destruction often drives the action. In other quest-based games, a more reflective position is available.

**Player perspective, role distance and role protection**

One way to explore how the dramatic conventions of role distance and role protection apply in video games like *EverQuest* is to consider the screen views available to the player. Following a video game convention of equating player perspectives and role distance with ‘camera views’, the player can cycle through the options to choose to view the game from different angles, and also zoom in or
out and pan left and right using keyboard commands. Table 5.3 outlines the camera views offered in *EverQuest*.

**Table 5.3: The camera views in *EverQuest***

<table>
<thead>
<tr>
<th>Description</th>
<th>View</th>
<th>Camera Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-person (default)</td>
<td>Straight ahead</td>
<td>Player cannot see character</td>
</tr>
<tr>
<td>Overhead (rotating)</td>
<td>From above</td>
<td>Rotates as character turns</td>
</tr>
<tr>
<td>Rear (rotating)</td>
<td>From rear</td>
<td>Rotates and stays behind the character</td>
</tr>
<tr>
<td>Overhead (fixed)</td>
<td>From above</td>
<td>Does not rotate as character turns</td>
</tr>
<tr>
<td>Read</td>
<td>From rear</td>
<td>Does not rotate as character turns</td>
</tr>
</tbody>
</table>

In practice, the authors found that playing the game comfortably and efficiently required a constant process of toggling between the first-person view, a view from over the shoulder of the avatar, and a distant third-person view. The ‘ideal’ view depended on the task being performed. For example, the authors found a first-person view good for navigating through corridors in pursuit of another character, while switching to a third-person view was sometimes necessary in a melee fight to ensure the avatar wasn’t being attacked from behind.

As noted earlier in Figure 5.3, a first-person perspective in terms of both role protection and role distance is the most likely to equate with a sense of being within the action; it is ‘as if’ you are the character. First-person view is the most ‘real’ perspective available in this game, and in others like it. Indeed, the ‘first-person shooter’ is recognised as a game genre in itself, modelled on neo-classics such as *Doom*, *Quake* and *Unreal*. It is the perspective that most places the player within the ‘skin’ of the character avatar. In this view, the world is seen through the character’s eyes. The point of view afforded the player in video games is often discussed in terms of ‘immersion’ — the degree in which the player is drawn into the mediatised ‘reality’ of the game environment.

Other camera positions offered in *EverQuest*, as listed in Table 5.3, present options for varying degrees of role distance and protection as outlined in Figure 5.3. Whenever the player is in role, standing apart from the action and looking down on their avatar, this role distance brings highly affective subjective elements into the social relationship being negotiated (Kress 2003: 118). The player is always in control of the role distance they choose. It is their desire for engagement that dictates how close to the naturalistic frame of total involvement they will go. These conventions exist as a visual genre which is similar in form to the illustrations that
exist within a multimodal text as outlined by Gunter Kress in *Literacy in the new media age* (2003, p. 118). The distance and positioning of the viewer in any visual text, video game or drama are always critical to their role position. Like many games, *EverQuest* allows the player to quickly toggle or cycle through camera positions using keyboard commands. In this manner, role distance can be changed more quickly and more often than is usually the case with process drama.

Figure 5.3 illustrates the third-person view in *EverQuest*. Here the authors (in the guise of their character Elviss the Ranger) have been attacked from behind by a Restless Skeleton (a computer-controlled character). The authors have toggled from first-person to third-person perspective to quickly gain a sense of the melee. In terms of role distance, this is a mid-range engagement that is in the action, but not too close for comfort. Being able to assess the situation and plan a response in third-person view is less distressing than reacting to an attack from a seemingly invisible enemy in first-person view.

![Figure 5.3: Third-person (rear rotating) view in EverQuest. Attacked from behind, the authors have adopted this perspective/role distance to identify their foe and plan a response.](image)

It is also important to note that *EverQuest* intrinsically acknowledges that sometimes players want to shift to other role frames during the game. One of the communication modes afforded in the game is known as ‘out of character’ chatting. By typing in ‘ooc’ mode, a player speaks out of character to all nearby players. The game instructions describe this facility as being ‘for speaking out of the context of the game and your character’. An odd but amusing example of this is shown in the
transcript of text-based conversation below, in which the character of Bareback comments out of character about Elviss’ name:

Bareback says out of character: Love me tender, love me sweet.
Elviss: Do you like my hair?
Bareback: Yes I do.
Elviss: I would like my shoes to be blue Suede.
Bareback: That would be cool.

This ability to toggle social interactions instantly and explicitly in and out of character clearly allows for shifts in role protection. This exchange equates to the role protection frame of critic, who can interpret and comment on the action. This level of spectatorship is highly protected and a long way from first-person involvement. Indeed, it is often the functional aspects of gameplay that afford the ability to alter levels of role protection. The player can choose to be in the action as a first-person participant or, as noted above, they can switch to a more protected role of critic by choosing to communicate out of character.

An even more protected position is that of the artist customising their experience. In EverQuest, this is typified by the function of allocating accumulated skill points to selected areas to enhance a character’s ability. In this mode, the character is not perceived as an avatar, but as a table of skills and abilities that can be favoured or ignored depending on how the player wishes to shape their experience. In video and computer games more generally, this high level of role protection is found in the practice of modifying the game code, or in creating new game levels or scenarios using software tools and programming skills.

**Process drama, video games and learning**

In learning terms, Eskelinen (2001) makes a critical distinction between the sort of learning exhibited by both process drama and video games, and that of engaging in traditional text-based learning. He makes the point that the dominant mode of learning in literature, mainstream theatre and film is interpretative, while in games and process drama it is configurative (Eskelinen, 2001, p. 2). This type of learning is directly applicable to the ergodic learning path that Aarseth describes in Cybertext (1997). He describes a phenomenon whereby the player, or user, of a
text is a closely integrated figure in the construction of a semiotic sequence. They construct the text by their input into the given elements. He argues that traditional texts require little input from the reader, apart from eye movements and page turning. He contrasts this with dramatic texts that require nontrivial effort to construct and traverse them, such as interactive fiction, process drama or video games. Aarseth uses the Greek words *ergon* (work) and *hodos* (path) to describe these as ergodic texts (1997, p. 1). Within process drama, the participants construct the narrative from the experiential moments of immersion within the negotiated group devised world. This is a very different experience from actors performing a written text or the theatrical experience of being members of an audience participating in the unfolding of a written text.

Similarly, within video games during the process of playing — say, for example, *EverQuest* — the participants are engaged in the construction of an individual and unique screen-based semiotic structure. This consists of a selective configuration of the game elements and their own player choices, and produces a unique improvised lived environment. The wide-ranging variable expression of meaning built into such a non-linear game text should not be confused with the semantic ambiguity of linear print-based texts, which allow for different reader interpretation of a preset format. The game world of *EverQuest* is constructed through an individual player’s work and exists as a unique artefact, and hence is an ergodic text as Aarseth defines it.

Of particular interest is how closely learning concepts drawn from process drama, such as understanding role distance and role protection (Carroll, 1986), apply to video games learning. For example, by initially ignoring a game’s manual most players appear to have a learning experience that closely mirrors the process of experiential learning that occurs in role-based process drama (Carroll & Cameron, 2003). In the role-playing video game *EverQuest*, a player’s continued interaction with game elements and tasks is rewarded with points for experience. A new player practices martial skills by killing rats, skeletons and other creatures that conveniently exist in plague proportions on the introductory levels. By becoming successful at these tasks, the character is eventually promoted to a higher skill level. Each time a character is promoted, the player can distribute a small amount of experience points among a range of character skills and attributes. In this way,
the player can shape the character’s growing expertise in or knowledge of certain areas.

*EverQuest’s* promotion system also allows for a penalty-free learning zone for the player. Until a character is promoted to a skill level of 10, they can die and be regenerated largely without loss. They will be returned to a safe location, and will keep whatever items they were carrying at the time. However, once a character achieves level 10 experience, it becomes necessary for the player to locate their ‘corpse’ in order to recover those items. If the character has died in a particularly awkward location, recovery may not be possible. This can be a significant penalty in a game that relies heavily on the collecting of powerful weapons, useful tools, valuable objects and magical items. Maintaining this inventory can be an expensive pursuit, both in terms of accumulating the game wealth to purchase or pursue these items, and literally in terms of the subscription costs to play the game long enough to develop a character’s worth.

Restricting the risks for characters below level 10 experience allows new or less able players to indulge in high-risk behaviour while at the same time being protected by their role distance from deep identification with the character so that his or her potential danger becomes a positive learning experience. The authors have noted a similar process at work when learning to play other video games, such as their introduction to *Resident Evil — Code: Veronica X* (Capcom, 2000) that frequently involved gruesome deaths for their avatar Claire, the character representation of the player, until their skills and strategies improved (Cameron & Carroll, 2004).

**Conclusion**

There is already considerable discourse on the developing forms of digital ‘interactive drama’. This paper contributes to that discussion by suggesting a theoretical connection between the conventions of live role-based performance of process drama, and the mediated performance of online role-playing video games. It is clear that a central element of both process drama and multiplayer online video games is their ability to allow participants/players to ‘step into somebody else’s shoes’. Both forms contain role distance and role protection conventions that allow a fluid ‘toggling’ between close active engagements within the unstructured
moments of the event, and a more protected observation or reflection on the experience. In video games, this toggling can be as instant as a keyboard press to switch the on-screen viewing perspective.

The authors’ experience of learning to play *EverQuest* demonstrates the increasing closeness of performance elements within both fields. Process drama’s appeal in the educational setting is its ability to provide a protected means of curriculum learning from an experiential position. The mutability of digital identities, as realised in online games, provides a similar penalty-free opportunity for exploring social relationships, identities and experiences ‘as if’ the player is somebody else. Switching in and out of (or between) characters, or toggling distance between first-person participation and third-person observation, provide mechanisms by which the participant/player can reflect on and adjust their involvement in the events they are a part of.

The challenge inherent in this digital gaming form is to explore how this connection might be further applied in fields such as education, where — at least within Western culture — young people’s concepts of performance, role and individual identity have already been changed by an increasingly mediated world. The ability to manipulate or ‘edit’ identity is a concept already assimilated into the digital world-view of many young learners. As more video game-based resources for the classroom emerge, it becomes increasingly important to incorporate artistic notions of role distance and role protection in their development. This may also help to address the ‘moral panic’ reactions to the use of games in classroom learning.

A continuing discussion between educators and especially process drama specialists and game designers on how best to connect these new learning and identity conventions to artistic form and curriculum content would seem worth having.

5.4 Critical reflection
Cycle 2 of the core action research conducted for this thesis study explored role conventions that appeared to be operating in both applied drama and digital games. The emphasis was on the conventions of role distance and role protection that operate in the performance frame, the dramatic device that allows ‘as if’
exploration of the drama or game space. It focussed on the particular applied drama form known as process drama, which often operates as an improvised real-time narrative that explores the drama in context as it unfolds, with an emphasis on the internal audience of participants. This is similar to the way in which massively multiplayer online role-playing games allow players to pursue emergent personal narratives within the scripted and designed elements of the game world. The research and the article produced focussed on the role and identity conventions at work in both the drama and game forms, noting the identity-based play that can be seen to operate within the imagined or virtual environments.

One point made within the article is that while drama draws upon role-based conventions, digital game-based performance uses 'filmic conventions' (Carroll & Cameron, 2005). The alignment of video games with cinema stems from early attempts to propose computers as a digital platform for theatre (Laurel, 1991), or to define ‘interactive drama’ (Ryan, 1997), which tended ultimately to limit consideration of the broader forms of drama beyond traditional script-driven theatre for mass audiences. John and I have subsequently examined the nature of performance in digital environments more deeply, for example in the game-generated animation form known as machinima (Cameron & Carroll, in press), and found much stronger links between live and mediated performances than is suggested by the passing reference to filmic conventions presented in the article. This illustrates the iterative nature underlying the participatory and collaborative development of knowledge in this research.

The article produced in Cycle 2 describes role distance and role performance graphically using the concept of the ‘performance laptop’ shown in Figure 5.2. On reflection I feel that in some respects John and I have ‘undersold’ this illustration, both in this article and in subsequent references to it in other publications and presentations. There is a sense that it plays very much to an audience from the applied drama background that would be more familiar with the concepts it depicts. But these role conventions are a bridge between the live and mediated forms being considered in this study, and a key to the performance frames — including affinity spaces — that can be used to provide penalty-free or protected environments for experiential learning. I will therefore now revisit the concepts it
describes, and repeat the illustration in this section as Figure 5.4 to complement my critical reflection on this action research cycle.

![Diagram of 'performance laptop' revisited](image)

**Figure 5.4: The ‘performance laptop’ revisited**

**Frame (A)**

Figure 5.4 emphasises that participation in the applied drama and digital game forms discussed in this study is a framed activity. Elements such as pre-text, performance conventions, other participants, characters, scenarios, settings and props — real, imagined or virtual — combine to form a constructed and often negotiated ‘reality’ in which the participants can act ‘as if’ the situation were real. In process drama this framing is deliberate, having been initiated by the teacher or facilitator. It allows analysis and exploration of issues through the protected role-shifting and agency through enactment that is seen as a vital transformative element of the form (Carroll, 1996, p. 72). Arguably, digital game-based learning also uses deliberate framing, established through the design of the virtual elements and game functionality, to allow participants to experiment with roles and actions that might otherwise not be possible. Central to both forms is the ability of participants to hold more than one frame in their head at any given time. Despite the use of terms such as flow, immersion and engagement to describe being in the moment of the drama or game, most participants can switch between the real and imagined worlds as needed or desired. The episodic nature of applied drama and some games, and this ability to move in and out of character, was noted in the analysis of my gameplay in *EverQuest* and is one of the shared conventions operating between the forms.
In Figure 5.4 we chose to use the laptop screen at (A) as an obvious visual reference point as a physical frame for digital performance. If discussing more traditional forms of performance we could have used a window, picture frame, or even a proscenium arch to signify a similar physical border. However, it is important to note that in the context discussed here framing refers to the conventions and elements that allow the participant in the drama or game to safely act ‘as if’ the fictional world were real. It is not limited to depicting the screen or stage as the space where the performance takes place. Stepping outside the dramatic frame — in other words, engaging with real life — has potentially more serious consequences for the participant than does simply looking away from the screen. On reflection, the distinctions between the screen as a physical border on which the digital performance takes place, and the use of the term ‘frame’ to describe the scaffolding for safe role-shifting and agency within the game or drama are potentially ambiguous in Figure 5.4 — at least to those unfamiliar with the concept of dramatic framing.

Performance convention (B)
As noted above, in Figure 5.4 the laptop screen at (A) becomes the space for role-play in the mediated drama or digital game, and it is within this frame that the parameters are established for how the participant might configure their identity, or act in the role(s) made possible within this frame. In Figure 5.4 we have attempted to show at (B) that performance conventions are critical components of the ‘as if engine’ that drives the role-based learning in these experiential forms; in particular, we focus on the intertwined conventions of role distance and role protection that we feel are a central element of generating a safe dramatic frame for applied drama or a learning-oriented digital game.

Role distance (C)
In process drama, the concept of a penalty-free zone has come to be known independently as role protection, where each participant’s personal role distance from the consequences of actually being in the event have been deliberately elaborated and structured for learning goals. Although described separately at times throughout this thesis, Figure 5.4 is an attempt to represent how these two conventions can work together to generate the performance frame.
At (C) in Figure 5.4 we have paired three examples from the dramatic form (on the left of the laptop) with three from digital forms (on the right) to describe the distancing effects that can be used to protect the participant. At a basic level, distancing refers to the level of immersion in the role required or desired of the participant. Thus at (C) we show the following pairings as examples:

**Full role / First-person**

In dramatic terms, full role places the participant in the closest proximity to the drama. This is the closest position to ‘acting’, in which the participant may take on a fully-fledged character with a story or history, and is expected to live within the skin of that role. In video game terms, we have equated that with the concept of first-person, which implies that the 3D game world is viewed as if through the eyes of the character being controlled by the player. Within process drama, immersion as first-person and full role is usually the culmination rather than the starting point of any improvisational drama. First-person ‘in-the-event’ drama requires a background understanding of the context, and high levels of group trust, to operate in a situation with minimal role protection. Within the performance conventions illustrated at (C) in Figure 5.4, full role and first-person are therefore the least protected positions shown within the dramatic frame.

**Signed role / Central character**

In this position, the participant is given a defined role in the drama that includes ‘signs’ as to how that character might be expected to act. In video game terms, this suggests that the character being controlled in the game world is central to the plot or tasks, but the events are not seen directly through their eyes. Table 5.3 in this chapter lists the different viewing or camera positions possible in the game *EverQuest* as an example. At a role distance closer to the action, the player can become a central character by ‘signing’ the role they have adopted through costume, name, career path or some other attribute. They can actively engage other human players, adopting a particular tone in their text-based conversations in order to convey a deeper sense of their role. The player is given a clue as to how they should act, but they are not placed in full role within a pre-scripted plot. Although we do not show movement between positions on the continuum, in practice it is possible for the participant to slide from being a signed role into a full role, and move closer to being in the event. In many video games, more distanced
roles are in fact potentially less entertaining, to the point where little or no direct impact on the event would be considered boring or pointless by most players.

*Attitudinal role / Operation of character*

In the most distant position shown in our examples at (C) in Figure 5.4, drama participants in attitudinal role are required to respond to events how they believe someone in that role might respond, asking themselves for example ‘what would a policewoman do in this situation’? This position doesn’t require the participant to adopt a particular character with a history, and thus does not apply pressure to ‘act’ in the theatrical sense. For a video game player, we have equated this to simply operating the character — for example, moving a chess piece does not require taking on the character of the individual piece in order for the game to progress in a meaningful way. The player in this position is a controller more than a performer in the dramatic sense. A video game that reduces player agency to only such mechanical functions would risk being too boring.

Although Figure 5.4 depicts role distance as a means of protecting participants in the drama or game, it is not linked solely to the role protection convention. Role distancing can also work with pre-text to quickly immerse a participant in the fictional world, by adopting an attitudinal or signed role that requires little or no rehearsal.

*Role distance toggle (D)*

In Figure 5.4 we tried to convey a sense in which the performance conventions are not fixed, allowing the participant to adjust their role to move closer to the action or more distant from it, in order to increase or decrease the level of protection offered by the use of role to play with the nature of identity and agency. At (D) we suggested this ability to switch or toggle role distance to adjust role protection was as simple as a metaphorical mouse-click; in *EverQuest* for example changing camera views from first to third person was literally as simple as a keyboard command or mouse action. However, while games often allow this rapid toggling between role distances through conventions such as camera position, this switching is certainly much faster than might be the case with most live dramatic role-play.
Role protection (E)

As noted earlier, in terms of role distance the first-person full role is the most emotionally exposed position, offering the least level of role protection. At (E) in Figure 5.4 we have shown how the level of protection afforded by being in role theoretically increases as the participant’s role becomes less involved in the event. While I have previously described how increased role distance can also provide a measure of protection, the two conventions operate independently on separate axes, as shown in Figure 5.4. Thus, the drama participant or game player may choose to maintain a full dramatic role, but stand back somewhat from the moment of unstructured participation by becoming a guide for other characters, or adopt even more distant observational roles. For example, as noted in the article presented in this chapter, in EverQuest I discovered that a player could choose to ‘hire’ other players as mercenaries to complete a dangerous task, or they could pursue a career as a merchant or tradesperson to provide services in return for rewards. In these cases, the players can remain fully in role, but choose to protect themselves by moving away from the dramatically intense action of a quest or fight towards more artistic or observational pursuits within the same shared game space.

Overall, I have started to view the role conventions described here as a key part of the wider performance convention operating to generate the dramatic frame, which is effectively a protected affinity space for experiential learning. I have previously noted that pre-text is another important component of the performance convention, and the transformation of this dramatic convention through digital media now becomes a focus of the next cycle of action research in this study.

5.5 Summary of the chapter

This chapter continues the application of the CRASP model to produce the exegesis section of the thesis. In Chapter Five I have outlined how the re-planning phase that marked the start of Cycle 2 of the action research fieldwork began with a focus on selection of a suitable game title from which to explore the similarities of role conventions between the applied drama form known as process drama and some genres of role-playing video games. The title chosen was EverQuest, a massively multiplayer online role-playing game. In Cycle 2, several game playing sessions
were recorded, and comparisons made with conventions such as pre-text, role distance and role protection drawn from applied drama forms.

The action and reflection phases of Cycle 2 are presented as a scholarly publication. The journal article presented in this chapter concentrates on the role conventions of role distance and role protection, and Figures 5.2 and 5.4 are an attempt to illustrate the possible connections between the use of these conventions in both applied drama and digital games. In particular, the creation of a safe environment to explore the possibilities of role-shifting and agency through drama or gameplay illustrate the similarities in these fields when considered in an educational context.

For the next cycle I chose to reflect on some of the work I had already conducted, with a reappraisal of two existing case studies. The first was the *To the Spice islands* project discussed in Chapter Four, which had been presented as a paper at the DAC conference in 2003 and sparked the collaborative work described throughout this thesis project. The second was the *Flood* project I had developed and discussed in my MA Honours dissertation, which I had undertaken prior to exploring a connection between applied drama and video games. In Chapter Six I consider how ‘everyday’ digital and online media, combined with a pre-text and a commission to produce ‘professional work’, can create powerful mediated learning communities or affinity spaces.
6. CHAPTER SIX
Cycle 3 (2006)
Drama, education and technology: Case studies of situated role

6.1 Introduction
This chapter describes the third cycle of core action research undertaken as the fieldwork phase of this study. As outlined in Table 6.1 it continues the autoethnographic narrative being used in the exegesis section of this thesis. The planning, action and observation stages of the cycle are provided at section 6.2. It then includes the scholarly publication in the form of a book chapter produced during Cycle 3 at section 6.3, and moves into the critical reflection of this work at 6.4 and a summary of the chapter at 6.5.

Table 6.1: The structure of Chapter Six in the CRASP model used for this thesis.

<table>
<thead>
<tr>
<th>AR phase</th>
<th>CRASP element</th>
<th>Chapter section</th>
<th>Autoethnography</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>Critical attitude</td>
<td>6.1 Introduction</td>
<td>The AR fieldwork continues with a critical reflection on two earlier applied case studies, the <em>To the Spice Islands</em> school-based project, and the <em>Flood</em> tertiary journalism training scenario. This research explores the pre-text convention, and the power of using everyday digital technology to expand role-based learning beyond the classroom and into real communities of practice via a digital pre-text.</td>
</tr>
<tr>
<td>Act &amp; Observe</td>
<td>Research</td>
<td>6.2 Context for the inquiry</td>
<td></td>
</tr>
<tr>
<td>Reflect</td>
<td>Self-evaluation</td>
<td>6.4 Critical reflection</td>
<td>Critical reflection on this fieldwork notes the concepts of situated role and mediated learning communities, and their connection to the application of drama and games to engage learners with professional practice. This leads to the comparison of applied drama forms such as Mantle of the Expert and the Commission Model with the game-based learning form of epistemic games, which is developed in the next AR cycle.</td>
</tr>
<tr>
<td>Reflect</td>
<td>Professionalism</td>
<td>6.5 Summary of the chapter</td>
<td></td>
</tr>
</tbody>
</table>

6.2 Context
As outlined in the previous two chapters, the first two cycles of my fieldwork used commercial video games as the platform to explore the learning discourses in games, an emerging games studies research methodology, and the intersection of drama and video game conventions in affinity spaces that is the focus of this
research. These large budget commercial products are the cultural reference point most familiar to many educators or practitioners when the concept of mediated applied drama or digital game-based learning arises. The financing, time, resources and skills to produce this type and scale of product make it unfeasible for most educators. For Cycle 3 of the core action research for this study I wanted to return to two earlier case studies that had used more accessible or consumer-level digital technology as the raw materials for developing virtual spaces for learning and exploration. I felt that teachers and practitioners could use freely available technology to engage students, and to establish a dramatic frame to enable learning.

The first case study, which became known as To the Spice Islands, was the drama research project designed around student learning experiences combining process drama and role-based digital interactivity. I have described the background to this project thoroughly in Chapters One and Four of this thesis. It is a consistent reference point throughout as it was the foundation of the research journey that is described in this autoethnographic account. This was my first experience of working on an applied drama project, and for Cycle 3 I was interested to view the nascent experimental approaches we had taken, particularly when introducing elements of media and technology, through the lens of the subsequent research, reflection and writing in keeping with the notion of perpetual beta.

The second case study, which examined the potential application of video game-based learning strategies to the creation of a training simulation for tertiary journalism students, had been developed as my Master of Arts (Honours) project. I have always simply called it Flood since its conception in 1998. As noted earlier in this thesis, I had been exploring the application of digital game-based learning but had not compared it with forms of applied drama, although there was some examination in my dissertation of early attempts to produce ‘interactive drama’ within the game design community. Flood was built using my intermediate Web design and media production skills, with a more advanced technical element being the use of simple artificial intelligence (AI) software known as chatterbots to generate a virtual character in the scenario. Despite the limited attention given to applied drama in the Flood project, in approaching Cycle 3 of my fieldwork I was now better equipped to reflect on it as an example of digital pre-text, having
started to develop my knowledge of applied drama’s practical and theoretical history.

The CRASP model of action research being used in this thesis emphasises the use of scholarly publication as part of the action and observation stages of the fieldwork. Chapters Four and Five have described how this process led to the submission and publication of two journal articles describing the research undertaken over the first two years of my research. Cycle 3 coincided with the conclusion of a book publication project investigating the emerging intersections between drama, education and technology. As I have indicated earlier in this thesis, the research journey it describes includes several overlapping projects that coincide with but are not always neatly placed within the cyclical CRASP model. This is the case with the book project that began in late 2004 and continued alongside the core action research. Further complicating the timeline is the fact that although published in 2006, the book chapter included in this thesis describes the earlier work carried out between 1998 and 2002. However, as I have discussed throughout the thesis to this point, it is exactly the iterative, cyclical and collaborative nature of this research approach that I find well-matched to a project that is dealing with the transformative power of digital media in fields such as drama and education.

Providing the context for Cycle 3 in this autoethnographic narrative does require a step or two back along the timeline for this research journey, which is perhaps appropriate given that the To the Spice Islands case study plays with the notion of time as a central element to generate and maintain the drama. In late 2004, I had been invited to submit a proposal for a jointly authored book to Trentham Books, a UK publisher. The invitation came from Dr Michael Anderson, from the University of Sydney. The book proposal drew on work that John Carroll, Michael and I had produced in the preceding two to three years, edited to reflect our current thinking about the nature of performance and applied drama when it was mixed with contemporary digital technology. The title was to be Real players? drama, technology and education, which we felt would capture the sense of these technologies being a part of the real and everyday lives of young people. Dorothy Heathcote agreed to write the foreword, emphasising the importance of her work to the applied drama field and the impact it had on our own work and thinking.
In particular, *Real Players?* started to draw together some different but related elements of performance, education and technology that John, Michael and I had been considering for some time. These included the concepts of pre-text, role distance and role protection already discussed in Chapters Four and Five of this thesis. John and I had also been exploring the concept of *liveness* in mediated performance, particularly game-based performance in the production world of game-based animation or *machinima*. Again, this emphasizes that the research underlying this thesis is multilayered, with the related elements converging at times in the form of publications or presentations. As a further example, in mid 2005 John and I had travelled to Vancouver in Canada to conduct a workshop exploring the links between applied drama and machinima for the Digital Games Research Association (DiGRA) conference. Interestingly, two participants in that workshop were Jane McGonigal and Espen Aarseth, whose papers at the 2003 DAC conference in Melbourne I have already noted as being so formative in my own research in this area.

At the DiGRA conference I was also struck by the concept of communities of practice, which arose in several papers about online games such as *EverQuest* and *World of Warcraft*. In particular, a keynote address by T.L. Taylor (2005) sparked me thinking about the communities that form around games, and the types of artefacts or activities that produce a sense of shared purpose. The concepts of situated learning (Lave & Wenger, 1991; Seely Brown & Duguid, 2000), communities of practice (Wenger, 1998b) and boundary objects (Star & Griesemer, 1989) had clearly already caught the interest of some researchers in game studies, and particularly those working in the emerging field of serious games. They began to influence our own approach to the issues we were considering in the mix of drama and technology.

This thinking about the intersections of drama, games and technology, as well as the nature of performance and communities of practice, coalesced in our development of the introductory chapter for *Real players*. The book would develop some of the existing research work that John, Michael and I had already undertaken. However, the first chapter was an opportunity to start pulling together some of our very latest thinking about the hybrid forms of drama and digital technology that might be possible in educational settings, and the mediated
learning environments that might emerge. I will discuss the specific model we proposed for Real Players? in more detail later in this chapter as part of the critical reflection on Cycle 3 of my action research. What emerged from this cycle of collaborative research and writing with John and Michael was a description of the influence of digital media on the different forms being investigated: applied drama, games, and learning.

It was during Cycle 3 of the action research fieldwork for this study that I also came across the term *epistemic game*, which emerged from David Williamson Shaffer’s investigations at the University of Wisconsin-Madison (Shaffer, 2005), and crossed over into Gee’s work examining games as learning systems (Shaffer & Gee, 2005). Although drawing on the language of educational psychology, Shaffer’s work resonates strongly with the concepts and conventions that we had been identifying in our work examining the links between applied drama and game-based learning. In tracing Shaffer’s research in this area, it became apparent that he too had been influenced by Goffman and others on the concept of framing, and had begun using what he called ‘epistemic games’ to explore how students might engage with the ‘epistemic frames’ that assist novices to become members of a particular profession’s community of practice (Shaffer, 2004). Reading Shaffer again reinforced the sense of two fields operating in parallel — applied drama and digital game-based learning — that John and I had noted several years earlier. I would continue to pursue this exploration of the connections between epistemic games and applied drama forms in Cycle 4 of my action research fieldwork, which is detailed in Chapter Seven of this thesis.

Cycle 3 is marked by the convergence of rich ideas to help shape our research and writing as the book project concluded. We attempted to capture the transformational impact of digital DNA once it starts to alter a field or practice. This is reflected in the book chapter presented in the next section of this exegesis, which examines two hybrid projects. Firstly, the *To the Spice Islands* case study describes how the dramatic conventions of process drama, when combined with the immersive qualities of everyday digital networks, can generate a hybrid form of dramatic engagement and performance we have called *situated role*. It uses the now commonplace digital technologies of the Internet, email, weblogs and online video to develop a digital pre-text for live and mediated process drama. I was
particularly keen to re-examine this work as an example of ‘grassroots’ media production, rather than the big budget commercial game products we had been using for our earlier games studies research.

Secondly, both *To the Spice Islands* and the *Flood* are examples of a form of dramatic framing we called a *mediated learning community*, but which actually bears a close relationship to what Gee and others have termed an affinity space. In *Real Players?* we invited educators and practitioners to:

>'Imagine a classroom that is not bounded by the limits of the “knowledge” of the teachers and students within it. Imagine a space where the collective knowledge of humankind could be accessed to enrich learning. Imagine in this space a group of young people busily engaged in a complex professional task. Engaged with their bodies and their minds, describing in the language of the profession, be it engineers, journalists, or marine archaeologists how they might fulfil a commission they have been set or solve a pressing social problem’ (Carroll, et al., 2006, p. 87).

In *Real Players?* we argued that this ‘imaginary’ classroom already exists and that everyday, even routine technology can be combined with well-known applied drama conventions to create authentic dramatic contexts for students of all ages. The implication for teachers is that current and relatively commonplace technologies can form the basis of dynamic dramatic experiences without the need to find (or fund) complex, specialised technological resources. The next section of this thesis presents collaborative research and writing on this topic, in the form of the book chapter that emerged during Cycle 3 of this research project. It reflects on two earlier phases of my research journey – the *To the Spice Islands* project and *Flood*. The first case study focuses on the dramatic conventions combined with everyday digital technologies. The second uses more advanced computer-based simulation, and illustrates how freely available technology can establish a relatively sophisticated dramatic frame for learning.

### 6.3 Scholarly publication

This section is based on an article originally published as:

Case Study 1: The Spice Islands project

Combining process drama and role-based digital interactivity

Excuse me. Do you know where there are any personages of historical significance around here?

*Bill & Ted’s Excellent Adventure* (1989, p. 98).

In the film *Bill & Ted’s Excellent Adventure*, two time-travelling teenagers on the verge of failing their history assignment ‘most heinously’ decide to collect famous figures for their class presentation. During this comical ‘excellent adventure’ new contemporary narratives are built around historical figures such as Abraham Lincoln, Joan of Arc and Socrates.

This case study describes a school-based project that allowed interaction with people and events from more than three centuries ago. *To the Spice Islands* was a computer-mediated learning experience bringing together Dutch tertiary drama students and primary school children to generate a collective dramatic narrative about the shipwreck of a Dutch merchant ship, *Batavia*, off the Western Australian coast in 1629. While Bill & Ted had access to a time-travelling telephone booth to complete their history class, this project combined role-based drama and online historical research to actively engage the participants in contextual learning of curriculum content and enrol them in a community of practice as marine archaeologists.

*What is a digital pre-text?*

Pre-text is the occasion that initiates dramatic action, providing a firm base for the dramatic encounter; such that:

‘the function of the pre-text is to activate the weaving of the text of the process drama. As well as indicating that it not only exists prior to the text but also relates to it’ (O’Neill, 1995, p. 20).

By extending the concept of pre-text in process drama, this project attempted to use the world of digital technology as a context for drama. As O’Neill and others see it, the pre-text operates as a ‘holding form’ (Witkin, 1974) for the meanings that are inherent in the dramatic content and helps to establish the location, roles and situation of the drama. Pre-text helps to frame the participants in a clear relationship with the potential action of the drama, and defines the nature and extent of the dramatic world. In turn, it implicitly defines the range of roles
available to the participants in the drama and generates expectations about the first moment of interaction that will start the drama.

This concept of pre-text was applied as a guiding principle for the *To the Spice Islands* project, which as well as establishing an online environment, adopted the following process drama features outlined by Taylor (1995) as part of its overall design, namely:

- separate scenic units linked in an organic manner;
- thematic exploration;
- an experience that does not depend upon a written script;
- a concern with participants change in outlook;
- improvisational activity;
- outcomes not predetermined but discovered in process;
- a script generated through action; and
- the project leader actively working within and outside the drama.

The extension of the concept of pre-text combined with process drama conventions in the digital domain was based on matching levels of dramatic engagement with increasing levels of digital interactivity. In this way it was hoped that the digital pre-text of the drama would evolve organically, allowing for a growing internal logic and coherence that met the qualities of a good pre-text and good drama. Cecily O’Neill (1995, p. 136) defines the qualities of a good pre-text for process drama as:

- responsiveness to imaginative transformation;
- the tensions, changes or contrasts it suggests;
- the questions it raises about identity and society, power and possibility; and
- its power to launch the dramatic world with economy and clarity; and
- the action it proposes and the implied transformation.

While the dramatic conventions of historically framed process drama are well understood within the drama field (for example Neelands, 1990) the pervasiveness of digital technologies within school classrooms means that the use of a computer constructed pre-text may provide new avenues for the development of dramatic role performance conventions. This case study of a digital pre-text used for a drama research project illustrates one such approach.
Designing the To the Spice Islands project

The project was specifically designed as an experiment in digital multi-platform dramatic learning using a digital pre-text. It used the power of small-scale social connectivity and the narrative interactivity inherent in the process drama form to play to the strengths of the digital interface with young people. As noted earlier, the methodology was designed to increase the levels of interactivity as levels of dramatic involvement in the project increased. Thus the project developed from a simple text-heavy Website to include email, weblog entries, digital video clips and ultimately digital and live performance.

The participants were two classes of Dutch upper primary pupils (10-12 years of age) and a group of Dutch tertiary drama students. The project coordinators were two Australian teachers with backgrounds in drama and Web production.

The online element of the drama project was built around the pre-text of a Website for a fictional organisation, the Australian/Netherlands Maritime Research Centre (ANMRC). Construction started with a simple Web page template incorporating a mock logo and internal navigation links. The material was deliberately modelled as if it were a real site — both aesthetically and technologically; there was no difference between the look and function of the drama-based site and any non-drama site. The site is hosted on Charles Sturt University's public Web server9.

The dramatic frame and conventions of the drama were established when two tertiary drama students made a first brief visit to the school classroom. Performing in dramatic role as ANMRC representatives they introduced the topic and the tension necessary for dramatic engagement in the project — in this case a request for help to solve the mystery behind a recently discovered letter from the 17th century. It was made clear to the pupils that this was a drama project and the letter was a dramatic construct (i.e. fictional), but that it was based on similar historically accurate documents.

9 http://www.csu.edu.au/faculty/arts/communication-creative-industries/research/batavia/
Figure 6.1: Digital video still of letter being read on board the Batavia

The letter concerned the fate of a child on board a Dutch East India ship the Batavia. The students were told this historical document had been found in an archive in Australia. The drama students, still in role as marine archaeologists, enlisted (or commissioned) the aid of the pupils as researchers on the Website in their quest to uncover the mystery surrounding the letter. This engaged the students with the basic digital pre-text behind the project and co-opted their assistance to develop the narrative, which Ryan (1997) argues is important to the success of an interactively generated dramatic work.

The Website originally consisted of a template of sub-sections based on topics or research areas related to the project such as marine archaeology, the Dutch spice trade, and Dutch shipwrecks on the Australian coast. A simple Web page was created for each of these topics, and some links to genuine existing online resources were added to provide initial content. An email account was opened at the free Web-based service Hotmail to provide an initial point of contact between the drama students in role as ANMRC archaeologists, and the school students in their new drama role as trainee marine archaeologists. The email also added to the functionality of the fictional site, increasing its credibility as a pre-text in the developing dramatic narrative. The pupils were encouraged to post their thoughts and research on the possible background and meaning of the recently discovered letter.
Original project content was added to Website topic pages as the Dutch drama students and the school pupils began to provide their own research material. The first visual contribution to the site by the school children was in the form of a digital photo gallery. Portrait shots of each student were taken with a digital camera, and the Web gallery was generated automatically using Adobe PhotoShop software. These shots were added to the project site with a link to ‘meet our latest assistants’, and the pupils were labelled ANMRC trainees, thus helping to further establish their commissioned role in the project/performance.

As levels of dramatic engagement and commitment built up, short digital movies were being shot in the Netherlands and transferred to the Website as Apple QuickTime video files. The first batch featured the drama students introducing themselves in role as ANMRC trainee marine archaeologists and highlighting their specialisations. These were added to the Website in both QuickTime and Windows Media format using Media Cleaner Pro software. The children were encouraged to contact the ANMRC staff first by email and later by the online journal tool commonly known as a weblog. While the Website was taking shape, a weblog was created using the free service provided by Blogger\textsuperscript{10} to enable this dialogue to happen. The Dutch drama students, while operating in role as marine archaeologists, used this form of interactivity to personally communicate with the pupils/trainees. The weblog was dramatically framed in the present as a diary created by the trainee archaeologists that built up a lively record of speculation and research ideas between the school pupil ‘trainees’ and the drama student ‘experts’.

When the dramatic conventions and techniques of using the weblog between the ANMRC and the trainee marine archaeologists had been firmly established a further dramatic convention of the Timescope was introduced. This dramatic device, instantly understood and appropriated by the children as a way to see into the past, through a ‘time telescope’, started to produce historical moments in QuickTime video format. The pupils had established by researching the web that the ship was the Batavia and became deeply involved in the historical research of the pre-text and emotionally involved in the plight of a child onboard the ship.

\textsuperscript{10} http://www.blogger.com
A second weblog allowed passengers and crew on board the *Batavia* to communicate with the school pupils via the conventions of the fictional Timescope technology. The tertiary drama students were provided with the passwords and access privileges that would allow them to create and edit the weblogs themselves, using the Web-based interface provided by *Blogger*. A link to the Timescope weblog was added to the homepage. The Dutch drama students provided the content, based on their role performances in response to questions and warnings from the school students. Garbled and fragmented text entries added to the illusion that the material was being drawn from the past via unstable experimental technology.

As the Timescope element was progressively built into the project, further video footage was added to the site showing the drama students performing in full role as the passengers and crew of the doomed *Batavia* expedition. This edited digital video was shot naturalistically on the replica of the *Batavia* (which is a tourist attraction in the Netherlands) and in period costume. The resulting online video was dramatically framed as a ‘top-secret experimental technology’, the results of experimental video from the past, which were being made available to the trainee archaeologists via the Website and the Timescope. The children were then able to participate in an unfolding narrative partly based and driven by their own research and interests.

![Figure 6.2: Timescope video footage from the Batavia](image)
The final element and culmination to the project added to the Website was a longer video segment that was edited from footage of the final live process drama performance at the school. This was framed as surveillance footage from the Timescope experiments, showing the Batavia passengers and crew (drama students) interacting with the trainee archaeologists (school pupils) in real-time. This in-role dialogic structure between the ANMRC trainees and the crew and passengers of the Batavia brought the drama to a climax in a devised live performance of the events leading to the shipwreck. The pupils and trainee researchers were able to activate ('logon') individual historical characters and question their motives and behaviour.

The barrier between the past and present became permeable until they merged in a final dramatic moment aided by technology. The pupils who had become trainee marine archaeologists through their online research were able to question, from within the protection of the drama, the historical characters brought to life by the drama students. Ultimately the fate of the young passenger along with many of those on board the Batavia was revealed in the improvised dramatic reproduction of the shipwreck and its aftermath.

In this way the immersive development of the drama pre-text aided by the Website research was paralleled by an increasing complexity in the interactivity and connectivity of the project interface. The aim of the Website was to create a pre-text, a context and an environment for the drama to operate within. This was, of course, designed for the participants and not for an external audience. As Kelso, Weyrauch and Bates (1993) point out, the performance of the users within the fictional world being created is not directed towards an audience in the real world but towards the users themselves. In the online world, as in some process drama, ‘interactive drama’ is staged ‘solely for the benefit of the interactor[s]’.

Beside process drama techniques the project used everyday technology such as the Website, email, hypertext, weblogs, QuickTime video clips, edited digital video and live performance to develop a consensual virtual world based on a pre-text that allowed the interactors to occupy two frames of reference at the same time. The use of this Web-based pre-text communication deliberately blurred the traditional boundaries between participant and spectator, actor and character, interactor and viewer, thus establishing a setting for process drama to occur.
Once the dramatic frame was established there was no further online ‘metacommunication’ (Bateson, 1972) with the pupils about the ongoing drama structure. One of the aims of the project was to use the Website to build up the ‘willing suspension of disbelief’ to use Coleridge’s term (Coleridge, 1907). Within drama and media practice in general there is a long history of an attempt to find participatory immersion through an ‘interfaceless interface’ that seeks to ‘...erase itself so that the user is no longer aware of confronting a medium, but instead stands in an immediate relationship to the contents of the medium’ (Bolter & Grusin, 1999, p. 8).

Process drama clearly uses symbolic material as content without any metacommunication about the process involved. Through the use of dramatic conventions the actual nature of the pre-text material takes on a subjective reality that may not be readily apparent to an outside observer. A similar process of symbolic alignment was carried out with the digital pre-text strategies and the drama elements as outlined in Table 6.2 below.

Table 6.2: Symbolic alignment of digital and dramatic elements

<table>
<thead>
<tr>
<th>Digital strategies</th>
<th>Drama elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANMRC Website designed and built</td>
<td>Context established for the pre-text</td>
</tr>
<tr>
<td>Email about a mysterious letter</td>
<td>Anticipation of action</td>
</tr>
<tr>
<td>Digital photo gallery of ‘trainees’</td>
<td>Enlistment to drama task</td>
</tr>
<tr>
<td>Weblogs</td>
<td>Establishing relationships between ‘trainees’ and ‘marine archaeologists’</td>
</tr>
<tr>
<td>Digital QuickTime videos</td>
<td>Providing validation of effort and content</td>
</tr>
<tr>
<td>Timescope video clips</td>
<td>Building tension in the drama</td>
</tr>
<tr>
<td>Edited video from the Batavia</td>
<td>Providing culmination for project</td>
</tr>
<tr>
<td>Surveillance video of live performance</td>
<td>Full role context</td>
</tr>
</tbody>
</table>

**Reflections on the To the Spice Islands drama project**

The process of using various forms of digital connectivity as well as live performance echoes the process drama structures outlined by Taylor and O’Neill used to establish a pre-text and conduct a successful drama. The pre-text for the drama in this case included the following elements:

- Website;
- an in-role presentation;
- email;
- digital still images;
- weblogs;
- *QuickTime* video;
- edited digital video; and
- dialectic role-based real life performance.

The project chose to use both digital interactivity and dramatic narrativity, and deliberately attempted to use hybrid performance forms to provide freedom for action as well as provide an immersive narrative through a pre-text and digital improvisation. The structure of the project attempted to deal with one of the central paradoxes of interactive art: that action is usually prospective but story narrative is largely retrospective. Real life is never a story except in retrospect when we re-edit our experience to construct a coherent narrative for our actions. By changing the digital form used to suit the levels of commitment generated within the drama the narrative structure was built within the dramatic frame so that action and narrative were developed simultaneously.

The essential element in this process was that the children were allocated an *attitudinal role* (Carroll, 1988) in the fictional world of the ANMRC Website by the symbolic, linguistic and dramatic references of the pre-text. The school students then used their situated role designation as trainee marine archaeologists to project themselves into the experience of the interface. This dramatic protection gave them the power to engage with the Web content and create the narrative from within the dramatic frame. The historical character performance of the adult drama students was shaped by their research into the history of the Dutch East India Company. It was also shaped by their reaction to the dialogue between their earlier ANMRC role personas as marine archaeologists, and their engagement with the pupil trainees.

Both groups of performers were engaged with the growing Website of the fictional world of the ANMRC, which contained only historically accurate information. Their analysis and input into these sources then drove the developing narrative on board the dramatic reconstruction of the world of the *Batavia*.

This developmental process occurred over a period of four weeks and produced the episodic structure that is typical of the dramatic form of process drama. Within that structure there was in-role negotiation and drama and out-of-role research and discussion. These role switches are part of the ability expressed in all drama
and provide no barrier to online dramatic engagement. Because of the dramatic conventions that had been established the pupils responded to the marine archaeologists and later to the crew of the *Batavia* with sustained dramatic involvement.

As the drama was concerned with the development of the participants’ involvement, learning and change of outlook, this involvement provided some measure of validation of the effectiveness of the project. To the outside spectator the outcome of this involvement may appear somewhat undramatic as it initially consisted of mediated forms of communication. However as demonstrated by the high level of project engagement, the internal experience of the drama for the participants can be profound as the drama develops.

The reintegration of these experiences expressed as learning outcomes for the students were demonstrated by the quality of engagement, research and questioning evident in the culminating drama interaction between the trainee archaeologists and the *Batavia* crew. The children also demonstrated their acceptance of the transfer of digital performance elements to the live performance situation. For example, the convention of the trainee archaeologists ‘logging on’ to the Timescope transferred seamlessly to the live performance as a means of activating role-based performers.

Further observations of the learning outcomes were made possible by the subsequent presentation by the children of their research findings to a large adult conference audience. The children’s carefully built up interactive process drama personas as trainee marine archaeologists protected them, while providing them with the expertise and confidence to speak and demonstrate with authority and passion about their own voyage of exploration in an online dramatic learning environment supported by a digital pre-text. In this project we see the emergence of a technology-enabled/supported development of Heathcote’s Commission Model, which can create a mediated learning community where students can develop real-world skills from the position of occupying a situated role within a technological framework.

The potential of situated role for approaches such as epistemic gaming and the Commission Model advocated by Dorothy Heathcote is further demonstrated in
the second case study. This applied drama approach described uses the drama education conventions of role and pre-text and applies them to the education of pre-service journalism students.

**Case study 2: The Flood project**

*Applied drama and technology*

Definitions of applied theatre or applied drama are hard to pin down, as the terms are relatively new (gaining currency in the 1990s)\(^{11}\). Helen Nicholson argues that the terms should not be viewed in opposition to the concept of ‘pure’ drama as an art form or the theatre as a specialized performance space, but rather as a set of cultural and theatrical practices ‘...that are motivated by the desire to make a difference to the lives of others’ (Nicholson, 2005, p. 16).

Recently the term applied theatre has come to prominence as a general way to describe process drama that occurs outside the classroom. Judith Ackroyd describes how applied theatre practitioners are using drama in education techniques outside classroom settings:

‘They share a belief in the power of the theatre form to address something beyond the form itself. So one group use theatre in order to promote positive social processes within a particular community, whilst others employ it in order to promote an understanding of human resource issues among corporate employees. The range is huge, including such as theatre for education, for community development, and for health promotion, and dramatherapy and psychodrama’ (Ackroyd, 2000).

Just as Heathcote explored the social condition through her ‘man in a mess’ and ‘Mantle of the Expert’ approaches, applied drama practitioners are also able to examine in a deep embodied and enacted way the issues that face the groups they are working with. In this case it was the needs of journalists to understand and respond to breaking news. The project was developed by creating an elaborate digital pre-text. The innovative aspect of this project is the way the pre-text appears to change as the drama changes course depending on the participants.

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\(^{11}\) This chapter in its original form used the term ‘applied theatre’ and ‘applied drama’ interchangeably. I have since replaced some references to ‘theatre’ with ‘drama’, for reasons established in Chapter Two.
Artificial intelligence in drama learning

In the film The Wizard of Oz (Fleming, 1939), the magic of the great and powerful Oz, despite his desperate plea to 'Pay no attention to that man behind the curtain', is revealed to be technological flim-flam. This case study applies this philosophy more generally to the use of software to engage online learners in the fact that they are navigating their way through a highly complex and multi-branching, though nevertheless pre-determined, narrative. The difference being that the learners are all on an individual learning journey travelling at their own pace and interacting with the material on their own initiative.

Flood is a computer-delivered journalism training scenario based on the flooding of an Australian regional city. Participants take on the role of a journalist covering the event. They are presented with information from news releases, wire service stories, and sources contacted via a telephone contact book, all contained in a dedicated Website. Participants can contact sources by clicking on their phone number, which appears as a hyperlink on the page. Sources are interviewed by following hypertext links to reveal lines of pre-determined questions and responses.

Flood also uses freely available software artificial intelligence software, known as a chatterbot, to allow students to pursue their own line of questioning through interaction with a character. The aim, like The Wizard of Oz, is to ‘...to distract people away from the machinery, to make the illusion more interesting than the technical wizardry’ (Murray, 1997, p. 219).

This is a striking example of the potential power of computers to contribute to immersive and interactive learning resources through the use of artificial intelligence (AI) software. Chatterbots are designed to operate in synchronous communication environments such as online chat rooms, responding to text input from human users with replies that give the impression that a real person is answering.

The software uses a series of rules to filter the input, and return a (hopefully) suitable reply from a database of pre-written options. There is an element of ‘trickery or deception’ (Wallace, 2002), but it does provide a potentially useful and
powerful tool for online role-playing based on human interaction with virtual characters.

The development of interactive narratives cannot rely solely on the setting, or the relationship of a single character — the user — to the environment; ‘...there must be more than one agent to create a reasonably dramatic action’ (Ryan, 1997, p. 692) The problem for designers of interactive learning environments is the need to make characters operate at a level that will assist, rather than hinder, the user’s suspension of disbelief/construction of belief.

The application of AI to interactive narrative can be seen in some of the earliest developments of computer games. Aarseth (1997, p. 12) notes the creation of the text-based computer adventure genre in 1976, with the release of the role-playing game *Adventure* (Crowther & Woods, 1976). The game required players to type text commands, such as ‘use sword’, which the software would interpret and respond to. The *Flood* project, with its moderate level interactivity and branching narrative structures, can in some ways be seen to be a descendant of those early computer-based adventure games.

**Designing the Flood project**

Journalism educators are always looking for opportunities to give students realistic experience of the working life of journalists. Patching (2002) has noted the enthusiasm with which Australian institutions channel hundreds of students into various volunteer media roles for events such as the 2000 Sydney Olympics. It is not desirable or practical to send students to every news event that comes along. There are the considerations of time, cost, safety, geography and access. There are educational concerns such as supervision, assessment and the desire for analysis, reflection and discussion of the work being done. Hence journalism educators have long used classroom scenarios to immerse their students in their professional role and a community of practice.

The *Flood* project was a training scenario designed to give tertiary journalism students experience at covering a complex unfolding story. It was based on serious flooding that affected the town of Bathurst in central western New South Wales, Australia, in 1998. Bathurst is home to Charles Sturt University, and during the actual flooding senior journalism students worked as freelance reporters for radio
and TV news organisations. Inspired by the valuable experience gained by students working on the coverage, a newswriting exercise was planned to use primary source material gathered during the flood.

The designers selected a Web delivery system, using some of the multimedia elements available including images, audio, text and video. The site attempted to marry some of the techniques and approaches of interactive game design with the aims of journalism education to produce learning materials that were more engaging for the students than the more traditional fictional paper-based exercises.

The simulation was designed around interaction with characters. Attention was paid to identifying the main sources of information, their roles in the real event, and the amount and type of information they were likely to impart to journalists seeking to cover a real flood event. Video footage of the Bathurst floods was also reviewed and logged to prepare video clips for students. The students used the clips as background material so they could see a real flood in progress, or as material for television news stories.

The fictional town of Lagoon was conceived, although its geographical situation was based on Bathurst. The designers decided to include reference to other fictional towns and localities in the region, to add depth to the scenario and provide more sources of information (some relevant, some not). A map of the region was developed, as was a map of the main area of Lagoon. Place and street names were invented and added to the map. The students found a sense of the fictional geography useful when scenarios within the simulation were being conceived. It lent a geographical consistency to the simulation. The designers also decided at this stage to try and avoid any specific geo-political references in the scenario, even though it was based on events in New South Wales. They felt a generic approach might give the scenario greater value, given that it was being designed for the borderless realm of cyberspace.

The raw material gathered from coverage of the real flood provided the inspiration for the navigation features in the simulation. Background material would be provided mainly in the form of faxed media releases and wire service stories. The intention was to give students information that might help them write stories, as
well as clues to possible sources of more detailed information and story angles. Some of the information would be out of date, contradictory, or generally irrelevant to a local audience as occurs in a busy newsroom during ongoing coverage of emergencies.

The main method of pursuing story angles was via reference to the journalists’ telephone contact book. Students identified the relevant organisations to contact and pursued them via the telephone contact list. Some of the organisations were obvious such as the State Emergency Service (a volunteer-based rescue organisation), Police, Fire Brigade, and the Ambulance Service. However, as the intention was to allow students to draw out a range of narratives, other elements were added. So for instance schools where evacuees were receiving help, local government facilities, and rescue helicopter services were added.

**Interaction with characters**

Once the basic locations were created, a series of mini scenarios was developed to populate the artificial town with characters that would act as sources of information. The simulation uses hypertext to lead students through these mini narratives. By going to the telephone contact book or media releases, the student can locate a source of information and contact them by clicking on their phone number that appears as a hyperlink on the page. This takes them to another page for that location. These pages might contain a photo of the location. Text on the page would then inform the student of possible next steps. In some cases this might be a simple statement that the phone is not answered. In other cases the call might be answered, but no opportunity is presented to interview the person who answers.

In most cases though, the page contains a number of hypertext links which give the student the option of pursuing a certain line of pre-determined questioning, or in some cases undertaking some other actions (such as reading a media release). Figure 6.3 illustrates a typical page from the scenario. Students could follow these hypertext links in an effort to find all of the information that a particular character has to reveal. Some of the information would be relevant; other characters ultimately prove to be largely a waste of time in terms of the news agenda.
The designers tried to provide a mixture of responses in an effort to give variety and authenticity to the characters. Just as in reality, some characters would prove more useful than others. Some characters were helpful and some were not so helpful. As with the media releases and other background material, some of these mini scenarios were deliberately devised as red herrings or time wasters. While the students had no choice but to pursue the lines of questioning written for the scenarios, they were still required to analyse what information was relevant or newsworthy, and which story angles were worth chasing.

Finally, the designers provided navigational hypertext links to the maps of the region and a gallery of images taken during the real 1998 flood. A page providing background on Lagoon and surrounding townships was also prepared to help draw students into the simulation, and give them more of an understanding of the lay of the land.

**Artificial Linguistic Internet Computer Entity (ALICE)**

In the *Flood* project, it was hoped that the role of the Lagoon State Emergency Service Controller could be played by Artificial Intelligence (AI) software rather than relying on the pre-scripted hypertext questions. This role was modelled on a key source of information in the real Bathurst flood emergency, and was a likely choice of person to interview in the simulation.
The software chosen was based on *ALICE*\textsuperscript{12}, a Loebner Prize winning chatterbot designed by Dr Richard S Wallace in 1995 and subsequently refined by Wallace and others (Bush, 2001). A free hosting service called *Pandorabots*\textsuperscript{13} provides tools for creating a chatterbot and fine-tuning its responses to user input.

These chatterbots use what is called Artificial Intelligence Markup Language (AIML) to program the chatterbot's responses. AIML provides a basic grammar for producing pattern-based stimulus-response content. In other words, it enables the chatterbot designer to create simple text files that define keywords or patterns of words and appropriate responses. For example:

```
<category>
<pattern>WHAT TIME IS IT</pattern>
<template>I'm sorry, I left my watch at home</template>
</category>
```

In this example, the <category> tag tells the software that a new input pattern and response are about to be defined. The <pattern> tag then indicates that what follows is the stimulus part of the category — the input. This is not case sensitive, and punctuation marks are ignored. The <template> tag indicates that what follows is the response that should be given — the output.

Using this example the following text based interaction might occur:

```
Student: What time is it?
Chatterbot: I'm sorry, I left my watch at home.
```

While this isn’t a particularly enlightening response, it does make sense in the context of the question. More importantly perhaps, it does not break the illusion that the character is responding to the student’s question. Most chatterbots will rely on generic default comments that can be drawn upon when all else fails. Another common approach is to change the topic, or refer to a previous topic of discussion (Murray, 1997). The main principle of this ‘graceful degradation’ is to avoid halting the conversation or breaking the user’s willing suspension of disbelief (Ryan, 1997, p. 694).

\textsuperscript{12} http://alicebot.blogspot.com
\textsuperscript{13} http://www.pandorabots.com
During one of the trial sessions of *Flood*, the following discussion occurred between a student and the software:

**Student:** What shops are damaged?

**Chatterbot:** I’m just looking through our latest flood bulletin. Where did you say you were calling from?

Lacking a direct response to the input, the chatterbot software resorts to the tactic of asking the user a question. As many politicians well know, changing the subject is a good way to duck a question you can’t answer. It is a good example of the *ALICE* software’s primary purpose — to simulate responses so people will think they are talking to a human. However these types of responses may also contribute to the realism of the scenario by distracting users from the underlying technology. Murray notes that the sense of presence generated by such artificial characters ‘...does not come from giving factually correct information but from demonstrating dramatically appropriate behaviour’ (Murray, 1997, p. 218).

One goal for this project was to create a character that students could interview, and that hopefully would return responses that made sense. Interestingly even nonsensical answers might have a benefit, as they can create an air of eccentricity ‘... that makes the characters more memorable and lovable’ (Ryan, 1997, p. 694), or at least seem to have a personality of their own. A small but added benefit of the *ALICE* approach is that part of the chatterbot’s default database is programmed to handle some of the more obvious swear words and explicit requests that could possibly be anticipated from users keen to push the boundaries of the software (the same drive that urges some people to judge the quality of a new dictionary by the number of swear words it defines)!

**Reflections on the Flood project**

Murray (1997) argues that one of the pleasures of digital media is the potential for immersive experiences in which we are able to construct belief, rather than just suspend disbelief. The inclusion of the chatterbot software in this project is an important step towards that experience, by allowing participants to engage with a virtual character that helps them construct an understanding of the virtual world represented in the scenario. The idiosyncratic nature of most chatterbots, a by-product of the programmers’ desire to deceive human users, can be exploited to
engage people with the characters. There is an intrinsic game-playing nature to such software that makes it the perfect prop for people willing to play a game of ‘make-believe’ with the computer (Ryan, 1997, p. 694).

Chatterbots pose interesting questions about the ‘liveness’ of digital performance. The software is not ‘a-live’ as compared to human performers, but nonetheless it operates and responds in real time so that:

‘it undermines the idea that live performance is a specifically human activity; it subverts the centrality of the live, organic presence of human beings to the experience of live performance; it casts into doubt the existential significance attributed to live performance’ (Auslander, 2002, p. 21).

It is this ambiguity — the difficulty in distinguishing between a live software performance and a live human performance — that makes chatterbots such a potentially powerful tool for drama and education projects incorporating online technology.

An example of the use of chatterbot technology to create successful online characters was a BBC-produced game based around a fictional popstar called Jamie Kane14. Using a range of media, including real and fictional Websites, the BBC created a mystery that blurred real and fictional events and resources. Players (mainly teenage girls) had to solve a series of puzzles to find clues to the fate of the missing singer. As part of the game, the BBC drew upon chatterbot software to create a fictional Jamie Kane fan online chat site. The chatterbot software provided a safe environment for the teenage game players, while replicating conversations with other fans in the chat site. The software used had originally been designed to act as an online service centre for a well-known Scandinavian furniture company!

Flew (2002, p. 98) suggests that the development of home-based games consoles like PlayStation and Xbox ‘... has drawn attention to the importance of developing media forms based around engagement and distraction, that draw the user away from ‘reality’ into a new thoroughly ‘mediatised’ space’. A central part of this experience is the degree to which participants can shape their own experiences in the virtual world. The notion of agency is important to this project, because it

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14 The BBC Websites are no longer active, though archived samples are available, for example at http://web.archive.org/web/20070127230909/http://www.bbc.co.uk/jamiekane/
highlights the possible benefits of interactive multimedia training materials compared to passive text-based resources. It allows learners to interact with the materials to draw out meaning, rather than simply being handed the information. Murray refers to agency as ‘... the satisfying power to take meaningful action and see the results of our decisions and choices’ (Murray, 1997, p. 126).

Traditional narratives such as theatre or cinema engage us emotionally because we relinquish agency to the characters and become absorbed in the paths they take, whereas interactive digital media such as video games force us to exert agency and become the character (Perlin, 2004). This can necessitate moments where the player steps in and out of role while negotiating the mechanics of gameplay, such as choosing a new weapon. Similarly, some games allow players to toggle views between a subjective first-person perspective and a more objective third-person view. In the Flood scenario, students also engage with the characters at different levels. There is the more distanced hypertext-based process of following the pre-determined narrative responses, or the more engaged role of interrogating the chatterbot character. This role-shifting perspective is a very useful dramatic device in a learning context, and is a fundamental convention in process drama.

When developing digital training simulations, such as the Flood package, the quality of immersion has great significance in terms of engaging the attention of participants. Importantly students using the materials can readily place themselves in their commissioned roles as reporters, and develop an understanding of the fictional world of the scenario. They may have only limited class or study time to become familiar with the material before being required to produce assessable work. Flood uses the following elements to quickly establish a simple but successful immersive narrative:

- Website populated by locations and characters with pre-determined narratives;
- digital still images;
- QuickTime video; and
- chatterbot artificial intelligence software playing the role of a key character.
The project has been used with on-campus undergraduate and distance education postgraduate journalism students at Charles Sturt University. Surveys of students using the scenario have indicated overwhelmingly positive responses, with a typical comment being:

This exercise was FAR, FAR more exciting than any we've done this semester — it actually made me want to write the story & understand how to differentiate between important news & not so important. I found this very enjoyable!!

What the responses reveal is the power of technology and media to energise learning experiences. The changing pre-text provides an added depth to the experience and provides potential for those interested in supporting and extending complex pre-texts. Fictional scenarios and role-playing simulations are not new to journalism education, but the application of dramatic principles and digital technology to create a new form of mediated learning environment is yet to be extensively explored in this area. The *Flood* suggests that the inherent strength of applied theatrical approaches can be complemented and expanded through technology. This case suggests exciting untapped potential in marrying applied drama approaches with appropriate technologies.

**Conclusions**

These two case studies reveal that there is great potential available to drama educators when conventional drama education approaches are transformed by appropriate and well-developed technologies. In the case of *To the Spice Islands* simple, commonplace technologies are used powerfully to extend and deepen the concept of drama pre-text. Most importantly, through the use of technology there is now an enhancement of the traditional role in a process drama. Students can now enter a digitally situated role and become part of a simulated and (in some cases real) community of practice. The implication here is that while drama has always been used to teach across the curriculum with great effect in primary and secondary education, it now makes sense to use process drama approaches for all age groups. The knowledge and practices of Marine Archaeologists can now be accessed through the Web by students of all ages. *To The Spice Islands* enriches the learning experience by adding the distributed knowledge of the Internet and focussing it through an embodied, reflective and selective process drama.
The *Flood* case illustrates that situated learning does not stop at the school gate. The integration of more complex (yet still free and accessible) technologies gives applied drama practitioners a glimpse of what is possible when the Internet and applied drama approaches are combined. While the use of chatterbot technology begins to question the very nature of performance and liveness (Auslander, 2002, p. 21) it adds an extra dimension to what is in reality an epistemic game. The outcome of both of these cases being that students’ learning, immersion and engagement is potentially enhanced.

However, the learning experience must drive the development of the technology rather than the technology determining the learning. In both of these cases the drama was deepened and extended through the use of technologies. In *To the Spice Islands* the drama would not have been possible had it not been for the use of technologies. The success of both of these projects depended on the acceptance and use of skills by both the teacher and the student, and the ability to accept the shared fiction generated by the pre-text.

### 6.4 Critical reflection

Cycle 3 provided the opportunity for reflection on these two earlier case studies that had identified some of the conventions operating in both applied drama and digital game-based learning strategies. It reinforced my view that there were connections and parallels between these forms that could contribute to learning and teaching strategies. However, the collaborative research and writing that occurred throughout Cycle 3 also marks the start of more direct thinking about the notion of drama and digital technology merging to create new and engaging spaces for learning.

In *Real Players?* we suggested that the creation of what we called mediated learning communities was the one of the transformative outcomes of engaging drama, performance, games and education with digital technology. Figure 6.4, is taken from *Real Players?*(Carroll, et al., 2006), and it provides a reference point for this critical reflection in Cycle 3 of my core action research fieldwork. I will now discuss the illustration, while emphasising the concepts that apply directly to my own study.
Drama & learning

In Figure 6.4 we suggested drama and learning as encompassing the range of activities that are usually thought of as ‘traditional’ practices, recognising the depth and validity of ‘pre-digital’ practice, experience and knowledge. As Real Players? focused on drama education, we were trying to represent the spectrum of educational practices that have been more traditionally known as drama in education, theatre studies and theatre in education.

Process drama, performance and games

Here in Figure 6.4 we focused on three forms selected from educational strategies that draw upon dramatic and theatrical practices. Firstly we chose process drama,
primarily due to its close alignment to curriculum outcomes and educational practice in a wide range of learning environments. It has had a strong theoretical and practical development over the last sixty years and has developed a range of techniques that seem particularly well developed to make use of technology. Secondly, we chose to include performance, which we defined in this context as ‘the process and development of dramatic work for an audience’ (Carroll, et al., 2006, p. 6). This was in line with the book’s focus on work created for and by young people, as that is where we believed much of the dynamism in mediated performance for modern audiences exists. Thirdly, games are an important part of the learning environment and have long been incorporated into drama as a learning tool. We felt video games are a very clear example of how technology and media can rapidly create a new, highly engaging and entertaining popular culture form.

Technology and media as transforming agents
As noted in the introduction to this thesis, digital technology evolves in an exponential pattern, and has a tendency to radically transform popular cultural forms. The central argument of the model presented in Real Players? and shown here as Figure 6.4 is that when traditional forms of dramatic practice are transformed by technology, they take on new qualities and produce hybrid forms that require a new conceptual framework and vocabulary to understand them.

Situated role, liveness and simulation
Here in Figure 6.4 we attempt to describe the transformative impact of digital technology on process drama, performance and games. Firstly, situated role is the term we used to describe how process drama operates when it is combined with the computer-mediated technologies of the Internet, and other everyday technologies. As discussed in the two case studies presented in this chapter, the use of a digital pre-text combines the drama with digital content and allows the students to develop virtual expertise. The drama takes on some of the qualities of situated learning because it is able to access the expertise of communities of practice that exist in the online world. Developing this concept reinforced our view of a connection between epistemic games and Dorothy Heathcote’s Commission Model of drama, which is explored further in Cycle 4 as described in the following thesis chapter.
Secondly, *liveness* is the term used by Philip Auslander (1999) to describe the technologically heightened awareness of live human presence in performance. Auslander suggests that until the development of a technical ability to record video and audio, our concept of liveness did not exist. We suggest here in Figure 6.4 that any performance developed by and for students is now more than ever likely to be influenced, created and performed in conjunction with digital media. The concept of liveness in computer-generated performance, such as in animated films made using video game software, is something that John Carroll and I have pursued as a separate track of investigation leading off from the main research journey described in this thesis (see Cameron & Carroll, in press).

Thirdly, the mediation of live games and play raises issues concerning *simulation*. At the highest levels of simulation, technology and media are used to create high-fidelity models with the aim of representing a real-world experience as accurately as possible. But as in the *Flood* project outlined in this chapter, I argue that even low fidelity representations can be just as engaging if the nature of the thing being simulated is captured. The chatterbot used in *Flood* did not have to simulate the SES Controller, but rather had to engage participants in a simulated interview with that character. This resonates with Shaffer’s concept of epistemic games, which he argues do not have to be high fidelity simulations that replicate every detail of a professional activity, but rather need to be authentic models of how practice-based learning occurs in that professional community (Shaffer & Resnick, 1999). The use of simulation in educational contexts such as military training became another research track branching off from this thesis research, and this is discussed further in Chapter Seven.

*Mediated learning communities*

In Figure 6.4 we proposed that mediated learning communities are the dramatic structures that are developed when the forms of process drama, performance and games are transformed by technology. While retaining much of their original form they nevertheless have a range of new and interesting qualities that can be used in the broader drama and learning context. In selecting this term we attempted to show that digital technology was making possible the creation of new spaces in which collaborative learning could occur. We were at the time unfamiliar with Gee’s use of the term ‘affinity space’ to describe a similar framework, though
intuitively we were seeing some of the same opportunities emerging from our own work with dramatic frames, digital pre-text and the learning discourses in video games.

One theme emerging from the research was related to the potential use of online technology to engage novices (learners, amateurs, students) with real communities of professional practice, but in a way that might break down the power relationships that might exist in more formal learning settings. I saw that computer mediated online communication allowed access not only to information, but also to real distributed communities of practice based on common interest and expertise, and based on virtual presence rather than spatial locatedness. Students with access to the Web could use the everyday technology of computer-based communication to engage with real-world digital pre-texts for dramatically situated learning. I started to see ways in which technology might enhance applied drama forms such as Mantle of the Expert, in which participants are given fictional commissions to solve problems as if a professional, and Heathcote’s Commission Model, in which real-world problems are solved by empowering students to think and act like professionals. The proximity of applied drama forms to Shaffer’s designs for epistemic games became even more obvious when compared more closely with Mantle of the Expert and the Commission Model, and this comparison was to become the basis for Cycle 4 of my action research fieldwork to be described in Chapter Seven.

Within the mediated learning community model shown as Figure 6.4 we identified a further three elements that could operate within these new learning spaces, created through the impact of digital media technology and mechanics upon process drama, performance and games. Firstly, we suggested in this model that within process drama scenarios situated in mediated communities of practice, the online technology would allow the participants to interact with the authentic learning vocabulary and information of such communities. In this virtual apprenticeship they could master the required content of the subject material under examination and develop a situated understanding of the context. A benefit of this approach is that learners can master complex concepts inherent in the material while remaining protected by the situated dramatic role they have assumed within the drama. We argue in this model that by accessing real
communities of practice while dramatically framed through role distance they are able to enter the epistemic frame (Shaffer, 2004) of the community of practice. This enables them to access the ways of thinking and acting that individuals learn when they become part of a specific community of practice.

Secondly, in Figure 6.4 we suggest that a **dramatic property** (Sutton, 2009) represents a transcodification (Tulloch, 2000) of content from one dramatic form to another. This concept of the dramatic property, which is the core intellectual property developed from a dramatic performance, is seen as being able to be transferred to all of the forms of representation that currently occur in young peoples’ lives in both live and mediated forms (Sutton, 2009). The model of mediated learning communities acknowledges this post-modern approach to content and performance as being an outcome of the integration of the dramatic property with the everyday technologies permeating young people’s lives. It is also a key part of generating digital pre-texts for applied drama, as it suggests how the dramatic property of the pre-text can operate across different spaces, both mediated and physical, to expand the world(s) of the drama.

Thirdly, in the model described in Figure 6.4 the term **boundary object** (Star & Griesemer, 1989) describes objects that serve to co-ordinate different perspectives towards a particular purpose. I had encountered the term in a discussion of emergent communities in online games during the 2005 DiGRA conference. Wenger (1998b) considers them as a common artefact that serves different purposes or provides different meanings to individuals within a community, or between communities. In the mediated learning communities model, boundary objects are a possible product of the transcodification of games through technology into a simulation or digital games. We use the example of The Sims that could be considered the technological transformation of doll play (or even to an extent, puppetry). As a boundary object, The Sims in turn may represent different things to members of a learning community; a teacher may see it as a way of learning about relationships, while a student may see it as the platform for recording and creating scenes to be edited later into a small movie parodying TV sitcoms. Transcodification operates within the practices embedded in participatory media cultures that edit, remix and share digital content.
In reflecting on Cycle 3 I am reminded that applied drama has a long ‘pre-digital’ history. What was so exciting to me about the *To the Spice Islands* and *Flood* projects was the sense of complementing well-established strategies for teaching and learning. There is very much a sense of simultaneously drawing upon both the traditional practice of these fields, and the opportunities and affordances of emerging digital technologies. Also, in both projects an underlying application of the technology was to connect the participants in ways that might not otherwise be possible, particularly due to geographical separation. The ability to extend the applied drama to times and spaces beyond the traditional classroom through the use of digital media conventions seemed to be a significant reason to continue to pursue this research. This can include extending the world of the learner into the world of professional practice by using technology to engage in situated role-based learning in a community of practice. While acknowledging that applied drama can and does exist without technology, the mediated learning community model suggests that technology can transform drama to generate hybrid new forms to augment and extend the power of the imagination.

### 6.5 Summary of the chapter

In Chapter Six I have outlined two case studies that illustrate how applied drama can be transformed and enhanced with technology and media to create a new hybrid form, which we called *situated role*. This dramatically framed position shares the conventions of process drama but is situated in a dramatically mediated ‘reality’ that augments the imagined context in a classroom. This concept of the mediated learning community is the term we used at the time to describe what in this thesis is also called an affinity space. In this cycle of research my collaborators and I argued that adopting this digitally mediated framing could bring educators closer to the aims of situated learning by drawing on students’ real life experiences, while using technology to enhance dramatic role identities beyond the classroom and into real-world communities of practice. The ability to extend the dramatic experience beyond traditional boundaries is a key affordance of the digital technology.

The first case study, *To the Spice Islands*, has particular significance to this autoethnographic account of my research journey, as it was my first experience of working on an applied drama project. It illustrates how everyday technology such
as Websites, blogs and short video clips can augment the live dramatic experiences undertaken in more traditional forms of drama. The second case study, Flood, was work I had first conceived in 1998. This marked the start of my interest in the possibilities of digital game-based learning, but at the time had not been consciously influenced by the applied drama field. During this Cycle of my action research, it became apparent that Flood is an example of how relatively simple digital technology, primarily a Website and digital media content, can create a virtual space — in this case a virtual newsroom and town — as the pre-text and supporting materials for applied drama. Flood could be used in a fully online mode, without the need for face-to-face contact, and is thus more like a digital game experience than To the Spice Islands.

As discussed in this chapter, Cycle 3 of the action research brought into relief the similarities between some forms of applied drama, particularly those with an often vocational leaning such as Mantle of the Expert or the Commission Model, and the game-based learning form that Shaffer has called epistemic games. The case studies presented here illustrate how technology and media can act as a transforming agent for traditional forms in the broad field of drama and learning. This study continues to explore how this can produce a new, hybrid, mediated learning environment, akin to the affinity spaces Gee refers to, and with similar aims to epistemic games. Consideration of the interrelationships between these applied drama forms and epistemic games is the focus of the next cycle of my research, presented in Chapter Seven.
7. CHAPTER SEVEN
Cycle 4 (2007)

Epistemic video games and Mantle of the Expert: A communities of practice approach

7.1 Introduction
This chapter describes the fourth cycle of core action research undertaken for this study. As shown in Table 7.1 it continues the autoethnographic self-narrative of the context for Cycle 4 at section 7.2. This describes the settings, aims and participants and establishes the motivation for this phase of the inquiry. The action and observation stage of the core action research project is then presented at section 7.3 as an edited version of a refereed conference paper presented in 2007. The chapter continues with my critical reflection on Cycle 4 at section 7.4 and concludes with summary at 7.5, leading to the re-planning phase for the fifth cycle of fieldwork to be discussed in Chapter Eight.

Table 7.1: The structure of Chapter Seven in the CRASP model used for this thesis.

<table>
<thead>
<tr>
<th>AR phase</th>
<th>CRASP element</th>
<th>Chapter section</th>
<th>Autoethnography</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>Critical attitude</td>
<td>7.1 Introduction 7.2 Context for the inquiry</td>
<td>The AR fieldwork continues with a comparison of Mantle of the Expert and epistemic games. This research occurs parallel to an Australian Research Council linkage grant with the Australian Defence Force, examining application of drama and game conventions to Public Affairs training.</td>
</tr>
<tr>
<td></td>
<td>Accountability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflect</td>
<td>Self-evaluation</td>
<td>7.4 Critical reflection 7.5 Summary of the chapter</td>
<td>Critical reflection on this fieldwork notes that digital media and applied drama forms can engage in commission-based roles to provide authentic situated learning. The use of everyday technology to engage with communities of practice strengthens the use of affinity spaces to continue learning beyond the classroom. This is developed further in the next AR cycle.</td>
</tr>
<tr>
<td></td>
<td>Professionalism</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7.2 Context for the inquiry
The autoethnographic narrative in Chapter Six has noted the collaborative process of producing Real Players? (Carroll, et al., 2006), which focused on the intersections of drama, technology and education. That collaborative research and
writing with John and Michael conceptualised how digital technology worked to transform drama, performance and games in educational settings. We had described the links we saw between the applied drama form of process drama — historically associated with the work of Heathcote, Bolton and others — and the emerging digital game-based forms espoused by Shaffer and Gee, for example. Specifically, as described in Chapter Six, we saw direct parallels between the process drama forms of the Commission Model and Mantle of the Expert approaches, and the epistemic games model.

The autoethnographic narrative now continues with an outline of Cycle 4 of my action research fieldwork, which coincided with another major collaborative project that drew upon and contributed to the work conducted during my thesis study. This was an Australian Research Council (ARC) linkage project with the Australian Defence Simulations Office (ADSO) as a partner, and the Department of Public Affairs (DPA) within the Australian Defence Force (ADF) as a client. The proposal for this project had originated in mid-2006, and the funded research project began in mid-2007. The project’s broad aim was to explore the potential use of digital game-based technologies and applied drama conventions to produce crisis management simulation tools for use by ADF Public Affairs personnel. Charles Sturt University (CSU) had a history of working with the DPA, having provided study programs for ADF staff in the area of public relations.

The original project team was a collaborative approach across several disciplines at CSU, and in addition to myself it consisted of:

- John Carroll (as Chief Investigator);
- Professor Terry Bossomaier, Director of the Centre for Research into Complex Systems;
- Zoe Hibbert, a Lecturer in Organisational Communication;
- Jim Tulip, a Lecturer in Game Design; and
- Dr Joanne Arciuli, a Lecturer in Psychology

The linkage project proposal was directly related to the collaborative work that John and I had been involved in throughout my thesis study to that point. It reinforced my belief that the combination of applied drama and game-based learning could have real-world uses in even high stakes learning contexts such as
the military. It is worth expanding on this ARC project as part of my autoethnographic account of my own study, as it connects directly to the research and publication undertaken in Cycle 4 of my fieldwork.

In contributing to the development of the ARC project I could see the opportunity to apply my developing awareness and understanding of how drama and game conventions could operate to transform practice within the ADF’s training model. Public affairs activity is seen as having increasing tactical significance for the ADF, with a potential for generating its own form of what the military call a battlefield effect, that is to say media coverage can shape public and political sentiments and thus it has a tactical impact on their activities. Digital technology has opened new channels for rapid and unfiltered communication of images, sound and text and the ADF must compete in an increasingly noisy media space for its messages to be heard. The speed with which audiences demand information also presents difficulties for an organisation that bases its responses on a clear doctrine and chain of command approach. The actions of some stakeholders, such as the media and politicians, are not always compatible with ADF internal processes. And like any large organisation — and the ADF is one of the largest within the Australian government — it suffers from its own internal communication problems.

The Australian Defence Simulations Office (ADSO), like similar military and emergency organisations around the world, was interested in exploring more effective role-based problem-solving methodologies that can be delivered using digital technologies. The overarching goal of the ARC project described here was to develop an online game-like scenario system based on drama conventions that could be used to help participants develop a clearer understanding of personal decision-making processes, a deeper understanding of other team members’ perspectives, and a fuller appreciation of the intense and unpredictable nature of communication flow within crises.

A fundamental problem facing the ARC project team was that some activities of the Defence Public Affairs personnel are not easily simulated or replicated in a digital or game-like environment. I felt that the field activities of personnel might lend themselves to some forms of simulation, such as the creation of virtual camera operators or military journalists to act as avatars in constructed 3D simulation spaces. Indeed, this would be one relatively simple way to include DPA personnel
in the types of mission rehearsal and simulation exercises such tools were already used for. In 2007 and 2008 I attended the annual SimTect conference, which is an Australian simulation industry conference and exposition. There is a leaning towards military applications and therefore training simulators for activities such as flying fighter aircraft, operating a ship-based weapons control system or driving armoured vehicles appeared well catered to in this marketplace. I saw that there was a game-like 3D first-person troop combat simulator, called *Virtual Battlespace 2* (Bohemia Interactive, 2007), which the ADF already used in a range of mission rehearsal and training systems. At that point I considered the possibility of adding avatars to *Virtual Battlespace 2* (*VBS2*) that might be suitable for DPA scenarios (e.g. a camera person, or civilian media personnel). In 2007 I approached programming staff at the *VBS2* stall at SimTect and described the ARC project, and how it might fit with their product. They indicated that it was theoretically possible and relatively easy to do so, but seemed unsure of why we would want to add these media characters to their product. Ironically, Bohemia Interactive now offer a range of civilian media personnel avatars for inclusion in the *VBS2* system, including a video cameraman and as shown in Figure 7.1 a reporter in the blue body armour now often worn by media in combat zones (Bohemia Interactive, 2007). If I were to revisit the ARC project now, I would give more serious thought to using the *VBS2* system to explore role-based and game-like conventions as part of a training scenario with the ADF.

![Figure 7.1: Civilian press avatar for use with *Virtual Battlespace* system (Bohemia Interactive, 2007).](image)

During Cycle 4 of my action research fieldwork I was therefore conceptually engaged with the problems facing the parallel ARC project, including how we might develop a game-like simulation or learning space around the decision-making and interpersonal relationships that make up the activities of Public Affairs
professionals. This would need to be assessed against the desired outcomes of the organisation, or measured against the prevailing doctrine, and could include simulated interaction with various stakeholders, which for the ARC project could include the media, politicians and the public. One of our approaches was to use drama conventions derived from applied drama, process drama, and the Mantle of the Expert approach to better understand the culture of ADF public affairs, current training methods, and to assist development of initial simulation scenarios. Small-scale applied drama sessions with trainee public affairs personnel used these conventions to explore, for example, the participants’ ability to follow ADF doctrine when decision-making under pressure. During Cycle 4, John Carroll, Joanne Arciuli and I used applied drama conventions to role-play a small crisis management scenario from the perspectives of different stakeholders involved, as a small-scale pilot of some of these ideas (Arciuli, et al., 2008).

Significantly for my PhD study, working in parallel on the ARC project reinforced the perception that two distinct fields in learning and teaching — digital games and applied drama — had points of overlap and convergence. Cycle 4 of my action research concentrated on the potential benefits of combining an epistemic game-like focus on replicating practica and professional problem-solving approaches with the proven conventions of applied drama. The aim would be to rapidly engage participants in effective role-play scenarios, while protecting them through shifting levels of role-distance and role-protection. John Carroll and I continued to develop our own interest in the links with the specific forms of Mantle of the Expert and the Commission Model. As noted in Chapter Six, in Cycle 3 of the fieldwork we had recognised that technology allowed the drama/learning experience to continue beyond the limitations of the traditional classroom space. In Real Players? we had considered how digital technology would allow these hybrid drama/game forms to operate with communities of practice, and thus allow students to engage with real practice and practitioners in the pursuit of authentic situated learning. They could be engaged in completing a commission — either fictional in the Mantle of the Expert form, or real in the advanced form described by Heathcote as the Commission Model. Although we used the term mediated learning community to describe this hybrid form of drama, game and communities of practice, it is close to what Gee and others refer to as an affinity space.
The focus of Cycle 4 of my core action research would therefore be a deeper examination of how communities of practice might operate with the overlapping conventions of epistemic video games and applied drama forms such as Mantle of the Expert. As noted in previous exegesis chapters, the action and observation phase of each cycle is based on a peer-reviewed scholarly publication, which has so far included two journal articles and a book chapter. The publication outlet for the cycle described in this chapter was a peer-reviewed paper prepared for the biennial International Drama in Education Association (IDEA) World Congress.

The arc of my research journey now moves towards examination of the relationships and overlap between Dorothy Heathcote’s Mantle of the Expert drama technique (MoE), epistemic games, and the communities of practice learning theory (CoP). Within the educational environment there are currently converging attempts to introduce a more practice based, life long, socially embedded approach to learning. Flaws in the current approach to learning and teaching outlined by Wenger in the opening quote of this article have been clear for some time to teachers and practitioners across a wide range of disciplines. Less clear is how institutions are to provide an alternative model of education, based on a more social and self-directed form of learning, which emphasises authentic connections to solving real-world problems. The following synthesis is an attempt to connect two educational approaches founded in the different fields of drama and video gaming to a communities of practice analysis of social learning.

7.3 Scholarly publication
This section is based on an article originally published as:


*Communities of practice*

‘Our institutions ... are largely based on the assumption that learning is an individual process, that is it has a beginning and an end, that it is best separated from the rest of our activities, and that it is the result of teaching’ (Wenger, 1998b, p. 3).
A community of practice in Wenger’s terms is a specific group with a local culture, operating through shared knowledge practices, linked to each other in a shared stock of common intellectual resources. They are, as James Gee describes them, a way of ‘...seeing, valuing, and being in the world’ (2005). These communities of practice provide participants, through a common repertoire of knowledge, ways of addressing shared problems and purposes (Lave & Wenger, 1991).

Wenger’s early work was initially concerned with business organisations and corporations and how they managed knowledge. In this context managing knowledge can be seen as ‘coordinating the activities of a variety of players who help discover, diffuse or apply knowledge’ (Wenger, McDermott, & Snyder, 2002, p. 166). This focus on organisational culture presupposes a learning environment of autonomous adults with their own intrinsic motivation and job pressures to become part of a learning organisation, either for profit or advancement or simply to maintain their position within the organisation. Educational environments, especially school learners, as we are aware, have very different motivations for acquiring knowledge. Following Wenger et al. (2002, p. 4) CoPs have been defined as:

‘groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis’.

Constructivist theories such as a community of practice approach build on pre-existing cognitive learning theory, and view education as a process of knowledge construction with concept development and comprehensive understanding situated within a social context of learning. This approach sees motivation and self-direction as the key drivers of learning. Such a view of learning firstly locates learners as actively involved in the process; and secondly, the knowledge they acquire is seen as highly related to the environment in which the learning is experienced.

This approach implies that learning should be task-oriented (Wenger, 1998a) and focused on the practices of the knowledge domain. How this social theory of learning might operate is elaborated by Wenger et al. (2002) and placed within the context of lived experience and social participation within the world. Learning for
Wenger is considered part of natural behaviour and as such it is life sustaining and ongoing.

He bases his theories about communities of practice on four major premises:

1. we are social beings;
2. knowledge is a matter of competence with respect to valued enterprises;
3. knowing is a matter of participating in the pursuit of such enterprises; and
4. learning should ultimately produce meaning — that is, our ability to experience the world and our engagement with it should be meaningful.

Learning is therefore seen as centrally involving participation. As Wenger puts it:

‘learning transforms who we are and what we can do ... it is not just an accumulation of skills and information, but also a process of becoming a certain person’ (Wenger, 1998b, p. 215).

So for Wenger, engagement in social practice is the fundamental process by which we learn, and through this negotiation of meaning we become who we are (Wenger, 1998b, p. 52). Such an approach clearly states that learning and knowledge construction is a matter of engaging and contributing to the practices in which the learners are involved.

This social learning theory therefore situates learning in practice and in the social groups in which this learning takes place and defines such groups as communities of practice. Practice is seen as ‘... the way tasks are done, spontaneous, improvised, responding to a changing unpredictable environment, driven by tacit knowledge’ (Seely Brown & Duguid, 2000). Such learning, when situated within communities of practice becomes the reification of the social groups in which learning takes place.

When this approach is applied to educational establishments such as schools the intrinsic motivation for the participants is not as clear-cut. Too often the learning in schools is seen as a ‘dummy run’ — practice for real-world engagement in the future, or for examinations that have no specific goal beyond grade point competition. In an attempt to counteract this tendency the techniques of Mantle of the Expert and epistemic games, respectively coming from drama and video gaming, have endeavoured in a convergent way to implement this social model of
learning in specifically school-based learning environments. Both techniques have evolved to take advantage of computer based online communities of practice, which now exist on the Internet.

In educational terms, online computer-based technology can provide access to the content of mediated learning communities of practice for both Mantle of the Expert drama and epistemic games. That is the technology, via computer-mediated communication, provides access not only to information but also to the production and discourses of a range of special interest online communities. The evolving social media and content sharing applications of online technology have allowed development of mediated communities of practice based on common interest and expertise rather than spatial locatedness. This presents an opportunity for educational drama to use everyday technology and computer-based communication networks to access centres of expertise that can then be used a teaching resource to create digital pre-texts (Carrol, 2004; Carroll & Cameron, 2003) for dramatically situated learning.

Such mediated communities of practice have developed in the highly distributed virtual environment of the Internet. While retaining much of their original non-mediated communities of practice form, they have a range of new and interesting qualities that can be used in the broader drama and learning context. In the past communities of practice were bound by spatial boundaries and proximity such as the workplace, the factory or the office. With the advent of the online world, communities of practice sprang up that were based on shared content and interest, not shared location. They have now developed in such a way that even a relatively obscure interest or hobby will most likely have a distributed community of practice based around it. Such mediated learning communities can be seen as a valuable learning resource.

**Mantle of the Expert**

Drawing on a dialogue between Heathcote and Bolton (1995, p. 15) the applied theatre technique of Mantle of the Expert can be seen as a role-based dramatic form in which the participants assume a role of professional expertise to run an imagined enterprise for a client. A more general term ‘enactment of the expert’ (Hughes, 1992) is inspired by Heathcote’s concept. In this approach as in MoE, the
group become characters endowed with specialist knowledge that is relevant to the situation; the situation is usually task-oriented; power and responsibility move from teacher to group; and learners feel respected by having expert status (Neelands & Goode, 2000, p. 34).

A further development of this technique is now occurring in applied drama where the conventions of Mantle of the Expert are combined with online communities of practice to provide participants with access to professional areas of expertise otherwise closed to them. When operating online, such mediated communities of practice can be used as drama resources to create digital pre-texts for dramatically situated learning. It is an approach to theatre making which emphasizes ‘involvement, participation and engagement’ (Nicholson, 2005) in the dramatic context. By combining a digital pre-text based on specific community expertise with an online drama scenario, participants are able to develop a form of distributed cognition and virtual expertise while operating in the dramatic role of Mantle of the Expert. This blend of technology and applied drama conventions has the potential to transfer valuable symbolic cultural learning into the hands of the participants.

Such scenarios allow participants, who are introduced to this mediated learning community approach, to interact with the authentic learning vocabulary and information of such communities of practice. While framed in dramatic role as virtual novices in a specific community of practice, the participants can master the required content of the subject material that is under exploration and develop a situated understanding of the specific context and possibilities for action.

Learners can encounter complex concepts inherent in the material while remaining protected by the situated dramatic role they have assumed within the MoE framework. By accessing the authentic production and discourses of communities of practice while dramatically framed through role distance, participants are able to enter what Shaffer (2004) calls the ‘epistemic frame’ of the community of practice. This enables them to acquire expertise in the body of knowledge and ways of thinking and acting that any individual learns when they become part of a specific community of practice. By developing and adapting a community of practice research design to Mantle of the Expert techniques this
approach provides a useful theoretical framework for online role-based applied theatre.

In Mantle of the Expert terms, mediated learning communities can most readily be used as an online source of content for dramatic pre-texts (O'Neill, 1995, p. 20). When such sites are used with the conventions of applied theatre, transformed and modified by online technology, they provide a digital pre-text and field of expertise for the drama to operate within (Carroll, 2004). The drama practitioner, working with Mantle of the Expert techniques can access such digital pre-texts by making use of the online resources within existing mediated communities of practice.

*Situated Role* is the performance term used in this paper to describe how individuals behave when they are engaged in dramatically framed role-based applied theatre or epistemic games when combined with a digital pre-text (Carroll, et al., 2006, p. 8). The dramatic frame when combined with the digital content of online communities of practice, allows the students to develop a form of virtual expertise while engaging in drama or games. This form of dramatic engagement is common in Mantle of the Expert drama and is increasingly being used in the emerging serious games movement approach.

This dramatically framed position of *situated role* shares all the features of a process drama but is situated in a dramatically mediated 'online reality' that augments the more typical imagined context that occurs in usual classroom practice. In this form, *situated role* draws on students' real life experiences, while using online networks to enhance their dramatic role identities and knowledge base beyond the classroom environment by providing access into the production and discussions operating within real (online) communities of practice. The students, in role as apprentices or as legitimate peripheral participants (Lave & Wenger, 1991) begin to share the specialist discourse of the communities of practice they access as they build up real content expertise.

*Epistemic games*

Practitioners and educators familiar with the power and potential of applied drama approaches such as Mantle of the Expert will be familiar with the following concepts:
'Getting players to take on the identity of a professional is relatively easy. In fact, there is a kind of recipe — a heuristic or rule of thumb — for how to get someone to see themselves as a professional, and for others to see them in that way. To make players feel like a *professional* X in an epistemic game, it seems they need someone to tell them they are a professional X. They need a badge of office or prop of profession X. They need to do something that they expect a professional X too do. They need to learn about something that a professional X does that they didn't know was part of the profession and then do that thing. They need someone they know (a peer, perhaps, or a parent) to see them as a professional X. And the virtual world of the game in which they are a professional X needs to be consistent in treating them like professionals rather than school students' (Shaffer, 2006, p. 159).

Shaffer is talking about the power of video game representations of professional practica — which he calls epistemic games. This statement shows how close the world of game-based learning or serious games has become to the applied or process drama approaches familiar to many drama educators.

Shaffer and Resnick (1999) in a discussion of epistemic games describe 'thickly authentic' learning contexts, as ones in which the learner uses real tools, knowledge and practices to address issues they care about. They claim that a more difficult prospect than conducting research in them is the actual creation of an environment in which this type of learning can occur. They are interested in creating contexts where the interests and concerns of the learners are aligned with a domain of knowledge, including authentic and valued practices and modes of assessment. As Shaffer says, 'in thickly authentic settings content is freely accessible, and motivation is easy. Creating thickly authentic environments though is hard' (Shaffer, 2005).

However, as already noted, there is a large body of expertise and experience in the educational drama world, which has worked to create thickly authentic settings with few resources and limited budgets and has developed a wide range of techniques for doing so. Drama teachers also know that developing thickly authentic learning environments in schools has always been difficult because these ways of working, based on a communities of practice level of real-world expertise, are largely absent from the current school curriculum. Much of the traditional school curriculum still operates on the basis of a transmission model of educational practice. These models, as Shaffer says, are derived from ‘...medieval scholarship constituted within schools developed in the industrial revolution’
Part of the problem is that the industrial time management model of classroom practice discourages a range of innovative teaching, including a community of practice approach as well as drama teaching. Students need to have time to think and work in depth in the discourse of a community of practice if they are to grapple with the complex problems of content it presents. This cannot be accomplished in 40-minute chunks of time, which are then assessed by standardized tests.

Teachers have long known that the most authentic contexts for learning involve engagement and immersion by becoming a participant in a learning community. Yet practical constraints such as access and time have limited the extent to which this can occur in traditional schooling. The apprenticeship model of engagement is generally applied in post-school/pre-career education and because of a focus on high status literary models of learning is generally undervalued as an educational pedagogy. However in the emerging learning environment of the digital age this has radically changed, as knowledge management and the ability to work in virtual groups becomes an essential skill. Both Mantle of the Expert and epistemic games simulate this immersion model by using the power of the new technologies to enter the skills and knowledge base of a community of practice. They harness ‘...the conventions of participation that individuals internalise when they become acculturated’ (Shaffer, 2005) to access a community’s way of thinking. Engaging with real knowledge, via the resources of the Internet, can enhance the authenticity of content-based learning. Students who are dramatically framed to participate in virtual communities can work and think in innovative ways as trainee professionals within the knowledge base of the community. Adopting this framing and accessing such mediated learning communities can bring educators closer to the aims of situated and social learning.

Shaffer (2005), Gee (2005) and others discuss this form of learning based on epistemic games. They see the potential to apply technology and appropriate learning systems from some digital games to create a learning environment that places students within a virtual professional community of practice. Shaffer (2005) describes a scenario in which students learn about town planning by using professional software, acting in role as city planners, and producing plans which they present to a representative from the city planning office. To drama educators
familiar with process drama, the parallels are obvious. The *Madison 2200* project described by Shaffer parallels Dorothy Heathcote’s Mantle of the Expert model, with both strategies taking their respective underlying forms (video game and drama) into seemingly alien territory, yet in reality drawing on the power of these forms to generate powerful and engaging learning experiences:

‘Perhaps this epistemic game doesn’t seem very game-like — not as game-like, say, as *SimCity* or *Full Spectrum Warrior*. The students in *Madison 2200* did enjoy their work. But more importantly, the experience let them inhabit an imaginary world in which they were urban planners. They first entered that world because they had volunteered to participate in an experimental workshop. But the world of *Madison 2200* recruited these students to new practices, identities, interests, and understandings as part of a new way of seeing the world. Urban planners have a particular way of identifying, evaluating, and addressing urban issues. By participating in an epistemic game based on these practices, students began to appropriate the epistemic frame of urban planning. This was play. Most serious play. Epistemic play. And as a result, it was fun, too’ (Shaffer, 2005).

The similarities between epistemic games and the Mantle of the Expert model lie in the application of a process to a task that has been derived from a community of practice basis and a form of learning through apprenticeship. For example, a project that en-roled students as hospital garden designers (Heathcote, 2003) needed access to the world and discourse of garden design. The mediated Mantle of the Expert model proposed here uses process drama and online situated role to achieve this, while the epistemic games approach put forward by Shaffer uses digital games to achieve the same ends. The epistemic games model is directly connected to the technologically driven computer games movement whilst the Mantle of the Expert model draws on the powerful traditions of applied drama. The epistemic games movement calls for ‘richly authentic settings’, while the Mantle of the Expert model also provides those settings for students to work within. This convergence of thinking from two very different educational perspectives demonstrates the developing synergies between the teaching strategies of Mantle of the Expert drama and epistemic games both using a common communities of practice learning approach.

**Comparison between Mantle of the Expert and epistemic games**

In Table 7.2 we have attempted to compare the fundamental elements of MoE and epistemic games. While the terms used by drama and video game educators may
differ, it is clear that they share similar conceptual understandings regarding the use of role-play, problem-solving, simulation and connections to real-world expertise as an approach to learning. We acknowledge that this paper concentrates on the similarities between the forms, as it argues for consideration of the potential benefits that might be gained from the sharing of expertise, experience and knowledge from these converging fields. There is clearly scope for further work in this area.

Table 7.2: A comparison of features between Mantle of the Expert and epistemic games

<table>
<thead>
<tr>
<th>Mantle of the Expert</th>
<th>Epistemic games</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dramatic Frame:</strong></td>
<td></td>
</tr>
<tr>
<td>Entering the world of the drama using drama conventions</td>
<td>Epistemic Frame:</td>
</tr>
<tr>
<td>Entering the simulation environment</td>
<td></td>
</tr>
<tr>
<td><strong>Role:</strong></td>
<td></td>
</tr>
<tr>
<td>Attitudinal (not a character) professional discourse (often at trainee level)</td>
<td>Task Identity</td>
</tr>
<tr>
<td>Real profession (professional discourse)</td>
<td></td>
</tr>
<tr>
<td><strong>Enterprise:</strong></td>
<td></td>
</tr>
<tr>
<td>Drama based, but authentic</td>
<td>Task:</td>
</tr>
<tr>
<td>Game based, but authentic</td>
<td></td>
</tr>
<tr>
<td><strong>Client focus:</strong></td>
<td></td>
</tr>
<tr>
<td>Enterprise needs to serve the client</td>
<td>Project focus:</td>
</tr>
<tr>
<td>Working on project or task appropriate to profession</td>
<td></td>
</tr>
<tr>
<td><strong>Practicum:</strong></td>
<td></td>
</tr>
<tr>
<td>Join community of practice through role-based drama to meet needs of client. Develop expertise</td>
<td>Practicum: Game-based practicum replicates key features of learning in community of practice. Develop expertise.</td>
</tr>
<tr>
<td><strong>Problem:</strong></td>
<td></td>
</tr>
<tr>
<td>Introduces dramatic tension to increase level of commitment and intensify task focus and creative outcome.</td>
<td>Problem: Tension in ‘conversation’ between problem-solving individuals and the community of practice leads to creative solutions</td>
</tr>
<tr>
<td><strong>Engagement:</strong></td>
<td></td>
</tr>
<tr>
<td>Adopting community of practice knowledge, identity and value system to solve problem</td>
<td>Simulation: adopting epistemology of a community of practice to solve problem</td>
</tr>
<tr>
<td><strong>Performance:</strong></td>
<td></td>
</tr>
<tr>
<td>Learning is displayed. Solution is presented to client. Performance occurs within from protection of expert role</td>
<td>Performance: Learning is displayed. Outcome seen by known other (peers, mentor, parents) as professional presentation</td>
</tr>
</tbody>
</table>

Mantle of the Expert relies upon the conventions of drama to engage participants in the world being explored and the authenticity of the problems to be solved. While there is always an element of ‘suspension of disbelief’ required, MoE uses the dramatic frame to enable participants to act ‘as if’ they are experts engaged in real tasks as members of a community of practice. Similarly, epistemic games require that learners enter the world being simulated by the game environment. This does not mean a high fidelity virtual reality system is required — rather, it is the authenticity of the problem, and the professional approaches to solving it, that will engage the learner to act ‘as if’ they are a member of that community of practice. As with Mantle of the Expert, epistemic games are about giving students
an appropriate and authentic worldview with which to view, explore, define and solve problems, as:

‘an epistemic game is a game that deliberately creates the epistemic frame of a socially valued community by re-creating the process by which individuals develop the skills, knowledge, identities, values, and epistemology of that community’ (Shaffer, 2006, p. 164).

There are a number of role conventions used in applied drama — particularly educational drama forms such as MoE — that inform and define the nature of the role-play functioning within these learning moments. As shown in Table 7.2, MoE for example allows for participants to quickly engage in the profession being simulated by adopting an ‘attitudinal’ role (Carroll & Cameron, 2005) that does not require deep knowledge or experience, or high-level acting ability. By adopting the attitude and discourse of the profession, students can start to engage in the tasks at hand, often inducted to the role as a trainee in that profession. In epistemic games, the participant takes on the task of a real professional, using the discourse of that professional community to define and tackle a problem that would be encountered in that profession. The epistemic frame engages the student in role as a professional by prompting them to adopt the skills, knowledge, identity, values and reflective learning methods of that profession.

Shaffer emphasises that epistemic games should focus on authentic problems of significance in order to engage the learner in a valid and powerful task appropriate to the future needs of the students, and to give them a sense of power over their learning:

‘If schools are going to adapt to new social and economic conditions, we need to develop viable alternative models of learning that excite parents, teachers, administrators, business leaders, politicians, and others who care about what happens in schools. And of course it would be important that these alternatives actually help prepare kids to be innovative thinkers in a complex, post-industrial world.’ (Shaffer, 2006, p. 183).

The designers of epistemic games seek to identify the ways in which professionals learn, and to replicate those elements of the practicum that lend themselves most effectively to the simulation environment. Although game-based, the tasks and problems need to be authentically grounded. In Mantle of the Expert, again the enterprise or project needs to be authentic as framed within a dramatic context. Whether being approached from a drama or a game perspective, the tasks and
problems at the centre of the learning experience need to be founded in a real-world representation of the problems and problem-solving methods.

Part of the authenticity of tasks in MoE or epistemic games learning approaches comes from the focus on producing work for a client, rather than for assessment by the teacher. As shown in Table 7.2, the enterprise being explored by MoE needs to serve the needs of a client. In some cases, the client may be a real person or organisation for whom the participants will produce and present work, as in the Commission Model. Or the client may be fictionalised and incorporated into the drama. With epistemic games, the participants need to be working on a project or task that is considered appropriate and authentic to the profession. Again, this may involve a real or potential client, but an engagement with professional mentors or practitioners where possible is an important element.

In both cases, it can be seen that access to and contact with the knowledge base of real communities of practice — often more conveniently through a mediated, online form — might allow for greater engagement between learners and professionals than might otherwise be feasible or possible. In MoE the participants develop expertise by joining a community of practice via role-based drama, and serving the needs of a client. Epistemic games are fundamentally built around the real practicum of a profession, replicating key features of how members of the professional community learn. Similarly, both approaches need to be developed around a problem that needs to be solved. In MoE, taking on a client increases the dramatic tension for the participants, thus increasing their levels of commitment and intensifying the focus on producing a creative solution for the client. By adopting the values of the community of practice with which they are connected, in role, the learners engage with the skills, knowledge and values required to solve the problem.

Epistemic games are built around the real problem-solving methods of a profession, and creative solutions stem from the tensions in the ‘conversations’ that take place between participants and a community of practice. By adopting the reflective practices of professionals, learners simulate the real processes that tend to separate professions from other endeavours, such as an ability to creatively solve previously unseen problems, and to effectively reflect-in-practice.
Finally, participants in both MoE and epistemic games are required to display the product of their professional labours. In a drama form, learning is often displayed in the form of an in-role presentation to the dramatically framed client. The learners are protected in their role as professionals, and can talk from a position of expertise rather than as students. In epistemic games, learning is also often displayed in the form of a creative outcome to the problem being addressed. Where possible, this takes the form of a professional presentation of outcomes to an audience, such as peers, a mentor, or even parents.

Conclusion

Drama and games practitioners who are prepared to develop and use the emerging performance conventions inherent in distributed communities of practice will be able to engage students and explore authenticity and role-based performance in new ways. This is particularly useful in educational environments where access to levels of expertise within communities of practice is limited. While not free, access to the knowledge, production and discourses of virtual communities is increasingly available through cheap and pervasive computer networks. However the importance of incorporating these new learning approaches in a school environment and curriculum structure, which has not yet caught up with the technological changes of the present day cannot be overestimated. In an increasingly fragmented and media-based world, students will continue to want authenticity within the drama or gaming experience. It remains the task of the teacher to adapt the conditions evolving in both the digital world and applied drama to their classrooms and find the learning strategies that work.

By adapting the Mantle of the Expert or the epistemic games model to make use of a digital pre-text and distributed communities of practice, all teachers can share an extraordinary vision of education and drama combining to produce a project both virtual and real, built by adept practitioners and their apprentices in a digital world that only situated role can provide. We need to develop a pedagogical praxis (Shaffer, 2004) that creates the environments that are true both to the ways of knowing embedded in mediated learning communities of practice, and at the same time capable of supplying the skills young people need to incorporate into their learning. The technologies of online mediated learning environments may help us do this. Teachers who apply this approach will be well placed to support their
students in their future life as both makers and appreciators of the newly evolving digital and dramatic cultures of contemporary society.

### 7.4 Critical reflection

This section continues the CRASP model adopted from Zuber-Skerrit (1992) for this thesis study, and reflects on Cycle 4 of my action research and the related scholarly publication.

In the book *Real Players?* (2006), John, Michael and I used the Commission Model as an example of an applied drama form that could be transformed by technology to meet aims similar to that of the epistemic games proposed by Shaffer. An immediate similarity is in the notion of engaging participants with real problems and the problem-solving approaches of professionals. The Commission Model is essentially about engaging students with a professional community of practice, while epistemic games attempt to replicate the practicum experience of novices entering a professional community. Increasingly, online technology has removed social, cultural and geographical boundaries and allowed communities of practice to emerge in virtual spaces, in a form John and I called ‘mediated communities of practice’ in the conference paper presented in this chapter, but which can also be termed an affinity space.

The emphasis on engagement with professional practice remains one of the immediate difficulties with presenting the Commission Model or epistemic games as classroom strategies. Not every teacher or practitioner has the personal contacts or cachet to engage with real clients, professional partners, or real-world projects. Nor do they have the technical skills and resources to create high fidelity digital simulations of real-world practice. A core principle of the Commission Model is that it provides a sense of authenticity and responsibility precisely because there are real clients with real requirements, and the final work is published and hopefully acted on, even though the work of the participants is dramatically framed. In reality the actual implementation of the project may be passed on to specialists to complete, and in many cases, particularly with young pupils, the parents and teachers may act as internal publishers with the ‘commissioned’ work presented to school gatherings or parents. John Carroll put this difficulty and other related practical issues to Dorothy Heathcote in a recorded
interview in 2004. She acknowledged that the Commission Model was indeed ‘tricky’ for most teachers to use. However, she also strongly believed that with good planning most obstacles could be overcome, and that persistence would bring rewards:

‘I suggest we start with a range of limited commissions, very relevant to the curriculum and links with technology teachers as part of the ‘team of leaders’ until a few commissions are seen to be accomplished’ (Heathcote, 2004).

Nonetheless, as with the To the Spice Islands and Flood projects documented in earlier chapters of this thesis, in working through Cycle 4 I was still aware that not everyone has the presence, skills, contacts, times or resources to develop real commissions using the Commission Model. Thus in developing the publication presented in this chapter, John and I made a conscious decision to compare epistemic games with the Mantle of the Expert approach instead, which we felt might be less confronting and more familiar to educators than the full Commission Model. As defined in section 7.3, the Mantle of the Expert approach could still engage participants with real practice, but the commission could be an imagined enterprise. MoE is already much more widely adopted in some school systems, such as in the U.K.\(^\text{15}\)

Regardless of the dramatic form used, the affinity space concept suggests that if access to more complex communities of practice than can be provided within school resources is required, then real expertise or specialised knowledge is readily and freely available in mediated communities. The argument developed in Real players?, and expanded upon in Cycle 3 and again here in Cycle 4, is that through online technology the aims of the Commission Model can be maintained while the high level of resource and time pressure on teachers and institutions is eased. Busy teachers will have time to plan, and the classroom sessions will be able to move quickly because a lot of the thinking and work for the project can be done outside of the classroom. Using the increasingly accessible resources of the online world expands the activity beyond the time and physical constraints of the classroom. This point is also considered in Cycle 5 of this study, detailed in Chapter Eight of this thesis.

\(^{15}\) See for example http://www.mantleoftheexpert.com/
Cycle 4 of the action research fieldwork, as reflected in the publication included in this chapter, marked a period in which Shaffer’s discussion on epistemic games assumed greater significance to my own work. It also further emphasized the connections I saw between digital game-based learning conventions and applied drama. Shaffer and Resnick’s (1999) description of learning environments where motivation and learning are part of a ‘thickly authentic’ situation resonated with my own understandings of situated learning based on projects such as Flood, *To the Spice Islands*, and the ARC project. As I myself engaged more fully with a community of drama education researchers and practitioners I began to understand how exponents of applied drama have long known that authentic contexts for learning always involve becoming a participant in a community of practice. What new technologies can offer is the ability to help participants engage with communities in virtual spaces, in order to benefit from the skills and knowledge of that community. These are ‘...the conventions of participation that individuals internalise when they become acculturated’ (Shaffer, 2005, p. 1) to a community’s way of thinking. The ability to manipulate the inherently dramatic structure of epistemic frames (or community knowledge) allows role based dramatic play. When enhanced by a digital pre-text it can simulate exciting learning opportunities within communities of practice. Students who are dramatically framed within distributed communities can work and think in innovative ways as professionals within that community. This is the authentic mediated role-based performance mode we called *situated role*, and it is central to the scholarly work developed in this action research cycle.

Figure 7.2 is my reflective summary of the arguments developed in Cycle 4 of my action research fieldwork. In attempting to describe the synergies possible when exploring applied drama and digital game-based learning we described the relationships between the three domains of role-based performance, communities of practice and digital media. In turn, we have described how the related elements of role conventions, epistemic frames and affinity spaces respectively contribute to an authentic mediated role-based performance mode we called *situated role*.
Therefore, as in Figure 7.2, the three domains and their contributions to situated role as outlined in this chapter can be summarised as follows:

1. **Role-based performance / role conventions**
   Although Cycle 4 compares the conventions of Mantle of the Expert and epistemic games, both could be considered educational strategies founded on improvised role-based performance. In this comparison, we suggest that more dramatically oriented strategies such as Mantle of the Expert can use conventions such as attitudinal role to quickly engage participants with the profession engaged with in the commissioned project. With epistemic games, we suggest that the framing of the participants within the learning model of the profession provides a similar role function. In both cases, the ‘as if’ role-based performance engages the participants with the professional attitudes and discourses desired and required for the project.

As discussed in other sections of this thesis, the role-based performance strategies observed in applied theatre and digital games contribute a number of role conventions that can operate in educational settings. I have already discussed role protection and role distance in Chapter Five, for example. Other performance conventions from applied drama are updated to reflect current digital technologies in the research cycles discussed in Chapters Eight and Nine of this thesis.
2. Digital media | affinity spaces

The comparison of applied drama and epistemic games in this chapter stems from examinations of the impact of digital technology on these forms, particularly within educational settings. Considerations of the impact of technology on applied drama described in Chapter Six discuss the concept of the digital pre-text, particularly using online tools to help generate the dramatic world. I again argue here that a digital pre-text, perhaps created by engaging with a real community of practice via online technology, is one of the ways in which an authentic situated role is created for practice-based learning. Continued exploration of the impact of technology on drama and performance draws on the concept of the mediated learning community to describe the new spaces for learning that can occur when digital technology transforms drama, performance and games in an educational setting.

In the discussion on communities of practice in this chapter, the inference is that online discussion and publishing systems available via the World Wide Web can lead to the creation of virtual or distributed communities of practice. The use of these different terms when talking about digital media within this thesis reflects the iterative nature of the action research approach in which concepts emerge and are adopted, adapted, discarded or developed as part of the cyclical research process. In this chapter, the impact of digital media is discussed predominantly in terms of mediated communities of practice, and the possibility of using them to generate digital pre-texts to support applied drama or game-based learning strategies. Within the broader context of this thesis study, in Figure 7.2 I have chosen to use the term affinity space to describe the contribution of digital media to this concept of the situated role.

3. Communities of practice | epistemic frames

In this chapter, the community of practice concept is used as the theoretical basis for the comparison of Mantle of the Expert and epistemic games. The argument presented in Cycle 4 and illustrated in Figure 7.2 is that the role-based performance forms of applied drama and game-based learning discussed here are clearly reliant on communities of practice to provide authentic learning experiences for the participants. Digital technology affords practitioners and participants the ability to create thickly authentic settings for the dramatically
framed exploration of problem-solving, while engaging in affinity spaces with real communities of practice.

In this chapter we describe how role-based engagement with the community of practice uses what drama practitioners would call a dramatic frame, or what Shaffer calls the epistemic frame, to allow participants to respond in role as if professionals (or novice professionals) using the skills, knowledge, identities, values and epistemologies of that profession. This epistemic frame is a deliberate construct, and is a key convention operating to produce the ‘as if’ performance frame in both applied drama and game-based learning. As described in Figure 7.2 it will by necessity draw upon the values of a real community of practice in order to authentically shape the drama or game being explored through situated role.

*Situated role*

As shown in Figure 7.2, the main thrust of the comparison between applied drama and game-based learning forms explored in this cycle is that when combined with a community of practice, and transformed by digital media technology, a new form of role-based performance emerges. Situated role describes how role conventions protect a participant while they operate within an epistemic frame to develop virtual expertise while engaged in drama or games.

Overall, the similarity between epistemic games and Mantle of the Expert as discussed in this chapter lies in the application of a process to a task that has been derived from a community of practice. Although the roots of the epistemic games model are in the digital games discipline, while Mantle of the Expert and the Commission Model draw on the traditions of drama and theatre, this chapter illustrates the convergence of the conventions used in both forms when applied to educational contexts. The next challenge, taken up in Cycle 5, is to consider some of the latest mobile and social media tools that are increasingly a part of the everyday world of learners, and how to match conventions to current technology.

**7.5 Summary of the chapter**

In Chapter Seven of the thesis I have described the work undertaken in Cycle 4 of my action research fieldwork to directly compare the conventions of applied drama and digital game-based learning. In earlier conceptual work (Carroll, et al., 2006) this comparison was made between the drama form of the Commission
Model, and the game-based learning form of epistemic games. Both are built on the stated goal of addressing real-world problems through project-based commissions. However, in Cycle 4 of my action research it was decided that the Commission Model is sometimes seen as too difficult by drama teachers and practitioners, particularly within the limited resources of school systems, and so the similar Mantle of the Expert was used as the representative model of a commission-based approach.

In this chapter, the transforming impact of digital technology upon communities of practice is considered, particularly in terms of the opportunities to engage drama/game participants with real communities of practice via online media. This is seen as one way of addressing some of the obstacles of access and resources noted in concerns about using the Commission Model in the classroom. This chapter argues that digital media allows the creation of affinity spaces which are to some extent more accessible to a broader user base than might be possible or practical otherwise.

Overall this chapter describes how the conventions of role-based performance forms can combine with the affordances of digital technology to engage with the epistemic frames of a community of practice, producing an instance of situated role to allow participants to authentically engage with the chosen commission or project. In the next chapter of the thesis, I describe Cycle 5 of the action research fieldwork for this study. Having considered some of the synergies between applied drama and epistemic games in this cycle, the collaborative research uses a classroom-based case study to explore the integration of dramatic conventions and digital technology to study a traditional text — in this case, Shakespeare's *Twelfth Night*. This reflects the on-going concern of this study that the means of producing digital pretexts and other mediated elements to support role-based learning should remain within reach of teachers and practitioners. The need to keep pace with changing technologies is also considered in Chapter Eight.
8. CHAPTER EIGHT
Cycle 5 (2008)
Drama, digital pre-text and social media

8.1 Introduction
This chapter describes the fifth cycle of core action research undertaken for this study. As shown in Table 8.1 it continues the autoethnographic self-narrative of the context for Cycle 5 at section 8.2. This describes the settings, aims and participants and establishes the motivation for this phase of the inquiry. The action and observation stage of the core action research project is then presented at section 8.3 as an edited version of a journal article completed in 2008, and published in 2009. The chapter continues with my critical reflection on Cycle 5 at section 8.4 and concludes with summary at 8.5, leading to the re-planning phase for the sixth and final cycle of fieldwork to be discussed in Chapter Nine.

Table 8.1: The structure of Chapter Eight in the CRASP model used for this thesis.

<table>
<thead>
<tr>
<th>AR phase</th>
<th>CRASP element</th>
<th>Chapter section</th>
<th>Autoethnography</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>Critical attitude</td>
<td>8.1 Introduction 8.2 Context for the inquiry</td>
<td>The AR fieldwork continues with two instrumental case studies, one a school-based project that explores the use of digital pre-texts to establish and continue the applied drama.</td>
</tr>
<tr>
<td></td>
<td>Accountability</td>
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<tr>
<td>Reflect</td>
<td>Self-evaluation</td>
<td>8.4 Critical reflection 8.5 Summary of the chapter</td>
<td>Critical reflection on this fieldwork notes that the use of digital pre-text has the potential to extend drama work beyond the traditional boundaries of educational settings. It is observed that young people use mobile and social media forms as a site for cultural production, and are attuned to the meta-information digital media can convey. The potential to adapt some drama conventions to reflect digital media is noted for further development in the following AR cycle — the last in this study.</td>
</tr>
<tr>
<td></td>
<td>Professionalism</td>
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</table>

8.2 Context for the inquiry
The cyclical rhythm of the fieldwork research for this study has been well established by now in this autoethnographic narrative. Following the IDEA conference in July 2007, John and I wrote up the paper presented in Chapter Seven for the conference proceedings. However, we continued to develop the ideas we
had outlined in Cycle 4, and further refine our comparison of epistemic games and Mantle of the Expert. For example, our related collaborative Australian Research Council (ARC) project for the Australian Defence Force (ADF) introduced us to a software text analysis tool called *Leximancer*[^16], which John has used to develop an empirical grounded theory approach to comparing the literature on Mantle of the Expert and epistemic games (Carroll, 2009a, 2010).

In moving from Cycle 5 of my core action research fieldwork I was looking for an opportunity to apply some of the conceptual work we had been developing in a small-scale drama project. Two opportunities presented themselves, the first was related to the ARC project with the military described in Chapter Seven, and the second was with some secondary English students. The latter became a part of the collaborative research undertaken in Cycle 5 and which is described later in this chapter. However, the ARC-related research is significant in that it established some of the approaches I was to take in developing my involvement with the English class, and so it is worth discussing briefly at this point in the autoethnographic narrative to provide context for this chapter.

As noted earlier in this thesis, the action research cycles tend to overlap more than the illustrative models suggest. So it was in 2007, when while concluding Cycle 4 of the action research fieldwork described in the previous chapter I was involved in a small-scale applied drama session with undergraduate psychology students. This was part of the ARC linkage project, and the aim was to examine whether the participants would find the applied drama methods to be realistic and relevant for crisis management training. It also provided me with another opportunity to see these applied drama conventions in operation.

The participants were en-rolled as members of a fictitious Student Welfare Advisory Panel (SWAP) and asked to provide advice (in their real life experience as students) to a university about how best to respond to an alleged drunken rampage through a dormitory by ‘guests’ of some of the residents. Supporting this pre-text were four facilitators who helped progress the scenario by working in-role as:

- a SWAP Coordinator (John Carroll);

[^16]: https://www.leximancer.com/
an inexperienced Student Welfare Officer (Zoe Hibbert);
- a university bureaucrat (Vianne Tourle);
- and a newspaper reporter (me).

Digital artefacts such as emails and reports were introduced at various stages. Dramatic tension unfolded as applied drama conventions were used to reveal more details about the nature of the incident, and place the SWAP panel under pressure for allegedly giving poor advice. Ultimately the panel members received a grilling from me, in role as an aggressive newspaper journalist, offering them a chance to defend themselves and their decisions in-role as the SWAP team.

Specific details of the methodology and findings from this project are available in a journal article we produced as part of the collaborative ARC research (Arciuli, et al., 2008). Broadly we concluded that the applied drama scenario was perceived to be realistic, enabled an understanding of what it is like to make difficult decisions under pressure, and shed light on how a single situation can be viewed very differently by different people. There did not appear to be any gender differences associated with these findings. It reaffirmed my belief that these methods could deliver a realistic educational experience that could examine awkward personal experiences in a safe environment. This informed planning for the second study, conducted during Cycle 5 of my own research. This would ultimately use applied drama and technology to touch upon secondary students’ views of bullying through the lens of a textual study of the theme of mistaken identity in Shakespeare’s *Twelfth Night*. This study also set me thinking about some of the well-known applied drama conventions we had used in establishing and generating the dramatic tension for the ARC applied drama session, drawing on conventions and modifying them to reflect contemporary digital technology relevant to the lives of the participants. I reflect on this in more detail later in the chapter at section 8.4. Consistent with the iterative nature of the action research methodology used in this study, revising existing dramatic conventions already familiar to applied practitioners became the basis for Cycle 6 of my research, which is presented in Chapter Nine.

During Cycle 5 of my action research fieldwork I wanted to continue my own practical experience with applied drama, while developing the use of technology to create a digital pre-text and generate an online space for the drama to continue
outside of school hours. John was also keen to conduct further classroom-based applied research, and further motivation came in the form of a call for papers issued for the journal *Research in Drama Education: The journal of applied theatre and performance (RiDE)*, which was planning a themed edition in 2009 examining drama in schools, and the challenges facing drama in education researchers in the twenty-first century. Michael Anderson, our collaborator on the publication project described in Chapter Six, was one of the guest editors. He invited John and I to consider submitting a paper based on our more recent work in drama and technology.

Given the focus on school-based drama, this edition of *RiDE* gave us further incentive to develop a classroom-based case study to examine some of the theoretical frameworks we had been developing since *To the Spice Islands* in 2002. Through his contacts in a local secondary school John had arranged an invitation to conduct a drama session in a Year 9 mixed ability English class. As described in more detail in the article we produced for *RiDE* and which is incorporated into this chapter at section 8.3, we eventually used online and mobile media to create a digital pre-text for an improvisational role-based drama. The session examined issues of mistaken identity in Shakespeare’s *Twelfth Night*, and opened up discussion about more personal issues for the students such as cyberbullying and appropriate use of digital technology.

Cycle 5 of my PhD study also coincided with some of my other research interests in mobile media technology, and the emerging online form of interaction and publication known as social media. As I have noted earlier in this thesis, the work presented in this study is only part of the research I was involved in during the time period being described. Since 2004 I had been conducting my own research and writing on the impact of digital technology on journalism and journalism education, and at one stage had considered exploring the area of mobile media as my PhD study. Since 2005 I had been surveying first-year Communication students at Charles Sturt University about their use of digital and mobile technology, and this had led to several research presentations, funded projects and papers (for example Cameron, 2005, 2006, 2007).

This parallel research undoubtedly influenced Cycle 5 of my action research fieldwork when, as John and I worked on the *RiDE* article in 2008, I presented
papers at two conferences in the U.K. Our draft thoughts on the classroom case study became the basis for a presentation in the research strand of the *Handheld Learning* conference in October 2008, held in London. I also presented a paper at the *End of Journalism?* conference held at the University of Bedfordshire in Luton, presenting some of my work on mobile media and the tertiary journalism education curriculum. A key theme in both of these presentations was the increasing significance of mobile and social media forms in the everyday lives of young people, and the need for educators to take account of this when designing curricula and learning activities. My research and reflections in these two presentations contributed to the following *RiDE* article, which was largely finished and submitted in 2008 during Cycle 5, despite the eventual publication year of 2009.

The next stage of my research journey presents a case study of Australian secondary school students as co-creators of a dramatic pre-text (O’Neill, 1995), using online and mobile media to develop an improvisation-based drama that introduces a textual study. Integrating recognised dramatic conventions (Neelands & Goode, 2000) within a digital environment provides the tension, and drives the educational exploration of the resulting drama scenario. The techniques used for the development of the digital pre-text (Carroll, 2004) for this project are based on facilitator-generated online social networking and mobile media content. This approach generates the students’ examination of mistaken identity as a platform for a classroom exploration of Shakespeare’s *Twelfth Night*. The implications for using such digital technologies in drama teaching with young people are then discussed.

**8.3 Scholarly publication**

This section is based on an article originally published as:


*Background*

Online and mobile communications have developed into a range of what are increasingly being labelled ‘rich media’ platforms — a term that describes levels of
interactivity and engagement beyond traditional forms. These technologies allow for information seeking, content production and delivery, identity maintenance and communication on a range of digital devices. In particular, the mobile telephone has shifted rapidly from a telephony device towards a portable, personal media hub that enables a range of personalised and customised communication, entertainment, relationship management and service functions. Its reach is pervasively global and trans-cultural, possibly more so than any other current digital media form including the Internet and World Wide Web (Cameron, 2006).

As part of a trend towards active participation in the production and sharing of content (Jenkins, et al., 2006), young people are using these platforms to engage with their culture and practice ways of being within it (Stern, 2008, p. 113). This article uses the term mobile telephone, as opposed to cell phone, as it considers the use of these devices as portable and personal media platforms rather than the underlying technical infrastructure. The terms are broadly interchangeable, and are only a sample of the names given to these devices in many languages (Goggin, 2006, p. 15).

This research project considers ways in which drama teachers can access this new communication capability to integrate their students’ real-world enthusiasm for and expertise in digital media with classroom-based drama. Young peoples’ social lives increasingly revolve around these developing interactive technologies, and drama appears to allow us a ‘heightened opportunity’ (Stern, 2008, p. 114) to engage with young peoples’ cultural production.

The case study is based on the use of specific facilitator-designed digital pre-texts to engage students with dramatic content. It questions whether this approach has the potential to change elements of drama pedagogy and influence approaches to role-based drama. Digital pre-texts are based on facilitator-produced drama source material such as digital text, images, audio and video. Some contemporary forms for this content include blogs (which may be mixed media), shared image tagging, video and audio podcasts, media enhanced by social networking facilities in applications such as Facebook, Bebo and Myspace, and mobile media specific tools such as Short Message Service (SMS). These digital spaces are already places of meaning making and identity production (Carroll, 2002a; Stern, 2008) for young people.
The collaborative nature of social media forms appears to create new opportunities to develop frameworks for drama. Jenkins (2006) refers to this collaboration as the ‘collective intelligence’ of digital audiences. David Weinberger (2007, p. 131) describes it as ‘the wisdom of groups, employing social expertise, by which the connections among people help guide what the group learns and knows’. This is the same impulse that allows cooperative improvised role-play to operate in drama. The generalised cooperative social expertise operating in the digital environment has the possibility to be used in hybrid drama forms. Drama appears to be particularly well placed to make use of the dramatic tension generated between individual and group shared knowledge within the various intertextual forms that make up social media. These networked sites are now the places where young people learn how to use cultural symbols (Stern, 2008, p. 114) for their own purposes.

Digital media technologies encourage an openness and temporal displacement in the construction of a complex drama pre-text that is not so easily achieved in other ways. Following Eco (1989) such dramatic digital pre-texts may leave open constituents of the scenario for the students to create content, which then allows for rewarding and active participation in the construction of the artistic work. Nevertheless as Virilio points out, in the digital world of computers, gaming, video and mobile phones, we are all, and especially young people ‘directors of our own reality’ (Virilio, 1989) and there are many other alternative forms of performance available.

The most obvious, and pervasive, form that has evolved is the mobile phone and its subsequent cultural appropriation by young people. The preferred form of usage by young people is SMS, which has evolved a language and subculture of its own. Goggin notes that there ‘has been much fascination in studying, cataloguing, and debating the varieties and intricacies of text messaging, and how it has modified social, media, and cultural practices’ (2006, p. 65). Messaging is a means by which young people initiate, maintain and dissolve intimate relationships with each other (Australian Communications & Media Authority, 2007, p. 293), and the links between mobile phone ownership and peer group culture place these devices at the centre of identity formation (Nafus & Tracey, 2002) as a key part of teen culture’s infrastructure (Downie & Glazebrook, 2007; Goggin, 2006).
This platform, with its associated new digital forms of social networking sites and video uploading, has continued to evolve and merge with video gaming and general Internet access. An Australian Communications and Media Authority (ACMA) study on media consumption in Australian families found that children 8-17 years were spending about one and a quarter hours online each day, with usage rising to just under two and a half hours per day for 15-17 year olds (2007, p. 8). The activities were mixed and difficult to characterize, but included emailing, chatting, homework, content-viewing, and social networking.

A 2006 Pew Institute study showed that 64 percent of American teenagers aged 15-17 years had created profiles in social network sites. The ACMA research found that 40 percent of Australian children and young people have some of their own content online, and a third created a page on a social networking site. Again, participation in these forms of media increases in the older age ranges with 70 percent or more of teenagers aged above 14 years engaged in some form of Web authorship, and two-thirds of 16-17 year olds placing an online profile on a social networking site (2007, p. 8). Digital media are everywhere, ‘taken up by diverse populations and non-institutionalised practices, including the peer activities of youth’ (Ito, Davidson, et al., 2008, p. vii). These young people are beginning to resemble the ‘digital natives’ that Prensky (2001b) spoke of as the new generation of learners. Drotner (2008, p. 172) point out that:

‘through their engagements with digital media in their leisure time, young people experience the fact that learning can be different from being taught at school... it can be a playful process of training and breaking rules and conventions; and its results can be immediately shared and appreciated by peers.’

Dealing with the new attributes of digital and networked communities such as persistence, searchability, replicability and invisible audiences (Boyd, 2008b; Carroll, 2002b) is a challenge for teachers. However, of all curriculum areas, drama seems best placed to begin the investigation.

**Pre-text and digital pre-text**

The following case study explores the efficacy of using a digital pre-text as a starting place for the dramatic exploration of thematic concern within texts — in this case, notions of mistaken identity in Shakespeare’s *Twelfth Night*. Pre-text is the term O’Neill uses to characterise the nature and launching strategy of non-
scripted collaborative dramatic enactment (P. Taylor & Warner, 2006, p. 5). The use of improvised or process drama often begins without any prior text in the sense of script, so the digital material provides the 'latent' text (O’Neill, 1995, p. 19) to be developed through dramatic interaction.

By extending the concept of pre-text in a process drama, this project attempted to use the environment of digital technology as a setting for drama. As O’Neill and others see it, the pre-text operates as a ‘holding form’ (Witkin, 1974) for the meanings inherent in the dramatic content and helps to establish the location, roles and situation of the drama. Pre-text thus helps to frame the participants in a clear relationship with the potential action of the drama, and defines the nature and extent of the dramatic world. In turn, it implicitly defines the range of roles available to the participants in the drama and generates expectations about the first moment of interaction that will start the drama.

In this case the world of the drama comes into existence because of the possibility of the imagined relationships that exist in the digital messages that make up the pre-text. These messages were created as a series of Short Message Service (SMS) texts to allow the students to identify with the imagined characters in the drama and begin to rapidly build a dramatic world. A fictional online profile was also created using the social networking application Bebo\(^\text{17}\) that was chosen due to anecdotal evidence that this site was popular among the students in the participating class. The disembodied nature of SMS and social networking sites paradoxically appeared to allow the students to identify with the imagined characters and rapidly engage with the emerging drama. Students are now accustomed and comfortable when dealing with digital messages from people who may be physically very distant. Nevertheless, digital sites carry with them strong cultural associations of location and identity that are very useful in constructing a firm base for belief in the drama to follow.

The digital pre-text messages in the drama carried clearly accessible intentions from the senders, along with other metadata (e.g. a name in a mobile phone address book to suggest the source of the message, or the username attached to the Bebo profile) that helped position participants in roles that they could clearly

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\(^{17}\) Bebo closed its Australian operations in late 2009 due to competition from Facebook; however the profile remains available at http://www.bebo.com/AndrewA016.
understand and respond to quickly. The use of SMS and social networking sites framed the participants very clearly in the potential action to follow. Because of the immediate nature of the digital material and the personal level of delivery it clearly signalled the first moment in the drama. As O'Neill says, a pre-text ‘establishes location atmosphere, roles and situations’ (1995, p. 22), and a digital pre-text appears to do this economically while inferring the trajectory of the drama to come.

The value of the digital pre-text in this case seemed to be its ability to quickly translate the theme of mistaken identity into immediate dramatic action. The extension of the concept of pre-text into a combination of process drama conventions in the digital domain was based on matching levels of dramatic engagement with increasing levels of digital involvement. In this way it was hoped that the digital pre-text of the drama would evolve organically, allowing for a growing internal logic and coherence. Cecily O'Neill (1995, p. 136) defines the qualities of a good pre-text for process drama as including its power to launch the dramatic world with economy and clarity, and the action it proposes and the implied transformation.

While the dramatic conventions of process drama are well understood within the drama field, the pervasiveness of digital technologies within school classrooms means that the use of a digitally constructed pre-text may provide new avenues for the development of dramatic role performance conventions (Cameron, 2009). This case study of a digital pre-text research project illustrates one such approach.

**Digital drama conventions**

The project draws on the drama conventions outlined in the books *Structuring drama work* (Neelands & Goode, 2000) and *Beginning drama 11-14* (Neelands, 2004). Given that many of these drama conventions use or model common media forms, this study sought to update them to reflect the ‘everyday’ digital technologies now familiar to young people from domestic and personal use.

At another level, it attempts to merge digital media forms with these dramatic conventions to enhance and extend the participants’ engagement with the dramatic content. Carroll and Cameron (2003) have noted that drama teachers and practitioners can capitalize on the pervasiveness of digital media forms,
particularly in the world of young people, by utilizing some of the features of this everyday technology as the basic elements for a digital pre-text.

Another aim was to explore the potential to extend the life of the dramatic activity beyond the limitations of a 50-minute secondary English class. The project used the face-to-face contact time to produce materials that were then placed online in a social networking space, allowing the participants to continue to engage with the materials out of class. To students now familiar with the marketing and narrative uses of such technology to support television and cinematic productions, there is probably nothing unusual in using digital and online media to establish or extend a dramatic activity.

The project

The classroom research project was specifically designed to use elements of digital media as a pre-text for an exploration of the theme of mistaken identity that would then engage the class with Shakespeare's *Twelfth Night*. It chose to use the medium of the mobile phone as a communication device, and the online social media networking site *Bebo* as a focus for the dramatic exploration. The use of the mobile phone within the drama classroom for curriculum purposes explicitly broke the school rules relating to such devices, with signs on the walls within the school proscribing their use within the classroom environment. The project wanted to see if such digital technologies provided tools which may both alter or enhance opportunities for social connection and collaborative problem solving, and added capacity for powerful information management and for personal and group learning. Emerging pedagogical approaches call for more active participation in the ‘co-construction’ of curriculum, in which social leaning and dialogic literacy are founded on new understandings about knowledge and learning (Bereiter & Scardamalia, 1996). This allows for complexity, promotes creativity and new outputs, and takes into account uncertainty and ambiguity (B. Davis & Sumara, 2005) when learning through drama.

The methodology

The research project from which this classroom case study is drawn is grounded in a qualitative interpretative research approach (Creswell, 2003; Erickson, 1986). It is an instrumental case study in that the process of digital engagement has been
examined to provide insight and broaden the researchers’ understanding of the use of digital learning materials within a classroom context. The research aimed at establishing believability based on coherence, insight and instrumental utility (Eisner, 1991). It involved examining student responses both to digital provocations and the classroom drama and attempting to gauge the efficacy of the pre-text that was used. An in-depth examination of one case made it possible to better understand the multiple positions the students occupied and the perspectives they brought to the digital pre-text of the drama. A textual examination of their responses on the networking site Bebo was also possible, as was the visual record that was captured on their cameras within the mobile phones.

The study took place in a Year 9 mixed ability secondary class in a high school within a large regional town in Australia. The space where the drama took place was a normal classroom with movable small individual desks and chairs. It was the English teacher’s home classroom, and the students were quite familiar with the setting and sat in self-selected groups of 6-8 with the tables pushed together to make four large groups. The tables tended to be divided on gender lines but there was no rigid division and the social health of the class appeared to be good.

The structure of the lesson began with a facilitator’s invitation for the students to become involved in a drama about a class much like their own. It was suggested that a problem stemmed from some images taken with a mobile phone camera, and confusion over who and what was being depicted in them. After some narrative description of the class and an out of role negotiation, a discussion followed about the use and features of mobile phones and the school rules covering them. The students were invited to take out their phones and turn them on, and compare the different models owned by students in the class. They were then asked to put them away in order to avoid distractions as the drama session continued.

The drama recommenced and the digital pre-text was established when one of the students volunteered to receive a SMS message on their phone from a character within the drama. Although the message clearly originated from the facilitator, the class readily accepted the convention that it was being forwarded from the character. The text message arrived, and was read out to the class. In it the
character stated that there had been a case of mistaken identity, and that they were being threatened unfairly by someone called Andrew as a result:

Andrew thinks it’s me, but it’s not, we just look alike. Ces.

There was now speculation about the situation between Andrew and Ces, and the case of mistaken identity. One student speculated, ‘could they be twins?’ It was then revealed by the facilitator that Andrew had a Bebo page, and it contained this threatening message about an unnamed person’s treatment of his classmate Olivia:

Gonna get YOU!
I know you’re gonna check out my page! You know who I mean.
I don’t like the way you have been treating Olivia.
Meet me at the gate after school and we’ll sort this out for real.
-- Andrew

The class now considered Olivia’s involvement in the unfolding drama, and were invited to compose an SMS message to her on the facilitator’s phone. They chose to confront Olivia as the possible source of the problem with this brief message:

I know what you have done.

This SMS was actually received by another facilitator whose phone was in silent mode, and who quickly sent a generic pre-drafted reply:

Hi :) I don’t know u but thanx 4 the txt. I wish I knew what to do. I hope we don’t get in trouble.

Although some of the class pointed to this facilitator and commented that ‘he’s sending the message’, the speed of the reply within the obvious dramatic frame quickly focussed students’ attention back onto the character of Olivia. The speed of reply to an SMS might have great meaning in the spontaneously organised social life of young people (Australian Communications & Media Authority, 2007, p. 294). Discussion ensued about Olivia, and a drama character building exercise was carried out. At first an orange scarf was draped over an empty chair before the group, and they were told it belonged to Olivia. They were invited to comment on what sort of person she may be, using the prop and empty chair as the focus for character development of the absent Olivia. Then a female volunteer sat in the chair and wore the scarf, as an even more realistic portrayal of Olivia. The original
intention was to use hot-seating to allow the class to question the student in-role as Olivia, but with time slipping away the facilitator instead used the moment to review events so far. Then, working with each of the four tables in turn, a female volunteer at each wore the scarf while others created still images with their bodies of ambiguous states of conflict or friendship with her. These tableaux were recorded as photographs on a facilitator’s mobile phone (making sure no individuals were identifiable) and later uploaded to the Bebo page created for the character Andrew.

As the session neared its end, the dramatic tension was heightened with a thought tracking convention (Neelands & Goode, 2000) used to frame the students within the drama as now having to walk through the school gates on their way home. The drama had established that the character of Andrew was planning to fight someone outside the gates, but that a case of mistaken identity meant that potentially anyone could be a victim. The students were asked to consider questions such as:

- were they going to watch the confrontation?
- Would they use their mobile phone to record it?
- What were their thoughts about the possibility that Andrew would mistakenly choose them?

As they moved through the ‘gates’ (some arranged furniture) in turn they were asked to pause and state what was on their mind. Given the prompts their responses predictably ranged from fear of being Andrew’s target, through to excitement about being a spectator. Some said they planned to capture the events on their mobile phones.

In a final dramatic moment the class were arranged in a frozen image of a group surrounding the fight, with several pretending to use their own mobile phones to capture the moment. A facilitator took a photograph of this tableau. To end the lesson, the students were invited to visit Andrew’s Bebo site18 in their own time to see the photographs, and add comments about mistaken identity. Their teacher told them they would be spending time in future classes examining similar issues in Twelfth Night and a recent film based upon that text called She’s the Man.

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18 [http://www.bebo.com/AndrewA016](http://www.bebo.com/AndrewA016)
This article will now outline some of the dramatic conventions adapted for this project, and describe how digital media technology was introduced to update, facilitate and extend the classroom drama.

*Overheard conversations*

This convention allows the group to overhear a ‘private’ conversation, providing a channel for new information or tension to be introduced to the drama (Neelands, 2004, p. 103; Neelands & Goode, 2000, p. 37).

This project used the form of a personal online message posted in a public space to an invisible audience. The anonymity of the author and intended recipient, and the sense of this being a personalised message, made this more akin to an overheard conversation rather than just using a conversation or message convention to introduce new information. Using the social networking application *Bebo*, facilitators created an online profile for the character of Andrew and a threatening message to an unknown person was posted using *Bebo’s* White Board tool. A screen image of this message showing the authentic *Bebo* on-screen format was printed as a handout to give the students in class; if computer access had been available they could have been simply given the profile’s Web address to send them to this message.

*Diaries, letters, journals, messages*

This convention allows for information to be delivered by the facilitator to the whole group or a sub-group to introduce new ideas, information or tension. It can be prepared or written by participants in or out of character. (Neelands, 2004, p. 102; Neelands & Goode, 2000, p. 16).

In this project an SMS message was used as the means by which new information was introduced to the group. It was logical to use this form, as the drama activity was being built around the students’ ownership and use of mobile phones and issues of identity. At another stage in the drama, students were asked to compose and send an SMS to a character, and a facilitator-in-role immediately sent back a reply.
Objects of character (or Private property)

Here a character is introduced or fleshed-out through consideration of carefully chosen personal belongings. The objects might be ‘found’ at any point in the drama, and may even suggest a contradictory sub-text to their behaviour. (Neelands, 2004, p. 103; Neelands & Goode, 2000, p. 20).

A facilitator introduced a scarf to the group, saying that it belonged to the character Olivia. It was used firstly with an empty chair to signify the character’s absence, then a student was chosen to model the scarf, and the group were invited to speculate about Olivia’s personality and situation.

In a variation of this convention, the class was then divided into smaller groups and in turn one female member from each group was asked to wear the scarf to represent the character of Olivia. The groups constructed tableaux (echoing the still-life convention described later) to represent a possible action involving some of the issues confronting Olivia that had emerged so far in the drama, such as bullying and some form of conflict surrounding issues of mistaken identity.

A facilitator used a mobile phone camera to take a snapshot of these tableaux, with a deliberate emphasis on the participants remaining anonymous. This was partly a pragmatic need to protect the privacy of the participating students, but also fuelled the drama’s tension around the mistaken identity and misinterpretation of events based on mobile phone images established in the pre-text. These were used to extend the dramatic activity beyond the classroom using the convention of ‘unfinished materials’ (also described later) by allowing students to view and comment on the image using Bebo.

Still-image

This convention can be used to crystallize meaning into an image, with the group asked to use their own bodies to devise an image, or perhaps given instruction by a participant acting as a ‘sculptor’ (Neelands & Goode, 2000, p. 25).

To complete our drama activity, students were invited to walk through the ‘school gates’ (some re-arranged chairs). They were told to stop at the gate, and state what was going through their mind at the time — in the context of the drama, they might be about to face the angry Andrew who had threatened to fight someone at the
gates that afternoon. This follows the dramatic convention of thought-tracking that reveals publicly the private thoughts of participants-in-role at a specific moment (Neelands & Goode, 2000, p. 91).

The class were then asked to form a still-life tableau depicting the fight at the school gate, and how they might react to it — particularly as regards using their mobile phone cameras to record the fight. A facilitator took a photo of this scene, again framed deliberately to obscure the identity of the participants.

*Unfinished materials*

In applying this convention the participants in the drama are provided with an object that provides a clue or partial information as a starting point for the drama. (Neelands, 2004, p. 104; Neelands & Goode, 2000, p. 28).

The set of images taken in class were later loaded to the photo gallery section of the *Bebo* profile created for the character of Andrew. These photos were deliberately vague in terms of what was being depicted, though a common feature was the scarf that had been worn by the participants in role as the character Olivia. Students were invited to visit the *Bebo* site and add their own interpretation to the images, and complete other related activities such as polls concerning their own experiences of mistaken identity.

![Figure 8.1: A moment created using the still-image convention as captured by a mobile phone camera](image)

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The example in Figure 8.1 illustrates the dramatic ambiguity as the image could be interpreted in a variety of ways such as an act of aggression or an act of comforting Olivia.

**Discussion**

This project demonstrates some of the ways in which drama teachers can tap into their students’ real-world experiences with digital and mobile media to generate contemporary classroom-based drama. Making use of the means of cultural production familiar and applicable to the participants can reduce the amount of time required to establish the drama, which is an important issue when working within the strictures of most educational systems. In the 50 minute lesson available for this study, the use of a digital pre-text grounded in SMS messages and the *Bebo* profile provided a rapid entry into the drama world.

The question arises as to how realistic the digital media forms used or replicated in the creation of digital pre-texts need to be. In this project, the participants were quick to note what they saw as flaws in the materials they were given, such as the fact that Andrew had apparently posted his threat on his own *Bebo* White Board, while the normal approach would have been to post his message on his intended target’s online profile. But having noted this ‘mistake’, possibly re-affirming their belief that they know more about the technology than adult teachers, they seemed happy to accept the use of such materials in the drama. The fact that they were examining a printed image of the screen message, rather than accessing the site itself, also did not seem to hinder their suspension of disbelief.

Another issue raised in this process is the possible significance of the meta-information linked to digital communications when using them as the basis for dramatic pre-text. The facilitators in this project quickly became aware through student observations and questions that in the case of SMS and online messages, technical information about the message may be just as significant as the message content itself. For example, students wanted to know about the names appearing in a mobile phone address book as a way of confirming the source. They were also aware of the information elements present in the printed *Bebo* materials, and were able to find the Web page with only the username printed on the handout as a guide. It is easy to see how details such as Web domain names and email addresses
could become important sources of meta-information if these forms were adopted for use as digital pre-texts. Facilitators need to be wary of this phenomenon when designing such resources, or at least be prepared to negotiate a level of accepted dramatic fidelity with participants.

The use of mobile phones and social media within the classroom context also emphasises issues of privacy when using user-generated, particularly student generated, content in the formation of a drama. The facilitators in this project were very careful not to capture any photographic images that would easily identify the participants, particularly as material would be published online. Care was taken to ensure that students acted responsibly during the times when they were invited to access their mobile phones in the classroom. Teachers and facilitators using these digital media forms, particularly the online publishing sites, will need to consider and develop suitable protocols and conventions for maintaining the safety and privacy of participants, while making use of their rich potential for exciting drama sessions. The use of these media forms in drama contexts may in itself provide a way of discussing and negotiating issues like privacy and appropriate behaviour with young people in a meaningful and productive way.

Once the students were engaged in the drama, we found that merging digital media forms with some established dramatic conventions allowed us to enhance and extend the participants’ engagement with the dramatic content. Although the students were well aware of the ‘edges’ of the dramatic frame, as seen in their comments about where SMS texts were actually coming from, or whether the Bebo profile was ‘real’, using the features of this — to them — everyday technology provided relatively smooth transitions in and out of the drama, interweaving the moments of drama fostered by the conventions and class discussions about what themes and stories were emerging. There is a hint that the role and identity play already inherent in some of these media forms may make them an interesting means with which to change elements of drama pedagogy and influence contemporary approaches to role-based drama. The students revealed a highly conscious process of reflexive self-enquiry and were quite aware of the dramatic digital conventions being used in the drama.

The project also begins to consider the potential to extend the life of the dramatic activity beyond the limitations of one 50-minute secondary class. There was little
opportunity for immediate follow-up from their English teacher to remind the students about the Bebo site and the invitation to participate. Nonetheless, in the evening following the lesson there were several visits recorded to the site, including comments added to the photo gallery that clearly referenced the drama and the themes discussed. Visitors were also able to participate in polls created by the facilitators that asked people to reflect on their own experiences of mistaken identity.

Improvised drama when combined with digital technology appears to take on some of the characteristics of social media forms, most notably in the persistence (Boyd, 2008b) of the traces of the drama on the Website and the phone messages. The drama’s searchability in retrospect in the form of digital artefacts adds a whole new dimension to out-of-role reflection. The release from time pressures when combined with anonymity of response for the Website audience allows for a different level of comment from the participants on the drama. Further research needs to be undertaken within the drama field as part of the exploration of the transformative role of digital technology (D. Buckingham, 2008) in learning across all curriculum areas.

8.4 Critical reflection

It should not be surprising that the identity play at work in Twelfth Night worked so well as an applied drama activity combined with digital media with these students, given that ‘they are familiar with the concept of assumed identity through email, passwords and Internet personas, they are able to move in and out of the media framework easily and clearly’ in these types of mediatised performance contexts (Shaughnessy, 2005, p. 208). Similarly the students’ familiarity with the possibilities for identity play led to forensic analysis of the meta-information conveyed in digital media forms in the Twelfth Night session. This reminds us that the use of artefacts like emails, the Bebo profile shown below in Figure 8.2, or SMS texts requires planning to determine the degree of fidelity required, regardless of the dramatic convention being used.
One of the significant contributions of the research undertaken in Cycle 5, and reflected in the RiDE article presented in this chapter, is the move towards updating some of the dramatic conventions within applied drama that are well understood within the field, but which can be reviewed in light of the impact of digital media technology. For example, Jonathan Neelands and Tony Goode’s widely used book *Structuring Drama Work* (Neelands & Goode, 2000) contains a clear explanation of conventions, and provides multiple examples used to establish pre-texts and conduct improvised drama. Heathcote (1991) in her earlier work outlined well over thirty conventions that could be employed in drama. The examples given in this chapter are largely taken from her work and that of Neelands (1990) or Neelands and Goode (2000).

Following this work, John Carroll and I revisited the applied drama session described earlier in this chapter that we’d conducted as part of the ARC project. In writing up that project for another publication (Cameron & Carroll, 2009), I noted that we’d already started to consider how digital media forms, particularly mobile and social media, could transform these dramatic conventions. Neelands and Goode use the terms context-building action, narrative action, poetic action and reflective action (Neelands & Goode, 2000) to structure their guide to some of the conventions available to drama teachers and practitioners. John and I drew heavily on this approach, filtered through our own ongoing work with applied drama and role conventions, and divided them into contextual, narrative, role and reflective
conventions. We considered how each had operated in the applied drama session, and how they might operate using digital media conventions.

Firstly we can consider contextual conventions, which enable a group of participants to engage with the dramatic pre-text. They reinforce the simulation and make explicit the situation and roles that will be present within the developing game or scenario. Such conventions also draw attention to the environmental and contextual constraints the participants are operating within. In the SWAP scenario conducted for the ARC project we used group contribution rather than individual performance to develop the context, and thus provide a high level of dramatic role protection for each participant. As an example of contextual conventions we used a combination of collective drawing and making maps (Neelands & Goode, 2000, pp. 14, 19), in which the participants make a large-scale collective image, diagram or map to represent the physical location of the simulation pre-text. Within our small-scale applied drama session, collective mapping was used in the form of a security guard's written report that outlined the location of events using real street locations familiar to the participants. This provided a concrete reference point for developing the simulation as it was being discussed. This convention gives specific form to the pre-text and provides group cohesion as it builds belief. Mapping and location imagery are features common to many games, providing visual representation of the pre-text. Geo-spatial data and digital imagery might be used to accurately reflect real-world locations, adding authenticity to affinity spaces created using digital technology.

Secondly, we can consider the use of narrative conventions that are designed to focus on significant events and incidents that are central to developing the subsequent narrative. This allows participants to speculate about their possible responses while protected in role by the dramatic convention structure. A group, working in an assigned role as enquirer, has the opportunity to question one of its members role-playing a character. One example of this convention is the use of a hot-seated (Neelands & Goode, 2000, p. 32) role drawn from within the group. This convention requires that the questioners adopt and maintain a low level attitudinal role, and the acceptance of the non-naturalistic dramatic conventions that allow the role of questioner and questioned to be altered. Within the ARC project the SWAP members were interviewed by a facilitator (me) in-role as a
newspaper reporter. The participants in turn were able to quiz the reporter about his story and what other knowledge he may have had about the events. In a serious games context this might help build narrative momentum as it highlights role motivation and personality disposition. Digital games often allow analysis of performance (e.g. statistical reports at the end of a turn or level). These ‘after action reviews’ might encourage a hot-seating style of reflection or extrapolation of the events portrayed in the mediated applied drama or digital game.

A third type of conventions we can consider are role conventions, which move beyond the naturalistic portrayal of action, and are a way of moving beyond the narrative line to consider subtext and nuance in responses to the developing situation. This is a slight departure from Neelands and Goode’s earlier work (2000, p. 44) in categorising conventions, in which they use the term ‘poetic action’ to describe a similar function. Generally, these conventions are more overtly dramatic and role-based, and this stylisation helps provide a high level of role protection for the participants. This mode of representation is highly selective and the boundaries of the conventions to be used are explicitly outlined. The effect of these role conventions is to provide a fresh perspective on the simulation as well as develop alternative channels of communication that work at the level of symbolic interpretation, and help increase the emotional commitment of the participants. Overheard conversations (Neelands & Goode, 2000, p. 37) is a convention that can serve a narrative action function, but which John and I believe can also serve as a role convention. This convention was used in the Twelfth Night case study, and it was also used in the ARC drama session in the form of an overheard conversation between the student advisor and university administrator discussing legal responsibility relating to advice. In digital game design, the convention of cinematic cut-scenes often provides a similar function by revealing new subtextual information.

The fourth form of conventions we can consider are reflective conventions, which operate outside of naturalistic time-flow in a more overtly theatrical way where the pace and action of the game is slowed or interrupted to create a space for reflection. They provide a way to review and comment on the action already taken and a way to articulate what characters are thinking. They also provide a way for the group to articulate what it already knows. There is a deliberate placement of
objects and spatial relationships as well as the use of non-naturalistic time to create a reflective atmosphere. An example of this convention is giving witness (Neelands & Goode, 2000, p. 78). A facilitator operating in-role or a group member in-role delivers a monologue to the group that they claim is an objective account of events, but which is actually a highly subjective re-telling from the witness’ point of view.

In our ARC applied drama session an email from an upset dormitory resident providing her version of events was discovered, which increased the stakes as it included the possibility of further legal action. In a serious games context, giving witness may be initiated in situations where players are able to communicate with each other, and can be prompted to report, in-role, to the others while the action is paused. Similarly, a facilitator or mentor may be able to report in-role to the players or alter game events in real time, in a concept known as ‘person in the loop’ that is common in training simulations requiring a facilitator’s intervention.

8.5 Summary of the chapter

This chapter has continued the autoethnographic account of my research journey, describing how during Cycle 5 of my fieldwork for this study I continued to consider ways in which to merge two seemingly parallel developments in learning and teaching — applied drama and digital game-based learning. In particular, the collaborative research undertaken during this cycle drew attention to the potential benefits of using everyday digital technologies such as mobile phones and online social media to firstly create a digital pre-text for classroom drama, and then to extend the drama beyond the confines of the school.

The focus on mobile and social media in Cycle 5 reflects the speed with which digital technologies can change, as noted in Chapter One of this thesis. One of the reasons for choosing an iterative action research model for the study was to match the exponential nature of transformation by digital media a perpetual beta approach to the research. The place of these media forms in the lives of young people as their central means of cultural production, social networking, and identity maintenance places them at the heart of the final cycle of research for this study.
Cycle 5 also identifies a technical challenge for educators seeking to adapt dramatic conventions to reflect these digital forms, which is the meta-information that can help or hinder the suspension of disbelief of participants. When constructing digital pre-texts it is important that consideration is given to these technical features and their impact on the veracity of the materials being presented to the participants.

The process of re-examining some well-known dramatic conventions and transforming them to reflect contemporary digital technologies is now continued in Cycle 6 of this study. In Chapter Nine I reflect on the changing nature of digital technology, the forms that are common to many people’s lives, and how digital media and dramatic conventions might be blended to produce powerful new role-based learning approaches.
9. CHAPTER NINE  
Cycle 6 (2009)  
Mashup: digital media and drama conventions

9.1 Introduction

This chapter marks the final section of the exegesis component of the thesis, which has presented a sequence of articles linked by an autoethnographic self-narrative. Each chapter in the exegesis has described one of the six core action research cycles that were the fieldwork phase of the project. Each cycle was modelled on the basic plan-act-observe-reflect strategy of action research (Kemmis & McTaggart, 1988), shaped by Zuber-Skerritt’s CRASP model (1992) to incorporate the accompanying autoethnographic account of the research.

Table 9.1 outlines how this field research model transfers to the thesis structure in Chapter Nine, beginning with the planning stage of this last core action research cycle. This is described in the autoethnographic narrative at section 9.2 of this chapter, which provides the context for the inquiry outlined in this cycle, and establishes the critical attitude towards theory and practice. The action and observation stage of the core action research cycle is then presented in the form of a book chapter at section 9.3, representing the research and accountability elements. The chapter concludes with reflections on this AR cycle at section 9.4, providing the self-evaluation and professional development elements of the CRASP model. A summary of the chapter at 9.5 leads to the overall conclusions of this study provided in Chapter Ten.

Table 9.1: The structure of Chapter Nine in the CRASP model used for this thesis.

<table>
<thead>
<tr>
<th>AR phase</th>
<th>CRASP element</th>
<th>Chapter section</th>
<th>Autoethnography</th>
</tr>
</thead>
</table>
| Plan           | Critical attitude | 9.1 Introduction  
9.2 Context for the inquiry  | The AR fieldwork continues with reflective theoretical conceptual research using digital media forms to update existing applied drama conventions. |
|                | Accountability    |                                |                                                                     |
| Reflect        | Self-evaluation   | 9.4 Critical reflection  
9.5 Summary of the chapter  | This fieldwork concludes with critical reflection on some of the affinity spaces that can operate within digital media forms. This leads to reflection on the rapidly changing educational |
9.2 Context for the inquiry

Although Cycle 6 of my action research took place through 2009, it was around the middle of 2007 that Michael Anderson, John Carroll and I had started to develop another book proposal, with the aim of following up some of the concepts we had considered in *Real players?* (2006). Our intention was to produce an edited book that would provide a snapshot of examples and case studies of current practice in the intersecting fields of drama, education and technology. Michael would be lead editor on the project, and he began to negotiate with UK-based publishers Continuum Books. A series was already underway called ‘Education with digital technology’, edited by Sue Brindley and Anthony Adams, and our proposal was accepted under the title of *Drama education with digital technology* with a planned publication date of mid-2009.

As previously described in this autoethnographic narrative, around the time the book project was getting underway in late 2007 and early 2008 my collaborative research for this study was focussing on the comparison between Mantle of the Expert and epistemic games as discussed in Chapter Seven. In addition to our editorial roles Michael, John and I originally intended to contribute one chapter each to the book as authors, and in the original proposal submitted around September 2007 my chapter was to be titled ‘Create, connect, consume: exploring the links between process drama and educational video games’. The proposed chapter would draw in part on the research John and I had conducted examining the links between applied drama and epistemic games. My proposed chapter also returned to some of the concepts that had emerged in *Real players?* such as situated role and the mediated learning community, discussed in Chapter Six. Coinciding with the applied drama projects described in Chapter Eight, my first proposal for the book chapter explored some of the practical considerations of blending professional practice and problem-solving with dramatic pretext in a digital environment.
As the Continuum book project developed throughout 2008, and started to overlap with Cycle 6 of my action research, John had continued his own work analysing the links between applied drama and epistemic games. It became clear in our editorial meetings that our proposed chapters might be covering too much of the same ground. John’s chapter was eventually refined to compare Mantle of the Expert and the Commission Model with epistemic games and digital simulations respectively (Carroll, 2009b). During Cycle 6, I saw an opportunity to reflect on some of the conceptual and applied research that had taken place throughout my study. I developed a new chapter proposal that continued the approach commenced in Cycle 5 of revising existing drama conventions, particularly those of Neelands and Goode (2000), to reflect digital technologies. I was interested in the emerging significance of mobile media technology, and also more participatory online media forms associated with Web 2.0 technology, which seemed to be playing an increasing role in the lives of young people.

Cycle 6 of my core action research fieldwork for this study was therefore themed around providing some practical structures that teachers and practitioners could use to develop digital pre-texts, create online applied drama sessions, or extend the drama beyond the confines of the classroom. As the final cycle of research and scholarly writing that would form part of this PhD study, I wanted to end the action research stage with some useful and realistic outcomes that might transform practice to meet the expectations of the current generation of learners. I was also mindful that one of the expectations of action research is that it will ‘create a developed, tested and critically-examined rationale for what we are doing’ (Kemmis & McTaggart, 1988, p. 25); while the case studies described in Chapter Eight had tested some of the revised conventions, I planned to provide further critical self-reflection through publication in this area.

Cycle 6 of my action research fieldwork also overlapped with an opportunity to reflect more broadly on the impact of digital technology on higher education. In August 2009 I was invited to produce what was described as a ‘thought piece’ — an informal scholarly editorial — for Charles Sturt University’s Flexible Learning Institute. The piece would be published online, and there would also be an opportunity to talk to some of my points during an educational symposium to be held at the CSU campus in Albury, NSW later that year. I returned to some of the
same themes described in Chapter One of this thesis, where I outlined the reasons for adopting a bricoleur approach to this research as a response to the perception that digital media accelerates exponential change. My conceptual research during Cycle 6 had brought this into focus, as I grappled with the technologies and conventions to include in the Continuum book chapter. I also reflected on how during the course of the fieldwork for this study I had often been required to make predictions about the possible impact of digital technology on drama education, and the risk that such punditry can quickly read like a bad science fiction story if you are off the mark.

This was the setting for Cycle 6, the final iteration of my action research for this project. I was mindful of the difficulties of predicting what even the immediate future might hold for a field or practice once it is transformed by digital media, let alone what the landscape might be in the longer term. Despite this I was attempting to update drama conventions with contemporary digital technologies that might be familiar to current learners or participants. During this process, it was striking how quaint some of the conventions described by Neelands and Goode sound in terms of the technologies referenced, such as telephone and radio conversations (2000, p. 42), or CB radio (2000, p. 37). However, far from the conventions themselves being obsolete, the ease with which many could be adapted or even enhanced to reflect contemporary technologies showed how useful many of these conventions remain.

In the conceptual research for Cycle 6 I adopted the concept of the ‘mashup’, which describes the blending of digital data sources to provide a new service. This not only fits with the bricoleur nature of my approach to this study, but also the notion of the new whole being greater than the original parts seemed to fit well in a reflection on the convergence of applied drama and digital game conventions. As Cycle 6 drew to a close, and I considered my editorial thought-piece, I mused on Canadian author William Gibson’s observation that science fiction is often mistakenly credited with predicting the future, simply because technological change seems to happen so quickly. With the benefit of hindsight, he argues, observations of emerging trends can seem prescient if they are not interrogated too deeply: ‘as I’ve said many times before the future is already here, it’s just not very evenly distributed’ (Gibson, 1999). Gibson — who coined the term
‘cyberspace’ in his novel *Neuromancer* (1984) — believes that rather than trying to predict the future, he often ponders an ‘unthinkable present’ in his works of fiction. More recently Cory Doctorow (another Canadian author) made a similar observation about science fiction’s tendency to ‘predict the present’, through what he calls a sense of ‘radical presentism’:

‘Mary Shelley wasn’t worried about reanimated corpses stalking Europe, but by casting a technological innovation in the starring role of *Frankenstein*, she was able to tap into present-day fears about technology overpowering its masters and the hubris of the inventor. Orwell didn’t worry about a future dominated by the view-screens from *1984*, he worried about a *present* in which technology was changing the balance of power, creating opportunities for the state to enforce its power over individuals at ever-more-granular levels’ (Doctorow, 2009).

In my own version of radical presentism I was not trying to tap into fears about technology, but rather to re-imagine traditional and well-tested drama practice transformed by the mutating digital DNA of new media technologies. In so doing I tried, in the final scholarly publication for my action research fieldwork, to embrace the perpetual beta nature of popular digital forms and attempt to engage with the unthinkable present.

In this final stage of my research journey, I take inspiration from Web developers’ use of the term ‘mashup’ to describe new applications that emerge when complementary elements are combined from two or more sources. In the following book chapter I consider how some educational dramatic conventions can accommodate contemporary and emerging digital media forms. Increasingly, these media forms regarded as ‘everyday’ communication are based on digital technology and networks that have moved from computers in academic and government settings into a range of devices for domestic and personal use. Digital media are everywhere, ‘taken up by diverse populations and non-institutionalized practices, including the peer activities of youth’ (Ito, Davidson, et al., 2008, p. vii).

As its starting point, this chapter takes the widely used conventions and techniques for structuring drama outlined in the books *Structuring drama work* (Neelands & Goode, 2000) and *Beginning drama 11-14* (Neelands, 2004). Many of the drama conventions discussed in those books make use of, or are modelled upon cultural uses of, common media forms. In some cases the digital media forms suggested here are presented simply as being a more contemporary form to
substitute directly into the drama, for example making use of an email message rather than a letter or facsimile. In other cases, the media forms suggested can be considered as a means by which the drama activity itself can be conducted, for example making use of a discussion forum as the means by which participants can engage in a drama activity beyond being physically present in the same space.

As with earlier drama conventions, the digital media forms and possible applications are presented as a selection of elements and ideas that individuals and practitioners can adopt and adapt in whatever ways are appropriate to them. They are offered as a means of thinking about the possible advantages of mixing established drama forms with new technologies.

9.3 Scholarly publication
This section is based on an article originally published as:


**Using drama conventions**
Drama facilitators, particularly those working in a school system, must somehow find enough time with the participants to produce meaningful outcomes from the drama activities. Although ‘it is better to spend the time doing drama rather than preparing to do it’ (O’Neill & Lambert, 1982, p. 147), already limited face-to-face teaching time is often soaked up by school administration including taking attendance or altering a classroom layout to suit the drama activities. Establishing the drama can itself take time, such that students often tend to be more fully engaged only towards the end of a school period. Similarly, the impact of the drama activity can be lessened as it crashes to a halt to the sound of the school bell, and students move on physically and mentally to their next subject.

It is therefore understandable that drama facilitators in these time-poor situations would look to effective scaffolding approaches to help establish and build the drama. One of the strategies adopted by drama facilitators is the development of ‘particular conventions that can be quickly produced without the need for lengthy preparations or rehearsal’ (Neelands, 2004, p. 51), allowing a variety of activities
within a single lesson or session. While being aware that the conventions are not the drama in the same way that a 'map is not the territory' (Korzybski, 1994), they nevertheless can help teachers implement elements of belief quickly in order to establish or carry forward a drama.

**Using digital media to establish the drama: pre-text**

Pre-text is the term O’Neill uses to characterize the nature and launching strategy of non-scripted collaborative dramatic enactment (1995, p. 5). This concept will be familiar to many drama teachers and facilitators, even if they may use other terms to define it. Unlike drama forms that follow an established text (for example, script), processual and improvised drama forms are initiated by a pre-text that launches the dramatic action and establishes the world of the drama, the range of characters that can inhabit it, and the likely encounters and actions that can take place within it (O’Neill, 1995). Pre-text can be based on all manner of things, including images, objects, conventions or texts, but should always provide a rapid entry into the world and action of the drama.

Carroll and Cameron (2003) have argued that drama teachers and practitioners can capitalize on the pervasiveness of digital media forms, particularly in the world of young people, by utilizing some of the features of this everyday technology as the basic elements for the development of a digital pre-text. One of the obvious applications of the blends between digital media forms and drama conventions outlined in this chapter is the ability to create a digital pre-text that is a good fit with the information, communication and media channels commonly used by many school-aged participants, such as email and mobile telephones. An aim is to enhance the ease with which the pre-text can initiate the drama in a seamless transition via an interface so familiar that it seeks to 'erase itself so that the user is no longer aware of confronting a medium, but instead stands in an immediate relationship to the contents of the medium' (Bolter & Grusin, 1999, p. 22).

**Using digital media within the drama: fidelity**

Another aim when combining new and emerging media forms with drama conventions is simply to update the cultural references surrounding them to suit contemporary drama groups, particularly those involving younger people. This raises questions about what level of authenticity is required to reduce obstacles to
acceptance of the drama, and to help participants rapidly suspend disbelief. The nature of many of these digital media forms is that they carry with them an element of meta-information. There is a certain level of fidelity required when using these media forms in drama to avoid participants being distracted by what they might perceive as errors. For example, if a facilitator were to use an email as a form of introducing new information to the drama activity, participants may be just as interested in the email address of the sender or who else the message has been copied to as they are in the contents of the message itself. The metadata carried by many of these digital forms can convey important information about the source of the information. This becomes even more significant if a facilitator chooses to use these digital media forms as the main medium for the drama activity itself, for example using a forum or chat tools to bring together distributed participants, or using social media applications like Facebook (Wotzko & Carroll, 2009) to promote interaction with characters. Participants may need to be guided about what aspects of the medium are relevant to the drama, and which are just a function of the medium in which it is taking place and can be seen as the limits of the ‘frame’ of the drama (Carroll & Cameron, 2005).

**Using digital media to continue the drama: expanded universe**

Another aspect of the possible blends of digital media forms and drama conventions is their ability to extend the life of the dramatic beyond the boundaries of the physical space in which it may originally, or ultimately, be enacted. For example, a facilitator can engage the participants with some elements of a pre-text prior to a drama session by using activities that can be conducted online. Students can engage with materials, characters and information in various forms. These can be real resources in the sense of research materials found online, or they can be fictional elements ‘seeded’ into online spaces. Similarly, online and digital media forms can be used to extend the life of a drama session beyond the limits of the time allowed in say a school timetable. There can be follow-up activities conducted online, perhaps from home or a computer laboratory or library, as an extra-curricular activity. To students now familiar with the marketing and narrative uses of online technology to support television and cinematic productions, there is probably nothing unusual in using digital and online media to establish or extend a dramatic activity. The term ‘expanded universe’ (Kapell & Lawrence, 2006) has been used to describe the process of
creating new narratives in a range of media using established characters, such as with creative franchises like *Star Wars* or *Star Trek*. Paul Sutton (2009, p. 39) uses the term ‘dramatic property’ to describe a similar ‘paradigm of practice’.

**Three basic digital media forms for drama**

Online and mobile communications have developed into a range of what are increasingly being labelled ‘rich media’ platforms — a term that describes levels of interactivity and engagement beyond traditional forms. These technologies allow for information seeking, content production and delivery, identity maintenance and communication on a range of digital devices. In particular, the mobile telephone has shifted rapidly from a telephony device towards a portable, personal media hub that enables a range of personalized and customized communication, entertainment, relationship management and service functions (Cameron, 2006). As part of a trend towards active participation in the production and sharing of content (Jenkins, et al., 2006), young people are using these platforms to engage with their culture and practice ways of being within it (Stern, 2008, p. 113).

The collaborative nature of many digital media forms appears to create new opportunities to develop frameworks for drama. Jenkins et al. (2006) refer to this collaboration as the ‘collective intelligence’ of digital audiences. David Weinberger (2007, p. 131) describes it as ‘the wisdom of groups, employing social expertise, by which the connections among people help guide what the group learns and knows’. This is the same impulse that allows cooperative improvised role-play to operate in drama. The generalized cooperative social expertise operating in the digital environment has the possibility of being used in hybrid drama forms. Drama appears to be particularly well placed to make use of the dramatic tension generated between individual and group shared knowledge within the various inter-textual forms that make up digital media. These networked sites are now the places where young people learn how to use cultural symbols (Stern, 2008, p. 114) for their own purposes.

For simplicity, this chapter breaks digital media forms into three categories: first, those that are largely text-based, in some cases reflecting their origins in a period where screen technology did not allow for graphical representations (for example, email); secondly, those that can be grouped under the term ‘participatory media’,
reflecting the content sharing and social network functionality typical of contemporary online applications; and thirdly, mobile media-based convergence of computing, multimedia and wireless telephony. These forms have different features, functions and modes of use that offer a range of opportunities for application to drama.

1. Text-based media forms

Despite more recent developments, the online environment has been for much of its history thus far a very text-oriented medium. Communication forms such as email, discussion forums and chat have relied on keyboard input. Even the first decade or so of the World Wide Web’s popular consumption has been dominated by its use for text-based applications. Digital media forms have, of course, long offered a mix of media forms, and some applications have pushed the technological boundaries of audio and graphical representations — computer games, for example. Some common text-based digital media forms are email, forums, message boards, discussion groups, newsgroups, instant messaging and chat. Note that although treated as a mobile media form, use of Short Message System (SMS) or ‘texting’ via mobile telephone can also be considered a text-based media form and many of the conventions described in this section apply to SMS as well.

These text-based media forms illustrate different time/space conventions that might be used or manipulated for dramatic effect. Email and discussion groups are asynchronous forms suggesting a time delay between a message being sent, received and responded to. Within the drama, the sender and user do not have to be using the service at the same time in order to have a discussion. Chat and Instant Messaging imply a synchronous form, in which the participants are engaged in the discussion at the same time. These forms also play with the notion of space, as a chat or IM session suggests occupation of the same virtual space created by the software (such as a chat room). These spaces may be private or public and mirror aspects of role-based drama.

Text-based communication forms are built around the ability to reply to a previous message. In email, this means automatically replying to the original sender, or perhaps using the reply-all function if there have been multiple recipients. Multiple recipients can be added in using the Carbon Copy (CC) function, in which case each recipient can see who else has received the message, while a Blind Carbon Copy
(BCC) function hides this wider distribution list from individual recipients. A message can also be forwarded by re-addressing it to new recipients. Some of the CC and forwarding functions are not always present in forms such as chat and discussion groups. The ability to easily (even accidentally) reply-all, CC and forward email has interesting dramatic potential, and has even led to some real-world dramas where information has been revealed accidentally or deliberately released.

Although these forms are text-based, they often allow for other content to be attached to the message or post. Documents, files, movies, sounds (and indeed, computer viruses) can be shared and forwarded in this way. For dramatic purposes, this means that although a text-based form might be used as the communication medium there is still scope for participants to share non-text content. These text-based forms of communication can also be collected into private and/or public archives. Individuals might collect copies of sent and received emails on their own computer or Web-based mailboxes. Discussion groups are often archived into online repositories or content is stored in retrievable ‘caches’ by search engines such as Google. Dramatically, the notion of searchable archives might allow for participants to explore past conversations or comments made in these forms. Connections can be made, or perhaps inaccuracies or lies could be revealed. Similarly, text-based messages might be ‘lost’ if they are deleted from storage, raising a broader issue of the ephemeral nature of mediated conversations and the volatility of digital media storage. Opportunities exist in a drama for alternative or conflicting reminiscences or accounts of events in the absence of more concrete records.

2. Participatory media forms

One of the terms emerging to describe the latest online applications, particularly those that allow a high degree of user-generated content, is ‘participatory media’ (Jenkins, et al., 2006). There is particular interest in how these forms can relate to educational settings, as by their nature they are built upon technologies that provide easy access to involvement, and generally allow for novices to engage with more experienced producers to learn and share skills and knowledge (Jenkins et al. 2006). Thus participatory media seem a natural fit with many social learning and constructivist educational approaches. Examples of participatory media forms are
blogs, podcasts, vlogs, social bookmarks, games, mashups, micro-blogs, media sharing, virtual worlds, wikis, simulations, tags and social network services.

Jenkins et al. (2006) note that these media forms encourage participation by offering low barriers to involvement. Commonly they are relatively simple means by which people can publish a range of media content. Blogs, for example, have become a simple means for people to create a personal Website without a need to learn web design skills and HTML coding. Similarly, many of these media forms have inbuilt tools and technologies that allow for content to be rapidly shared between users. Traditional media forms such as television are increasingly taking advantage of these features to incorporate user-generated content into their own productions, or to provide another form of marketing by allowing users to easily share content.

Another basic form of user-generated content is the use of ranking or rating schemes that allow users to score their favourite content, or to add a review or comment about content or products. In the same way, data that is generated automatically by visitors to a Website can be turned into ranking or rating content such as most popular or most viewed content. This data becomes a significant factor in attracting people to some of these sites, as they become engaged in a process of wanting to improve their ranking or attain a kind of celebrity within that particular online community. Reputation rankings such as online auction site eBay’s rating system for buyers and sellers may even have commercial consequences for some users. The ability for users to add their own opinion or comments to existing material, or to enhance its meaning for other users, is a fundamental driver behind use of many of these participatory forms. Many of the applications described in this section allow for a meta-commentary of published content in some way. In the case of blogs for example, the amount of ‘traffic’ generated as user annotations can be a key measure of your success as a contributor to that media form.

These forms present a range of opportunities for drama facilitators, from using them as contemporary technologies to update familiar conventions, through to their potential use as a channel to conduct the dramatic activity itself. The popularity and functionality of many of these forms appear to lend themselves to a wide range of potential uses for drama.
3. Mobile media forms

One of the ways in which digital technology has allowed for convergence is in mobile media devices. The modern mobile telephone for example is becoming a multi-purpose digital tool combining telephony and multimedia messaging, media playing, gaming, photography, videography, Web access, file sharing and mapping. The take-up of wireless and mobile technology around the world has been rapid and widespread, and in some cases may even be the means for overcoming the so-called digital divide between nations well served by communication infrastructure and those less capable of adopting other forms of telecommunication (Cameron, 2006). It is in the embedding of mobile media, particularly mobile phones, in youth cultures around the world that the greatest opportunities exist for blending them with drama conventions. At the very least, the mobile phone is the one digital media production and reception device that most young people are likely to have in common.

Examples of mobile media forms are SMS text messages, geotagging (adding location data to images and other media using GPS technology), Multimedia Messaging Service (MMS), mobile blogging (moblogging), ringtones, screensavers, voice telephony and graphic wallpapers.

Mobile devices are a highly personal media device, which — in Western cultures at least — tends to be closely guarded in terms of privacy and intimacy. Landline telephone numbers are traditionally associated with a geographical location, such as a house or business, while mobile telephone numbers tend to be associated with a person, regardless of their physical location. This sense of ‘always on’ communication has led to increased attention towards mobile phones as a technology for educational purposes. The addition of GPS technology to mobile devices is leading to greater consideration of location-specific interactions with mobile phone users. There are already examples of games that use GPS tracking technology to pit players against each other in real environments. This feature has also been used to explore the potential for new forms of dramatic engagement.

Although the capacity to create, share and consume media content on these devices is rapidly evolving at both a device and infrastructure level, there are still limitations to the broader functionality of these devices as media players. Storage capacity is often restricted on these devices, although portable storage media such
as flash cards are developing to contain more and more digital data. Small screen sizes and limited sound outputs have hampered their take-up, although there is a trend towards slightly larger screens (for example, smartphones like the iPhone) within product lines to appeal to the mobile video/TV market. In many countries it is the cost of downloading data that has prohibited the wider adoption of these devices. Nonetheless, the limitations of these devices have contributed to a production and dissemination form that allows for small ‘snack-size’ versions of content that invites a casual approach. Mobile/casual gaming is also an example of this.

**Drama conventions and digital media forms — some examples of ‘mashup’**

Web developers use the term ‘mashup’ to describe new applications that emerge when complementary elements are combined from two or more sources. For example, the Google Maps tool combines street address information with geospatial data to create a search engine that can indicate a business location on a map. This chapter will now give examples of how each of the media forms (text-based, participatory and mobile) may be combined with some dramatic conventions that may already be familiar to many educators or practitioners. They are drawn from the descriptions collated in *Structuring Drama Work* (Neelands & Goode, 2000) and *Beginning Drama 11-14* (Neelands, 2004). Page references for these sources are cited with each basic description, along with discussion on the adaptations made possible by digital media forms.

**Text-based media forms**

‘Overheard conversations’

The group overhears a ‘private’ conversation, allowing for new information or tension to be introduced (Neelands, 2004, p. 103; Neelands & Goode, 2000, p. 37). Email is a good match here as the ability to reply-all, forward or copy an electronic message to other recipients lends itself to this dramatic convention. A simple mouse click can ‘accidentally’ send content to unintended recipients, thus allowing participants to ‘eavesdrop’ on the electronic conversation. Other dramatic opportunities can exist for participants to sneak a look over someone's shoulder at on-screen messages, to guess a password based on their knowledge of a character,
or even to ‘hack’ a character’s electronic message account to spy on their communications.

‘Diaries, letters, journals, messages’
Information is delivered by the facilitator to the whole group or a subgroup to introduce new ideas, information or tension. It can be written by participants in or out of character (Neelands, 2004, p. 102; Neelands & Goode, 2000, p. 16). All of the text-based forms provide an opportunity for delivering new information to the group, perhaps as an email that has just arrived in the inbox, a new forum post, Twitter ‘tweet’ or a comment made using IM. Similarly these forms can be used by participants to reflect in or out of character on the drama experience. The archiving nature of the forms can allow for a cumulative account of the work for the teacher.

‘Conflicting advice’
A character is offered conflicting advice as to which course of action to take in a given situation. Other participants in character can offer the advice, perhaps as different aspects of the same character’s internal voice. There can also be debate between participants (Neelands, 2004, p. 101). The discussion group forms accommodate this dramatic convention where the ability to thread replies to an initial message would enable participants to track responses. These online tools, such as forums, are often used in this Question/Answer format as support or advice services.

Participatory media forms

‘Alter-ego’
One participant adopts the role of the inner voice of another participant’s character in order to express how they are feeling, thus explicating to the group the text/subtext relationship (Neelands, 2004, p. 100; Neelands & Goode, 2000, p. 47). The annotation features of many applications can allow for an alter-ego style exploration of a character’s inner voice. For example, the character could ‘speak’ via a blog entry, while another participant provides a subtext using the comment function. The ability to append comments is also found in media sharing sites, and may even move beyond text, for example the video sharing site Youtube allows for video comments to be linked to a video clip in addition to text comments.
Subtextual commentary can also be built up through the keyword tags that are used to describe an online media artefact, for example images in a photo-gallery. Or social bookmarks can be used to comment on a character by linking to online resources that can reveal more information or an alternative view. Wiki tools also allow for use of the alter-ego convention, with the subtext revealed through edits made to a page, or via a commentary function.

‘Collective character’
A character is improvised by the group, with any participant able to speak as the character. There is no need for conformity in the responses they make, and differences of opinion or attitude allow for group discussion about the character (Neelands, 2004, p. 101). Games, simulations and virtual worlds often incorporate a stage or process of creating an online character to represent each participant (known as an avatar). This is particularly the case in 3-D graphic spaces, where the construction of the avatar can involve a ‘paper doll’ style process of selecting attributes such as physical appearance and clothing. The creation of personal profiles in social networking sites is also a process similar to character creation, in which personal details, physical attributes and likes and dislikes can be shared with others.

‘Unfinished materials’
An object provides a clue or partial information as a starting point for the drama (Neelands, 2004, p. 104; Neelands & Goode, 2000, p. 28). Collaborative publishing tools such as a wiki can be used with this convention, with participants invited to edit and complete an unfinished article. The edit history and discussion features used by wikis to track changes can be brought into play here as clues to the origin of the materials. Video, audio and photographic materials can be made available online through content sharing sites, with the comment and tagging functions used by participants to discuss the information and build upon it with their own contributions.

Mobile media forms

‘Making maps/diagrams’
Participants make maps or diagrams within the drama to reflect on experience or to aid problem solving (Neelands & Goode, 2000, p. 19). Mobile devices that
include GPS functionality can be used by participants to incorporate real geospatial data (for example, latitude, longitude, altitude) into the drama. Geotagging allows for geographical data to be attached to images. GPS-equipped devices can often download maps of areas to be incorporated into the drama.

‘Objects of character’ (or ‘private property’)
A character is introduced or fleshed-out through consideration of carefully chosen personal belongings. The objects can be ‘found’ at any point in the drama, and can even suggest a contradictory subtext to their behaviour (Neelands, 2004, p. 103; Neelands & Goode, 2000, p. 20). Private property left behind can include the device itself (contextually, it is quite easy to believe that someone can misplace a mobile phone) or personalized mobile content such as ring tones, wallpaper, screensavers, and personal greetings on voicemail.

‘Soundtracking’ (also ‘Soundscape’)
Sounds are used to accompany or describe an environment, to create a mood, or can perhaps be taken from one situation to illustrate another. Sounds can be natural or stylized, live or pre-recorded, and can include dialogue and musical instruments (Neelands, 2004, p. 73; Neelands & Goode, 2000, p. 24). Many of the latest model mobile phones have the capacity to play sound files, either as ringtones or as a media player function. Portable media players such as Apple’s iPod are a popular consumer digital device, and most can be connected to smaller speaker units to be played to a group. Software to record and edit sound files is available freely for most computer systems; software also exists to help users create their own mobile phone ringtones. Some phones also include an audio recording feature, either as a note-taker or perhaps as part of recording video.

‘Telephone/radio conversations’
These are used to illuminate a situation or to break news or inform. They may be two-way conversations between pairs, or one-way in which the group hears only one side (Neelands, 2004, p. 104; Neelands & Goode, 2000, p. 42). The mobile telephone simply replaces the landline analogue that a drama facilitator can use when adopting this convention. Participants in a drama are likely to accept that mobile phone conversations are easily overheard in many everyday contexts,
establishing a reason within the drama to consider whether the conversation contains private or public information.

**Conclusion, and moving forward**

This chapter suggests some of the ways in which drama teachers can tap into their students’ real-world experiences with digital and mobile media to generate contemporary classroom-based drama. Making use of the means of cultural production familiar and applicable to the participants can reduce the amount of time required to establish the drama, which is an important issue when working within the strictures of most educational systems.

Further work is required to consider how realistic the digital media forms — real or simulated — need to be when working with these dramatic conventions. These digital forms often carry meta-information (for example, Web domain names or email addresses) that drama participants can scrutinize closely for accuracy and veracity when such forms are used in drama sessions (Carroll & Cameron, 2009). Facilitators need to be wary of this phenomenon when designing such resources, or at least be prepared to negotiate a level of accepted dramatic fidelity and frame the drama with participants.

The use of technology such as mobile phones and social media within the drama context also emphasizes issues of privacy when using user-generated — particularly student generated — content. Teachers and facilitators using these digital media forms, especially the online publishing sites, will need to consider and develop suitable protocols and conventions for maintaining the safety and privacy of participants, while making use of their rich potential for exciting drama sessions. The use of these media forms in drama contexts can in itself provide a way of discussing and negotiating issues like privacy and appropriate behaviour with young people in a meaningful and productive way.

The combinations of digital media forms and dramatic conventions discussed in this chapter are presented as a selection of elements and ideas that practitioners should experiment with to find the recipes that best suit their individual contexts. They are not asserted as concrete approaches to practice, but rather are presented here as a means of thinking about the possible advantages of mixing established drama forms with new technologies. It is hoped that drama practitioners will
continue to share their experiences of working with new and emerging media forms in a range of educational settings.

**9.4 Critical reflection**

Jenkins (2006) notes that new media encourages participation by offering low barriers to involvement. Commonly they are relatively simple means by which people can publish a range of media content. Blogs, for example, have become a simple means for people to create a personal Website without a need to learn Web design skills and HTML coding. Similarly, many of these media forms have built-in tools and technologies that allow for content to be rapidly shared between users. Concurrently, the capacity to create, share and consume media content on mobile devices is rapidly evolving at both a device and infrastructure level, though there are still limitations to the broader functionality of these devices as media players.

While in Cycle 6 I have given examples of blending the conventions of applied drama and digital media, it is also important to note some of the sites or affinity spaces in which these hybridised drama/game experiences might take place. Following are some of the examples that emerged during my own critical reflections on the conceptual ground covered in Cycle 6.

*Social networking sites*

Online communities formed around common interests have long been a feature of the Internet. The software tools to enable people to connect with each other and to easily share content in variety of forms have developed into a set of applications known generally as social networking services. Recent Web-based examples include *Facebook*, *MySpace*, *Orkut* and *Bebo*. These sites generally allow a user to create a unique online personal profile, which forms an identity that can be shared with other users. Links are made between these accounts, so that content and information can be shared. Most allow for different levels of private and public content-sharing. Many extend into the mobile media space by allowing content editing and updating via mobile telephone.

These sites also contain tools to allow a high degree of personalization, ranging from image galleries, blogs and messaging tools, polls, games, quizzes, status updates, calendars, event-coordination, and collaborative groups. In my own experience of working with undergraduates in social media classes, for many
young people *Facebook* has become the space for much of their online activity. In terms of developing *Facebook* as an affinity space for dramatic activities, Wotzko and Carroll (2009) have noted how the features lend themselves to a variety of ways in which participants can engage with characters through commenting, messaging, sharing links and discussing content.

*Blogs, Micro-blogs, podcasting*

A blog is a journal-style Web publication that typically displays the newest entries first. Blogs tend to be written by one person, though blogging is being adopted as an online publication form for non-personal uses such as journalism, public relations and political campaigning. Key features of blogs are links to other online resources (especially other blogs) and the ability for readers to add comments to individual entries. Blogging software is a content management system that generally makes the process of publishing content online easier for people with limited Web publishing skills. Mobile blogging or moblogging is the publishing of blog entries directly to the Web from a mobile device. Photographs taken with a camera phone are a popular form of moblog content, as many phones now allow images to be sent directly to a Website for publication. Text-based moblog entries tend to be quite short, due to the awkwardness of many mobile phone keypads.

While blogs can usually contain multimedia such as images and videos as well as text, an expressly video-based form of blogging is sometimes described as a *vlog* (video log). Podcasting uses similar underlying technologies to blogging, but is based around syndication and downloading of audio files. Vodcasting is a term used to describe a similar use of video content.

Micro-blogging is a form in which users write particularly brief text updates — 140 characters maximum in the case of *Twitter* — often providing pithy observations, or a running narrative of events. Status updates on social networking services such as *FaceBook* provide a similar function. Micro-blogging is also increasingly finding journalistic, marketing and public affairs applications. Posts can contain links to other media such as images, longer articles, or video. A culture of monitoring real-time themes (trending) has emerged around micro-blogging.
Media content production and sharing sites

Video and image sharing services are examples of sites and communities formed around digital content production and sharing. A video sharing service allows users to upload and watch video content. The service provides the storage space and bandwidth, and aggregates the content into a searchable database. Content might be rated or ranked according to user votes or popularity. Some services allow viewers to contribute text-based comments, or to link their own video responses to an entry in the same way that some text-based forms such as forums will thread related comments. One popular example is Youtube.

Similar to video sharing services, there are Internet applications to allow the sharing of digital image content via online photographic galleries. Some services allow users to control access to galleries for private or public viewing. Users may be encouraged to post comments or to rate and rank images or galleries. The use of user-generated keywords or tags to identify photographic content is increasing. Copyright controls are an issue, as digital images can easily be copied from the Web. Privacy is also a growing concern, particularly as images may be published directly from mobile phone cameras.

Virtual worlds, games and simulations

A virtual world is a computer-based simulated environment intended for its users to inhabit and interact via avatars. Increasingly virtual worlds are 3D graphic environments, although they can be text-based or two-dimensional spaces as well. The model world may simulate or even manipulate rules based on the real world such as gravity, topography, locomotion, real-time actions, and communication. Communication remains largely textual, though real-time voice communication is possible in some environments, as well as graphical icons or sets of avatar gestures or actions.

Simulation in this context refers to digital or online representations of systems designed for education or training purposes. Digital simulations typically involve virtual simulation, where real people use simulated equipment in a simulated world; and constructive simulation, where simulated people (as avatars) use simulated equipment in a simulated environment. These forms may cross-over into the forms of online games or virtual worlds.
Common games platforms are the personal computer, specialized consoles that plug into a TV monitor, handheld consoles, and mobile phones. Although a stereotypical view of a game player is a loner in front of a screen, games have historically included many multiplayer features. This is expressed now in the form of massively multiplayer online games that might feature tens of thousands of players simultaneously.

**Wikis, social bookmarking, tagging**

Wiki software (named after an Hawaiian word for ‘fast’) enables users to add, remove, and edit content of a Website. The collaborative encyclopaedia, *Wikipedia*, is one of the best-known examples. Bookmarks developed as a way to store, organize, share and manage lists of links to online resources such as Websites. Web browsing software includes this feature to enable an individual to return to sites without having to remember complex web addresses. The concept of *social bookmarking* extends this into Web-based sharable lists, often built around topics or themes. The use of keywords or tags creates searchable user-generated classifications for bookmarks. The use of keywords or *tags* is a way of building a description of a digital object by allowing users and viewers to contribute to the definition. It is assumed that over time this produces a useful way of searching for content, though it is subject to anomalies such as cultural/language differences, vague or disputed word meanings and possibly even deliberate vandalism. Tagging does represent opportunities for a meta-commentary or annotations to be created, for example by adding captions to photographs.

**Email**

Email is one of the oldest and most popular applications for composing, sending, storing, and receiving messages via computer networks. Email is considered an *asynchronous* form of communication, in that the sender and receiver are not communicating in real time, in the same space. Email is increasingly seen by many young people as a tool for communicating with ‘adults’ such as teachers and parents, institutions like schools, and as a way to convey lengthy and detailed information to large groups rather than peer-to-peer interaction (Lenhart, Madden, & Hitlin, 2005).
Forums/message boards/discussion groups/newsgroups

A common feature of these forms is that messages are threaded so that an online discussion can be followed via links between the original message and subsequent replies. Content is often in the form of a question or problem, followed by replies with comments or possible solutions. These forms are asynchronous, and may also be moderated in that some members have the ability to filter messages before they are made publicly available, or to control membership.

Instant messaging/chat

This is a form of synchronous (real time) text-based communication in which users enter a chat ‘room’ at the same time. Instant Messaging (IM) is a more recent form of online chat, characterized by tools for tracking the status and availability of contacts (for example ‘buddy lists’), and a capacity for asynchronous messaging similar to email. Users adopt names, aliases or nicknames to identify themselves and to create an address for others users to contact them. Some organisations use IM as a form of internal communication, and it is heavily used for everyday conversations by young people in preference to other forms such as email (Lenhart, et al., 2005). Video and audio chat tools also exist.

Portable spaces

Mobile devices are a highly personal media device, which — in Western cultures at least — tends to be closely guarded in terms of privacy and intimacy. Landline telephone numbers are traditionally associated with a geographical location, such as a house or business, while mobile telephone numbers tend to be associated with a person, regardless of their physical location. This sense of always on communication has led to increased attention towards mobile phones as a technology for educational purposes. The rapid growth of digital repositories to enable customers to find and download free or purchased mobile software applications (or apps), such as Apple Computer’s App Store, Nokia’s Ovi or Google’s Android Market, is fuelling this trend. Mobile devices suggest the possibility of portable affinity spaces.

As I have noted throughout this thesis, one of the difficulties of working with digital technology in any field is the pace — both real and perceived — of change. The speed with which the ‘digital native’ concept spread among educators for
example, shows that there is an underlying tension regarding the ability of teachers to keep pace with their students’ use of digital media. While the reality is that many teachers may be just as savvy, or more so, than some of their students we can easily struggle to keep pace with all of the tools and techniques that will continue to emerge from the intersection of education and technology. My approach in recent years, emerging from the work in this study and consultancies with large enterprises and government department (see for example Alexander, Cameron, Carroll, & Simmons, 2010), has been to try and focus on the activities rather than the specific applications.

The analogy I use is verbs versus nouns. Trying to invest heavily in one particular online 'brand' simply because it is popular with a target audience at any given moment is a risky strategy for rich businessmen, let alone educators with limited time and resources — News Limited’s massive investment in *MySpace* just before *YouTube, FaceBook* and *Twitter* exploded in popularity is just one recent example. On a smaller scale, the resources I produced for the classroom-based digital drama described in Chapter Eight used the social media site *Bebo* which was popular at the time with the students, but which has since gone into decline. As Table 9.2 illustrates, the brands (the nouns) are important innovators and market leaders, but it is the activities they allow (the verbs) that can guide a more strategic approach to their possible application:

<table>
<thead>
<tr>
<th>It’s easy to get seduced by the ‘nouns’ …</th>
<th>But look to the ‘verbs’ when planning …</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Bebo, Blogger, Digg, Ebay, Facebook, Flickr, Foursquare, Google, Hotmail, Last.fm, LinkedIn, Myspace, Reddit, Scribd, StumbleUpon, Tumblr, Twitter, Wikipedia, Yahoo!, Youtube</em></td>
<td><em>Buying or supplying goods and services</em>&lt;br&gt;<em>Collaborating on content, solving problems</em>&lt;br&gt;<em>Organising activities</em>&lt;br&gt;<em>Creating, re-creating &amp; sharing media</em>&lt;br&gt;<em>Discussing common interests, connecting</em>&lt;br&gt;<em>Playing games for fun, or exploring through playful behaviour</em>&lt;br&gt;<em>Learning and teaching</em>&lt;br&gt;<em>Networking (forming new relationships)</em>&lt;br&gt;<em>Social graphing (tracing existing relationships)</em>&lt;br&gt;<em>Searching for and verifying information</em></td>
</tr>
</tbody>
</table>

The risks of putting time, energy and resources towards the nouns, rather than the verbs, is why I have emphasised in this chapter that the updated conventions are designed to be a guide or starting point for combining applied drama and digital
game approaches. They are examples of the way in which the knowledge and practice of educators is not simply replaced by new technologies, but can operate with them as a mashup to produce something new and powerful. The role of the teacher becomes critical in a learning environment mediated by networked digital technology. As both educators and subject matter experts, they must select the right tools in a blended environment to suggest and support the desired learning activities, in line with the curriculum and learning objectives. They must also learn to act as co-producers, curators, guides and trusted filters in the many affinity spaces made possible by these media forms.

Despite looking to the future, it is still necessary to mark the end of this part of my research journey. One of the research objectives for this study was to report and critically reflect on the story of the action research methodology for this project, and this has informed the autoethnographic commentary throughout the exegesis section of this thesis. The process of reflecting on the collaborative projects and publications that were both part of and parallel to this study has highlighted to me how blurred the stages of action research are in reality, compared to the models presented in the literature. This reinforced the view I noted in Chapter One that action research is not a mechanical sequence, but a more dynamic model in which the steps may overlap or initial plans are quickly rendered obsolete, and in which success is measured not by participants’ adherence to the model but:

‘rather whether they have a strong and authentic sense of development and evolution in their practices, their understandings of their practices, and the situations in which they practice’ (Kemmis & McTaggart, 2005, p. 563).

I feel that the part of my research journey documented in this thesis does represent a strong and authentic sense of development in my own practices, and in that of many of my collaborators, as we gained greater understanding of the principles and processes at work, and the contexts — both real and virtual — in which we were operating.

For me, one satisfying milestone in this journey is the creation and application of a model for an action research thesis that incorporates scholarly publications as the fieldwork. I believe blending thesis and core action components in this compilation model, formed around an autoethnographic approach that recognises academic
writing as a form of scholarly self-narrative, offers a strategy that other social science researchers will find both credible and powerful.

9.5 Summary of the chapter
This chapter has developed the work started in Chapter Eight, with an examination of further theoretical conceptual research conducted during Cycle 6 of the action research to explore the convergence of digital game-based learning and applied drama. The resulting mashup takes well-tested examples of dramatic conventions drawn from the literature, and updates them with the digital media forms familiar to current learners. The examples have been categorised as text-based, participatory and mobile media forms, though in many cases the conventions might operate across more than one. It is noted that despite the difficulties of keeping pace with technological change, many existing drama conventions can still operate effectively with contemporary audiences after such an update. In this regard, it is also suggested that scarce time and resources should be focused on the types of activities that digital media forms might allow, rather than concentrating on popular but sometimes fleeting applications or media ‘brands’.

Consideration is given to some of the practical issues involved in generating digital pre-texts and artefacts in this way, such as the level of fidelity that is conveyed in the metadata associated with these online and mobile digital channels. It is also observed that beyond artefacts and conventions, digital media forms can also create affinity spaces for dramatic engagement beyond the classroom.

Cycle 6 of the research fieldwork ends with some observations on the action research approach used in this study, and the application of a thesis model that accommodates collaborative publications produced during the fieldwork stage.

This chapter concludes the exegesis section of the thesis, which is contained in Chapters Four to Nine. The following chapter draws together the findings discussed in the scholarly publications and critical reflections contained in the exegesis, with reference to the existing literature summarised in Chapter Two.
10. CHAPTER 10

Conclusion

10.1 Summary of findings
This thesis has explored some of the ways in which educators can tap into their students’ real-world experiences with digital and mobile media to generate contemporary role-based approaches to teaching and learning. The use of some applied drama and digital game conventions enables the creation of protected but authentically situated affinity spaces in which to explore problems and issues. Making use of digital media forms, the means of cultural production familiar and applicable to many participants, can reduce the amount of time required to establish the drama or game, which is an important issue when working within the strictures of most educational systems.

Structurally, this thesis combines the ‘traditional-complex’ (Paltridge, 2001) and the ‘compilation’ (Dong, 1998) models and consists of an introduction, a review of the literature, a general methods section, an exegesis section formed around a series of published research articles, and a general conclusion. Thus within this structure I have presented individual articles with their own concluding sections, but I will now summarise those findings in terms of the overall study and the specific research question and objectives.

In Chapter Four, the first in the exegesis section of this thesis, it was noted that playing video games exists as a continuum of performance modes that exhibit constantly shifting dramatic role positions. At one end there is the participant, at the other there is the spectator. This led to discussion of an interesting methodological dilemma at the start of this fieldwork — how does the interpretative ethnographic researcher analyse a digital game when he or she becomes part of the playing process? How do you analyse the learning mechanisms of games when you are being reflexively engaged in the training materials and systems mapped into the text by the games designers?

This collaborative fieldwork took the approach that video games can be performed as ergodic texts(Aarseth, 1997), and thus they can be explored through a form of qualitative research that embraced the performance interview, performative
writing and ethnodrama. The reflexive interview functioned as a narrative device that allowed me to share the story of playing the game with my co-researcher, and together we selectively reconstructed that world by telling and performing our own unique story within the ergodic game structure. This gave some initial clues as to the nature of affinity spaces that can be created through role-based performance within digital frameworks. In game texts, the real world is no longer the referent for analysis. Gaming is simultaneously an ergodic text and an interpretative process (Strine, et al., 1990, p. 84). The original textual product, the unique gameplay becomes the site for new interpretative work, and the participant — a researcher in my case, but potentially a student in a learning context — as gamer/performer is now inserted into the ergodic nature of the text and becomes part of it. In the case of playing the game *Resident Evil — Code: Veronica X*, my collaborator and I concluded that ‘objectivity is never an option; you kill the zombies because you must — the world is just structured that way’. However, it is suggestive that one of the affordances of combining dramatic and digital game conventions is the creation of affinity spaces in which learners can interpret, engage with, and potentially experiment with the way the world is structured.

As outlined in Chapter Five, the thesis then began to explore the connection between the conventions of the live role-based performance of applied drama and the mediated performance of online role-playing games. It was noted that the conventions of both allow participants to act ‘as if’ somebody else. Both forms deal with the identity shifts possible within imagined environments, or affinity spaces, made possible through digital media. The research suggested a theoretical connection between the conventions of live role-based performance of applied drama, and the mediated performance of digital games. Clearly a central element of both process drama and multiplayer online video games is their ability to allow participants/players to ‘step into somebody else’s shoes’. This mutability of identity provides a metaphor for considering the episodic nature of in-role performance and out-of-role reflection in both drama and video games.

Both forms contain role distance and role protection conventions that allow a fluid ‘toggling’ between close active engagements within the unstructured moments of the event, and a more protected observation or reflection on the experience. In digital games, my collaborator and I observed that this toggling can be as instant as
a mouse click to switch the on-screen viewing perspective. Applied drama’s appeal in the educational setting is its ability to provide a protected means of curriculum learning from an experiential position. This penalty-free opportunity for exploring social relationships, identities and experiences ‘as if’ the learner is somebody else is a convention common to both digital games and applied drama. Switching in and out of (or between) characters, or toggling distance between first-person participation and third-person observation, provide mechanisms by which the participant/player can reflect on and adjust their involvement in the events they are a part of.

In Chapter Six, reflection on two case studies revealed the potential to create affinity spaces for learning when conventional drama education approaches are transformed by appropriate and well-developed technologies. In the case of To the Spice Islands, my collaborators and I used simple, commonplace technologies to extend and deepen the concept of dramatic pre-text. The use of technology enhanced the traditional use of role in applied drama. It was observed that students can now enter a digitally situated role and become part of a simulated and (in some cases real) community of practice. This led to the conclusion that digital pre-texts might facilitate the application of drama conventions to teaching and training situations beyond schools, and for a range of age groups, in the same way that serious games have found a willing market in health, emergency response and military training.

The Flood case study also illustrates that situated learning does not stop at the classroom door. My integration of more complex (yet still free and accessible) technologies offers a glimpse of what is possible when digital game and applied drama approaches are combined. While the use of chatterbot technology begins to question the very nature of performance and liveness (Auslander, 2002, p. 21) it also adds an extra dimension to what is in reality digital pre-text for an epistemic game. The finding in both of these case studies was that students’ learning, immersion and engagement can be enhanced by combining the conventions of applied drama and digital games.

Specific forms of applied drama and digital games were then compared in Chapter Seven, which described the relationships and overlap between Mantle of the Expert drama technique, epistemic games, and a communities of practice learning
theory. It was noted that current educational environments lean towards a more social and self-directed form of learning, which emphasises authentic connections to solving real-world problems. I argued that networked digital media forms allowed learners to legitimately engage with real communities of practice in affinity spaces. It was argued that drama and games practitioners who are prepared to develop and use the emerging performance conventions inherent in these mediated learning communities will be able to engage students and explore authenticity through situated role-based methods.

One finding was that this approach is particularly useful in educational environments where access to levels of real expertise within professional communities of practice is limited. Access to the knowledge, production and discourses of distributed communities in online affinity spaces is increasingly available through cheap and pervasive computer networks. The importance of keeping pace with current technology was noted, even for learning environments that have limited resources, as students belong to an increasingly mediated world. I argued that adapting the Mantle of the Expert or the epistemic games model to a digital pre-text engaged with online communities of practice could produce a project virtual and real, built by adept practitioners and their apprentices in an affinity space supported by situated role.

In Chapter Eight, a case study of Australian secondary school students as co-creators of a dramatic pre-text demonstrated the integration of recognised dramatic conventions (Neelands & Goode, 2000) within a digital environment. We found that this provided the dramatic tension, and drove the educational exploration of the resulting drama scenario. This project demonstrated some of the ways in which drama teachers can tap into their students’ real-world experiences with digital and mobile media to generate contemporary classroom-based drama. Making use of the means of cultural production familiar and applicable to the participants can reduce the amount of time required to establish the drama, which is an important issue when working within the strictures of most educational systems. However, the question arose as to how realistic the digital media forms used or replicated in the creation of digital pre-texts need to be. I observed the possible significance of the meta-information linked to digital communications when using them as the basis for dramatic pre-text. I found, for example, through
student observations and questions that technical information about digital content used as a pre-text may be just as significant as the message content itself. Facilitators need to be wary of this phenomenon when designing such resources, or at least be prepared to negotiate a level of accepted dramatic fidelity with participants.

The use of mobile phones and social media within the classroom context also emphasises issues of privacy when using user-generated content with students in the formation of a drama or game. The use of these media forms in drama contexts may in itself provide a way of discussing and negotiating issues like privacy and appropriate behaviour with young people in a meaningful and productive way.

Once the students were engaged in the drama, we found that merging digital media forms with some established dramatic conventions allowed us to enhance and extend the participants’ engagement with the dramatic content. The students were well aware of the edges of the dramatic frame, as seen in their comments about where SMS texts were actually coming from, or whether the Bebo profile was ‘real’. Using the features of this everyday technology provided relatively smooth transitions in and out of the drama, interweaving the moments of drama fostered by the conventions with class discussions about what themes and stories were emerging. There is a hint that the role and identity play already inherent in some of these media forms may make them an interesting means with which to change elements of drama pedagogy and influence contemporary approaches to role-based drama. The students revealed a highly conscious process of reflexive self-enquiry and were quite aware of the dramatic digital conventions being used in the drama.

In Chapter Nine, the last chapter in the exegesis section, I used the new media mashup approach to consider how some drama conventions can be blended with contemporary and emerging digital media forms. As its starting point, I took the widely used conventions and techniques for structuring drama outlined in the books Structuring drama work (Neelands & Goode, 2000) and Beginning drama 11-14 (Neelands, 2004). Many of the drama conventions discussed in those books make use of, or are modelled upon cultural uses of, common media forms. In some cases the digital media forms suggested in this thesis are presented simply as being a more contemporary form to substitute directly into the drama, for example
making use of an email message rather than a letter or facsimile. In other cases, the media forms suggested can be considered as a means by which the drama activity itself can be conducted, taking on the characteristics of an affinity space.

For simplicity, this chapter breaks digital media forms into three categories: first, those that are largely text-based, in some cases reflecting their origins in a period where screen technology did not allow for graphical representations (for example, email); secondly, those that can be grouped under the term ‘participatory media’, reflecting the content sharing and social network functionality typical of contemporary online applications; and thirdly, mobile media-based convergence of computing, multimedia and wireless telephony. These forms have different features, functions and modes of use that offer a range of opportunities for application to applied drama and digital game-based learning. The combinations of digital media forms and dramatic conventions are presented as a selection of elements and ideas that practitioners should experiment with to find the recipes that best suit their individual contexts. They are not asserted as concrete approaches to practice, but rather are presented as a means of thinking about the possible advantages of mixing established drama forms with new technologies to create affinity spaces for situated role-based learning.

Finally, the exegesis section concludes with my observation that despite being commonly presented as discrete stages, the cycles of an action research project are often less defined and more fluid in reality. This does not hinder the approach, but requires that attention is given to describing the impact and authenticity of the understandings and transformations that emerge in the process. I consider the creation and application of a model for an action research thesis that incorporates a compilation of publications as the fieldwork, combined with an autoethnographic narrative, to be a significant outcome of this study.

10.2 Addressing the research question
The central research question for this study was:

*What are the conventions of applied drama and digital games that lend themselves to affinity spaces?*
The conventions operating in digital games and applied drama, as well as the nature of the affinity spaces for authentic learning that can be created through a convergence of these forms, have been explored in this study. These hybrid conventions, and some of their key features, can be distilled into this summary:

1. Digital pre-text
   a. Mashup
   b. Fidelity
   c. Expanded universe
2. Situated role
   a. Role-based performance
   b. Performance frame
   c. Digital media mechanics
3. Mediated learning communities
   a. Distributed communities of practice
   b. Dramatic properties
   c. Boundary objects

10.2.1 Digital pre-text

Pre-text is the term O’Neill uses to characterize the nature and launching strategy of non-scripted collaborative dramatic enactment (1995, p. 5). Pre-text helps to frame the participants in a clear relationship with the potential action of the drama, and defines the nature and extent of the dramatic world. In turn, it implicitly defines the range of roles available to the participants in the drama and generates expectations about the first moment of interaction that will start the drama. Cecily O’Neill’s (1995, p. 136) proposed qualities of a good pre-text apply equally to both applied drama and digital games in learning contexts, which should be based upon:

- a responsiveness to imaginative transformation;
- the tensions, changes or contrasts it suggests;
- the questions it raises about identity and society, power and possibility;
- its power to launch the dramatic world with economy and clarity; and
- the action it proposes and the implied transformation.
Interactive digital media can take the form of ergodic or open texts, which display the ‘narrative plasticity’ apparent in improvised drama forms and video games. The story of the drama or game is often told in hindsight, but in both forms the lived moments of drama or game can be forms of experiential learning. The drama facilitator or game designer can provide elements to create the pre-text for the drama or play, but the narrative is then produced through configurative exploration, rather than fully interpretive engagement with a complete text. The use of digital media to generate the pre-text, extend it across affinity spaces, and potentially to engage with real distributed communities of practice, creates a hybrid form known as digital pre-text.

**Mashup**

Web developers use the term mashup to describe new applications that emerge when complementary elements are combined from two or more sources. This study found that many well-known educational drama conventions can readily accommodate contemporary and emerging digital media forms, producing a new mashup that corresponds to those technologies now ‘taken up by diverse populations and non-institutionalised practices, including the peer activities of youth’ (Ito, Davidson, et al., 2008, p. vii). In some cases the digital media forms might be substituted directly into a pre-text, for example making use of an email message rather than a letter or facsimile. In other cases, the media forms can be considered as a means by which the drama activity itself can be conducted. This study identified three categories of digital media with different features, functions and modes of use that could be used to create digital pre-texts:

1. text-based such email, instant messaging and blogs;
2. participatory media, reflecting the content sharing and social network functionality; and
3. mobile media, based on the convergence of computing, multimedia and wireless telephony.

Online and mobile communications have developed into a range of what are increasingly being labelled ‘rich media’ platforms — a term that describes levels of interactivity and engagement beyond traditional forms. As part of a trend towards active participation in the production and sharing of content (Jenkins, et al., 2006), young people are using these platforms to engage with their culture and practice
ways of being within it (Stern, 2008, p. 113). The generalized cooperative social expertise operating in the digital environment has the possibility of being used in hybrid drama forms.

**Fidelity**

This study found that drama teachers and practitioners can capitalize on the pervasiveness of digital media forms, particularly in the world of young people, by utilizing some of the features of this everyday technology as the basic elements for the development of a digital pre-text. One of the aims should be to match the digital pre-text with the communication channels that best fit the media and communication experiences of the participants, so that the role-based performance can occur via an interface so familiar that it seeks to ‘erase itself so that the user is no longer aware of confronting a medium, but instead stands in an immediate relationship to the contents of the medium’ (Bolter & Grusin, 1999, p. 22). When designing a digital pre-text consideration must be given to the meta-information that these digital media forms can contain, and the tendency for participants to look for this information as part of their engagement with the pre-text. This meta-information can give vital clues to the identities and roles to be explored, but there must also be a degree of fidelity to avoid friction with the expectations of the participants that might slow down their immersion in the fictional world. The issue of fidelity becomes an even more significant factor if these digital media forms are used as the medium for the activity itself.

**Expanded universe**

This study found that blending the conventions of digital games and applied drama enables the creation of digital pre-texts to extend the life of the drama beyond the boundaries of the physical space in which it may originally, or ultimately, be enacted. The term ‘expanded universe’ (Kapell & Lawrence, 2006) has been used to describe the process of creating new narratives in a range of media using established characters, such as with creative franchises like *Star Wars or Star Trek*. Paul Sutton (2009, p. 39) uses the term ‘dramatic property’ to describe a similar ‘paradigm of practice’. Drama facilitators, particularly those working in a school system, must somehow find enough time with the participants to produce meaningful outcomes from the drama activities. By using digital pre-text, a facilitator can engage the participants with some elements of a drama before a
class by using activities that can be conducted online. Students can engage with materials, characters and information in various forms, and both real and fictional. Online and digital media forms can be used to extend the life of a drama session beyond the limits of the time allowed in a school timetable. There can be follow-up activities conducted online, perhaps from home or a computer laboratory or library, as an extra-curricular activity. The hybrid conventions of digital games and applied drama can be used to create digital pre-texts, which become part of the mix of strategies and conventions ‘that can be quickly produced without the need for lengthy preparations or rehearsal’ (Neelands, 2004, p. 51) in these time-poor situations. Practitioners also need to exercise caution when investing resources towards possibly transient digital brands (nouns), and concentrate where possible on the activities or functions they enable, enhance or replace (verbs).

10.2.2. Situated role

Situated Role is the performance term used in this thesis to describe how individuals behave when they are engaged in dramatically framed role-based applied theatre or epistemic games when combined with a digital pre-text (Carroll, et al., 2006, p. 8). The dramatic frame when combined with the digital content of online communities of practice, allows the students to develop a form of virtual expertise while engaging in drama or games. This form of dramatic engagement is common in Mantle of the Expert drama and is increasingly being used by the emerging serious games movement. This dramatically framed position of situated role shares all the features of a process drama but is situated in a dramatically mediated ‘online reality’ that augments the more typical imagined context that occurs in usual classroom practice. In this form, situated role draws on students’ real life experiences, while using online networks to enhance their dramatic role identities and knowledge base beyond the classroom environment by providing access into the production and discussions operating within real distributed communities of practice. The students, in role as apprentices or as legitimate peripheral participants (Lave & Wenger, 1991) begin to share the specialist discourse of the communities of practice they access as they build up real content expertise.
Role-based performance

This study observed that the two related conventions of role distance and role protection are a central element of generating an affinity space for learning. Role protection describes a penalty-free zone, in which each participant’s personal role distance from the consequences of actually being in the event have been deliberately elaborated and structured for learning goals. I have observed three examples of these conventions operating in both dramatic and digital performance forms, and described the distancing effects that can be used to protect the participant as:

- **Full role / First-person** which are the least protected and closest role positions described, apart from real life roles. It is equated to full role dramatic 'acting' or a first-person experience in digital games.
- **Signed role / Central character** which uses ‘signs’ such as props or costumes to suggest how a role might be expected to respond, or in video game terms shifting the camera position to an external view of the character.
- **Attitudinal role / Operation of character** which is the most protected and distance position described, aside from exiting the drama or game completely. Attitudinal role suggests participants respond to events how they believe someone in that role might respond. For a video game player, this sometimes equates to mechanical operations with reduced player agency.

These performance conventions are not fixed in applied drama, and many digital games also allow this rapid toggling between role distances through mechanics such as camera position, though this switching in games is certainly much faster than might be the case with most live dramatic role-play. This thesis argues that the level of protection afforded by being in role theoretically increases as the participant’s role becomes less involved in the event. Thus, the drama participant or game player may choose to maintain a full dramatic role, but stand back somewhat from the moment of unstructured participation by becoming a guide for other characters, or adopt even more distant observational roles. Participants can remain fully in role, but choose to protect themselves by moving away from the dramatically intense action towards more artistic or observational pursuits within the same shared game space.
These role conventions are in operation in both the applied drama and digital game forms explored in this study, and are therefore a key element when considering the nature of role-based performance in hybrid forms, or situated role, contexts.

**Performance frame**

This study noted that participation in an applied drama or digital game is a framed activity. Conventions such as pre-text, role distance and role protection, and interaction with other participants, characters, scenarios, settings and props — real, imagined or virtual — combine to form a constructed and often negotiated ‘reality’ in which the participants can act ‘as if’ the situation were real. In applied drama this framing convention is deliberate, having been initiated by the teacher or facilitator, as it allows analysis and exploration of issues through the protected role-shifting and agency through enactment that is seen as a vital transformative element of the form (Carroll, 1996, p. 72). This study found that digital games also use a deliberate framing convention, established through the design of the virtual elements and game functionality, to allow participants to experiment with roles and actions that might otherwise not be possible.

Central to both forms is the ability of participants to hold more than one frame in their head at any given time, including the frame that is real life. Thus the ‘as if’ frame of the drama or game takes place in the ‘as is’ frame of reality, making it possible to hold multiple ‘IS+IF’ frames simultaneously and move between them (Edmiston, 2003, p. 223). Despite the use of terms such as flow, immersion and engagement to describe being in the moment of the drama or game, most participants can switch between the real and imagined worlds as needed or desired. The episodic nature of applied drama and some games, and this ability to move in and out of character is one of the shared conventions operating between the forms. The IS+IF model is a key part of situated role, in that applied drama or digital games that engage with real or fictional commissions seek to frame participants in a community, and re-create the processes of developing skills, knowledge, identities, values and epistemology in that community (Shaffer, 2006, p. 164).
**Digital media mechanics**
This study found that digital technology has a transformative effect on applied drama, and part of that impact stems from what game designers call 'game mechanics' (Crawford, 1982). When a broader range of digital media forms beyond games are considered, these mechanics can be viewed as the conventions and attributes that contribute towards the generation of an experiential system, converting the underlying code and rules into opportunities for interactivity and communication. It is these mechanics that contribute to the creation of affinity spaces that use technology to replace or extend the interactions possible in physical spaces (Gee, 2004, p. 98). Some of the characteristics of digital media considered in this study are that information becomes manipulable, programmable, infinitely variable, automated, replicable, persistent, searchable, networkable, archived, modular, dense, compressible, impartial, transcoded, and viewable by invisible audiences (Boyd, 2008a, p. 126; Manovich, 2001, pp. 3-8). All of these digital media conventions have implications for the creation of hybrid forms of applied drama and digital games, and the mediated situated role conventions that will operate within them, in order to take into account the everyday technologies now embedded in the lives of learners.

**10.2.3 Mediated learning communities**
In this study I have proposed that mediated learning communities are the dramatic structures that are developed when the forms of process drama, performance and games are transformed by technology. These are a mediated form of what Gee calls an affinity space (2004), though his definition includes non-mediated spaces and interactions. I use the term more directly to describe spaces for interaction that might be either fully online, or which blend physical and virtual presence, as opposed to 'traditional' or face-to-face encounters for drama and learning.

**Distributed communities of practice**
This study explored the application of online technology to engage novices (learners, amateurs, students) with real communities of professional practice, but in a way that might break down the power relationships that might exist in more formal learning settings. Computer mediated online communication allows access not only to information, but also to real online communities of practice based on common interest and expertise, rather than spatial locatedness. Students with
access to the Web can use the everyday technology of computer-based communication to engage with real-world digital pre-texts for dramatically situated role-based learning. Within the mediated learning community model, online technology allows the participants to interact with the authentic learning vocabulary and information of distributed communities of practice. In this virtual apprenticeship they can master the required content of the subject material under examination and develop a situated understanding of the context. A benefit of this approach is that learners can master complex concepts inherent in the material while remaining protected by the situated dramatic role they have assumed within the drama. By accessing real communities of practice while dramatically framed through role distance they are able to enter the epistemic frame (Shaffer, 2004) of the community of practice. This enables them to access the ways of thinking and acting that individuals learn when they become part of a specific community of practice.

**Dramatic properties**

One of the mechanics of digital media noted earlier is that content can be transcribed from one form to another. For example, the machine-readable code of a JPEG file can be rendered as a beautiful photograph on the screen. In this study we adopt the term *dramatic property* (Sutton, 2009) to describe a transcodification (Tulloch, 2000) of content from one dramatic form to another. This concept of the dramatic property, meaning the core intellectual property developed from a dramatic performance, is seen as being able to be transferred to all of the forms of representation that currently occur in young peoples’ lives in both live and mediated forms (Sutton, 2009). The model of mediated learning communities presented in this thesis acknowledges this as an outcome of the integration of the dramatic property with digital technologies. This relates to the concept of the expanded universe described as part of the digital pre-text convention, and this ability to move the drama across multiple affinity spaces is one outcome of this hybrid approach.

**Boundary objects**

This study used the term boundary object (Star & Griesemer, 1989) to describe objects that serve to co-ordinate different perspectives towards a particular purpose. They are related to the operation of distributed communities of practice.
within the mediated learning community. A boundary object is a common artefact that serves different purposes or provides different meanings to individuals within a community, or between communities (Wenger, 1998b). In the mediated learning communities model presented here, boundary objects are a possible product of the transcodification of games or drama through technology into a mediated form. Thus, an object provided as a digital pre-text may have different meanings in different communities, or be taken by a community and adapted or modified and re-shared, as is the nature of practice in the participatory cultures of mediated learning communities.

10.3 Further research
One immediate challenge to researchers, teachers and practitioners highlighted by this study is the relentless nature of exponential change once digital technology is absorbed into a field. Young people’s concepts of performance, role and individual identity are in a state of flux in this increasingly mediated world. The ability to manipulate or edit identity is a concept already assimilated into their digital worldview. Developing better understanding of the conventions that operate in this space, such as role distance and role protection, will become a vital part of the strategies employed by educators and practitioners seeking to engage these young people. Further research needs to be undertaken within the drama and education fields as part of the exploration of the transformative role of digital technology (D. Buckingham, 2008) in learning across all curriculum areas.

The gap between the parallel worlds of applied drama and digital games, particularly in learning contexts, remains frustratingly wide. While the projects in this study were often conducted and reported with a foot in each camp, there are still many more bridges to be built. There is a need for greater dialogue and collaboration between specialists in both fields on how the affordances and possibilities of common and hybrid conventions might best be applied.

At a practical level, this study has highlighted that further work is required to consider how realistic the digital media forms — real or simulated — need to be when working with these dramatic conventions. These digital forms often carry meta-information that participants can analyse for clues to the drama; in fact, many digital games train players to be on the lookout for such clues, cheats or
markers in order to advance more easily through the challenges. This presents a challenge for practitioners, and scope for further research.

Finally, the use of technology such as mobile phones and social media within the drama context also emphasizes issues of privacy, ethics and intellectual property. Teachers and facilitators using these online publishing sites as affinity spaces will need to consider and develop suitable protocols and conventions for maintaining the safety and privacy of participants, while making use of their rich potential for exciting drama sessions. The use of these media forms in drama contexts can in itself provide a way of discussing and negotiating issues like privacy and appropriate behaviour in a meaningful and productive way.

Some educators and practitioners may find it daunting to contemplate keeping abreast of the relentless emergence of new and interesting media forms and digital technologies. Some will naturally find this an unpleasant frustration, while some will find it a seductive distraction. I tend to find it a bit of both, though I’m probably more disposed to being distracted. The challenge for all of us is to avoid embracing the extremes, either avoiding technology at all costs or embracing it in one wild experiment after another. In looking to the future of these blended or hybrid approaches using the methods and conventions of applied drama and digital games, or the broader performance and media landscape of which there are a part, we should value our time-tested and successful educational traditions. At the same time, we can continue scanning the unthinkable present for the forces, policies, tools and trends that will shape the evolution of drama and education in our (inter)connected digital world.
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