

Collaborative Radio Making in a Complex Networked Environment: From Seduction to Hope

An exegesis submitted in partial fulfillment of the
requirements for the degree of Doctor of Philosophy

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Declaration

I certify that except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the durable record is the result of work which has been carried out since the official commencement date of the approved research program; any editorial work, paid or unpaid, carried out by a third party is acknowledged; and, ethics procedures and guidelines have been followed.

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19 April, 2013

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Abstract

The shift from analog to digital modes of production and distribution and the emergence of new and hybrid radio forms have presented challenges that many believed radio would not survive. To do so, it has been forced to integrate a variety of changes from the relationship between audiences and producers, to the way radio practitioners collaborate to co-create content.

This study seeks to bring new knowledge to the currently under documented area of collaborative radio production. It does so using a two-phase process. The first phase employs an Action Research approach to study the production of 3 separate radio projects using a specially developed online content management system (ROAR). The second phase uses a Case Study methodology and Sonnenwald's Four Stages of Collaboration framework to structure data into narrative format, prior to subjecting it to thematic analysis. Subsequently, cross case data comparison is used to develop a theoretically informed and empirically grounded framework, outlining how aspects of work organization can enable (or hinder) the development and successful completion of small-scale, collaborative radio projects. The study also extrapolates on some of the practical applications of this knowledge.

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Chapter 1

Introduction

Printing press, perspective, extended metaphor, circumnavigation of the globe, reinvention of the “individual”, the beginnings of calculus, all find their modern parallels in the internet, holography, hypertext, orbiting the globe, re-invention of the collective, the beginnings of systems theory.... old, repressed ideas, like the value of collaboration and cooperation, are being reborn in the next context of connectivity (Rushkoff, 2007).

1.1 Introduction

Authors from a variety of disciplines have argued that we are currently in the midst of a technological, economic and organizational transformation that allows us to rethink working, learning and collaboration (Benkler, 2006; Bereiter, 2002; Tapscott and Williams, 2007; Rushkoff, 2007).

In his publication, 'Web Radio', Chris Priestman explored some of the implications of digitalization for the radio industry, including opportunities that digital technology has offered in areas such as the formation of listening publics and audience participation (Priestman, 2001). In this study I seek to contribute knowledge to an associated area of and currently under-researched area of radio studies – collaborative or co-creative radio production. I do so by addressing the research question:

How can we optimize collaborative radio making in a complex networked environment?

To effectively respond to this question, the following sub-questions are also addressed:

- What are the specific challenges created by virtual collaboration?
- What opportunities are offered by new collaborative production technology?
- How can we best equip future practitioners to successfully negotiate this environment?

The focus of the project is limited to the activities of self-identifying radio producer/practitioners. As such it does not address issues related to the formation of listening publics and audiences.

1.2 Background

This study is in many ways a natural evolution of my practice as a radio producer in community radio, and as a radio teacher in the community radio and tertiary education sectors. It embraces the collaborative/participative nature of radio production that first attracted me to the medium over 25 years ago, as well as the challenges and opportunities of the networked environment which is an important topic for both new practitioners and those who teach them.

I began working in radio in the early 1980's, attracted by the immediacy and relative simplicity of a medium which enabled the marginalized and those without a voice in mainstream media to articulate their ideas, dreams and responses to the world around them. At that time, community radio was growing rapidly and 3RRR, the station where I worked, was culturally central in Melbourne's media landscape. Analog radio production was confined to relatively simple but expensive equipment, with the editing process of chalk, razor blade and splicing block in many ways akin to a craft skill, and developed and honed over years of experience. This skill was also the focus of new practitioner training. While many of the programs I produced at 3RRR at that time were participatory, my knowledge of collaborative radio making was largely tacit and the meaning within associated processes rarely surfaced.

The advent of digital technologies changed many of the givens for the oldest of the electronic media, with the very technologies that eased methods of production – editing software, on air assist programs and automated panels – also putting colleagues out of work. The ways people used radio changed too, as did the relationship between audiences and producers, and accordingly the very role of the producer. The new networked environment also impacted the skills required by graduates and developing practitioners.¹

When I began this research project in 2007, television and radio were at a crossroads, with many people believing that the rapid emergence of hybrid and alternative media forms delivered on-line marked the death knell for heritage or more traditional media. Others, including myself, saw the new, digital networked environment as presenting opportunities for people to pioneer new forms of storytelling and to collaborate in the production of these stories in ways that had not yet been imagined.

While predictions of radio's impending death have proved incorrect, or at the very least premature, the medium has been forced to adapt, at times dramatically to become part of a networked media environment. The migration of radio and radio-like services to multiple delivery platforms has created a tension in sections of the radio community. For some, radio as a broadcast technology transmitted over the airwaves is essentially different to audio distributed through online technologies and should not be considered

¹ This subject was addressed in my Master's thesis "Radio Production in the Digital Era" (2002) and the associated project Fest On The Net. <http://www.abc.net.au/arts/netfest/>

radio. It is for this reason that both radio and audio are used in the name of the content management system developed in the project: RMIT Online Audio and Radio (ROAR).

This study relates my journey into collaborative radio production during this period of transformation; the questions explored, the challenges confronted and the conclusions drawn. It falls into the general category of project based research as described in RMIT's project based research guidelines.

1.3 Collaboration

Although research findings indicate the ability of collaboration to develop everything from creativity (Uzzi and Spiro, 2005) to innovation (Sonnenwald, 2007), there is no accepted definition of collaboration, and terms such as collaboration, cooperation and even coordination are often used interchangeably. There are however a number of different typologies available, including those of Mattessich and Monsey (1992) and Himmelman (2002) which can assist us in distinguishing collaboration from other activities such as co-operation and coordination. Himmelman (2002, 2 - 5) describes key differences as revolving around the areas of time, trust and turf. These can be summarized as follows:

NETWORKING

- Involves an informal relationship in which participants exchange information for mutual benefit.
- Makes relatively low demands on time, trust and the necessity to share or concede turf.

COORDINATION

- Concerns a more formal relationship, in which information is exchanged and activities are altered in pursuit of mutual benefit and achievement of common purpose.
- Involves more time and higher trust but little or no access to one another's turf.

COOPERATION

- Requires higher levels of time and trust vis-à-vis networking and coordination.
- Each party provides access to its turf

- Participants play together in the same game with agreed rules of interaction; work is divided so that each party solves a portion of the problem
- Protocol allows participants not to "get in each other's way" as they work

COLLABORATION

- Is a process of shared creation, resulting in the production of a new solution, strategy or product through the combination of different perspectives, talents, and ideas
- Involves a willingness of the parties to enhance one another's capacity—helping the other to 'be the best they can be'
- Is characterized by interdependence: parties share risks, responsibilities and rewards, and invest substantial time; have high levels of trust and share common turf.

Continuing interest in collaboration appears to be linked to several parallel phenomena. The first of these is the increasingly globalised economic model of the 21st century which demands increased agility in the way people do business across international boundaries and time zones. Recent years have also seen the development of new ways of working in a local context, with more flexible approaches to where, how and when people work, the growth of mobile working and the development of associated technology. And finally, we have seen the emergence of the 'net gen'; a generation of young people that is totally au fait with interactive, touch-screen technology and comfortable using collaboration tools for education or work.

1.4 Collaborative Radio Making

Collaborative radio production or co-creation is not in itself a new concept. In an on-line discussion in 2012, ABC radio producer and community pool manager, John Jacobs commented that 'the creation of media that involves a group has always had the potential to be a co-creative process'.² Jacobs went on to compare film and TV productions with their 'higher budgets, larger editorial quality expectations and associated constraints and hierarchies of creative control' with the 'small teams, low budgets and fast turnaround' of radio, which he maintained has always left 'more room

²Jacob's comments on co-creative radio making may be found on Jonathan Hutchinson's blog <http://jonathonhutchinson.com/2012/01/20/behind-the-scenes-at-abc-radio-national-cocreativefeaturemaking/#comment-248>

for flat structures and co-creative ways of working'. For Jacobs, collaborative or co-creative radio production is simply 'good practice'.

While collaborative radio production can be seen in all sectors of the industry, it has a particularly strong tradition in community radio, with its focus on the participation of non-professionals in program making and a preference for real people telling their stories rather than the producer as author. As Spurgeon, Rennie and Ming Fung comment in their 2011 paper *Community Participation in the Development of Digital Radio – The Australian Experience*, "community broadcasting is one of a number of important social movements with its origins in the 1960s that anticipated and informed the development of the participatory and co-creative affordances of digital networked media" through the development of "important new platforms, practices and spaces." (Spurgeon, Rennie and Ming Fung, 2011). However, it is also true to say that whilst the "small teams, low budgets and fast turnaround of radio" may have always left more room for "flat structures and co-creative ways of working" (Jacobs 2012), this potential has at times remained unrealised. Spurgeon, Rennie and Ming Fung (2011) identify a number of potential reasons for this including the idea that co-creative media requires professional facilitators to lead collaborative projects with explicit purposes and that although community radio stations do have a paid workforce that works alongside a voluntary workforce, the professionals are more likely to be station managers than content makers (Ibid 2011).

What has changed for community radio stations with the advent of digital network technologies (or ICTs), is the potential for producers and their communities identified by geography or interest to collaborate in new ways.

Similar opportunities exist for independent media producers working within communities of interest globally and locally. Open source platforms and social media that span geographic boundaries are now providing opportunities for communities of interest separated by distance to participate in the processes of production. With audiences having a growing capacity and motivation to interact with distributed media, new relationships between producers and audiences are also being developed, with User Generated Content becoming a part of this collaborative network. This shift in relationships between producers and audiences is also being witnessed in mainstream media organizations through the introduction of community producers to facilitate collaboration with the public.

1.5 The Networked Environment

‘Different technologies make different kinds of human action and interaction easier or harder to perform. All other things being equal, things that are easier to do are more likely to be done and things that are harder to do are less likely to be done. All other things are never equal. That is why technological determinism in the strict sense—if you have technology “t” you should expect social structure or relation “s” to emerge—is false (Benkler, 2006, 17).

The advent of digital network technologies has had a significant impact on both the production and distribution of radio and on opportunities for participative radio production. Where radio production and distribution were previously characterized by studio and transmission facilities requiring large capital investment, today an almost immeasurable number of individuals equipped with a domestic computer and the requisite hardware and software have the means to manage content production. However, an early insight from this study was that having the required technology is insufficient, and that effective collaboration is the result of a dynamic interplay between both technological and social factors. Henry Jenkins argues that media convergence needs to be understood as a cultural process rather than a technological endpoint and while participatory media might be a cornerstone of a participatory culture, technology cannot in itself ensure participation (Jenkins H. 2006).

Actor Network Theory (ANT) calls this web or network of associations an ‘actor network’ (Callon and Latour, 1981), with Latour arguing that we are never faced with objects or social relations, but rather an interconnected network of human and non-human associations (Latour, 1991). Whilst ANT has not been used as an analytical tool in this study, core concepts such as actor-network and translation have provided important insights into how the interests of all relevant actors in a network can converge, and order can be achieved and sustained in a changing environment.

Perhaps the most extensive research into technology mediated collaboration has emerged from the natural sciences, which as Dormans (2009) notes is unsurprising given the long standing tradition of scientific laboratories. The general consensus is that the challenges of collaboration in both distributed and co-located contexts should not be underestimated (Dormans, 2009). Many of the literature’s more important

insights into the social and technical variables of successful collaboration are explored by Olson et al in their Theory Of Remote Scientific Collaboration (2008). Based on an examination of over 200 online laboratories and drawing from literature on computer-mediated communication, management information systems, organizational behavior and science and technology studies, TORSC identifies a number of key variables for collaboration in both distributed and co-located contexts. This has been an important resource throughout this study.

1.6 Significance of This Research

Since I began this research, an increasing number of studies on computer mediated collaboration have emerged from fields outside the natural sciences, including business, health, I.T. and education. Unfortunately, similar studies in media and more specifically radio remain rare.³ This may relate to what Peter Lewis refers to as the 'invisibility' of radio, the marginal attention given to the medium within media and cultural studies, which the author attributes to radio no longer holding the same culturally central position as it did in the 'Golden Age' (Lewis, 2000, 160-167).

Another possible contributing factor to the limited research into computer mediated collaboration in radio production may be the tension between academic and practitioner perspectives cited by Niblock. In her 2007 paper, 'From "Knowing How" to "Being Able"', Niblock evokes on the one hand, the academic view that a body of knowledge is inherent in everyday practice and that this corpus can be 'abstracted and unpacked', and on the other hand, the more action oriented 'judgment by doing' approach of the practitioner (Niblock, 2007, 20-32). Although the context of Niblock's paper is journalism, many of her comments resonate strongly in a radio production context, where deadlines, production cycles and workplace pressures tend to take precedence over any kind of analysis or conscious reflection on the work done and the processes employed, thereby creating an important gap between theory and practice. At any time this would be regrettable, but at a time of rapid shifts in the roles, processes and the forms the medium takes, this kind of exploration cannot be deferred. This project aims at helping bridge this gap.

³. In the area of media studies research has been conducted into the use ICT and radio for development purposes (Tacchi and Kirin 2008) while other studies have investigated how actor-network and communities of practice theory can help understanding of innovation in online newsrooms(Weiss & Domingo, 2010, Plesner 2009). No similar studies have yet emerged in the area of collaborative radio production in a networked environment.

1.7 Research Structure

THREE PRODUCTION PROJECTS

This study is structured around 3 different radio projects conducted over a 5 year period, using a specially developed online content management system (ROAR), which housed the projects and acted as a laboratory, offering facilities and a site for experimentation and development unavailable in resource-stretched radio stations. All projects were produced in a university setting (RMIT), with each project representing collaboration opportunities and challenges in a different setting:

- Shared Stories (virtual collaboration)
- Documentaries (collaborative production processes)
- Room With A View (multi-platform distribution environment)

ROAR (RMIT Online Audio and Radio)

ROAR was initially envisaged as a content management system to archive and distribute material online for use in the radio production courses at RMIT. The public interface allows friends, potential employers and the community to access work produced over several years in the genres of interview, documentary, feature, audio arts and reviews through a searchable database. Room With A View, the 3RRR weekly radio program produced and presented by Media and Professional Communication students, is also available for streamed listening on the site, together with interview summaries, track listings, images and links.

During the design process, it was decided to build functionality into ROAR to support and further enable processes of distributed and collocated radio production. In these internal project spaces, producers use weblogs to develop story ideas, post research material, discuss production issues and comment on the finished pieces. Associated with ROAR is a media annotation tool (MAT), which is employed to reflect in and on practice throughout the production process.

A THREE PART SUBMISSION

This document constitutes one element of a three-part submission for a Doctor of Philosophy (PhD) degree conducted by project. The second element is an artefact, a DVD guided journey of the ROAR site and the on-line radio projects outlined above,

and the third and final element of this submission is a presentation. This research study is aimed primarily at the community broadcasting sector and at independent media producers working within communities of interest. Practitioners and professionals working to develop the skills of emerging radio practitioners in local and global contexts will also find it useful. I believe this work should also be accessible and prove to be of interest to researchers and practitioners within the radio community generally.

1.8 Exegesis Structure

Having addressed the context and aims of this project and associated research question in **Chapter 1**, the remainder of this document is structured as follows:

- **Chapter 2** presents the theoretical approach adopted and specifies the research methods chosen and the rationale for their choice
- **Chapter 3** provides a first person narrative overview of the research journey from 2007 – 2012 using extracts from the researcher’s journal and blog
- **Chapters 4, 5 and 6** are devoted to 3 in-depth case studies composed of 2 parts:
 1. A case description/narrative using Sonnenwald’s Stages of Collaboration (2007) as a high-level framework
 2. A thematic analysis around 3 key themes previously identified in the literature around successful collaboration
- **Chapter 7** responds to the original research question through a theoretically informed and empirically grounded socio-technical framework showing how certain aspects of work organization enable the development and successful completion of small-scale collaborative radio projects.

Chapter 2

Research Design

Exploratory practice-driven research provides an environment for researchers and practitioners to collaborate, with the objective of solving a specific problem in practice and developing new theory, thus producing research that is both rigorous and relevant (Kilduff, 2006, 252).

2.1 Introduction

Decisions concerning the choice of research methodology traditionally begin with a 'gap in the literature' or a problem to be solved. However, as Schön (1987) notes, the challenge for the practitioner/researcher is that real world problems often don't come out 'well formed', but as 'messy, indeterminate situations' (Schön, 1987, 4). This perspective is shared by Hammersley (2000) who contends that research can have an open-ended, exploratory character which reflects the fact that problems sometimes have to be 'discovered' (Hammersley, 2000, 456).

The methodology I chose to accompany me during my exploration of collaborative on-line radio production was Action Research (AR), a practice-driven research approach. Between 2007 and 2012, I conducted and documented five AR cycles, generating a significant volume of research data. During a second study phase in 2012, this research output was distilled into three case studies. Underpinning both project phases was a multi-layered action inquiry approach. In this chapter I outline the rationale for my methodological choices, as well as the principal methods of data collection and analysis employed.

2.2 Action Research

Candy (2006) suggests that research seeking to advance knowledge about practice or within practice, often falls within the general area of action research. Hearn and Foth (2004) indicate that AR may be particularly well suited to new media and communication studies, 'where innovation and change are continual, and where processes and outcomes are usually not predictable and often involve fuzzy and emotional human parameters' (Hearn and Foth, 2005, 80). My choice of AR as a methodology was motivated by two of its key characteristics - its flexible, spiral process and its collaborative, participatory approach.

FLEXIBILITY

Implicit within AR's spiral model of planning, acting, observing and reflecting is the notion that with each action cycle there is an opportunity to integrate new learning. An AR approach therefore enables action (change and improvement) and research (understanding and knowledge) to be achieved at the same time (Dick, 2002). Dick describes this process of action alternating with critical reflection as a 'double helix', with two intertwined spirals developing as the research proceeds and ultimately

resulting in better understanding of the situation being researched (and as a consequence better plans for action and change) and better processes for researching the particular situation (ibid). AR enabled me to begin my research in discovery mode without any precise idea of what would emerge, and to gradually refine my research question and research design as I learned more about the situation I was investigating.

PARTICIPATIVE/COLLABORATIVE APPROACH

The collaborative nature of AR is grounded in the belief that the views, knowledge, and skills of those being researched are valid. As such, it belongs to the tradition of interpretive research that accepts and values the existence of multiple and even contrasting definitions of situations. AR also provides an environment for researchers and project participants to collaborate. Whereas in the positivist research tradition the researcher attempts to remain objectively remote from the system being studied, AR involves the researcher in taking action in social systems of which s/he is a part (Bawden, 1991). According to Bawden, 'it is the activity of the (researcher)-observer joining with other participant-observers, that enables the system to become a researching system in the first place!' (Bawden, 1991, 37).

At the core of this collaborative approach lies a process of critical reflection/inquiry which participants undertake in order to better understand their practices, as well as to improve the rationality and coherence of these practices (Kemmis and McTaggart 1988, 2000). Critical reflection involves two stages: a review of what happened in the previous cycle to draw insight from it, and planning what to do in the next cycle (Dick, 1996). The role of critical inquiry in this project is explored in further detail in section 2.4 of this chapter.

A participative /collaborative research approach appeared appropriate for this project for three main reasons:

- Firstly, the coherence between the methodological approach and the topic of the study – collaborative radio making
- Secondly, consistency between AR's focus on critical inquiry and the learning culture in which the study took place, where reflective practice had already been introduced.
- Finally, the technology design aspect of the project, which the literature suggested would benefit from a participative approach involving a diverse set of stakeholder inputs and in particular those of users (Hearn and Foth, 2005).

CONSTRAINTS AND OPPORTUNITIES

AR is about action for change and improvement by a group. But it is also about research. This includes collecting data to inform the group about the context for present practice; generating theory about, in, and from the area of practice; connecting that emergent theory to previous theories in that field; and disseminating that theory so that others may benefit from it. Without research, AR becomes merely action to solve problems perceived by the group (Melrose, 2001).

In spite of AR's growing popularity as a research methodology (Melrose, 2001), a number of criticisms have emerged concerning its use, particularly in relation to one-off projects. For the main part, these relate to a lack of generalizable outcomes (Checkland and Holwell, 1998; Coghlan, (2002a); Blichfeldt and Andersen, 2006; Holwell, 2004).

Both AR and Case Study Research can be categorized as practice driven approaches (Kilduff 2006). However, comparing the two, Coghlan (2002) makes the point that whilst neither AR nor case research attempts to create universal knowledge but rather focuses on local realities, where case researchers seek to arrive at analytical generalizations, action researchers tend to leave it to the reader to decide 'what can be taken from the story' (Coghlan, 2002a,64). Coghlan goes on to suggest that 'It would be so much richer if the writer/presenter articulated why he/she thought this story should interest others and inform their understanding of organizations' (ibid). In a similar vein, Checkland and Holwell (1998) argue that action researchers' tendency to not declare and discuss the intellectual framework of ideas they bring to bear on their projects actively discriminates against their work (Checkland & Holwell, 1998).

For Hearn and Foth, one of the main challenges relates to the sheer volume and diversity of data generated in an AR project and the associated time required to digest the varying perspectives. The authors argue that for secondary consumers of the research to make sense of the results, some process for distilling outputs is necessary. They also suggest that the production of narratives and the use of analysis and reflection on verbatim transcripts of action research sessions may be options for action researchers seeking to enhance the transferability of their findings (Hearn and Foth, 2005).

Holwell (2004) proposes three criteria for addressing the criticisms of lack of generalizability and external validity often associated with one-off AR projects. The first of these is 'recoverability' which implies action researchers clearly declaring the intellectual frameworks and processes used to conduct their research. The second criterion is 'iteration' and the final criterion which Holwell (2004) describes as the 'glue' in AR, giving coherence and helping make sense of a program of research by linking separate projects and allowing for cross-fertilization between them, is 'a set of themes' (Holwell, 2004).

2.3 Case Study Approach

A case study is an empirical inquiry that investigates a contemporary phenomenon within its real life context, especially when the boundaries between phenomenon and context are not clearly evident (Yin, 1994, 13).

Case studies can be single or multiple, with Yin (ibid) describing multiple (comparative) case studies as analogous to multiple experiments in that they follow 'replication logic'. I chose to complement the overarching Action Research methodology of this project by revisiting the multiple data generated during earlier action cycles and developing three case studies. Each case addressed a different aspect of collaborative radio making, involved a different group of participants and took place at a different point in time (2008, 2011 and 2012). Each individual case study consisted of a whole study, in which facts were gathered from various sources and conclusions drawn on those facts. During the final project phase, the focus moved from individual cases to a comparative cross case study approach, once again looking for patterns in order to build a framework for collaborative radio making. The analysis and reporting of case studies is explored in further detail in 2.6.

2.4 Action Inquiry

Underpinning both the AR and case study project phases was a multi-layered action inquiry approach integrating first, second and third person inquiry. For Reason and Bradbury, the fullest kind of action research will engage all three strategies (Reason and Bradbury, 2001).

FIRST PERSON INQUIRY

First person inquiry, or as it is sometimes referred to, subjective inquiry, is concerned with individual experience and agency (Chandler and Torbert, 2003). According to Torbert, this is where all action inquiry must begin (Torbert, 2001). In the context of

this project, I kept an on-line journal to record my reflections before and after each of the project cycles, as well at critical moments during the cycles themselves. Chapter 3 of this study is the narrative of my personal journey into the new, networked environment and my new role as action researcher as captured in this journal. These first person reflections are recorded in the first person 'I' form.

SECOND PERSON INQUIRY

Second-person or collaborative inquiry is the mode of inquiry that usually underpins the participative approach in AR projects. Second person inquiry occurs through interpersonal dialogue and opens up the domain of multiple perspectives (Chandler and Torbert, 2003). In this project, second person inquiry was conducted through ongoing informal dialogue with participants and peers throughout the different AR cycles, as well as through more formal post action feedback sessions prior to the planning and implementation of change. These formal interviews which ranged in duration from 30 to 80 minutes followed a semi-structured format and were recorded in MP3 format using a digital audio recorder. Collaborative inquiry was also conducted at individual production team level and captured in writing.

During the initial AR phase of the research process, this dialogue was critical in enabling me to better understand my blind spots as well as to move my thinking about production methods, the use of different systems and how the project could and should move forward. During the second phase of this study, recordings and written documents constituted a critical source of primary data for the development of case-study narratives, as well as for the qualitative analysis by theme, where they are presented in the form of direct participant quotes.

THIRD PERSON INQUIRY

This final mode of inquiry and its associated third person 'objectivity seeking' voice aims at creating a wider community of inquiry or shared information with those not originally involved in the work. This is the voice of most academic research (Torbert, 2001; Chandler and Torbert, 2003). It is also the voice used for the narration of this research project's 3 case studies (Chapters 4 – 6).

Whilst the pre-dominant voice of the case studies is third person, the first and second voices of project participants are also interwoven via direct quotes in order to confront each other and the literature in a search for patterns that may contribute to building new knowledge. For Torbert and Chandler (2004) this confrontation of different voices

is a critical enabler of double loop thinking. They also argue that it provides researchers with the opportunity to generate new and wider forms of validity testing triangulation.

2.5 Data Collection

TRIANGULATION OF DATA

The idea of multiple methods or triangulation is that information collected will be more solid if it is collected from more than one source, at more than one point in time and in a number of different ways. Over the 6 year period of this research, a wide range of information gathering strategies was used including interviews, student assignments, Facebook postings, data annotation entries, blogs and journal entries. Project artefacts such as production plans and running sheets were also collected. Certain data (e.g. interviews for first 2 case studies) was collected during the AR projects themselves and then revisited for detailed textual analysis during phase 2 of the project.

SEMI-STRUCTURED INTERVIEWS

A semi-structured interview format was developed, with some questions focusing on specific factors that had been shown to impact collaboration and other questions of a more general nature to allow the participants to suggest factors that might not have been identified in other studies. Interviews were audiotaped and later transcribed. As interview transcripts were made, I identified what seemed to be important points in the text, noted contradictions and inconsistencies as well as any common themes that seem to be emerging, references to related literature, comparisons and contrasts with other data and so on.

2.6 Data Analysis and Reporting

The analysis and reporting of individual case study data involved a 2 step approach. The first step consisted of a detailed case description/narrative that integrated and summarized key information around the focus of the case study thereby enabling third parties who were not part of the AR project to understand what happened during the case. The second part of the case study consisted of an analysis by theme. During the final project phase, the focus moved from individual cases to a comparative cross case study approach.

2.6.1 Creation of Case Study Narratives

USE OF SONNENWALD'S COLLABORATION MODEL

Data was organized in chronological order to reflect the different phases of the project using Sonnenwald's Collaboration Framework (2007), which suggests that collaboration is a dynamic process evolving through 4 main stages over time.

FOUNDATION	FORMULATION	SUSTAINMENT	CONCLUSION
Pre-history stage Pre-existing factors that may enable or constrain the collaboration from happening. These include knowledge, norms, policies and pre-existing relationships	Project set up Key issues for consideration at this stage include project vision, goals and tasks, organizational structure and the use of information and communications technology (ICT).	Main project phase Any major issues including technology related challenges are likely to emerge at this time. Sustaining learning, trust and communication is fundamental.	Evaluation Evaluation of success and dissemination of results

Although this framework was developed in the context of scientific research, the dynamics the model outlines are also relevant in a radio production context as outlined below:

FOUR STAGES OF COLLABORATIVE RADIO MAKING

FOUNDATION	FORMULATION	SUSTAINMENT	CONCLUSION
Project conception Stakeholder /partner enrolment High level project scoping including technological and budgetary requirements	Pre-Production Production team creation Research phase Development and validation of production plan	Production and Post-Production Recording Interviews Editing Interviews Sharing and review of interview material Reflection and adaptation of production plans Scripts – links and narration Post production effects and Mixdown Generation of ancillary online resources	Project Evaluation Distribution of material – broadcast and online Reflection to evaluate project and planning of future projects Feedback from audience/ stakeholders

Adapted from Sonnenwald 2007.

ANALYSIS PROCESS

To construct the narratives, I firstly read through all interview transcripts and other data to get an overall sense of the shape of the narrative. During a second reading, I identified key phrases/ sections of the text relating to each of the 4 stages. The aim at this stage was not to code all data by collaboration stage but rather those pieces of data that related to a key event/turning point in one of the 4 stages. Once I had sorted data by phase, where relevant I grouped it by theme. These clusters of data became the core content for the case study narrative.

2.6.2 Analysis by Theme

Themes can be thought of as a hierarchy. At the top are the themes that motivate researchers to become involved. Then there are themes more relevant to a particular research program. At the third level, there are themes relevant to particular projects, and finally there are some relevant themes within a particular organizational setting. New themes may be recognized at any time (Checkland and Holwell, 1998).

Reflecting on the requirements of a research process, Checkland and Holwell (1998) propose the use of research themes to drive more generalizable outcomes. Analysis by theme constituted the second level of data analysis in this study.

ANALYSIS PROCESS

The first step in this process was the identification in the literature of three main variables to collaboration success. These 3 themes were Trust, Shared Vision and ICT. The process of building the high level case narrative had already enabled me to consider the consistency of these categories with the reality of the data.

During this phase of data analysis, I read through the data, highlighting quotes in a different colour depending on the associated theme. Once I had sorted interview transcript data by theme, where applicable I sorted it into sub-themes. This cutting and sorting process was iterative as often quotes originally associated with a particular theme no longer fitted on re-reading and either had to be reallocated to another theme or excluded from the 3 themes and set aside for consideration at a later point. This phase of analysis also consisted of confronting individual case study findings with

similar findings in previous research, thereby attempting to generalize both to other settings and to theory.

2.6.3 Cross Case Analysis

During the final project phase, the focus moved from individual cases to a comparative cross case study approach, once again looking for connections and patterns in order to build a framework for collaborative radio making. When evidence from one case to another conflicted, deeper probing was conducted to identify the cause or source of conflict. Consulting the literature was also an integral part of this phase allowing another level of comparison to be made.

2.7 Ethics Statement

This research was undertaken within a university setting using established participatory action research processes of investigation. The involvement of volunteer student participants was central to the data collection and part of an iterative process of project development. Fieldwork interviews were covered by the rules of the Australian National Statement on Ethical Conduct in Human Research (NH&MRC, 1999), which is the official policy of RMIT's University's Human Research Ethics Committee.

In the approved research ethics application (attachment 1) the type, age and range of the participants was detailed. This document indicated that participants would include students from RMIT and other universities. Participation in interviews was voluntary, contributions made anonymous and consent obtained before publication. Participation in or withdrawal from the project did not compromise participants, as interviews were conducted following the completion of the course and the assessment period.

Chapter 3

A Personal Journey

What do we take with us of our old culture when we have to go to a new country? What becomes more important, what is forgotten, what is diluted or strengthened, what is new in the old or old in the new? (Ulrike Ottinger, 2008)

3.1 Introduction

The practitioner allows himself to experience surprise, puzzlement, or confusion in a situation which he finds uncertain or unique. He reflects on the phenomenon before him, and on the prior understandings which have been implicit in his behaviour. He carries out an experiment which serves to generate both a new understanding of the phenomenon and a change in the situation (Schön, 1983, 68).

As outlined in Chapter 2, reflective inquiry lies at the heart of AR, with three broad pathways of inquiry open to the researcher – first, second and third person inquiry. The focus of this chapter is on first person or subjective inquiry. This form of inquiry is very close to Donald Schön's (1983) notion of reflective practice - a way in which practitioners can bridge the theory-practice gap to uncover knowledge embedded in practice (ibid). The voice adopted in this chapter is the first person 'I'.

Using extracts from my blog and journal, this chapter aims at providing the reader with insight into my personal journey into the 'new' networked environment and more specifically the development of ROAR, during the period June 2007 until October 2012. It does so by setting the context for the study and then tracing my journey across the 5 AR cycles which constitute this project.

- Cycle 1 reflections relate to Shared Stories, the first collaborative online project conducted in 2007/2008
- Cycle 2 reflections explore the development of the first version of ROAR in the period 2008/2009 and its first use in the production of student documentaries
- Cycle 3 reflections chart the introduction of MAT (Media Annotation Tool) to ROAR in 2010 and its use in student documentary making
- Cycles 4 and 5 explore further evolution of online production and distribution through the use of Facebook and other social networking tools during the period 2011 – 2012.

For each cycle two key project phases: pre-project planning and after action review reflection are addressed.

The process of capturing my reflections in writing was not always easy but proved extremely useful both at the time of writing and when I needed to revisit moments from the past in the context of writing this exegesis. My hope is that my story will also provide a useful resource for other practitioners, a relatively rare opportunity as Lindgren (2011) describes it, for 'the reader/learner to learn by looking over the shoulder of a practitioner' (Lindgren, 2011, 98-100).

3.2 Cycle 1

3.2.1 Context

My experience in the development of online environments dated back to my radio classes in the late 1990s, where we used the online environment as a testing ground for DAB (Digital Audio Broadcasting) services. In 2000 my students and I collaborated with ABC New Media on a very early online radio project which documented the 2000 Next Wave Festival through archived radio reviews and interviews, together with associated text and images. This project, Fest on the Net, involved two teams of radio students in the production process. One group was based in the studios at RMIT where recorded interviews, performances and reviews were produced and saved onto floppy disk and digital audio tape, and the other team was based in the ABC studios in Southbank where the data was physically transported, so that the team could then upload it together with photos and associated text through Wallace, a system to manage online content for distribution.

In parallel to this, my own listening habits were changing and I started accessing stations and independent productions from around the world. While I still listened to am/fm radio for the immediacy and localism it provided, I began to find I was increasingly drawn to the emerging communities of interest that were sharing concerns across international borders. An opportunity to become involved in an online cross-border project emerged with the Bouncing Story, a project developed by Ryerson University in Toronto. The project involved students from different parts of the world working together to produce a serialized radio drama, with one group posting an episode online and the other group having a week to respond with the next episode. My students at RMIT participated in two series of the Bouncing Story in the period 2005 – 2007.

While the radio play format of the Bouncing Story was fun and educationally beneficial, I was curious to know how the Bouncing Stories transnational production model might be extended to documentary program making. I was also convinced that the technological environment was sufficiently stable to further develop the online aspect of the project. With the Bouncing Story this had been largely limited to participants using blogs to reflect on their own and other groups work and the uploading of the finished episode to a shared blog. The time seemed ripe to move towards full on-line production.

Project planning for Shared Stories began in mid-2007 with the operational (action) phase of the project taking place during first semester 2008. The project ran for 1 cycle.

3.2.2 Key Project Phases

PHASE	PERIOD
Pre-action planning	June 2007 – February 2008
Action (Production)	March 2008 – May 2008
Post-action Evaluation	June 2008 – October 2008

Project Participants

UK	2 final year media students; 1 University lecturer/coordinator
AUSTRALIA	3 final year media students; 1 university lecturer/coordinator

3.2.3 Pre-action Planning

During the June 2007 Radio Conference in Lincoln, I presented a paper on the response of Australia's community broadcasters to new digital technologies. For a combination of historical, technical, political and economic reasons Australia was at that time wedded to the introduction of DAB (Digital Audio Broadcasting) using the Eureka platform. My paper questioned whether DAB was the most appropriate distribution form for independent production and explored other digital distribution forms being developed to connect with local and global audiences and in particular online formats.

One of my goals in attending the 2007 conference was to find a partner who would be interested in collaborating on the cross border documentary project I envisaged. I found that partner in Bryan Rudd, a radio lecturer at Lincoln University and the organizer of the conference. We agreed to look for potential participants and to follow up by email

over the next couple of months, with a projected project launch envisaged for March 2008 when RMIT students returned to university.

Following my return to Australia, Bryan and I exchanged by email to discuss the way the Bouncing Story had operated and how employing a shared server and weblog would enable communication between the participants and access to shared content throughout the production. We were both extremely optimistic about the viability of the technical processes we envisaged. I also detailed the idea with my current students, who asked a lot of questions and expanded on some of the ideas I had as to how this type of project could benefit them in the contemporary industrial context. The project was a recurring theme of conversation after class and many of my students wanted to sign on to the endeavor as volunteers.

At around the same time, I heard about the learning and teaching investment fund of the university (LITF) and decided to put in an application to develop a content management system. I knew that even if my application was successful, the system wouldn't be operational in the life of the Shared Stories project. However, I considered it would be a useful place to house the finished documentary and other work produced by the students.

By January 2008, email exchange with the UK had become sporadic, with the necessity to follow-up on the same logistical issues several times before getting a brief response. I was starting to feel frustrated and slightly anxious about the lack of communication as although it was the summer break for Australian universities, the semester's teaching had begun in the UK. However in early February, I was relieved to receive an email from Bryan telling me that he had managed to recruit two really strong students who complimented each other's abilities and were enthusiastic. Like the RMIT students they were final year students. Brian mentioned that they would be doing the production as their final coursework assignment.

In a subsequent email, the UK students mentioned that it had been suggested they might come to Australia to complete the final mix. They also noted that this possibility had been a key motivation for enlisting in the project. My feeling was that this would take away from the intention of the process and I expressed my concerns about it with Bryan who agreed. I also raised the issue with the Melbourne participants who considered that doing all of the production online but then meeting up in person to edit and mix the material would be a 'cop out' and defeat the purpose of the process. I was

concerned that this needed to be handled sensitively because it had been a motivating influence for the involvement of the UK students, and I decided that this was a topic that participants would need to discuss as soon as they made contact in March.

3.2.4 Post-action Reflection

The project came in on time with a final edit being delivered as planned at the end of May with several possibilities for the program to be aired on community radio in Australia and the UK. Nevertheless, I felt a sense of frustration that we hadn't managed to deliver on the full project potential. In this context I decided to meet with my students and at least one of the Lincoln students to get their feedback.

KEY INSIGHTS/LEARNING

Three key insights emerged from my feedback sessions with participants and subsequent reflection:

1. Collaboration is complex

I embarked on the Shared Stories project with an optimism based on my experience of what I considered to be a similar project, the Bouncing Story. My assumption at that time was that any challenges we might face would be purely technological ones. Post-project it was clear that my initial assumptions had been wrong. What I had failed to take into account was that although the Bouncing Story had elements of collaboration, it was inherently more of a co-operative venture, where teams worked off each other's contributions but produced material separately, creating at times a competitive (albeit friendly) relationship between the production groups in different locations. This was fundamentally different from what we were trying to accomplish with Shared Stories.

Brian and I had both been convinced that the collaborative work that we'd seen our students do in their local environments would naturally translate to a more global project. In our enthusiasm, we'd looked for what was similar between the two cohorts rather than at differences (e.g. in skills sets and motivations to do the project) which could potentially cause problems further down track. After individual feedback interviews with the participants, it was clear that the motivations of the 2 groups to become involved with the project had been distinctly different. Where my students at RMIT had been essentially motivated by the process, the UK team had been focused on outcomes – naturally so, as this was their final assessed work for their degree. While these two very different motivations weren't necessarily incompatible, I

suspected that we had spent insufficient time discussing divergent views and attempting to find a consensus approach which met everyone's needs.

Another issue that I only really became aware of during my individual debrief sessions with students was the importance of trust in the collaborative process. In an attempt to better understand the relationship between trust and effective collaboration as well as other emerging issues, I began to explore some of the literature around collaboration. My reading suggested that the issues we had confronted during Shared Stories were far from rare and that such challenges are instantly magnified in a virtual or remote situation and/or where teams are cross-cultural in nature. Of course, Shared Stories had both these elements.

IMPLICATIONS/OPPORTUNITIES

While there is obviously no magic formula for effective collaboration, the literature suggested a focus on a number of key areas which I aimed at integrating into any similar future projects.

- Establishing shared vision, goals, expectations
- Translating this vision into goals and objectives and create a clear roadmap for achieving them
- Finding ways of building trust
- Communicating effectively using methods of communication that best fit the mutual needs of members and the situation

2. Technology and people are inevitably linked

My second key insight from Shared Stories related to the use of technology. I had come to the project pre-occupied with the affordances enabled by a set of contemporary technologies, but without sufficient acknowledgement of their individual limitations or the context of their use. Post-project and at the suggestion of my supervisor, I began reading Bruno Latour's work on socio-technical networks and came to understand that within a distributed production environment, a given technology is just one part of a complex set of relationships (Latour, 1991).

Shared Stories made me realize that while the potential enabling power of an appropriate technology is heightened within the context of distributed collaboration, the choice of technologies to work with is also complex. Aside from issues like suitability for a task and ease of use, the inclusion or exclusion of a technology and the alignment of participants around those choices will have a significant impact on the direction of a

project. This proved to be the case with Shared Stories where decisions such as not to use Skype, to use a blog rather than email and to introduce a media annotation tool, all fundamentally impacted project outcomes.

I also learned that individual participants may have different understandings of a technology within a production process, but that without shared understanding, technology value is limited. This was the case with the blog in Shared Stories. The Melbourne participants had used weblogs in the research and reflection processes throughout their degree and I had assumed that because the two cohorts worked on similar activities in their courses they also shared similar production methodologies. In large part this was true. I had talked with the staff and students at Lincoln and seen that they produced voxpops, interviews, documentaries and broadcast live to air programs. What I didn't realize was that the UK students had no experience with the use of blogs. While I had been pleased and impressed with the speed with which the UK students acquired the associated technical ability, what I had missed was that they were using the blog in a fundamentally different way from their Australian colleagues.

On reflection, I realized that I should have teased out the issue of blog use in more detail with Bryan in the foundation stage of the process. If we had shared this important difference in skills level with the central tool employed in the process, the UK students could have had some training and experience engaging with this form before the project commenced in the two locations. As it turned out, there were two months when this could have occurred, at a time when instead the UK students were, from their accounts, waiting and becoming increasingly anxious about how the process was going to work.

IMPLICATIONS/OPPORTUNITIES

I identified three technology related opportunities for similar projects moving forward.

- Build alignment around technology choices before the project begins, taking the time to surface concerns.
- Enable team members to apply any key technology with confidence BEFORE the production phase of the collaboration begins
- Continue to work on the development of a media annotation tool. Whilst the tool used in Shared Stories (Protospace) had been in beta form and still had bugs that limited access to some participants, participant feedback indicated that this development was worth pursuing

3. Action researcher – an ambiguous role

The act of embarking upon action research itself propels the researcher into a new role as insider-outsider, which harbours the potential for confusion and contradiction... a research site is likely to shelter several groupings with conflicting identities and interests under its umbrella, and an insider researcher will have particular loyalties and antipathies like all the other players which renders insider-hood problematic for all.” (Humphrey, 2007, 22-23).

Another key insight from Shared Stories related to my new role of action researcher. My vision of the organization/management of Shared Stories had been one of an empowered, participative process where participants took project ownership. From my perspective, this meant giving up the privilege automatically conferred by my role of expert/teacher and creating a democratic space for participation and for mutual inquiry, with Bryan and I simply acting as coordinators to facilitate the information and communication technologies. However, reflecting on the project, it became clear that my decision to assume a role of simple technical coordination had been inappropriate and naïve. I also realized that the role of AR facilitator was not a neutral one, and that I was inevitably going to have some influence on the way the process developed directly or indirectly.

In a supervision meeting it had been suggested that I read Chris Argyris' work on espoused theory and theory in use. When I applied this concept to my Shared Stories experience, I saw that there had often been a clear gap between my 'espoused theory' (what I believed I did) and my 'theory in action' (what I actually did). An example of this occurred in relation to the proposal that the UK students come to Australia to complete the final mix.

When I decided to transfer the issue to the student producers for discussion and a final decision, I believed I was acting in an empowering and non-authoritative way by placing control of the decision making process in the hands of the participants (my espoused theory). When the students came to a decision after a series of blog exchanges that it would be better for the group not to come together physically for the mix, I felt a strong sense of relief, coupled with a nagging feeling that although the issue appeared to have been resolved amicably, I had been selfishly sticking to fixed

view of what the process would be, not thoughtful of the UK student's perspective and the potentially positive consequences of their visit.

On reflection, I wondered whether the results of the exchange would have been the same if it had taken place by Skype and if Brian and I had been there to help tease out the issues. I also questioned to what degree my vision of the project, which I had inevitably communicated to my students when I first discussed the project, had driven the vehemence of their response to the UK students' request (my theory in action).

IMPLICATIONS/OPPORTUNITIES

I identified two key opportunities for the future. The first was to declare my interests as a researcher but also offer support and relevant advice as a participant. The second was to reflect more critically on my beliefs and assumptions and to acknowledge my own biases and blind spots.

3.3. Cycle 2:

3.3.1 Key Project Phases

PHASE	PERIOD
Pre-action planning	May 2008 - February 2009
Action (Production)	March 2009 – October 2009
Post-action Evaluation	November 2009

Project Participants

EduTAG personnel	Darren Smith, Jody Fenn
Radio 1 and Radio 2 student cohort	
Project Co-ordinator	

3.3.2 Pre-action Planning and Development

In April I received notification that my LTIF application to design and build ROAR had been successful and in early May I embarked on system development with the educational media group at RMIT (EMG). Given that the early stages of ROAR development took place in parallel with the final (and most challenging) phase of the

Shared Stories project, my vision of ROAR was in a constant state of evolution as I attempted to integrate learning from SS into the new project.

My Shared Stories experience shaped the development of ROAR in two important ways: design content (what we were trying to build) and design process (how we were doing it).

ROAR DESIGN CONTENT

Shared Stories had convinced me that there was real value in distinguishing clearly between the publicly accessible areas of the site (the front end distribution of material), and the private production spaces where project ideas could be generated, discussed and developed (the back end production of material). I decided that I would like the public interface to include audio, images and text, but also to have a comments section to allow interaction with peers and the general community. In the individual private project spaces, I wanted to see an associated blog for participants to engage in the type of documentary production development the Australians used in Shared Stories. Given Shared Stories participant feedback that media annotation was an idea worth pursuing, I also decided to explore what might be possible on that front. As we moved forward on design, I realized that my initial ROAR vision of a content management system was slowly but surely being transformed into something akin to a virtual production studio!

ROAR DESIGN PROCESS

The ROAR project was an ambitious and risky one and Shared Stories had convinced me of the importance of taking time to tease out relevant issues and build alignment before making decisions. Whilst I had a vision of what I wanted the system to look like, I also knew that I was not a technician and that the only way of pulling off a project like this would be in close collaboration with the Educational Media Group (EMG) team. I was also aware that I belonged to a different generation to the people who would be using ROAR and that some of the conceptual and technical challenges we would inevitably face would be likely to be understood and resolved more easily by young people than me. While the Shared Stories participant feedback sessions had been critical in shaping the ROAR project, I wondered if I might not be able to involve one or more of the Shared Stories team in a more hands-on way in the development process.

The early stages of ROAR development were characterized by a number of vigorous and positive discussions with EMG about what could be reasonably expected from the system, both in terms of interface design and functionality. Based on these discussions, Darren, the developer worked on a wireframe for the project (appendix two). I was really impressed with the way EMG worked collaboratively as a group of designers and developers as well with their openness to my ideas and their willingness to shift in their thinking about what the system could do. Although I was referred to as the client, they said that we were taking a far more collaborative approach to the process than their other jobs. Jody suggested that this was probably because I come from a media production background. In spite of its challenges, this project was proving to be the one of the most interesting I'd been involved in since coming to RMIT.

PRODUCTION DELAYS AND BETA TESTING

I had been expecting to introduce ROAR to the students during the second semester of 2008 and have them upload their documentaries and associating additional text and images with their audio. However EMG was involved in an important, organization wide project in 2008, with the result that ROAR slipped behind schedule. While I was initially disappointed that the launch would be delayed until 2009, Shared Stories had taught me that a system needs to be stable and user friendly for project participants to engage with it usefully.

I decided to engage Emily, one of the Shared Stories producers to beta test the ROAR system using documentaries she'd produced. This made sense as I was too close to the process to work with the system as a new user would. The beta testing went well, with Emily able to navigate the system really easily and whilst she needed to work around some limitations in functionality, she was able to upload audio, images and text and use the comment box. I began to understand the notion of 'digital natives' beyond a rhetorical catchphrase. I also decided to commission Emily to document the processes she'd engaged with during the beta testing and to write a user guide. This time I would be the user in the process. I figured that if I could understand the process of uploading and working with content on ROAR anybody could.

A NEW ANNOTATION TOOL

In October 2008, we completed a research investigation report for Australasian Cooperative Research Centre for Interaction Design (ACID) showing a clear benefit in pursuing media annotation as part of documentary production. My assessment was that such a tool might also be useful for other projects like Room With A View. EMG

had been working with the Physical Education program on a different media annotation tool to the one we used in Shared Stories. Although this new tool, MAT (Media Annotation Tool) had limited functionality, we decided to see how it might be customized and integrated into ROAR.

ROAR DEVELOPMENT COMPLETED

In December 2008, the development of the ROAR site was complete (apart from MAT) and I signed off with EMG. However it was clear that we would need to continue to work together as there were bound to be teething problems in the first year and the media annotation tool still needed to be customized. I was feeling excited about introducing the system in 2009, but also scared. There had been a lot of time and energy invested in the process and I believed that the processes within ROAR would enable new kinds of production that I thought would be useful to producers. However I wasn't sure how students would engage with ROAR, and I was concerned that it might all be too complicated and they would feel like guinea pigs in my research experiment. I decided to introduce the system through an individual interview project which would provide an opportunity to test the system and resolve issues before the group work on the documentary project later in the year.

3.3.3 Post-action Reflection

To a large extent the system worked as planned in 2009, with students using ROAR to distribute all of the material they produced during the year and setting up individual showcase pages. In the absence of MAT, I tried to use the blogs in a similar way to Shared Stories, as a collaborative tool to post research and enable decision-making outside face to face meetings. (The group productions in 2009 had the advantage of not being in a distributed setting, so the blog interaction worked as an adjunct to physical studio sessions).

The blogs associated with projects were also used to post research and to reflect on the process, with the comments box on the project page enabling peer feedback on finished work. In some assignments like the radio program Room With A View (RWAV) there was an explicit requirement for students to comment on each other's work. In any case, this seemed to be occurring a lot more without prompting. One of the features we built into the system was the capacity for comments to only be seen by students in a project. Theoretically this provided the opportunity for more candid discussion to occur.

As I had suspected, there were indeed technical teething problems, but overall I was relieved to see that students managed to successfully work around any issues and to produce good work, which demonstrated the development of their understanding of online media distribution and the type of ancillary data that can be used to extend the storytelling possibilities beyond FM broadcasting.

KEY INSIGHTS/LEARNING

1. Lack of expertise is not a reason for lack of engagement

One of the frequently cited benefits of collaborative work is its ability to integrate diverse expertise as needed to accomplish an important task. Peter Senge (1990) calls this way of working the ‘total learning organization’, where everyone is both a teacher and a student, depending on the given information exchange. This cycle confirmed that as far as the technical side of the project was concerned, I am inevitably a student, however I felt happy to have Darren and Jody and many of my students as my teachers.

An example of my learning curve in this area occurred in relation to ROAR security/access issues. A core principle in the design and build of ROAR had been to allow the self-managed upload of media. However, experience in 2009 showed that that level of access can create unintended consequences for all of the system. There were a couple of instances when a producer turned off/on functions and changed settings that impacted on the whole site. We also found that some of the functions were less stable than others. More specifically there were problems with the functionality of the data upload interface. I began to understand the complexity of administration rights and the need to balance user control with security of the whole system.

Previous to this project I’d worked cooperatively with technicians and had always valued their contribution. However like many who aren’t highly technically literate, I realized that I had often relegated technical components of a project to ‘the other’. Latour talks about ‘black box’ moments, when an issue involving technology is perceived simply and somewhat dismissively as a ‘technical’ issue and those engaged with technology in a production process as somewhat subordinate ‘technicians’ (Latour 1994). Given the stakes, this time I realized that I needed to be fully engaged in the technological aspects of the project.

2. It's time to focus on the forest as well as the trees

A cloud masses, the sky darkens, leaves twist upward, and we know that it will rain. We also know the storm runoff will feed into groundwater miles away, and the sky will clear by tomorrow. All these events are distant in time and space, and yet they are all connected within the same pattern. Each has an influence on the rest, an influence that is usually hidden from view. You can only understand the system of a rainstorm by contemplating the whole, not any individual part of the pattern. Business and other human endeavors are also systems. They, too, are bound by invisible fabrics of interrelated actions, which often take years to fully play out their effects on each other. Since we are part of that lacework ourselves, it's doubly hard to see the whole pattern of change. Instead, we tend to focus on snapshots of isolated parts of the system, and wonder why our deepest problems never seem to get solved (Senge, 1990, 6 – 7).

An important insight came for me through a meeting in early 2009 with my supervisors Cathy and Laurene, during which they suggested that I needed to get beyond the minutia of my project work and take an aerial view, in order to see the forest and not simply the trees. The mental distancing necessary to do so didn't come easily, but I suspected this was a challenge shared by many other practitioners who are used to spending most of their time 'doing'. In my case, most of my adult life had involved project work, be it as a producer in radio, or an academic teaching into production courses. The production/project cycle has an addictive rush to it and I'd thrived on the need to make something concrete out of ideas and concepts, usually without many resources and often in challenging circumstances. This had created a comfort zone that I found difficult to let go of. Frankly I feared that if I removed myself from the most visceral part of the process over which I felt I had developed some level of mastery, I would lose sight of what I was trying to do.

As I moved into the still relatively unknown territory of cultivating a deeper and more systemic understanding of my research area, I found some valuable friends to accompany me on the journey. The first was Argyris (1991), whose focus on continuously questioning assumptions in order to reorganize our mental maps of the real world was fascinating if not always easy to do. I was also finding it useful to confront my personal insights with those of theorists likely to challenge me to reflect on the familiar in a completely new way. In this context and at the suggestion of my supervisor, I was reading Bruno Latour's work on socio-technical networks and was interested in exploring in more depth his argument that we are never faced with objects

or social relations, but chains of associations, of humans and non-humans (Latour 1994). So in the context of the radio, we might have a producer, the interviewee, programmer and presenter, but their association depends on email, recording and editing processes, compression software, content managements systems and distribution platforms. Senge too provided valuable insights into learning and collaboration, as well as into taking a systems approach and seeing the dynamic relationships between different parts of the system (Senge, 1990).

IMPLICATIONS/OPPORTUNITIES

In 2009 I learned that Bryan, my partner on Shared Stories, intended to conduct a second version of Shared Stories in 2010. In consultation with my supervisors I conducted a cost benefit analysis and decided that another cross border collaborative project should wait until I had finished this research, as I needed to better understand the social and technical issues of distributed collaboration before proceeding with another project.

3.4 Cycle 3

3.4.1 Key Project Phases

PHASE	PERIOD
Pre-action planning	February 2010
Action (Production)	March 2010 – October 2010
Post-action Evaluation	November 2010

PROJECT PARTICIPANTS

EduTAG personnel	Darren Smith, Jody Fenn
Radio 1 and Radio 2 student cohort Project coordinator	

3.4.2 Pre-action Planning

Having piloted ROAR in a limited way in 2009, my aim in 2010 was to have students extend their use of the platform's collaborative opportunities. This included the use of MAT (the new media annotation tool) which I believed would be sufficiently stable to introduce in second semester. Whilst the collocated context of the project didn't involve the same issues as a distributed setting, it was clear that the students needed to work

on projects outside of the studio sessions, so I was hoping that MAT would enable this form of production work as an adjunct to the precious 'face time' in the studio. In the absence of MAT during first semester, I planned to use the blogs to post interview ideas, research, production plans and reflections, also using the comments box on the distribution pages to get additional feedback.

3.4.3 Post-action Reflection

During their first semester Room With A View productions, students successfully used the ROAR platform at different points in the production process in order to:

- Upload production credits, playlists, guests, links to further information and telephone numbers
- Upload the entire show as an mp3, to listen to the program and make some reflective comments
- Engage in a form of peer review using the comments box below the audio file.

I was happy to see that all of these processes worked well, as did the use of MAT as a reflective tool, but I also observed that once again the blog posed problems.

Problems with the blog emerged most clearly in a documentary production project where I had asked the group to post their research plans onto the blogs in ROAR. It took ages for any of the material to appear and when it finally did, all of the formatting had been lost and the text ran as one continuous stream, without any spaces between sentences or paragraphs. The problem was finally resolved after a series of email exchanges between Darren and I. Whilst Darren was generous in helping sort out the problem, I felt I was imposing on his valuable time now that the site was built and in a sense his job was done. What this flagged for me and for the EMG team (now known as EduTAG - Educational Technology Advancement Group), was the absolute necessity of ongoing technical maintenance support for ROAR.

I also discovered that as a result of the blog issues, one group had started a Facebook page to assist in program planning. I considered this problematic as it obviously ran counter to the idea of ROAR acting as a one stop production site and I felt that project members shouldn't have to go to an outside social networking site to communicate with each other about their projects.

KEY INSIGHTS/LEARNING

1. Media Annotation adds value to reflective work

Although MAT came online later than anticipated due to some initial technical teething problems, we were able to use it in the reflective processes for two assignments - Buzzcuts, an individual production which is part of a broader collaboration and Room With A View - a group collaboration with multiple distribution outcomes. Post production feedback interviews confirmed the value of annotation as a part of reflection on action in both contexts.

Whilst post action review is useful in any production context, arguably in live to air work – the most ephemeral of genres – it is harder to achieve. The most experienced presenters I know are often reluctant to listen back to their air checks. Introducing reflective annotation as a part of a production cycle foregrounds the issue. In the context of a collaboratively produced show like RWAV, there are likely to be five or so individuals each annotating the same material providing each other with a rich analysis of the program presented.

Although many of the initial reflective annotations related to technical points, it was interesting to observe that MAT's ability to home in on specific parts of the audio seemed to facilitate a kind of specificity in reflections that I hadn't seen before.

3.5 Cycle 4

3.5.1 Key Project Phases

PHASE	PERIOD
Pre-action planning	February 2011
Action (Production)	March 2011 – October 2011
Post-action Evaluation	November 2011

PROJECT PARTICIPANTS

EduTAG personnel	Darren Smith, Jody Fenn
Radio 1 and Radio 2 student cohort	
Project co-ordinator	

3.5.2 Pre-action Planning

2011 was the first year in which ROAR was fully embedded in the curriculum. While 2010's piloting of MAT had confirmed the usefulness of annotation during the reflective part of the production cycle, I was excited to see how it might become an enabler of collaboration in the actual making of documentaries. I decided to propose the following process to students:

- Uploading of raw documentary interviews to ROAR
- Annotation by all group members
- Decision making about what should be included in the group piece and where connections lie between the different interviews.

This was the process I had hoped to use in Shared Stories, but which had never been fully realized due to the technical constraints of Protospace, the annotation system in beta form used in the Shared Stories project. However, MAT provided a lot more flexibility than Protospace, with each participant easily identifiable, precision in associating comments to audio, and unlimited space to write comments. I also decided to continue using the project blogs to post production plans, interview ideas and research material.

3.5.3 Post-action Reflection

2011 was a bittersweet year. On the one hand, student feedback indicated that MAT had added real value to the documentary production process by facilitating a type of reflection that informed subsequent group discussion and decision-making and individual development. On the other hand, although feedback on ROAR was generally very positive, there had been ongoing technical problems and while most students found workarounds I knew it had been frustrating for all of us. In addition, Facebook had once again emerged as a tool of choice for at least one group, and as a result, my dream of ROAR being a one stop virtual production house had been severely challenged.

KEY INSIGHTS/LEARNING

1. Technology Overload Can Be a Risk

Towards the end of semester 1, I became concerned that with so many new processes involved in producing material for on air and online delivery, students were becoming overwhelmed. The whole of the semester involved learning new technical skills – ProTools, panel operation at RRR, media upload and blog functions in ROAR and now

media annotation in MAT. These processes were all important in the Radio 1 learning experience and all assignments required at least some, if not all, of the functions to be employed. However along the way, we had experienced quite a few teething problems with functionality which hadn't facilitated the learning experience. This was quite aside from the way the students were taught to navigate the system.

OPPORTUNITIES/IMPLICATIONS

Students needed a clear and logical introduction to the system.

2. Technical Challenges Can Affect User Confidence

When Jody came in at the end of first semester to show students MAT and a typical workflow, a few problems arose in the presentation with functions like image and PDF uploads not behaving in the way we expected. For me and some of the students, it was re-assuring that it was a problem in the system and not us making a procedural mistake. However for anyone lacking confidence, it might have been very scary to see that the system's designer was not able to work out what was wrong. While all of this was to be expected as we put the system through its paces and stretched the envelope in terms of what we asked it to do, I was concerned about how it might affect some students' confidence once they got into documentary production.

OPPORTUNITIES/IMPLICATIONS

I decided to address ongoing issues by openly recognizing that ROAR was still in development. I encouraged students to experiment with the system, suggesting that a part of the learning experience was trouble shooting problems as they arise. While students were required to submit all of their work on ROAR, I reassured them that if they had problems, they could submit hard copies, along with details of the problem and the steps taken to trouble shoot. The objective was to help participants to gain familiarity with the system and at the same time identify issues.

3. The Development and Implementation of Technology Takes Time

Another major issue cropped up in preparation of files for MAT in 2011. There were a couple of mp3 files (an interview and the first RWAV programs) that I had tried to "prepare for MAT" several times using the same process: Log on, go to page select edit page, click the prepare media for MAT and then wait for the conversion (to a flash file) to occur overnight. I'd log back in the next day and nothing had changed. In these

situations, I usually took the view that I missed a step or “did something wrong”. However, after trying the same files several times, I realized it wasn’t just me. As usual, Darren was really helpful. I knew he had heaps of other projects on the go and yet he always looked into problems immediately.

The problem of converting mp3 files to MAT was finally identified in the logs by Darren. It seemed that the system didn’t like the encoding used in the mp3. It took a bit longer to resolve but I felt a huge sense of relief when I got the message from Darren:

Mp3 encoding for MAT should be a bit more robust now and I’ve encoded all those files that weren’t previously encoded correctly (nodes 2985, 3008, 3009, 3056, 3220). Let me know if you have any further issues.

I realized that I would be lost without Darren and considered that we certainly wouldn’t be using the system. The question was whether this was inherent in any system of this type. Or was it just ROAR and MAT? Were these teething problems that would be permanently resolved now that the system was more robust?

IMPLICATIONS/OPPORTUNITIES

My experiences with MAT pointed to the need to establish a good relationship with the developer and design team. They also indicated the amount of after commissioning care/maintenance required with this type of system.

4. Technology that doesn’t add value may be rejected

Blogs had been successfully used in the RMIT radio production process pre ROAR, so it had seemed natural to integrate them into the ROAR design with each individual project site having an associated blog. I had wanted the students to use the blog as a way of developing the show, posting research and draft running sheets, but also realized that this would be more easily achieved if there were more sophisticated ways of writing and publishing this type of data. However during semester 2 there were continuing problems with formatting with blogs and media pages still not allowing tables or attachments.

What had emerged since we first began piloting ROAR was that where some groups used the blog to develop projects, others preferred to set up a Facebook group. Why? Was it a question of familiarity? Was it because ROAR was clunky? Did participants want privacy in their negotiations or was it simply that they got a notification from Facebook on their mobile phone when a group member posted new material? Was it

important in the production process whether they used the one system? Was it important in the learning experience?

At the end of 2011, I conducted an interview with James to dig into the topic a little deeper. A self-identified computer nerd and unashamedly so, James was interested in technology and the relationship between functionality and task. He was also interested in producing good radio. James had an interesting line on software. ***I like software that does one thing really well.*** According to him, ROAR did a lot of different things, but because of that, became complicated and messy. He understood and agreed with the idea of the ROAR blog and MAT being used in the development of documentaries, but argued that Facebook was a more appropriate choice for the planning of a program like Room With A View.

When a group had first used a Facebook page to assist in program planning for RWAV in 2010 I had dismissed it as a temporary aberration, believing that all would enter into order once the ROAR blog worked properly. Receiving the same feedback a year later was more problematic and initially felt quite threatening. On reflection I realized that a large part of my concern was bound up with the idea of the 'one stop production facility' concept which had become central to my research. If that aspect of my study had been called into question, what were the ramifications for my broader research study? And then I remembered Chris Argyris and his thermostats (Argyris, 2002).

For Argyris and Schön (1978, 2), learning involves the detection and correction of error. Single-loop learning occurs when errors are corrected without altering the underlying governing values/objectives. For example, a thermostat is programmed to turn on if the temperature in the room is cold, or turn off if the temperature in the room becomes too hot. Double loop learning occurs when errors are corrected by changing the governing values and then actions. A thermostat is involved in double loop learning if it questions **why** it is programmed to measure temperature and then adjusts the temperature itself (Argyris, 2002). In my case, the double loop learning – the why question - consisted in my asking myself **why** the concept of the one stop shop had emerged. The answer was to improve the ease and effectiveness of the participant production experience whether it be collocated or distributed. The next obvious question was 'If there are other production spaces which work as effectively as or more effectively than those on ROAR why would we not use them? And suddenly James' analysis of Facebook and RWAV made absolute sense, as did my decision on how to move forward in 2012.

3.6 Cycle 5: Multi Platform Radio – ROOM WITH A VIEW (RWAV)

3.6.1 Key Project Phases

PHASE	PERIOD
Pre-action planning	February 2012
Action (Production)	March 2011 – August 2012
Post-action Evaluation	September - October 2012

Project Participants

Radio 1 and 2 student cohort	
3RRR personnel	
Project coordinator	

3.6.2 Pre Action Planning

I decided that a major focus of activity in 2012 would be the consideration of multiple distribution outcomes in the work participants collaboratively produced for RWAV. This was an area that had only been available since ROAR came online as a publicly accessible archive. It was also being developed by RRR on their website using AirNet, a Community Broadcasting Association of Australia (CBAA) initiative.

I decided to introduce ROAR prior to RWAV through a process of documentary making. This involved groups developing a theme for the production (self-selected by interest) and posting a plan on the project blog (or link to a shared document) and then conducting individual interviews that would form the initial source material for the collaboratively produced feature. Individuals would then upload and annotate their raw interview. This would be followed by other members of the group annotating the same interview. First introduced in Shared Stories with limited success, this process had been employed in 2011 by some groups using MAT and considered a valuable part of the production process in reflective pieces. Previously participants had only reflected on their work post-production. This process would hopefully encourage reflection during the action cycle of production.

OPENING COMMUNICATION OPTIONS

In addition to the core ROAR applications already available in 2011, I decided to offer RWAV teams the opportunity to set up a dedicated Facebook group to post ideas and communicate with each other, as well as the possibility of using any other online tools they considered useful. I now understood that some areas of ROAR functioned better than others and that in the context of collaborative production, what was important was that individuals, whether they be collocated or in a distributed setting, could communicate effectively with each other. If Facebook allowed groups to share ideas through individual posts and to be notified on their mobile phone immediately, then it was an asset within the production process. If Google docs, Dropbox or any other of a plethora of emerging shared writing and project management tools assisted in the asynchronous production process, they too were useful. The production group needed to make these decisions and to ensure that all participants were confident in the use of selected tools.

3.6.3 Post-action Reflection

The first semester of 2012 produced some outstanding live to air and pre-recorded material, with RRR's Program Director and Talks Co-coordinator telling me repeatedly how impressed they were by the overall standard and amazed by the quality of some shows. I felt that I couldn't take much of the credit for this. Not only was I very fortunate to be working with such an intelligent and committed cohort, I also considered that the critical feedback from RRR's talks co-coordinator had greatly contributed to the success of this collaboration. However, participant feedback suggested that the processes and tools developed over the past few years, as well as the decision to allow participants control over the modes of communication had also played a key role.

KEY INSIGHTS

1. Multi-platform delivery has become normalized

Multi-platform delivery was an explicit part of the production process throughout 2012, contributing to the communication technology choices of groups. While some limited functionality in ROAR still constrained the type of material uploaded for distribution (tables and formatting issues), participants were readily identifying the type of ancillary data appropriate for online delivery. With RWAV, this was in the form of images taken in the studio, production credits, summaries of material and links to further information on content. Some teams had started to link individual interviews and segments already on ROAR to the program.

I was also interested to see how quickly the teams had come to understand the relationship between audio and other media in the online environment. A few years ago people were saying that this confused the definition of radio; however the co-mingling of media has clearly become a normalized mode of reception. The group opened a Twitter account and the number of followers steadily increased. It was also interesting to see how the maintenance of this social media became a role of the online content producer with guests 'tweeting' their presence on the program and an increasing interaction with listeners through the medium.

2. MAT adds value throughout the production cycle

In large part thanks to MAT, reflection became normalized as an active stage within the production cycle. The tool received consistently positive feedback from groups, including those who initially struggled. The production team that needed to repeat their RWAV demo because their first had not reached required standards reported how they had effectively used MAT to identify opportunities for improvement and re-shape their second (successful) demo. MAT was also successfully used by the majority of groups during both the production and post-production phases of the documentary making process.

Within the RWAV program-making cycle, annotation of the broadcast program was also part of an iterative process of reflection. While it has always been good practice to listen back to a show just broadcast (you're only as good as your last show as the adage goes), the use of an annotation tool like MAT helped foreground this for program-makers (not only presenters) by surfacing issues in a concrete way. It was particularly interesting to see how people became more discursive in their annotations over a five-month period and not just about technical issues.

3. Facebook was a personal enabler

Although all groups used the blogs in ROAR as a central repository for documentary material, most activity occurred on Facebook and in shared documents using Google and Dropbox. In my role as an executive producer of projects I saw my email inbox flooded with notifications from all of the different Facebook groups I belong to. This was more useful than it might seem. RRR had taken a much more hands on approach to the program in recent years and had high expectations and the ongoing Facebook connection enabled me to more effectively support participants in meeting these

expectations, by commenting on interview ideas for RWAV in real time and clarifying issues as they emerged, instead of reacting to decisions or actions taken by the participants prematurely.

4. ROAR will continue to evolve

In 2012, RRR introduced The Australian Music Radio Airplay Project (AMRAP) pages to individual programs on their website. This system allows program-makers to publish similar material to ROAR and to link music played to Wikipedia and YouTube content. It may make the RWAV programs publicly available on ROAR redundant in the future. While I would still use ROAR for reflection and to archive material not necessarily aired on Triple R, there would be little sense in duplicating the distribution of broadcast material on a separate site to rrr.org.au. On the positive side, it indicated that the architecture of ROAR as a content management system reflects those employed by industry.

5. Collaboration remains complex

In 2012 I was able to embed into the production cycle much of what I'd come to understand about collaborative media production in general and more specifically as it applies to radio. To a large extent this worked. However, reading the reflective writing from members of two of this cohort's six RWAV groups, suggests that successful collaboration can still be elusive.

Chapter 4

Shared Stories Case Study

How different would it be if you were in the same room...people that you don't know ...I don't think it would be the same... we'd have those initial meetings find out what we have in common, iron out the differences (Shared Stories participant, 2008)?

4.1 Introduction

This chapter and the two that follow it are devoted to 3 in-depth case studies, developed from data generated during the project's five action cycles. Each case study is made up of 2 parts:

- A case description/narrative using Sonnenwald's Stages of Collaboration (2007) as a high-level framework
- A thematic analysis around 3 key themes previously identified in the literature around successful collaboration.

The case studies aim at complementing the perspective offered in the previous chapter through both a shift in voice and in focus. Whereas Chapter 3 provided a first person narrative, the pre-dominant voice of the three case studies is third person, with the writer referred to as 'the researcher'. Quotations from first person reflections and second person collaborative inquiry are used to support the analysis, as are references to the literature. Where the focus of chapter 3 was on project context, pre-action planning and post-action reflection, the primary focus of the case studies is on the action phase of the cycle.

4.2. Narrative

4.2.1 Foundation

The idea behind the project, later to be known as Shared Stories, was for radio producers with shared interests but situated in different geographic locations to use weblogs, online production tools and servers to create a collaboratively produced documentary. While virtual collaboration in radio already existed in large networked settings like that of Australia's national broadcaster, the ABC, systems of networked production available to the national broadcaster were inaccessible to community radio and independent broadcasters.

The researcher found a partner for the project he envisaged in Lincoln University academic and organizer of the 2007 radio conference, Bryan Rudd, with whom he had already developed a collegial relationship based on their shared experience of

conference organization and on the similarities of their media courses. Both were optimistic about the viability of the technical processes they envisaged implementing, and enthused by the innovative nature of the project they were contemplating.

A key constraint that had to be integrated at project outset was the need to respect different academic calendars. In the UK, the semester's teaching period ran January until mid-May, while Australia's first semester didn't commence until the beginning of March. For Shared Stories, this meant there would be just three months for production to be completed. The academics recognized that tight time-lines coupled with operating in a virtual environment would add to the complexity of the production process and that regular local co-ordination meetings would be required as well as email exchanges between the two countries. The coordinators agreed to look for potential participants at their respective universities and to follow up by email over the next couple of months with a projected project launch in March.

4.2.2 Formulation

RECRUITMENT OF PARTICIPANTS

A priority in both the U.K. and Australia was to find project volunteers. In Australia, six final year radio students initially expressed interest in being involved as volunteers. However, finally, only three people were prepared to commit time and energy to a process that was essentially experimental and without any academic credit for the work undertaken. In early February, Rudd confirmed his recruitment of two strong final year students who complimented each other's abilities and were enthusiastic. One significant difference between the 2 groups was that whereas the project was an extra-curricular activity for the Australians, for the UK group the documentary would be assessed as their final major project.

PARTICIPANT MOTIVATIONS

Both the Australian and UK students were interested in the innovative nature of on-line working that the project offered. The UK students were also attracted by the opportunity to work with colleagues from a different culture and had been told that there was a possibility that the final mix of the programme would take place in Australia. However, the researcher was concerned that this would take away from the intention of the process and the item of where and how the final mix would occur was placed on the agenda for discussion by the students when they first made contact in March.

USE OF COLLABORATIVE TOOLS

For this virtual collaboration to succeed, project participants in both locations required access to a shared web server to host audio and weblog. The weblog integrated time zone differences by enabling participants to engage with the project wherever and whenever they were available. The blog had been designed as a central tool in the production process; a space for participants to exchange ideas about a topic of shared interest, post relevant research, negotiate the style of production, develop a shared production plan, identify potential interviewees, post rough cuts of recordings and develop scripts. The blog was also a site of reflective practice, where participants could openly comment on their own work as well that of other team members. For the Melbourne students this way of working was in the continuity of their production course work at RMIT, where ideas were often discussed online as an adjunct to their sessions in the physical studio.

Online collaboration ... is something we have been trained in, when we get together over coffee and talk about a project, we get bored after 5 minutes and go home and draft an email...so much of what we do is by correspondence and that seems to work for us.

However, it emerged fairly rapidly that the UK group hadn't previously used weblogs in their studies. Nevertheless, and in spite of some initial reticence on the part of the UK participants linked to both a lack of familiarity with the technology and a preference for at least one member for oral rather than written communication, it was decided that the project would continue as originally envisaged through blog. Participants also agreed to have the weblog as a public document with the whole process open to public scrutiny.

4.2.3 Sustainment

EMERGING DIFFERENCES

While it didn't take long for the UK team to work through the technical considerations and conventions of posting and commenting in weblog discussions, the researcher noticed that where the Australian participants were used to posting onto the blog anywhere and anytime, all of the posts from the UK came from one person. He queried this with his UK partner.

I asked Bryan and he thought it was because the two UK students had a long history of working together, where one did the ‘technical’ work and the other was more the ideas person (a view confirmed in a post-production interview I conducted). It seems that posting onto the blog had been relegated to a ‘technical’ role and the task was performed in the production studio.

This difference in approach was just one of many that began to emerge during the pre-production phase. Perhaps the most fundamental of these differences related to the product versus process focus of the 2 groups of student producers. On the one hand the UK participants, who were already 2 months in to their final semester, were keen to move ahead with content discussions on the program outcomes on which they would be assessed:

This was our last big project for the degree so what we would produce was important.

On the other hand, the Australian participants were primarily interested in the project journey and in the learning and transferable skills they would acquire in the online production process.

We had a lot invested in the process, just in terms of the time. We were all excited by the process – we had some grand ideas about what this could represent.

For the Australians, there was also a sense that a clear image of the final destination was perhaps unrealistic and unnecessary; that the journey itself would inevitably shape the destination.

CHOOSING A THEME

One of the first blog exchanges between the UK and Australian participants related to the choice of a documentary theme. Having begun their semester 2 months earlier than the Australians, the UK students had had time to reflect on possible themes and had come up with the idea of young people’s attitudes towards the monarchy. The Australians’ response was immediate and categorical:

From our point of view, the monarchy was completely irrelevant to the lives of young Australians. We wanted it to be about something we could all relate to.

The ensuing exchanges concerning a mutually acceptable documentary theme were continued by blog. They were extended and intense with the Australians discarding

their former individualistic approach to blogging contributions to adopt the UK 'one voice' approach. It was ultimately decided to adopt the theme of emigration between the two countries.

DIZZY

A new critical episode was provoked in relation to an English born interviewee named Dizzy, who had spent her childhood in Australia before returning to the UK. For the UK participants Dizzy had become central to the story they wanted to tell and they proposed that she play a recurring role throughout the narrative. The Australians disagreed:

We said 'great interview but we don't know how it is going to work, where it fits in'. The response was, 'well, we want to use it'. It was really frustrating – it seemed like we were doing all of the compromising.

Disagreements between the two teams over content soon developed into a more general dissatisfaction with the broader production process.

They weren't using the blog in the same way. They used it to document their research, not reflecting on what they were doing or engaging in the collaborative process.

They say it needs doing by next week, but until I know what is wanted, where it is going to fit in the larger picture, why should I be working on this section?

At this point, blog activity went quiet at the U.K. end and email took over. As the communication medium changed from blog to email, both teams perceived that the level of aggressiveness from the other team had mounted.

X. found it a bit confronting... well that's just the way we do things.

There were a few really terse email exchanges at that point, where they were pretty much saying this is how it is going to be.

The absence of blog postings also meant that critical exchanges to do with the process and decisions being made and why, were rendered invisible to observers

outside the email distribution list, including the project coordinators who had launched the project. At one point the UK coordinator, Bryan Rudd sensed a problem:

A number of production decisions are being discussed and I'm asked what I think. I have responded with but "what do your partners think? There seems to be a gap on the blog". There's no direct answer, I think there is an issue but decide not to pursue.

LEAD UP TO FINAL EDIT

By May, the impact of a collaboration occurring in a group consisting of assessed students and volunteers became increasingly apparent.

Their assessment had a big impact. Because we didn't get assessed they treated it as though their say was more important. I think that we might have been a bit defensive about that, because we were like, we're volunteering to do this – it's not because we have to.

Different university schedules were also contributing to an already less than smooth communication process.

There was a point where we were not communicating our time commitments – nobody said we are going into a period of assignments.

We were posting comments and for a couple of weeks there was no response (they had other assignments), then we went into our busy assignment period and I suppose we went, well we don't owe them anything. It was all a bit shambolic towards the end.

By mid-May, the UK examination deadline was looming and participant stress levels were rising. In Australia, disenchantment with the process was palpable:

We tried to set out a process where we'd collaborate throughout the editing, but they would say – you send us the stuff and we'll edit it – and we'd say, but that's not the point, we wanted to collaborate until the end.

I expected them to negotiate the process with us – they didn't express concerns with our material – they just defended their positions – at a point we gave up and handed over the editing to them.

In the end, the pressure of an exam deadline meant the UK group took responsibility for the mix, with narration recorded in both locations.

INTRODUCTION OF PROTOSPACE

During the final phase of the project, participants worked with a beta version of a media annotation tool: Protospace. While the tool was still in an early development phase and some participants had difficulty accessing all functions, it enabled participants to mark specific points along an audio timeline and to comment on specific content and related technical issues. During the final mix, Protospace enabled the UK students to post rough versions and for the RMIT crew to feedback almost immediately.

4.2.4 Conclusion

The project came in on time with a final edit being delivered as planned at the end of May 2008 and the program aired on community radio in the UK and Australia.

ORGANISATIONAL LEARNING

For both Lincoln University and RMIT the project provided learning opportunities. For RMIT, Shared Stories offered the opportunity to fine-tune specifications for MAT (Media Annotation Tool). Whilst the tool used during Shared Stories was in beta form and still had bugs that limited access to some participants and comments were restricted to a limited number of characters, participant feedback indicated that this development was worth pursuing. For Lincoln, the innovative use of blogs was later embedded into the curriculum.

PARTICIPANT LEARNING

A good deal of learning emerged at an individual level as was evidenced during the follow-up interviews and individual reflective pieces by students. A recurring theme on both sides of the globe concerned the opportunities offered by the new networked environment as well as the opportunity to experiment with a completely new way of producing radio.

I liked the whole process of working like this (Australian participant).

I'm really happy with the experience, the process.... I gained a lot of insight into communicating online, working with people you'd never met before, and it also demonstrated to me that it's possible (Australian participant).

The knowledge that something like this can work, that the internet has progressed so far that people from different sides of the world can produce something like this and can probably do it very quickly and the time difference didn't impact that much (UK participant).

For the UK participants the key discoveries were linked to new ways of exchanging by blog rather than orally, as well as the challenges but ultimate benefits of working collaboratively online on the final mix of the documentary.

We spent many hours in the studio – uploading, getting feedback and then back in the studio. It was pretty stressful, but a really good thing. We might have gone that's good enough, thinking it was best, but really second best. With the Australians going it is not quite there yet, you give it a little bit more. And that was really different – we would have gone, I think we've done our final edit, and then the Australians would go, no not that music, link there. At the time we'd complain and go oh no, because we were getting too close to it, in retrospect it was so good for what we did (UK participant).

For the Australian team, although there was a frustration with certain content elements of the final mix (the inclusion of Dizzy), there was also a sense that transferable skills had been developed.

It was frustrating that it fell apart at the end, but I still feel like I gained a lot in trying. I feel secure working online and in a virtual environment. I feel a lot of the skills I've gained can be transferred, a confidence in working in that way (Australian participant).

There was also awareness that responsibility for a number of challenges confronted were shared and reflections on how they might have been effectively addressed.

I liked the whole thing. I'm glad I did it. I don't want to blame them. A collaborative contract would have been useful. Time and expectations, something concrete you had to do (Australian participant).

When you are dealing with a group who are not used to online collaboration, we needed to understand how that might be difficult for them, understand different ways of doing things (Australian participant).

4.3. Thematic Analysis

The majority of qualitative data gathered for Shared Stories fell into 3 broad themes, which the literature has identified as key drivers of successful collaboration:

- Shared Vision
- Trust
- Information and Communications Technology (ICT)

4.3.1 Shared Vision

One regularly cited criterion for successful collaboration is a clear project purpose and vision (Linden, 2002; Dowling, 2004). Although the terms 'purpose' and 'vision' are sometimes used interchangeably, they are in fact different and complementary concepts. Where project purpose defines the problem, challenge or opportunity that is at the heart of the project by answering the question: 'Why' are we doing this project?' project vision answers the related question – 'What' do we intend to achieve/create together?'

PURPOSE AND VISION IN SHARED STORIES

The overarching purpose of Shared Stories was clear: to develop an on-line documentary through cross national collaboration. It was a purpose that was sufficiently engaging to attract an academic partner and project team members from both the UK and Australia. However the literature suggests that while a strong and inspiring purpose may be instrumental in attracting participants to a project, sustaining their commitment requires that the project purpose be translated into a shared vision at project team level (Mizrahi and Rosenthal, 2002). Project findings indicate that Shared Stories failed to complete this translation during the Formulation Stage of the project and that this negatively impacted project outcomes.

SHARED OUTCOMES AND PROCESS

Tinnirello (2002) suggests that the creation of a shared vision needs to address two aspects of the future project: outcomes and process. He also maintains that one difficulty in developing shared commitments around project outcomes is that significant

points of difference can exist among participants about project priorities and that *'finding common ground in these circumstances requires imagination and insight as competing interests are easier to see than common ones'* (Tinnerello 2002).

Senge suggests that differing perspectives and resulting conflict should not be seen as an obstacle to collaboration but as an essential part of the visioning and post visioning process:

In great teams conflict becomes productive. There may, and often will be, conflict around the vision ... the essence of the 'visioning' process lies in the gradual emergence of a shared vision from different personal visions. Even when people share a common vision, they may have many different ideas about how to achieve that vision ... The free flow of conflicting ideas is critical for creative thinking, for discovering new solutions ... Conflict becomes, in effect, part of the ongoing dialogue. (Senge, 1990b, 249).

Shared Outcomes and Shared Process in Shared Stories

Choices in relation to project organization and decision making process were addressed early in the project with the two academics and the participants in both locations agreeing on an egalitarian and participatory collaboration where decisions would be made collaboratively between the student producers. However, blog exchanges and post project feedback interviews indicate that whilst the Australian team members were anxious to engage in detailed process discussions this was less the case for their UK counterparts, who needed to deliver a finished program by the end of May, and consequently may have preferred to avoid engaging in discussions around process issues which risked causing lengthy and potentially tense exchanges. Ultimately this unwillingness to enter into potentially problematic process questions appears to have increased the frustration levels of their Australian counterpart.

The focus was on what, rather than how we are going to work on the project. We wanted to talk about this stuff – the process - how we're going to edit it, but they were like, 'we'll worry about that later...' we said 'shouldn't we talk about that now' and their response was 'oh we might come over to Melbourne, let's leave it for now'

For their part, the UK students were concerned that excessive time was being spent in talking about 'how' things would be done rather than 'what' would be done.

We weren't making a documentary about making a documentary ...we kept having to remind ourselves that it wasn't about the process.

As the project moved from the Formulation Stage to Sustainment stage, issues that should have been discussed and in case of disagreement negotiated during the vision setting phase began to emerge across topics ranging from documentary theme to stylistic approach. Although the Australian and UK team members had never explicitly shared their respective creative visions for the final documentary, both groups had made assumptions about the style of the finished product. For the Australians the documentary was about 'sharing of stories by young people and not authority figures', whereas the UK team took a more historical, fact-based approach.

It was assumed, we didn't ever explicitly talk about whose voices, that we were talking with peers and then they started doing interviews with experts.

I wanted it to be our voices but they wanted to look at the historical perspective – it was like two different documentaries being produced.

There were definitely different approaches to putting it together... what we saw coming out the other end. (The Australian) team seemed very set on a personality based, story led approach, whereas we were more interested in facts and having the stories to back this.

Post-project participant feedback suggests that communication tool choices made in the early stages of the project may not have facilitated an ideal environment to build project ownership and vision. This will be discussed in further detail in 4.3.4 below.

4.3.2 Trust

Trust may be defined as the condition in which one exhibits behavior that makes one vulnerable to someone else, not under one's control (Zand, 1972). Two types of trust, cognitive and affective, have been identified as important in an organizational or project context (Sonnenwald, 2003). The first of these, cognitive trust, focuses on judgments of competence and reliability, while the second, affective trust, focuses on perceptions of colleagues' motives and intentions. Sonnenwald argues that both forms of trust are essential for successful collaboration (ibid).

COGNITIVE TRUST IN SHARED STORIES

Very few comments relating to cognitive trust were recorded by the interviewees, although one Australian participant reflecting on her contact with the UK participants during the early stages of the project commented:

I didn't feel like I knew them, didn't know their skills or them about me. How can you trust someone when you don't know how good they're going to be?

However by the final phase of the project when it was decided that the UK team would complete the final mix with feedback and in out from the Australian participants both the UK and Australian team members reported a certain confidence in/respect for their counterparts' technical expertise:

By the end, when we said just do it. I was confident that they would do a good job and they did.

AFFECTIVE TRUST IN SHARED STORIES

Interview data suggests that no real affective trust was established between the Australian and UK participants. Key factors for this appear to be physical distance and an associated lack of face to face and social contact.

I didn't get to know them as people – in group work I try to make sure everyone is happy. But I didn't even know them.

I couldn't imagine them as people. They seemed too distant.

Participants reported that in times of conflict, both defensiveness and a sense of anonymity of the 'other' increased, and a sense of ownership of final outcomes decreased:

When there was disagreement, we felt I don't know this person, what do I owe them?

Because we didn't get assessed, they treated it as though their say was more important. I think that we might have been a bit defensive about that, because we were like, we're volunteering to do this – it's not because we have to.

There was a point where we were not communicating our time commitments – nobody said we are going into a period of assignments. We were posting comments and for a couple of weeks there was no response (they had other

assignments), then we went into our busy assignment period and I suppose we went, well we don't owe them anything.

Findings from Shared Stories data are coherent with research indicating that cognitive trust is easier to develop than affective trust. They also support the findings of Gibson and Cohen (2003) that building trust is one of the greatest challenges in creating successful virtual teams.

COMMON GROUND

The term common ground refers to mutual understanding among communicators (Clark & Brennan, 1991). The literature suggests that common ground is built up over time through repeated interactions and mutual engagement and that the more common ground interlocutors share with each other, the less effort and time they need in conveying and interpreting information (Enfield 2008, 223). Common ground has been identified as a precursor to developing trust and essential in the success of collaborative activity (e.g. Zheng, Veinott, Bos, Olson and Olson, 2002).

COMMON GROUND IN SHARED STORIES

It was common ground between the researcher and his UK counterpart which initially enabled the Shared Stories project to move beyond a simple idea. Common ground was also evident within the 2 participant groups. The UK participants had worked extensively together in the past, whilst their Australian counterparts were similarly part of the same cohort and pleased to be working with each other. However for a truly collaborative project to take shape sufficient common ground needed to be built between the 2 national teams so that they became one. This didn't occur.

The literature indicates that both trust and common ground may be more difficult to establish in a virtual or distributed environment. Sonnenwald suggests that this may be because mechanisms such as informal face-to face interactions and observations that are typically used in building and maintaining trust are often absent. Olson and Olson quoting Handy (1995) 'Trust needs touch' agree (Olson and Olson 2006).

Without more personal cues, people tend to mistrust others they have not seen. When collocated, we acquire a lot of information that naturally leads to trust. We acquire information in a short amount of time that the person is paying attention to us, and that they have things to offer to the common good, two kinds of information that accumulate to engender trust. Of course, this kind of

information is hard come by when we are interacting with people over only email or audio conferencing. It is no surprise that trust is slow to form, and in some cases impossible, when we cross distance and have an impoverished medium in which to communicate (Olson and Olson, 2006, 8).

Feedback from Shared Stories participants supports these findings:

How different would it be if you were in the same room...people that you don't know ...I don't think it would be the same... we'd have those initial meetings find out what we have in common, iron out the differences.

4.3.3 ICT

The introduction of information and communications technology (ICT) is not an end in itself but a means to an end. Sonnenwald argues that while technology can help facilitate successful new forms of collaboration, if it is not seen as complementing existing practices it will not increase collaboration and may be rejected (Sonnenwald, 2007). This section outlines 2 criteria identified by the literature as critical for successful virtual collaboration. It then examines how these elements played out in the Shared Stories project.

ICTS TO BUILD COMMON GROUND

Clark and Brennan present eight properties of media that have an impact on the grounding process and as a consequence, effective collaboration. These are co-presence, visibility, audibility, contemporality, simultaneity, sequentiality, reviewability, and revisability (Clark & Brennan, 1991). As the table below shows, face-to-face communication supports the first five of these characteristics.

MEDIUM	Co-pres.	Visible	Audible	Contemp	Simult.	Seq.	Review.	Revis.
Face to face	*	*	*	*	*	*		
Phone			*	*	*	*		
Videocon.		*	*	*	*	*		
Two-way chat				*	*	*	*	*
Answer machine								
Email							*	*

Adapted from Clark and Brennan, 1991 and Olson et Olson 2002.

A more recent study (Turner, Qvarfordt, Biehl, Golovchinsky, Back, 2010) found that in spite of a plethora of new communication technology, face to face communication remained the preferred communication channel in the organization studied, where it was described as good for building mutual understanding and common ground as well as for ideation and problem solving.

Olson and Olson make the point that people who have established a lot of common ground can communicate well even over impoverished media, but argue that those who have little common ground benefit significantly from having video contact if no face to face contact is possible (Olson and Olson, 2008). To support their claims the authors cite the results of a 2002 study which explored what could be done to prevent the loss of trust when project team members are forced to converse only by text chat or email. (Zheng et al 2002). In this study, researchers tried a variety of activities from exchanging pictures, to exchanging a brief 'resume' that included information on hobbies, to engaging in a social text chat, where participants were told 'to get to know each other'. The results showed that where the resume achieved close to nothing, both the picture and the social chat helped engender trust to a significant degree. What appears to be important is not so much the medium used but what is done on the medium.

THE SHARED STORIES EXPERIENCE

As outlined in the previous section, the Shared Stories project did not manage to build strong common ground between the 2 groups of student producers. It seems probable that ICT choices at key moments of the project contributed to this.

Introduction of the blog

Whilst initial exchanges between the researcher and his UK partner were face-to-face, the central tool in the production process was the web-log which RMIT students had already successfully used in previous co-located projects to plan and reflect on production. It was planned that Shared Stories participants would use the blog in a similar way - to exchange ideas about a topic of shared interest, post relevant research, negotiate the style of production and develop a shared production plan, identify potential interviewees, post rough cuts of recordings and develop scripts. The blog integrated time zone differences by enabling participants to engage with the project wherever and whenever they were available.

Unfortunately, the tool presented some disadvantages in the Shared Stories context. It was not a tool with which the UK team members were familiar, nor was it a tool that was ideally adapted to a virtual collaboration context where team members didn't know each other and where there was little if any shared ground.

Whilst the UK team acquired the requisite technical skills to post blog entries, what was less evident was the very different way in which the Australian and UK teams were using the tool.

The Australian participants were used to posting individually from all sorts of locations at any time of day and night. The blog shows all of the Australian participants posting individually and I wondered why all of the posts from the UK came from one person. I asked Bryan and he thought it was because the two UK students had a long history working together, where one did the 'technical' work and the other was more the ideas person (a view confirmed in a post-production interview I conducted). It seems that posting onto the blog had been relegated to a 'technical' role. As the production progressed, I felt this contributed to the 'us and them' dynamic that was developing (Researcher's Journal Entry).

In the 2 years they had been using the blog the Australians had also built up confidence in voicing their views in a straightforward manner in posts and making collective decisions online. This was not the case with the UK students and without the benefit of shared experiences prior to production, and not feeling that they 'knew' their collaborators, the direct posts from Australia were open to misunderstanding and at times a re-enforcement of national stereotypes. As disagreements emerged over a variety of production choices, blog posts became increasingly terse and both teams reflected after the project that they had 'stopped listening'.

It's one thing to write on the blog and another to listen/understand. We took responsibility to make notes, I read the notes, but didn't listen – that wasn't good.

We expressed what we thought – but not sure whether they received it the way it was intended.

Skype

Data suggests that the possibility of using Skype, at least for some early exchanges, was raised during the early stages of the project but not pursued. During post project interviews a number of participants regretted this decision:

This (online) means of developing an idea ...felt very limited. This was possibly due to our having to submit ideas to one another in written form, whereas as in a usual brainstorming session people would be able to bounce ideas off each other and discuss variations on a theme in person. In hindsight, I feel that by making use of such a service as Skype we may have been able to overcome this problem.

Not being able to negotiate differences of opinion in the same way as face to face, that's what was missing. Skype could have been interesting in creating a better relationship and perhaps part of the creative process.

There was also recognition that the social element of the project had been missing.

It would have been good to speak in real time. I only know Joe's voice from the narration.

I approached this the same way as any other project – a million emails to people with the same tone - the difference is not being able to have a beer afterwards - it softens things.

We had all the work things, but none of the personal things.

We should have become Facebook friends.

COLLABORATIVE TECHNOLOGY READINESS

Olson and Olson (2000) maintain that one key to successful collaboration lies in collaborative technology readiness. The authors suggest that advanced technologies be introduced in small steps when there is certainty that they will deliver on their proposed functionality and users are fully equipped to use them proficiently. They consider that launching a new tool that is not yet stable on users with performance expectations can create serious backlash.

COLLABORATIVE TECHNOLOGY READINESS IN SHARED STORIES

The media annotation tool Protospace, which was introduced during the final phase of Shared Stories was in a beta stage of development and still had teething problems. Interestingly, trialing a tool that was not yet stable did not provoke negative user reactions but rather interested comments on how development might continue for future projects.

Chapter 5

Documentaries Case Study

When individuals read the perspective of others, it often confirmed or extended the views and feelings they had. I want to bring this type of analysis into the production process sooner (Researcher's Journal, 2011)

5.1 Introduction

This chapter is devoted to an in-depth case study of 2011 documentary production at RMIT using the ROAR platform. Whilst ROAR was first introduced to student documentary production as early as 2009, the 2011 documentaries were the first to use a version of ROAR that integrated the Media Annotation Tool (MAT). Like the previous case study of Shared Stories presented in Chapter 4, this study is made up of 2 parts: a case description/narrative and a thematic analysis.

5.2. Narrative

5.2.1 Foundation

In April 2008, the researcher received notification that his application for a grant to design and build an on-line content management tool in collaboration with the Educational Media Group at RMIT (EMG) had been successful. Initially envisaged as a searchable database to house material produced by students, the ROAR concept rapidly evolved into one of a 'one stop' virtual production facility, integrating private project spaces and associated blogs with a public interface to access and archive work; a system that would be useful in collaborative production work in both distributed and local production settings.

Feedback from an earlier collaborative project, Shared Stories, had convinced the researcher that ROAR should also integrate a media annotation tool, albeit a more sophisticated and user friendly one than Protospace, the tool that had been piloted in the latter stages of Shared Stories. Whilst keen to launch ROAR as rapidly as possible, the researcher's experience with Shared Stories had convinced him that the system needed to be stable and user friendly for project participants to engage with it usefully.

The initial beta testing phase for ROAR and a ROAR user guide were successfully completed by the end of 2008 and system testing was extended to individual projects in 2009. However development work on MAT (Media Annotation Tool), a customized version of an annotation tool that the EMG had originally developed for the annotation of RMIT Physical Education students' fieldwork, proved longer than planned. MAT was finally piloted for the first time in September 2010 for post-production reflection on two

student productions, Buzzcuts and Room With A View. Results were encouraging with the researcher noting in his journal:

It's interesting to see how the producers have worked with the tool effectively in both contexts. Although many of the annotations relate to technical points, it has also provided a space to reflect on the reasons why decisions were made. The ability to home in on specific parts of their audio enables a kind of specificity in their reflections that I haven't seen before.

ROAR seemed ready to roll out in the context of collaborative documentary productions in 2011.

5.2.2 Formulation

The ROAR collaborative documentaries presented a number of differences in relation to the earlier Shared Stories project. Where the participation of student producers in Shared Stories was voluntary, students' collaborative documentaries in 2011 were assessed work. Where Shared Stories was a virtual on-line project, Shared Stories was co-located but using on-line technology. The scale of the projects was also different. Where Shared Stories concerned one collaborative group of 5 students from two different universities, one in Australia and one in the UK, the 2011 project involved 8 different groups composed of 25 students, including 4 international students, all of whom were students at RMIT's Melbourne campus. Whilst the researcher believed that the participation of multiple groups with inevitably differing levels of technical expertise and confidence would enable a more thorough testing of the tool to take place than in a single group situation, he also acknowledged that any major technical challenges would be increasingly complex to manage.

INTEGRATING EXPERIENCE FROM PREVIOUS PROJECTS

From previous project experience, including that of Shared Stories, the researcher recognized the importance of project team members being able to apply any key technology with confidence before the production phase of the collaboration began. Shared Stories had also convinced him of the necessity for production teams to take sufficient time to build a shared vision and ownership of their future project, both in terms of outcomes and process. To address these issues, the researcher decided to schedule the project over two semesters of the academic year, with first semester devoted to familiarizing participants with the ROAR technology and creating production

plans for the documentaries. This ensured that when groups moved into production phase in second semester they did so with a shared notion of the journey they wished to take and how they intended to get there.

PRE-PRODUCTION

In early first semester, the young producers embarked on a series of practical tasks which enabled them to explore the different functionalities of ROAR in a realistic but less pressured manner than would exist once documentary production began. Simultaneously, students began to reflect on possible documentary topics and by early May eight project teams had been formed, with participants having self-selected into the group whose topic interested them the most. By June all groups were in program pre-production. By the end of semester and in spite of some technical teething problems with the ROAR blog, all production plans were completed and successfully uploaded onto the ROAR system.

Production Plan Example

Group Members: *Sophie Fitzpatrick, Michaela Palmer and Georgia Morgan*

Title: *Fur*

Angle: *How has fur grown and changed as a trend in the last fifty years? Is it becoming more acceptable to wear fur?*

Aims: *To create a 10-12 minute radio feature which will explore the story of fur as a fashion trend, the history of it in different cultures and the various issues surrounding its use. Note that we will not simply be making an anti-fur piece, but rather exploring it as a three dimensional topic and portraying both sides of the argument.*

We will aim to speak to a fashion designer, possibly Alannah Hill or Arabella Ramsay, who have both used and or currently use fur in their collections. We would like to speak to them about both the fashion elements of fur - its popularity and ability to sell, as well as the difficulties or pressure they may have faced for using the material in their line.

We will also speak with a member of an animal welfare group (in the vein of PETA, or RSPCA) who can outline their argument against the use of fur, why they consider it to be cruel, the success of their campaigns over the past decades, and the introduction of 'faux fur' into the market, and the effects of this. If at all possible, we'd love to do an interview (either locally or over the phone) with someone who owns/works at a fur farm,

about the economic aspects of the fur industry, and the experience of running these farms. We would also like to speak to a historian/academic who can explain to us the beginnings of the fur phenomena - the way it was worn in ancient culture, how it grew to be a contemporary trend.

Information: We will need to gather some more research on appropriate interview subjects and to source some sounds with which to create soundscapes, as well as the kind of music we might like to utilise.

Content Structure:

Introduction

- One minute outlining the history of fur and its development in fashion. The introduction will be provided through narration

Four interviews: fashion designer, animal activist, historian and fur farm worker.

- Interviews will be edited so the accounts are interwoven so that the audience is provided a balanced account of each experts experiences and knowledge.

Soundscapes

- Will be developed and placed to further enhance what the interviewees are saying and to allow the audience to develop images that help capture the environment of a fur farm, a fashion designers office, and an animal activist's campaign.

Outro

- A one minute summary the interviewees main points and feelings towards the fur industry. Contact information for further research will be provided to the audience. The outro will be provided through narration.

Research/Links:

<http://www.furcommission.com/resource/perspect999bz.htm>

www.furcommission.com The Fur Trade // Animals Australia

www.animalsaustralia.org Wearing fur was once a fashion statement. Nowadays, an increasing number of designers are choosing not to use fur in their garments as a statement that they are ag<http://www.peta.org/issues/animals-used-for-clothing/fur.aspx><http://www.peta.org/issues/animals-used-for-clothing/fur-farms.aspx>

5.2.3 Sustainment

FROM PRE-PRODUCTION TO PRODUCTION

The development and delivery of production plans by the end of first semester meant that enthusiastic teams could, if they wished, move into production during the semester break, rather than waiting for second semester. A number of groups took advantage of this possibility and by early August all students had begun the interview stage of the process, with a majority successfully using the ROAR blog to post interviews and associated research, as well as to flag potential interviewees and other spontaneous production ideas.

Unbeknownst to the researcher, an alternative tool to the blog, Facebook, had also been adopted by at least one of the groups to upload material, schedule meetings and communicate ideas. This implicitly put into question the researcher's notion of ROAR as a one-stop shop. The researcher commented in his blog:

I need to better understand whether the use of Facebook is because of its familiarity or whether it is because ROAR is clunky. Do they want privacy in their negotiations or is it simply that they get a notification from Facebook on their mobile phone when a group member posts new material. Is it important in the production process whether they use the one system? Is it important in the learning experience?

CHALLENGES TO THE VISION

As projects moved further into production and post-production, the majority of the documentary teams were confronted with challenges to certain elements of their original project vision and needed to re-visit decisions that had been made during the production planning phase of first semester.

The interview process made it clear that we had strayed from our initial thoughts of tackling mental health in schools. Instead, our focus was on the fact that more needs to be done to combat the problems of youth mental health, as well as the type of care that already exists.

We had wanted to use mainly the voices of our interviewees to drive the piece, however, we had to review the concept once we realised the interviews weren't

working so well together.

Our initial documentary concept and pitch changed significantly throughout the production process.

The post-production stage was a little troubling as we had a lot of different content that needed to be made into a clear and structured piece. (Interviewees) spoke of similar issues that would work well together, yet they also spoke of different (no less important) issues that were a little difficult to fit into our documentary's flow.

All groups managed to successfully negotiate these challenges with MAT playing a key role by providing a space for participants to articulate their personal impressions of specific elements of interviews, thereby facilitating a creative type of reflection that could inform subsequent group discussion and decision-making.

TECHNICAL CHALLENGES

Given the varying level of technical expertise within the project groups, and in spite of the familiarization process of first semester, a number of minor issues arose during the production phase through user error or confusion. In these cases, the researcher acted as a conduit between the developer and production teams for their resolution. Time sensitive production issues were in general handled directly between the developer and the production teams and all teams managed to successfully upload their final documentaries onto ROAR by the end of September 2011.

5.2.4 Conclusion

KNOWLEDGE CREATION

The 2011 documentaries production project enabled further understanding of a hybrid approach to documentary production in a co-located setting. Whilst the project involved collocated participants, many of the processes developed could be adapted for use in a distributed production setting which presented an obvious potential for a university with a strategy of globalization.

ROAR

Although certain applications of ROAR had been introduced at RMIT in 2009 and 2010, 2011 was the first year in which the system was embedded in the curriculum in its entirety. Initial reactions to the tool ranged from the tentative, 'I'm a bit scared of ROAR' to an appreciation of ROAR's capacity for empowerment, with one international student explaining how ROAR had enabled him to overcome his reluctance to say what he thought about work in class and to feel less embarrassed about what he was working on. An analysis of post project feedback interviews indicated that participants had found that ROAR added project value across a number of dimensions:

Characteristic	Description	Implications
Asynchronicity (Blog)	Opportunity to meet and develop projects off campus asynchronously	Provided flexibility and made face to face meetings more constructive because of the preparation and discussion that had already occurred on line
Rapid feedback	Opportunity to feedback rapidly, directly and quickly	Quick corrections possible when there are misunderstandings or disagreements – no need to wait for face to face meeting
Upload facility	Ability to upload	Provided flexibility about when, where and how participants could update and publish material for group, public and radio stations
Centralised public archives	Public interface	Able to point potential interviewees, community and or employers to work produced and shows presented Knowledge bank where participants could consult past productions not only in terms of finished productions but in a way which made the process decisions visible.
Publication Richness	Ability to publish work in context with additional text, graphics, urls	Provided opportunities to contextualize material and extend narrative with additional data – images, links and summaries
Reflection Aid	Individual annotation on MAT	Facilitated a type of reflection that informed subsequent group discussion and decision-making and individual development

A decision was made to continue with ROAR in 2012.

5.3. Thematic Analysis

5.3.1 Shared Vision

Building a project vision was embedded into the high level project design by providing groups with the time required to form, brainstorm ideas and develop a project plan. Whilst project groups were provided with a deliverable date for production plans, the way in which they achieved that deliverable was self-managed. Post project interview data and the production plans suggest that participants approached this phase of the project with enthusiasm and seriousness and that it was conflict free.

We were excited to brainstorm ideas and find a clear focus for our radio documentary.

The pre-production phase was the most stress-free part of the project.

As evidenced by student production plans (c.f. 5.2.2), this pre-production stage enabled groups to gain clarity around their creative visions for their documentaries. Most groups also proceeded to move beyond the general direction setting and high level structuring to begin explicitly identifying research and interviewing roles for the production phase to come.

We assigned a task to each member of the group: find an interviewee each.

The roles and tasks of the documentary were assigned equally.

Whilst the literature suggests that assigning clear roles during the Formulation stage is especially important for virtual or distributed projects (Maglaughlin & Sonnenwald, 2005; Olson et al 2008) , the smoothness with which the groups transitioned from pre-production to production appears to support Sonnenwald's suggestion that early identification of task responsibilities may also be useful when considering collocated collaboration.

5.3.2 Trust

Scholars fundamentally agree that trust is a “psychological state comprising the intention to accept vulnerability based upon positive expectations of the

intentions or behavior of another". Trust involves risk and interdependence, or reliance on others. Distrust can be defined in opposite terms, i.e., as negative expectations of the intentions or behavior of another... It involves a lack of risk and no dependence on others (Sonnenwald, 2003).

Like vision, trust is not an end in itself in collaborative production, but rather an enabler or driver of that collaboration; to quote Sonnenwald, it is 'the grease that oils the wheel'. Sonnenwald indicates that the moment at which trust issues are most likely to emerge is during the sustainment phase of the project, when initial project visions are often called into question due to external or internal forces (Sonnenwald 2007). This is the stage where individuals will retract to self-protect and where low trust teams run the risk of derailing as a result of fear, blame, recriminations and communication breakdown. It is also the stage where high trust teams will keep communication channels open, accept being vulnerable and maintain the interdependence required to find innovative and synergistic solutions.

TRUST IN ACTION

Whilst no specific references to either trust or distrust emerged in feedback interviews or participant reflections, participant descriptions of project interactions were characterized by the interdependence, positive expectations and sharing of tasks and ideas which characterize trust (Sonnenwald 2003).

We collaborated as a group to determine the structure of the documentary. This involved the whole group sitting together listening to the edited footage to decide what we would include or discard. By doing this it ensured all the best parts of the interviews were kept and pieced together to form the final documentary.

We all shared the editing duties together. We met on several occasions to discuss the structure, soundscapes and narration. At the end of each meeting we would assign tasks for each person to complete before the next meeting. Tasks were assigned to ensure all members contributed equally to the three main components of the editing.

When the inevitable challenges to early project vision occurred (c.f. 5.2.3), participants displayed an ability to maintain cohesion of purpose and approach while adapting the internal organization of the group as required.

We assigned JC as the chief editor as we felt this was necessary in order to be

able to make quick decisions as opposed to spending all of our editing time merely discussing things. This worked well as it allowed things to move along much more quickly whilst also keeping our objective opinions in toe. JD and DC were able to give feedback on the editing work JC had done and the documentary was shaped accordingly.

COMMON GROUND

In Chapter 4, Common Ground is cited as one of the principle enablers of trust and essential in the success of collaborative activity. Common ground factors identified in this case study were: physical proximity (all participants were Melbourne based), shared organizations (all were students at RMIT) and disciplinary biases (all were media students). The rapid building of common ground was also created by self-selection of subject. In addition, a number of documentary groups had already developed common ground through working together on earlier projects. This was the case of the group who integrated the use of Facebook into their documentary production, a tool they had already used informally as a support on a previous project.

5.3.3 ICT

THE INTRODUCTION OF ROAR

Although certain applications of ROAR had been introduced at RMIT in 2009 and 2010, 2011 was the first year in which the system was embedded in the curriculum in its entirety. The ROAR implementation occurred in a context of collocation, which meant that in addition to the on-line tools they had at their disposal, participants were also able to engage in regular face to face contact.

A COLLOCATED CONTEXT

As discussed in Chapter 4, much of the literature continues to suggest that face to face remains the preferred communication mode because of its multi-channel nature, with information flowing freely among participants across a number of channels – voice, facial expressions, gesture, body posture etc., thereby allowing a subtlety and complexity of message unavailable elsewhere. Whilst the majority of groups reported scheduling face to face meetings at two key phases of the project - brainstorming and vision setting (Formulation Stage) and preparation for final edit (Sustainment Stage) – it is noteworthy that in post project interviews, face to face meetings emerged as just one

item of a broader communication ecology that participants employed, appearing to move fluidly between tools to satisfy their communication needs.

As outlined in 5.2.4, post project participant interviews indicated that ROAR had added distinct value to the documentary production process. This section will take a more detailed look at the effectiveness of two of the ROAR production functions – blogs and MAT.

BLOG – BENEFITS AND CONSTRAINTS

Given that RMIT students had previously used weblogs with success for production planning and reflection, it was decided to integrate blogs into each of the dedicated project sites on ROAR for use in a similar way. As the ROAR familiarization process unfolded during first semester, the researcher noted that while some processes had been practiced by everyone, others like the blogs had only been taken up by some. This trend continued as participants moved into project pre-production and production with the researcher noting:

While the blog has been successful in terms of archiving research material, it has had a mixed reception for asynchronous group discussion.

At the outset, there appeared to be two possible explanations for limited tool adoption:

- In a co-located context, participants preferred using synchronous and or face to face communication
- Participants found the blog interface insufficiently user friendly

The first of these possibilities was discarded when the researcher received feedback from blog users that they appreciated its asynchronous nature, and with the realization that those participants who had chosen not to use the blog had replaced it with another asynchronous discussion tool –Facebook. The interest in the asynchronous nature of both the tools supports Hinds and Kiesler's finding that whereas users preferred synchronous communication tools to interact outside their immediate workgroup and with their superiors, asynchronous tools are generally preferred for within-workgroup communication (Hinds and Kiesler, 1995).

Feedback interviews with Facebook users indicated that one of the major reasons for their choice was the relative functionality of the two tools. Although ROAR only required

one login, blog access associated with a particular project required a number of steps, making it potentially frustrating when there were no new posts. In contrast, Facebook offered the same facility as the blog for asynchronous discussion with the added advantage of messages being accessible by mobile phone anytime, anywhere and participants notified when one of their peers posted a comment. The literature suggests that participants' easy engagement with Facebook may also be linked to the increasingly prevalent merging of social and work contexts:

The use of mobile media within communities and organizations has been blurred, as mobile media are used in relationship building, whether this is related to work or social life. This fusion is much stronger when the technologies are used by younger employees from Generations X and Y – the so-called 'digital natives,' through the merging of social and work contexts, pertaining to SMS, email and mobile phone use (Kim et al, 2007 cited in Hearn, Foth and Gray, 2009).

USE OF BLOG

As evidenced by the following blog entries, when the tool was used for discussion purposes, it provided a useful platform for informal, asynchronous exchanges in relation to the scheduling and project organization:

Just an update on where we're at with some of the others on our interviewee wish list... Upon looking up the contact details of ReachOut.com I found that all of the contact information was in the form of email addresses and online contacts. I also found that the website had no land address or office contact information listed either. It made things a little difficult as now I'm unsure of whether we can get a face-to-face interview. I am awaiting an email response.

Did you guys know about the nude anti-fur protest outside Scandal and Theodore on Chapel St today? I only just saw this on the news, would be good to maybe get some footage and talk to the organizers?

I'm a bit concerned that we may not have enough material to produce a rough cut by Week 5 (just under two weeks away) but if these developments and interview prospects go according to plan then we are well on our way! Fingers crossed!

It was also reported that planning conducted via the blog provided a useful adjunct to face to face meetings by making the latter more time effective when they did occur. This tends to support Aragon et al's 2009 finding that the rapidity of change in

technology as well as users' facility with this technology is creating a generation that is significantly more at ease with non face to face contact than their elders.

There is a generational shift taking place within the United States and around the world, where young people are growing up around computers, cell phones, and other communication technologies. They are developing a mode of text-based communication that is as natural to them as spoken language is to older adults (Aragon, Poon, Hernandez, Aragon, 2009).

MAT

MAT's usefulness for post-production reflection had already been effectively demonstrated during the 2010 tests with Buzzcuts and Room with a View. In 2011 the researcher wanted to bring this same form of co-creative thinking into the production process.

When individuals read the perspective of others, it often confirmed or extended the views and feelings they had. I want to bring this type of analysis into the production process sooner.

In 2011, MAT was used at 4 different phases of the production/post production process:

- Raw/unedited interview stage (group member feedback and recommendations)
- Edited interview stage (group member feedback and recommendations)
- Finished piece (group reflections)
- Finished piece (feedback from others)

Examples of annotations from each of these phases are included below.

BALANCING A TASK BASED APPROACH WITH SOCIO-EMOTIONAL INPUT

Recent research (Aragon et al 2009; Aragon and Williams, 2011) suggests that developing the socio-emotional character of content exchanges is critical to the development of creative collaboration in an on-line environment. In this context, it is interesting to note that whilst at project outset the communication style employed in MAT annotations was primarily neutral and task based (technical in content, factual, objective, rational opinion), as participants moved further into the annotation process

(and gained more experience in using the tool) their annotations also increased in terms of their socio-emotional content (self-revealing, use of 'I' and 'we', references to feeling as well as thinking.) This was true not only in the groups' final reflections on their own documentaries, but also in individual reflections on the productions of other groups, with any criticisms or suggestions for improvement consistently constructive and creating a strong foundation for any future work that participants might undertake together.

1. Raw unedited interview stage

Fred had a bad cough when we interviewed him. This will need to be edited out in post-production

Here Jon peters out while discussing making fur new again, and adapting the material to contemporary styles/needs. This is a shame; it could have been an interesting point to have him discuss, but I didn't press him enough to continue.

I like this sound-bite; I think it could be a good opening statement for Jon, as he sounds really emphatic about not wanting to use fake fur regardless of its benefits. Would be good to juxtapose with Fred Bartfeld.

This might be a good area to put a little research into so we can segue through narration to some of Tullia's thoughts on reinterpreting old materials, such as vintage fur?

2. Edited interview stage

I think that although this section of the interview does supply us with context, e.g. who Fred Bartfeld is, his history in the business etc, we can cover most of this with a one-liner of narration. For example, I think it will sound cleaner and less waffly if there is a voice over saying "We spoke to Fred Bartfeld, director of Bartfeld Textiles, who has worked in the faux fur industry for forty years." etc. That way we can save more space for the anecdotal, more interesting info he gives later on.

3. Final Piece – Reflection on finished production

I really love the way that Hugh tells this story, it is such a visceral and disgusting description of the waste, a really beautiful concrete description which plays on

the listener's imagination. I think that little descriptions like this are so suited to radio because as we saw when we were actually exposed to the machine, the visual reality of the waste is nowhere near as disgusting as one would imagine. That is why these little moments are so great, because the listeners are forced to reconstruct the moment in their head.

I think this is perhaps the best part of the whole documentary. Some of the individual sounds are so wonderful, the shredder grinding, the engine whining and in particular the sound of the waste dropping into the catchment chute at the bottom of the machine. I think that it is a testament to the ZOOM as a piece of equipment, that these sections were so well recorded. I was a little bit worried that the noise of the machinery might drown out Hugh's voice, but with the microphone held quite close to his mouth, we were able to get the voice and the atmosphere without one compromising the sound of the other. I think it is one of our biggest technical achievements.

I really like the way this documentary came together, but I think that one weakness we perhaps have is the lack of music or ambient sound throughout. However, given that our interviews are quite fluid and flow into each other quite well, I think in many ways music in our documentary would have been distracting, particularly if it was simply a generic soundtrack, rather than something relevant to our topic. I also think that the soundscape at the beginning did a great job of providing some light music to grab the audience's attention.

4. Feedback from others on finished production

Your interviewees were very interesting. I liked how you had a youth voice; this helped to breakup what Pat said. I also think it gave the piece a more personal touch rather than just stating facts. The music helped to balance out the long blocks of talking and also helped to personalize the piece.

The introduction was great; the music along with the decision to get right into the interview was a really powerful technique to familiarize the audience with the interviewee. It built a connection with the voice straight away and emphasised the importance of the interviewee over the anchor. I think the sound quality is of the highest calibre of the documentaries I have heard so far, and the overall structure and editing was excellent. No complaints - Well done!

A very clear and direct beginning, awesome perception! Beautiful technical skill.

I thought this was great guys! The voice of the girl at the start was a really good way to get the audience in. Straight away I was interested in what was going to happen. One criticism was that the music got a little bit repetitive throughout the piece which made me switch off slightly as the doco continued. Obviously great interview with Pat - well done getting that! Overall top stuff- excellent mixing and recording! Well done!'

Chapter 6

Room With A View 2012

I have discovered that the time we live in is an incredible one, as we can easily share ideas, content and information from our own computers, and collaborate without physically being in the same space.... I feel that multi-platform production and distribution really increases accessibility, both for content producers and for listeners, and therefore opens up the potential for new and wonderful things to occur (RWAV 2012 Participant).

6.1 Introduction

This case relates to the planning, production and presentation of a series of 12 'Room With A View' shows (RWAV) during the period March – July 2012. RWAV 2012 extends the research focus of the 2011 documentaries to a multi-platform distribution environment. In addition to the core ROAR applications already available in 2011, participants were offered the opportunity to use Facebook or other social media they considered appropriate.

6.2. Narrative

6.2.1 Foundation

Room With A View 2012 was produced by RMIT Media and Professional Communication students in collaboration with Melbourne community radio station 3RRR. Founded in 1978, and synonymous in its early days with the post punk and new wave subcultures of Melbourne, 3RRR remains an essential part of the city's cultural landscape (Phillips M, 2006).

The weekly one hour magazine show RWAV has been running for almost as long as the station and its longevity reflects a high level of engagement from all key stakeholders. For RMIT students, RWAV provides a valuable opportunity to work in a real professional context and to learn how a successful community station operates at a grassroots level.

I've worked in community radio before but it's such a different experience when you know that thousands of people could be listening – you really have to step up your game and be accountable for your actions and your opinions.

You really begin to take yourselves seriously – you're not just students anymore, you're broadcasters. You're taking up an hour's worth of time that others would love to have, so you have to try and prove your worth.

The show also presents its young producers with the challenge of shaping their show to a specific station voice and listener expectations.

Many of the students have no familiarity with Triple R before they join Room with a View. So, they get the experience of having to learn about a station and its sound, as well as facing the challenge of trying to create programming that is relevant to an audience of people very different to themselves. It's an experience that should hold them in good stead in other radio sectors, be it government or commercial (Mick James, former 3RRR Program Manager).

For RMIT Professional Communications Program Director and former RRR senior producer, Bruce Berryman, the partnership between 3RRR and RMIT is a strong and committed one which allows RMIT to differentiate its radio offering from many other institutions:

The partnership between RMIT and 3RRR is a strong one and the station has taken a more hands on role in recent years providing technical and content feedback to teams after each live to air session and presenting a group feedback session for all participants after the first round of shows.

He also acknowledged that RRR 'expectations are high.'

6.2.2 Formulation

GROUP ORGANIZATION

In early March 2012, each project participant was allocated to one of six RWAV groups. Allocation was organized on the basis of information provided in an initial survey of experience and skills. This method of group organization was chosen to reflect an industrial setting, where individuals rarely have the opportunity to choose their fellow team members.

By the end of March, all groups had come together either in face to face meetings or virtually in order to begin planning their first show. Given RWAV's long and clearly archived history, groups already had a high level view of the kind of program that they needed to create. Consequently, their priority as they met for the first time was to begin to translate this high level vision into a more operational roadmap for their first program

FROM PLANNING TO PRODUCTION – EARLY COMMUNICATION CHOICES

Whilst some groups chose to conduct their early planning conversations face to face in a social setting, a number of groups opted to use Facebook as their primary means of communication.

The planning stage involved the entire group and usually consisted of a good chat over coffee, airing all kinds of ideas despite how crazy they may seem initially.

As I had never met anyone in my group, having electronic communication as a tool was invaluable as we could easily discuss not only our ideas, but also meeting times and locations to further our discussion... there is arguably nothing these days that is as 'instant' and powerful in small group communication as the creation of a Facebook group.

Due to particular members inability to show a degree of flexibility with their calendars we decided on organizing through social media.

The other tool used with success during this phase of the project was MAT.

DEVELOPING BROADCAST READINESS

In recent years, a number of production protocols had been jointly established by 3RRR and RMIT to assist groups during the initial planning process. These included the requirement that teams allocate 6 clearly distinguished roles among the group:

- 1 panel operator
- 2 presenters,
- 3 producers (1 on-line producer, 1 segment producer, 1 edition producer)

Groups were also required to develop a detailed running sheet for each of their shows and to attend panel training at 3RRR. During the same period, the young producers embarked on a documentary making project which enabled them to explore the different functionalities of ROAR.

DEMONSTRATING BROADCAST READINESS

In order to be considered ready to go live to air on 3RRR, participants needed to be able to demonstrate competency across two key areas. The first of these related to the technical expertise necessary to effectively use both ROAR and the 3RRR panel. The second involved the capacity to plan, prepare, produce and present a program that met 3RRR's live to air standards and was consistent with the station's style. To demonstrate that they had acquired the necessary competency level, students recorded demos of their first program in one of the 3RRR studios. These were assessed by the RMIT course coordinator.

Coordinator feedback on the demo submissions, as well as post-project reflections by participants indicate that whilst four project teams successfully negotiated this first critical project stage, two struggled. One team failed the demo assessment process and was required to resubmit.

Post project feedback on the Formulation Stage of the project was mixed. Members of four groups from the six were enthusiastic about the process in which they were engaged, often citing the diversity and complementary nature of skills as a key enabler of the collaboration achieved.

Working to individual's strengths and interests manufactures good synergy and allows the product to be greater than the sum of its parts.

In Room With A View each individual member of the team has different experience, personality, passion, talents and skills. It really is true that two heads are better than one, and six are better than two.

However individuals from the other two groups reported that they had struggled to achieve cohesion during the early phase of the project, characterizing the project environment as one of confusion, lack of focus and decreasing motivation.

The first two to three weeks of planning time were largely wasted due to our unfocused and unmotivated group dynamic.

There was a lot of confusion over the roles we would each take on.

Feedback also made reference to jockeying for leadership and the inequitable division of roles and responsibilities.

The most prevalent issue faced was group leadership and the fight for who leads.

The roles, which were given weren't taken on board entirely by one person, and therefore the amount of work that was contributed from individuals wasn't necessarily equal.

6.2.3 Sustainment

By mid-June, all teams had delivered a first RWAV show which met or surpassed 3RRR's quality expectations however group perceptions of the effectiveness of the process employed to achieve these outcomes continued to be mixed. As the project moved into the Sustainment Stage participants began to extend their focus from the successful delivery of one hour of live radio to encompass the broader multi-platform nature of the project:

In a production sense, this means that we need to create content that is able to be adapted and consumed in a variety of formats. In many ways we really don't know how the content will be used or consumed. How will it be heard, when, and by whom? Open ended questions, really with no answer. And yet, we must address each of them as best we can. What is a radio show in a sea of personal music players? Not only does a coherent self-contained radio show need to be constructed, but also all the 'links' to that show, often to be broadcast (tweeted etc.) simultaneously. This may mean content on a website, accompanying material such as photos and video, or extended audio.

During this phase of the project, communication technology played a central role, with MAT continuing to receive positive reviews. Initially positive feedback on Facebook became more polarized as the project continued. This stage of the project also saw the launch of Twitter.

MOVING TOWARD MULTI-PLATFORM RADIO MAKING

A radio show continuing to exist on air, (as with RWAV) also very much exists

beyond that one hour time slot. The show may be distributed after broadcast via the internet, through a website and in such a format that can be happily consumed. I say happy, because there must be little friction in experience when the consumers make the transition from a broadcast medium to that of 'on demand.

3RRR possessed a RWAV web page which enabled production teams to update playlists and add video/band bios automatically. The station also possessed a Radio On Demand facility which allowed website visitors to listen to past shows in their entirety, however RWAV producers identified that the show was lacking easily downloadable podcasts and a strong social media presence. A potential solution was found to the first problem within ROAR, where individual parts of the show could be uploaded and shared with the public. The second issue was tackled by opening a Twitter account, thereby enabling RWAV to engage audiences in new ways:

RWAV is not a talkback show, so the Twitter profile allows interaction with listeners that otherwise would not be existent. It also allows promotion of the show before (and after) airing – making our RWAV a converging media landscape.

We have created shows for RWAV that span multiple platforms. We have hosted a show that has contained interviews, music, sponsors, and assorted other topical content. Simultaneously to the shows broadcast, we “live-tweeted” little blurbs about what we were talking about, or what the listener could look forward to. We also shared photos, and links to anything via the said twitter account. The show, upon completion, was promptly uploaded to the RRR website (to let listeners review the exact content ‘On Demand’), a summary of the show and playlist was added to the RRR website— again with links to extended interviews, photos etc— as well as links to the twitter account where the listeners could remain engaged with us, the producers and curators, of the content they are now able to access.

In our previous RWAV show we aired a prerecord interview with Claire Bowditch, and using the tag function on Twitter, were able to tag Ms Bowditch in the promotional tweet. She re-tweeted our tweet thus extending our show onto her many Twitter followers, potentially expanding RRRs listener base.

6.2.4 Conclusion

In spite of participant illness, accidents and other absences, all RWAV shows went to air as scheduled, with RRR feeding back to RMIT that they were impressed by the overall standard of shows and amazed by the outstanding quality of some specific shows. Overall, the project created value for each of the three stakeholders involved in its production: 3RRR, RMIT and Student Producers.

STAKEHOLDER	VALUE ADD
RMIT	ROAR successfully used for uploading of shows and media annotation for critical analysis. The 12 programs produced and associated participant feedback further extended understanding of a hybrid approach to radio production in a co-located setting. It also developed learning in the area multi-platform radio for all key stakeholders
RRR	A version of RWAV that transcends weekly live to air format through live tweets and links extended interviews, photos etc on RRR website
PARTICIPANTS	Opportunities to: <ul style="list-style-type: none"> - create shows spanning multiple platforms - experiment with a variety of online tools including Google docs, DropBox, Trello, FaceBook, Twitter - operate as a functioning production team member in a real world media workplace - develop skills in reflective practice

It was decided that The Room With A View program would continue in 2013, using ROAR to archive shows and MAT as a reflective tool. Facebook would be used in production, together with other shared document applications and Twitter feeds would be embedded into the live to air production process. The RWAV page on 3RRR's website would be used to publish edition specific ancillary data.

6.3. Thematic Analysis

6.3.1 Shared Vision

Ultimately a shared vision unified the group....its benefits include speedier decision making and a similar approach to interviewing.

As indicated in Part 1 of this case study, feedback on the Formulation Stage of the project (vision setting and project planning) was mixed, with two of the six project groups indicating that they had struggled to build a cohesive team vision. These challenges were also reflected in early project outcomes with one of these groups failing the initial demo test and obliged to resubmit, and the other group advised to schedule more preparation before going to air with their first program.

Team theory suggests that the early challenges reported by these teams were far from atypical and similar to issues that the vast majority of teams confront as they evolve towards collaborative teaming (Tuckman, 1965). Whilst Tuckman's 'Forming, Storming, Norming, Performing' model is useful in describing the different stages of team formation and in particular the storming stage, where Tuckman maintains that most fail, it does not explain why in some teams conflict or difference becomes constructive and a source of creativity (cf Chapter 4 Senge) and in others destructive and demotivating.

KEY ENABLERS

Analysis of post-project reflections from teams reporting a positive experience of the initial vision setting and planning phase provide a number of clues, with groups identifying three key enablers to effective vision setting:

- Allocation of roles and responsibilities based on individual choice and personal strengths
- Collaborative creation of the program running sheet
- Combining task and social aspects of project planning

1. Allocation of roles and responsibilities

The way in which roles and responsibilities were allocated varied from one group to another. In certain groups each role had an accompanying set of individual responsibilities/deliverables. Participants in these groups reported that clearly defined jobs assigned to each role – panelist, producer and presenters had *'given order to*

proceedings;’ that ‘when everyone knows their responsibilities things are more likely to run like clockwork, which on live radio is critical.’

In other groups, while individual roles were allocated, tasks and decisions were broken down into those which were individual responsibilities and those which were group responsibilities. Another group used an even more fluid way to distribute responsibilities:

One thing that worked really well was the way we operated in and out of our roles. We allocated roles of presenter, producer, panelist, music producer and online producer, but we would all work together regardless of the badge we were given. For example, even though S was online producer for the second show, she set up the interview with the “live below the line” volunteer. We would individually fulfill our given roles, but not limit ourselves to them, which reflected our dedication and our commitment as a team.

The range of skill sets present in our group has also been key to enabling successful collaboration. Where one group member lacks, another has proven more than able.

Working to individual’s strengths and interests manufactures good synergy and allows the product to be greater than the sum of its parts. For example in RWAV, T. had an affinity with presenting. His quick-wit and friendly nature made him an ideal candidate for the role. Similarly, G. is brilliantly organized and enjoys making plans; she had the makings of a producer. While working to your strengths is good for the group, it also usually means that the area is something that interests you too.

In spite of their slightly different approaches, what characterized all of these groups was an interdependent approach, where team members arrived at whatever organization they finally implemented through a process of give and take and a sense of mutual responsibility.

2. Collaborative Development of Running Sheet

Group 1 – the first group to air on RWAV in 2012 provide a good example of how a simple organizational process or tool may be used intelligently to simultaneously develop a solid project roadmap and strong group ownership.

Having our extensive, three-page, running sheet was at the very heart of our entire show. The running sheet proved to be incredibly helpful and enabled us to stay on track with time and content. Having consistently edited and improved the running sheet we were very confident in the final product and we attribute the success of the show to our excellent organization and planning.

RWAV – GROUP 1 – RUNNING SHEET (From ROAR)

SEGMENTS	TALKING POINTS	DURATION
THEME		1:03 Mins
INTRODUCTION	<p>Welcome to the show. Mention they are with RWAV, RRR. 'Great show coming up': Mention some artists/songs we will be airing: RYAN ALICE, THE MURLOCS, BIG SCARY</p> <p>'First up we have a Feature Documentary' Kit to provide brief outline of the documentary.</p> <p>Mention that Tom will be joining us in the studio. Also - Later on, we'll be hearing from Curt with his quirky facts of the week and also from Bianca with a review of a new, life changing app she has discovered.</p>	2:00mins
SONG	<p>In the Other Room- Ryan Alice</p> <p>Singer song Writer from Ascot Vale; 2010 release from album Leaking Days.</p>	3:21 Mins
INTRODUCE DOCUMENTARY	<p>Zoe and Kit to have a brief conversation about their reactions to the documentary while explaining what it's about.</p> <ul style="list-style-type: none"> - Recorded in local area of Carlton - Explores the monopoly of the supermarket and the demise of the Milk bar and effect on society/community - Nostalgia 	1:00min
NO MILK TODAY Gets us to 15 minutes		8.25 mins
TOMS IV	<p>Brief discussion with Tom</p> <p>Is there a personal story behind why you chose to focus on this niche in society?</p> <p>What do you think about the 'life' of Milk bars, will supermarkets and 7/11 stores eventually replace them all?</p> <p>How do you think this is affecting society generally? I got a really strong sense of the community involved in Milk Bars, the regular customers, their quirks etc. The social experience of 'shopping' is now quite a sterile, impersonal experience.</p> <p>How can the average person help struggling milk bars – do you think a</p>	5mins

	community kind of co-op can still exist? What's your ultimate milk bar snack?	
PROMO		1:00min
SONG	We Shall Tread Softly (from Now on) - Fraser A Gorman 'After spending many years plating in 60's Garage band Revolver and Sun Fraser has turned his song writing abilities to country music. You can really hear the influence of Bob Dylan throughout this piece'.	2:38 mins
ID	Gets us to 24 minutes	0.05 mins
WHATS COMING UP	'ITS BEEN A GREAT SHOW SO FAR, BUT DON'T GO ANYWHERE' Mention we have some great music still to come – Big Scary, The Easy Beats. Discussion about alternate ways of living sustainably in Melbourne Pre-recorded follow up interview with independent film maker Rohan Spong after his film premiere in New York. BUT FOR NOW LETS HEAR FROM OUR QUIRK FINDING EXTRAODINAIRE CURTIS WITH HIS ODD SPOT NEWS UPDATE.	1 min.
CURT'S QUIRKS		2 min
PROMO		0.20min
CURTIS' QUIRKS CHAT Gets us to just under 30 minutes	LETS HEAR FROM THE MULOCS WITH THEIR AWESOME TRACK, STEP AND STAGGER, STAY WITH US GUYS, YOU'RE WITH RWAV.	2.00min
SONG	Step and Stagger - The Murlocs Some soulful Rock'n'roll From The Murlocs. Lead by Ambrose Kenny Smith, son of Broderick Smith from classic 70's bands such the Dingos and Carson, these young men are well schooled in blues, RnB and soul.	3:48 mins
THEME	1 min 57 minutes	1 min
ROHAN SPONG IV INTRODUCTION	Now we've got a really exciting interview with a local documentary maker Rohan Spong who actually spoke to RRR late last year when he was in New York about to premiere his latest work All The Way Through Evening which is a musical exploration into those lost in the pandemic of HIV aids which swept America in the 1980's. Zoe caught up with Rohan earlier this week to find out about how his documentary was received.	
ROHAN'S IV Gets us to just under 40 minutes		5 min

SONG	HEY SOMEBODY – BIG SCARY Australian musical duo formed in Melbourne in 2006, by Tom Lansek and Jo Syme.	3.46 mins
DUMPSTER DIVERS AND IV WITH MORGAN Gets us to 50 minutes	DISCUSSION/IV ABOUT DUMPSTER DIVING. A new kind of 'sustainable' approach has begun to grace our shores from America – Dumpster diving. Divers basically describe themselves as an anti-capitalist social group who live foraging for commodities like food, furniture and clothing and by doing this, are not only reducing waste but are protesting against the system of overproduction creating this waste. INTRODUCE MORGAN – 20, Visual Arts Student living in Falkner. So Morgan, can you explain to us the process of an actual dumpster dive – what happens? What kind of stuff do you look for, and more importantly what kind of stuff do you tend to get? Is there a real community of divers who share hot spots and stuff you guys pick up? What's your response to the argument that dumpster diving is unfair to producers and a form of stealing? Any funny stories from a dive gone wrong or have you found anything super gross in a bin? SEGUE INTO BIANCA'S APP REVIEW	6 mins
APP Review		4:00mins
WRAP UP	Thank listeners & guests Don't forget to tune in next week Forward Announce Dumpster Diver by The Black Lips.	1:30 mins
THEME		0:19 sec
SONG	Dumpster Diver – The Black Lips	2:24 mins

The above version of the running sheet was created for the presenters on the show and another version created for the panel operator. Whilst it is easy to see how the highly detailed running sheet enabled the group to deliver its first program with confidence and precision, perhaps equally as impressive as the final artefact is the nature of the iterative and collaborative process that the group used to create it.

3. Combining task and social aspects of project planning

Whilst most groups used a combination of face to face and virtual communication during the Formulation stage of the project, it is perhaps significant that both groups

who encountered early difficulties indicated that initial contact had been purely virtual. “Successful” groups also noted that initial exchanges combined a mix of the social and task aspects regardless of whether they were conducted face to face or on-line:

The planning stage involved the entire group and usually consisted of a good chat over coffee, airing all kinds of ideas despite how crazy they may seem initially.

6.3.2 Trust

Individuals who described the vision setting and planning phase of the RWAV production cycle as a success, rarely referred to trust by name. However, their descriptions of their relationships with fellow team members were characterized by examples of interdependence and the constructive harnessing of diversity. In contrast, in the two groups which struggled to create a clear shared project vision and associated roadmap, difference tended to become a liability and team member intentions were regularly questioned.

When everyone is involved from the beginning, trust is established and the group can function as a cohesive whole but when trust is absent the negative “we’ll just wing it” attitude creeps into proceedings and dooms the final product to be a haphazard substandard piece.

Trust was something that I struggled with in RWAV. I felt that some members did not care a great deal about the end result.

While it is possible that at least some of the setbacks we experienced may have been the result of fear or nervousness, I believe that a great many of them were due to a general lethargy in our group, even laziness.

Towards the end of semester I was dealing with a pre-existing health condition that affected my ability to complete my individual interview by the due date. It was not something I wanted to discuss with my team members in detail, but I did explain that my contribution would be delayed. It was at this time that I started to feel as though I was being excluded from the team. I was even rebuked about the late interview by one of the team members in front of the others, which affected my morale significantly.... My reaction was to withdraw even more, and to reduce

the level of my contribution in order to avoid the discomfort of working with people who I felt didn't want me around.

6.3.3 ICT

One of the aspects which characterized RWAV 2012 was the multiplicity of technology employed. In addition to ROAR and its integrated blog and MAT functions, participants reported the use of tools as varied as DropBox, Google Docs and Trello for project organization, to Sound Cloud and ABC Pool for distribution. The media most regularly reported in participant feedback as either having facilitated or hindered collaborative program production and distribution were: Facebook, Face to Face, MAT and Twitter.

Feedback concerning the first 3 of these media was analyzed and synthesized using the following questions as a framework.

- 1. Context:** When and how was the medium/technology used?
- 2. Benefits:** What did users most appreciate?
- 3. Challenges and Opportunities:** What challenges or opportunities for improvement were reported?

FINDINGS IN RELATION TO MAT

1. Context

MAT was used at three critical moments in the project process:

After our demo recording, MAT was excellent in helping to identify our weaknesses, and areas in which work was required.

MAT and ROAR allowed the critique of others' work: pre-recorded interviews, or previously made documentary features could be heard in preparation for the show.

The Media Annotation Tool (MAT) was helpful for the post-discussion of the production of the RWAV shows.

The tool was used to reflect and communicate feedback on personal work, the work of team members and the work of members of other teams.

By going through the whole show after production and annotating thoughts, points, positives/negatives and suggestions it allowed for a platform of discussion amongst group members on the work that had been produced. The benefit that the MAT process allowed for the group as a whole was to see where there could be possible in the RWAV process.

MAT was essential in forcing us to listen back to our work and listen to what worked well and what we could perhaps look to improve moving forward.

MAT also provided us with a useful platform through which to reflect upon and critique our own work, along with the work of the group. The end result was a valuable insight into other team member's opinions, done so in a way that promoted honest discussion.

2. Benefits

Three themes regularly emerged in terms of the characteristics most appreciated MAT.

(i) Accuracy and precision

One frequent piece of feedback in relation to MAT was its precision – the fact that the application enabled users to pinpoint a specific moment of the audio on which to feedback

MAT enabled me to comment directly onto the area of the show that I feel worked well or perhaps needed adjustment.

This feedback is much more accurate and succinct with comments correlating to the direct moment you are referring to.

(ii) User friendliness

Participants also appreciated a number of technical functions of the tool, including the commenting function which used colour-coding by category of comment, thereby enabling rapid focus on groupings or patterns of response. Users also appreciated that the tool provided a permanent record for easy reference.

The categorized-by-colour comment feature made viewing easy, and critical feedback was easily accessible.

Grouping and patterns were visually obvious, which made the team aware of particular areas requiring work.

As opposed to writing notes on the show MAT is a much more convenient tool that enabled me to record my thoughts online in a space that I can continually return to.

(iii) Capacity to drive reflection and analysis

MAT's capacity to drive reflection at an individual and group level was confirmed in RWAV 2012 feedback.

Having an outside voice and view is pivotal, as sometimes we can get so caught up in our work that it is impossible to view the show/work objectively.

Having the opportunity to listen to and comment on other people's work helps give you some perspective on other things that might work well and ideas that your own group could implement to further improve your own show.

By commenting on other people's work and having them listen and comment on your own, you are forced to look at both the positive and negative elements of your work and have the opportunity to receive advice and feedback on elements of your work you may never have picked up on yourself.

Challenges

Few challenges were identified in regard to MAT, although several participants indicated that they had not used it as extensively as they would have liked.

I think it is a really useful tool that I could have utilized more.

At first I found it more of a clunky SoundCloud track, but once I got used to its intricacies I began to appreciate it more.

FINDINGS IN RELATION TO FACEBOOK

1. Context

Used in a limited way in the 2011 Documentaries project, Facebook became omnipresent in 2012, with all RWAV groups integrating the tool into their communicative ecology. FB was used to:

- Share information and multimedia: participants used their Facebook sites to brainstorm ideas for shows as well as to post information, ideas, questions, concerns, thoughts and pictures
- Send messages. From unexpected absences to rescheduling delivery of interviews exams
- Provide direct communication with other stakeholders: FB was used to communicate with the RRR talks producer about upcoming show. The RMIT program coordinator was also copied into messages.

2. Benefits

(i) Ease of use/informality

Most Participants reported that as they were already users of Facebook implementing it into the project provided a comfortable way to participate in the project.

We are a generation that checks our Facebook every day. Thus, any updates and posts shared in the RWAV group are viewed with immediacy, helping to propel the group's progress and brainstorming of ideas.

Given the ease of access to the site, it meant that no group member had any justifiable reason to say they hadn't 'seen the message' or 'didn't receive the email'. All members were on the same page and it quickly became clear that every member had to check the page each time there was a notification.

(ii) Immediacy/Responsiveness

Groups who assessed they had made effective use of the tool also cited the responsiveness of their fellow group members and other stakeholders in responding to concerns immediately, thereby helping reduce stress or pressure.

When one of the other RWAV groups was left with only two group members, everyone else being overseas, through Facebook (and one of the member's cry for help on the RMIT Media page) I was able to 'raise my hand' and volunteer to help them out. I was also 'introduced' to everyone else without having to meet

them. It is safe to say that without this kind of instantaneous electronic connection, the show would never have run as smoothly.

The fact that the course coordinator (Bruce Berryman) had access to these groups was a bonus, as queries and concerns regarding the course and the show can be clarified through, again, the everyday utilization of Facebook. Conflicting timetables meant that in order for work to get done, communication channels had to be open with a constant stream of ideas flowing. Creating a Facebook group took some of the stress off group work.

(ii) Facilitating Connection

Participants who saw FB as an important enabler of effective collaborative work consistently referred to the dual (task and socio-emotional) aspects of the tool.

Facebook has been an excellent organisational platform for putting together running sheets, suggesting possible segments, interviews etc. But perhaps the most important function of these pages has been their use as a facility for expressing support and gratitude. The overall tone of almost all of what is said has been overwhelmingly positive. By 'liking' a post, I am not only acknowledging it and taking in the information it contains. The action has an implicit air of acceptance – you are giving an online 'thumbs up'.

Whether it is to express a sense of panic, to inform everyone of an email from E (3RRR), or to ask for advice, I found this by far the most easy and accessible way to communicate.

This is consistent with research indicating that the socio emotional character of content exchanges is critical to the development of creative collaboration in an on-line environment (Aragon, Poon, Hernandez, Aragon 2009).

3. Challenges

The topic of Facebook attracted the highest number of ICT related comments for the RWAV project. These comments were also the most polarized, with users identifying almost as many user challenges as benefits. The most frequently cited challenges were:

- Delays in response

- Potential for misunderstanding
- Impersonal nature of communication

(i) Communication Delays

Where a significant number participants cited the rapidity and immediacy of Facebook as one of its more important benefits (see Benefits section above), others had a different experience leading to frustration, anxiety and a sense of inequity..

There was often a delay in response reaction, which proved frustrating for team members seeking a more immediate response.

I think a problem occurs when people are unwilling or simply can't be bothered to contribute to the conversation on Facebook. In my role as producer for our last show – and at several other times in production for RWAV, it's often made me anxious as I throw ideas 'out there' and receive no response.

Participants attributed these delays to a range of causes from individual communication preferences to the informal and therefore less 'serious' nature of Facebook.

Individuals have different social media that they prefer to use so at times conversing with group member's was a slow process as some people would check their Facebook less than others.

The trap of Facebook comes in (as) we see it as an easier and more immediate way of communicating, but our more casual use of the site means that it's not taken as seriously.

In response to this challenge, a number of participants found individual strategies for ensuring that their team-mates were aware of their posts, whilst others reached the conclusion that Facebook was not adapted to their needs at least at certain stages of the project.

Using the 'tagging' function on Facebook allowed me to ensure that my teammate(s) were, in the very least, aware of my post, but a reply was not necessarily inevitable. I found such communication challenging at times, and would have preferred face-to-face meetings, where discussion is more fluent and conversation immediate.

If members are not checking or responding to the discussion regularly, then we need to look at a different way of preparing our program as this method doesn't distribute responsibility equally to all group members.

(ii) Potential Miscommunication

A second recurring theme was the potential of Facebook to drive miscommunication or isolation rather than communication and connection.

At times it was difficult to express certain things and the tone of people's writing could be misread creating tensions between group members.

The FB space became so prevalent that physical meetings were secondary to comment threads on the web, impersonalizing members from each other so that when physical meeting did take place, those who had not previously met or worked together hardly commented or shared their ideas.

FINDINGS IN RELATION TO FACE TO FACE COMMUNICATION

1. Context

Face to face communication was most frequently cited as a complementary communication medium to Facebook.

Ultimately, the contributions to the Facebook page, combined with the weekly face-to-face communication have ensured a productive and inclusive collaborative process.

For a number of groups, face to face communication was primarily employed during the initial brain-storming and planning phases of program development. For others it became a regular adjunct to online activity with many groups choosing to meet before or after their weekly radio lecture.

2. Benefits

The two benefits of face to face contact most frequently cited by participants were its ability to enable **critical discussion** to take place in a time effective manner and its capacity **to involve and focus** all group members. Group members who perceived

their groups as unsuccessful in having optimized collaboration frequently cited face to face communication as a missing element of their communicative ecology.

It was through these brief meetings that, in particular, the delegation of tasks was possible. For example, in the lead up to the first show, my group and I would clarify certain elements necessary towards creating our Room With A View shows, such as which member had the right CD's, who had access to a pre-recorded interview needed for the show, who was interviewing who etc.

Physical meetings are more effective for getting the group to focus and be more attentive rather than fading to the background while one or two individuals comment and post links for ideas as sometimes happened on Facebook.

Where our group's organisation failed was in relying too heavily on Facebook for brainstorming and planning purposes. I think that, going forward, we should aim to catch up once a week (directly after the lecture at a minimum) and to talk face-to-face about our progress. This would enable us to, in a short period of time, critically discuss ideas from conception to creation.

Much of our communication was conducted indirectly, over the Internet, and as a result there was often a delay in response reaction, which proved frustrating for team members seeking a more immediate response. I found such communication challenging at times, and would have preferred face-to-face meetings, where discussion is more fluent and conversation immediate.

3. Challenges

The only challenges cited for Face To Face communication related to the difficulty in setting it up due to conflicting schedule

Chapter 7

Conclusion

*We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time*

T. S. Eliot, Little Gidding, 1942

7.1 Introduction/Overview

Whilst collaborative radio production is not a new concept, the advent of digital network technologies has multiplied opportunities for radio stations and independent media producers to collaborate in new ways. These range from participatory collaborations between conventional broadcasters and media makers within their communities of interest, to the increasing use of social media platforms to creatively collaborate with audiences in the production and distribution of content.

However, collaboration literature indicates that whilst new forms of networked collaboration may offer important opportunities for innovation and creativity, success is far from assured (Beninger, 1987). This sense of the (as yet) unfulfilled promise of digitalization is echoed in Spurgeon, Rennie and Ming Fung 2011 study of the Australian community radio sector's response to digitalization, with the authors finding that although the digitalization of community radio has enabled participation, overall the sector remains only erratically engaged with digital media and dominated by radio enthusiasts who are not necessarily in tune with digital media culture (Spurgeon, Rennie and Ming Fung, 2011; Rennie et al, 2010).

Over the past 10 – 15 years, significant research has been generated in response to the perceived challenges involved in delivering on the potential of networked collaboration for innovation, notably in the area of scientific research. However, very little work has emerged in the area of radio studies. In this exploratory study, I set out to help fill that gap by posing the question:

'How can we optimize collaborative radio making in a complex networked environment?'

My journey towards a response to this question began in 2007 with "Shared Stories", a project bringing together geographically separated communities of interest to work collaboratively on a radio documentary. Underlying "Shared Stories" was a belief that ICTs had sufficiently stabilized to enable established processes from analog radio production to be transposed into a networked environment. I had also assumed that any challenges that might be encountered would be of a technical nature. By project

end, this assumption had been turned on its head, with the emergence of a number of important non-technical obstacles indicating that there was a more complex dynamic at work than originally imagined, and that optimizing the effectiveness of future projects of this nature would necessarily involve taking into account both their social and technical aspects.

Over the course of the next 4 years, my initial insights from Shared Stories were challenged, developed and fine-tuned using a participative action research approach which enabled action (change, improvement) and research (understanding, knowledge) to be achieved at the same time. Central to this process of change and development was ROAR, which I had initially envisaged as a simple archive to house material produced by students, but which evolved over time to integrate both a back-end collaborative production space and a publicly accessible distribution site.

The iterative action research approach I adopted for this project, with its focus on formalized critical inquiry at both individual and small group level, resulted in the generation of a significant mass of data over 5 action cycles. This output was subjected to critical analysis via 3 case studies, each of which addressed a different aspect of collaborative radio making, involved a different group of participants and was completed at a different point in time (2008, 2011 and 2012). Each individual case study consisted of a "whole" study, in which facts were gathered from various sources and conclusions drawn on those facts. Finally, individual case study data was subjected to a comparative analysis in order to identify recurrent themes/patterns which might constitute a useful framework for use by other radio practitioners. A synthesis of key findings and their implications for theory and practice is presented in sections 7.2 and 7.4 of this chapter.

During the early phases of this study and in the absence of any radio specific research data, a review of broader collaboration literature was critical in helping me to begin to make sense of what I was observing in practice, as well as to situate my research focus in the wider academic community. Two bodies of work emerged as particularly relevant in enabling a more comprehensive understanding of the dynamics of collaboration and some of its key influencing factors. The first of these was the work of Olson et al, whose Theory Of Remote Scientific Collaboration describes the aspects that they and other researchers believe are important in determining the success of remote collaboration in science (Olson et al, 2008). The second key reference was Sonnenwald, whose 4 stages of collaboration model provided critical insight into the

way effective collaboration is constructed dynamically over time (Sonnenwald, 2007). As the action research cycles of the project unfolded, my initial research focus broadened to integrate studies on themes that were emerging as critical in my own research, but which were either not addressed or only cursorily addressed in broader collaboration literature.

Whilst the collaborative production projects examined in my study are very different from the large-scale scientific collaborations addressed by much of the literature, both in terms of scale and the nature of the work itself, a number of findings confirm expectations from the extant literature, in particular expectations relating to the critical importance of trust and common ground in building effective collaboration. I believe these findings are of interest not only because they contribute to filling a research gap in the area of radio studies, but also because they add new depth to our broader understanding of the phenomenon of collaboration. This study also reveals more fundamental contributions or additions to knowledge arising from findings which either disconfirm expectations from the literature, or reveal new areas which have not been raised in previous collaboration literature.

7.2. Key Study Findings and Insights

During the individual case study phase of this project, I identified three main variables to collaboration success: trust, shared vision and ICT. During the comparative analysis of case study data, a fourth collaboration influencer emerged: boundary objects.

7.2.1 Trust

A key insight from my study is that at the heart of successful collaboration lies the willingness to share information and ideas and that trust is an important enabler of this process. As a project participant commented:

'When everyone is involved from the beginning, trust is established and the group can function as a cohesive whole but when trust is absent the negative "we'll just wing it" attitude creeps into proceedings and dooms the final product to be a haphazard substandard piece.'

The theme of trust emerged strongly during the initial Shared Stories project and has been a leitmotif throughout the research, with results showing that when team trust is

high, a large amount of energy and creativity is poured into idea generation, but that when trust is low, team members become reticent about sharing ideas and information with others. These results are consistent with previous studies identifying trust as a major determinant of knowledge sharing (Abrams, Cross, Lesser and Levin, 2003; Huotari and Livonen 2000, Sonnenwald 2006).

I have also observed that interpersonal trust may influence group process and performance indirectly, by moderating (facilitating) the relationship between other variables and overall group performance. A case in point is diversity, where production teams reporting strong levels of trust considered group diversity to be an enabler of collective performance, whilst teams where trust was low considered difference to be a constraint to effective collaboration. This indirect, modifying/facilitating role also appears to play out in terms of the perceptions of ICT effectiveness. This will be explored in more detail later in this chapter.

Whilst there is an increasing volume of literature describing the importance of trust to successful collaboration and the difficulties of developing it in a computer mediated environment, there are considerably fewer insights into how trust might best be developed in the context of a collaborative project (Sonnenwald 2007). One significant contribution in this area has come from Olson and Olson, who suggest that common ground may be a precursor to trust and therefore an accelerator of the overall collaboration process (Olson and Olson 2000). My findings support Olson and Olson's proposition, showing that pre-existing common ground between stakeholders or team members who have previously worked together is an important facilitator of the early phases of collaboration. However, given that forming production teams of people who have already worked together is often not feasible even in a co-located environment, I have sought to identify processes, tools and practices which might act as accelerators of the development of common ground among team members who don't know one another. These are explored in sections 7.2.2 – 7.2.4 as well as in the practical implications section of this chapter.

7.2.2 Shared Vision

A second key finding is that teams who successfully negotiate the vision and goal setting phase of the production process develop a level of mutual understanding and trust which enables them to confront later project phases with a degree of flexibility and confidence that is unavailable to those who fail to create a shared vision. However, as

Sonnenwald (2007) comments, the process of developing a shared vision and roadmap is not necessarily an easy one. Whilst project visions and goals often 'appear obvious and straightforward after they have been achieved or are close to being achieved, in the early stages of formulating a collaboration, they can be difficult to articulate' (Sonnenwald 2007). Tinnirello suggests that the challenge may lie in 'finding common ground in a situation where competing interests are easier to see than common ones' (Tinnirello 2002).

My findings indicate that one of the keys to finding this critical common ground during the vision building process may lie in a strong focus on both task and relationship. Study data reveals that teams that described the vision setting and project planning phase as 'successful' had an early task/process focus, with team members moving quickly and enthusiastically to define roles, key deliverables and individual and shared responsibility for tasks. This is consistent with findings from collaboration literature on the importance of early task allocation, particularly in distributed teams (Sonnenwald 2007, Olson and Olson 2000).

'Successful' teams were characterized by what Lunsford and Bruce (2001) call 'intentionality', where participants feel involved in a mutual project from the outset, and the project becomes a generative space where members feel that they can get as much as they give from taking part in the exchanges. Teams that successfully negotiated the vision setting phase reported a participative decision making environment where different perspectives were shared freely and where activities, such as the allocation of roles and responsibilities were often based on individual choice and personal strengths. In contrast, teams that experienced difficulties in negotiating this stage reported contested role allocation and/or overall difficulties in moving from discussion to decision making and action.

The early task focus, coupled with an enthusiastic, participative approach that was observed in 'successful' teams appears to have much in common with 'swift trust', a form of rapid bonding that Meyerson et al found in their investigation of temporary work teams, such as film crews, theatre groups or cockpit crews that come together to complete interdependent, often ambiguous tasks within tight timescales (Meyerson et al 1996). However, where Meyerson found that a positive task and action approach rendered a relationship focus unnecessary (*ibid*)), my study found that both are important during the early phases of a project.

My findings reveal that early exchanges within teams that successfully negotiated the vision and goal setting phase were conducted using a mix of face to face and on-line communication. For a number of groups, face to face communication was primarily employed during the initial brain-storming and planning phases of program development. For others it became a regular adjunct to online activity with many groups choosing to meet before or after their weekly radio lecture for a coffee. However, regardless of the communication medium employed, exchanges systematically combined a mix of social and task aspects.

In contrast, groups which encountered significant difficulties in the vision and goal setting phase indicated that contact during the early stages of the project was entirely virtual. They also reported a lack of any social exchange. Members of these teams described discussions as characterized by either an avoidance of difficult conversations, and/or exchanges that were closer to advocacy battles than any form of collaborative reflection, with imposed decisions by self-declared 'leaders'. In both cases the impact for a majority of team members was one of frustration and perceived inequities in terms of role and task allocation. Findings suggest that 'victims' of undue process generally chose to conform rather than challenge contested decisions, resulting in intellectual and/or emotional withdrawal from the project with inevitable impact on overall team performance.

7.2.3 Information and Communications Technologies

In their theory of remote scientific collaboration, Olson et al (2008) identify five key elements that they believe affect distributed collaborations, but that are also critical to collocated projects: common ground, collaboration readiness, technology readiness, nature of the work and participants' management style and leadership. My study provides new insights into three of these areas as they relate to technology choices.

NATURE OF THE WORK

Olsen and Olsen (2000) argue that one of the key determinants of effective collaboration is the degree to which that work is 'coupled', a term the authors use to describe the amount of communication and coordination necessary in order to complete a certain task. Tightly coupled work is described as 'non-routine' or 'ambiguous' in nature and therefore requiring a high level of team member interdependence and

frequent and complex communication. In contrast, loosely coupled work requires either less frequent or less complicated interaction. *'In loosely coupled work, there is common ground about the task, goal and procedure; it merely needs to be played out.'* (Olson and Olson 2000, 21).

Olson and Olson have found that successful collaborative projects almost always consist of unambiguous, loosely coupled work projects. They have also found that remote collaboration intensifies the innate challenges of highly coupled collaboration because technology does not support the rapid back and forth in conversation or the rich, nuanced communication required.

While my study findings show that distance can indeed create significant barriers to the frequency, richness and openness of communication, they also indicate that highly coupled work is not only achievable but may be enhanced in an asynchronous, computer mediated environment by the use of media annotation technology. This insight will be explored further in the Boundary Objects section below

COMMON GROUND

Since the identification of common ground as an enabler of trust and successful collaboration, a number of studies have sought to assess the capacity of different communications media to develop common ground and more effective collaboration (e.g. Clark and Brennan, 1991; Olson et Olson 2002). In their 2009 paper 'What still matters about distance', Olson et al suggest that social networking sites such as Facebook and Twitter may be important enablers of collaboration by facilitating rapid response times from people who are always on their computer and by grounding exchanges, giving a sense of the remote person's situation which provides important contextual information, thereby mitigating against attributing delays to bad character (Olson et al 2009). My study findings suggest that a more complex and less linear relationship may exist between social networking applications and common ground/trust than envisaged in the literature.

For the final case study of this research, Facebook was the tool of choice for all teams for the purpose of ongoing project coordination and communication. By the end of the project, while high performance, high trust teams remained extremely supportive of the tool, members of teams that had confronted challenges in building common ground and trust were negative in their feedback.

Impact of Facebook as seen by high and low trust teams

Perception of FB by High Trust Teams	Perception of FB by Low Trust Teams
Encouraged frequent, timely, rapid communication	Inhibited communication both in terms of frequency and rapidity of response
Built a sense of connection with other team members	Developed a sense of isolation
Enabled free-flowing exchange of ideas	Increased misunderstandings
Reduced anxiety and stress	Created uncertainty and anxiety

I argue that this discrepancy in team feedback is an example of how interpersonal trust (or lack thereof) may moderate the relationship between other variables and overall group performance (cf 7.2.1). In other words, depending on the actual level of trust and common ground present in a group, an ICT may be perceived as an enabler or restrainer of effective collaboration, a perception which will in turn impact the use of the tool.

TECHNOLOGY READINESS

The literature indicates that technology that is not perceived as complementing existing practices will not increase collaboration and may run the risk of being rejected (Sonnenwald 2006, Olson and Olson 2000, Slater and Tacchi 2004). My findings support this proposition, with the blog originally designed for use within ROAR but rejected over time in favour of Facebook providing a case in point.

However, where collaboration literature stresses the need for complete systems stability prior to the launch of new technology or the risk of backlash/non adoption (Olson and Olson 2008; Sonnenwald 2006), I have found that in the context of collaborative radio making, technology cannot be considered truly stable until it has been fully appropriated by the users and that this involves an iterative, incremental approach to design and development. This finding is consistent with end user literature which argues that the appropriation of information technology is not a phenomenon that 'somehow happens once a software tool or application is in its application field', but rather a network of activities that users continuously perform in order to make an application 'work' in a given environment. This notion of 'shaping the artefact as a material as well as a meaningful object' (Pipek, Rosson, Ruyter, Wolf 2009), has characterised the development and implementation of ROAR and MAT across this

research project. Implicit within this notion of iterative development is the need for ongoing technological support to ensure that the inevitable technological 'breakdowns' during early production cycles do not prohibit users from achieving project outcomes.

7.2.4 Boundary Objects

Boundary objects are objects which are both plastic enough to adapt to local needs and constraints of several parties employing them, yet robust enough to maintain a common identity across sites. ...the creation and management of boundary objects is key in developing and maintaining coherence across intersecting social worlds (Star and Griesemer, 1989).

It could be argued that the ability of a team to combine different perspectives, talents and ideas in a way that results in the creation of something far beyond what could have been achieved individually is intimately linked to team members' ability to get beyond the boundaries or differences that divide them as individuals. While these boundaries may be engendered by geographic and/or cultural distance, I have observed that a sense of perceived 'difference' may also be experienced by co-located team members of the same age and culture, attending the same university. A key finding from this study is that certain artefacts or 'boundary objects' can play an important role in helping bridge perceptual and practical distance. Three such boundary objects have been identified in this study.

PRODUCTION TEMPLATES (RUNNING SHEET AND PRODUCTION PLAN)

Whether radio producers are operating in analog or digital environments, running sheets and production plans are critical elements in the planning, negotiation and production phases of making radio. The templates used in this project are illustrative of what Lee (2007) calls Boundary Negotiating Artifacts – artefacts that are used to iteratively align perspectives and solve specific design problems that are part of a larger design project.

A key finding in relation to these templates was their potential to be used in a dynamic, iterative fashion which encouraged dialogue and the sharing of perspectives and resulted in a sense of shared ownership of final outputs. The templates enable this to happen by providing a fundamental infrastructure and focus for critical pre-production activities where the design process is cut down into subtasks to make it more

manageable, thereby creating interfaces/ boundaries and the need for making interface requirements explicit. Although these templates are not technology dependent, in this project, they have been available online and much of the negotiation and development has occurred asynchronously through shared documents. Study findings indicate that the asynchronous nature of the process provided a useful adjunct to face to face production meetings.

ANNOTATION TOOL - MAT

Originally developed as a video annotation tool to assist in the evaluation and reflection process within the RMIT physical education teaching program, MAT was customized for use within RMIT's radio curriculum. The tool is now successfully embedded into the production process where it is central to both pre-recorded production and the iterative cycle of action and reflection within live to air program-making.

A previous, small scale case study focusing on the use of the tool within the physical education teaching program (Colasante 2011), found that MAT impacted positively on learners' capacity to reflect on their videoed teaching practice and on teacher feedback to students. This study extends that of Colasante through its multiple case approach and by demonstrating that MAT is not only an effective enabler of individual feedback and reflection on practice, but can also play a central role in supporting design exploration and creative collaboration.

More specifically I have found that MAT:

- Facilitates feedback which is fact-based, specific and actionable thanks to its ability to home in on specific parts of the audio
- Opens a space for dialogue which enables team members to see new connections between fields, ideas, and concepts in a way which would not be possible through face to face discussion
- Supports a range of team exchange from the purely technical to the aesthetic, as well as encouraging socio-emotional exchanges that build common ground and establish and maintain shared understanding
- Makes the informal processes of creative collaboration traceable and visible for future cohorts of radio makers

CONTENT MANAGEMENT SYSTEM – ROAR

In the 4 years since it was launched, ROAR has evolved to become closely identified with the RMIT radio curriculum and a key boundary object in use. Study findings indicate that ROAR is appreciated for its flexibility of use – there are few prescribed tools and those that are prescribed (e.g. MAT) are acknowledged as helping participants cross boundaries. It is also appreciated for its ability to serve as a “memory” - not only of the programs that teams have produced, which are all archived on the system, but also of the collaborative process engaged in getting there, making explicit the reflections and exchanges which resulted in particular creative decisions being made.

However, boundary object status is not eternal - artefacts become (and remain) boundary objects by being used as such over time (Lee 2007). In her 2011 on-line article ‘What causes a boundary object to fail?’, Rees maintains that although shared communication platforms or content management systems have the potential to serve as boundary objects, they often fail to do so because it is assumed that merely deploying the technology will create an impetus to use it and that this impetus will be sustainable. Rees argues that one of the keys to developing useful boundary objects lies in understanding the diverse audiences that will use them and finding a way to adapt the boundary object to different case uses without destroying its share-ability (Rees 2011). Bechky (2003) underlines the critical role of stakeholders in this process, maintaining that what matters is that all relevant actors actively contribute to the co-construction of meaning of a given boundary object’ thereby creating “the common ground that leads to shared understandings” (Bechky, 2003a: 326).

The action research methodology employed in this project has facilitated a process whereby production teams and other key stakeholders have actively engaged with ROAR over time, shaping its identity and keeping its ‘plasticity’ alive through an iterative process of reflective practice and informed action.

7.3 Implications for Theory

IMPLICATIONS FOR RADIO THEORY

As mentioned in the opening paragraphs of this chapter, collaborative production using digital technologies is an under-researched area of radio studies. While Chris Priestman’s 2001 study, ‘Web Radio’ provides important insights into a number of

important opportunities that digitalization presented for the medium, as well as their political, economic and social implications, his work does not address collaborative production. Given that Priestman's text was published in the very early days of internet radio this is perhaps unsurprising. As the author himself has acknowledged, there were obvious difficulties in writing for a future shelf life when details of the subject matter were changing so rapidly (Priestman, 2002). What is however more surprising, is that 12 years after the publication of Priestman's book, and in spite of a developing interest in digitally enhanced collaborative production in other areas such as design and I.T. development, the topic of collaborative production remains a neglected area of radio studies.

This exploratory study seeks to begin bridging this gap, as well as providing a starting point for further radio specific research in the area of collaborative production. It does so by providing a theoretically informed analysis of a 5 year long collaborative radio production project, showing the dynamic interrelationship among collaboration influencing factors over time. More specifically, through an iterative process of data analysis and critical engagement with the literature on collaboration and boundary objects, the study provides new insights into the role of social media in trust building and collaborative production, as well as into the use of a CMS as a boundary object that enables creative production work.

IMPLICATIONS FOR BROADER COLLABORATION THEORY

As outlined in 7.1, given the theory and praxis gap in this area of radio studies, I chose to ground my research study in broader collaboration theory. My findings also contributes to this broader theoretical area by extending central notions such as trust, common ground, shared vision and the integrated use of ICTs, to a context which is significantly different from previous studies, both in terms of project size and the nature of the work. On the one hand, findings affirm the central role of these influencing factors in successful collaboration. On the other hand, study findings offer a richer conception of the dynamic interrelationship between factors.

In addition, the study identifies another potential influencing factor not present in core collaboration literature – boundary objects. As Vyas and Nijholt (2010) have observed, most research into boundary objects has referred to them within the context of a collaborative work that focuses on bringing productivity and efficiency. This study contributes to an emerging body of research exploring the role of boundary objects as enablers of creative work (Vyas et al. 2009, Jacucci and Wagner, 2007).

7.4 Implications for Practice

A number of practical implications can be drawn from the study. Many of these become more critical in virtual teams or teams composed of new/developing practitioners who have never worked on a collaborative production project before.

DEVELOPING A SHARED VISION

An early enabler of effective collaboration is the development of a clear stakeholder vision and implementation roadmap. Whenever possible, initial stakeholder meetings should be conducted face to face. If this is not feasible, initial meetings should be scheduled via Skype/tele-conferencing. Project stakeholders should take the time to examine the 'Why', 'What' and 'How' of the project; identifying specific challenges/risks and reflecting on how these would/could be addressed. Coordinators of virtual teams and those composed of new practitioners should pay particular attention to determining ways in which production team members can build common ground socially prior to the formal project launch. It is also important to clarify any ambiguities between partners at this stage even at the risk of creating disagreement. Any discussions about technical solutions should involve future users and a clear action plan put in place for team members to become comfortable with any new technology prior to having to use it in a pressured production environment.

The translation of project vision and roadmap at production team level is a critical milestone in the development of a successful collaboration. Where projects embrace the self-managed model employed in this study, it is essential that the production team vision and goal setting process addresses not simply 'who will do what by when', but also broader issues of organization, such as how the team will communicate with each other and how decisions will be made. This process can be enabled by clear stakeholder guidelines and user friendly production templates that simultaneously provide a clear framework and incite dialogue and exchange.

BUILDING COMMON GROUND

Wherever possible, initial meetings between production team members who have never worked together should be conducted face to face, but when this is not possible, participants need to be given the opportunity to see the faces and hear the voices of

their team mates via Skype or video conferencing to accelerate the process of building common ground. Project coordinators should also reflect on ways in which production team members can build common ground socially prior to the formal project launch. The overall design of the production process also offers opportunities to build mutual knowledge and the foundations of trust by having team members move through stages from simple (pair activities to more complex collaboration in groups. Working collaboratively on low risk exercises such as vox pops before moving onto more complex collaborative productions may also facilitate the development of mutual knowledge and openness.

ENCOURAGING CONSTRUCTIVE COMMUNICATION

When introducing teams to the processes and tools they will be using, project facilitators are advised to focus on 'what' the tool or process is, 'why' it is important and 'how' it can best be used. This is particularly relevant for boundary objects such as MAT and the production templates.

Facilitators should also share the dangers of suppressing discontent and avoiding conflict with participants, providing them with some simple communication strategies for constructive communication. This is particularly critical in virtual contexts, where any perceived discontent needs to be addressed as early as possible, as emotions left unchecked in the virtual environment may erupt into sequences of negative comments which will be difficult to resolve asynchronously. In this context the project facilitator(s) may need to actively facilitate any discord. An associated finding is that as far as possible, production teams should have the flexibility to choose the tools or applications that they consider work best for them in a given context, thereby allowing them to adapt rapidly to changes in the internal and external environments.

ENABLING PARTICIPATION, REFLECTION AND DIALOGUE

Participation, adaptive procedures, reflective practice, and informed action lie at the heart of the action research approach adopted in this study. My findings indicate that this approach is particularly useful during the introduction of a new content management system like ROAR or collaborative technology such as MAT, but can also be successfully employed at other key stages of the collaboration process to optimize both product and process outcomes. Whilst the education setting in which the project evolved offer opportunities for reflective inquiry and analysis of the resulting data that are unfeasible in the majority of production contexts, each key project stage offers

opportunities for developing feedback and dialogue and learning in a way that is easily transferable to non-academic contexts such as community radio. These range from stakeholder feedback to teams before they move into production to the ongoing negotiation of meaning between team members throughout the pre-production, production and post-production phases to individual and small group reflection and feedback to stakeholders at the end of a production project.

7.5 Suggestions for Future Research

Whilst the idea of ROAR and an associated media annotation tool were conceived in the context of a geographically distributed project, Shared Stories, their development took place in the context of hybrid, co-located programs. One obvious starting point for further research would be to study the use of these artefacts in a fully distributed higher education setting, either between partner universities situated in different geographies or within one university with a number of different international sites.

Another research opportunity lies in the Australian community radio setting, which in spite of its historical role as a precursor of participatory and co-creative platforms and practices has so far failed to optimise the opportunities for innovative, co-creative production offered by digitalisation (Spurgeon, Rennie, Ming Fung 2011). Study findings relating to the collaborative generation of multi-platform content and the development of tools and platforms for collaboration in distributed communities would appear to be both relevant and transferable to this context, thereby justifying applied research in the area.

A number of additional areas that were raised in the oral presentation which constitutes part of my PhD candidature are also worthy of further study. These include:

- The use of MAT to materialise radio, thereby enabling its detailed theoretical study
- The possibility of commercialising MAT via an open-source model
- The location of ROAR within other participatory media movements
- Developing cross and inter cultural appreciation through the use of distributed learning
- Peer mentoring in distributed higher education

Finally, study findings in relationship to the use of MAT as a collaborative, co-creative

tool in radio, could be extended to broader media teaching and learning contexts such as film studies.

7.6 Conclusion

I embarked on this research project with the aim of finding methods by which communities of interest, whether co-located or separated by geography, could effectively share ideas and participate in the production and distribution of audio content reflecting their concerns and aspirations. In retrospect, I see that I was initially seduced by what I considered to be the almost limitless possibilities of emerging networked technologies to enable collaboration. Confronted with the reality of a cross-border project, I swiftly realized that my early analysis of the relationship between networked technologies and collaborative radio making had been simplistic and that collaboration was extremely complex.

Six years later, collaboration still seems complex. It is fair to say that when more than one person works on a creative project the risks are almost certainly as evident as the opportunities, and that these risks increase in a virtual environment. This has led to the argument that the kind of tightly coupled, interdependent collaboration required to co-create a radio program should ideally not be attempted in a computer mediated environment (Olson et al 2010). Yet, my exploratory research gives reason for hope by indicating that technology can play an important role in supporting design exploration and creative collaboration. My findings also identify a number of processes, artefacts, practices and behaviors that appear to help build the common ground and trust that lie at the core of successful collaboration. I believe that these insights are as relevant to practitioners in community radio as they are to fellow radio academics.

BIBLIOGRAPHY

Abrams, L.C., Cross, R., Lesser, E., and Levin, D.Z. (2003), *Nurturing Interpersonal Trust in Knowledge Sharing Networks* Academy of Management Executive, Vol. 17, No. 4.

Aragon, C., Poon, S., Monroy-Hernandez, D., Aragon, D. (2009), *A Tale of Two Online Communities: Fostering Collaboration in Scientists and Children*. ACM Conference on Creativity and Cognition, Berkeley.

Aragon, C.R. and Williams, A. (2011), *Collaborative Creativity: A Complex Systems Model with Distributed Affect*. ACM Conference on Human Factors in Computing Systems, Berkeley.

Argyris, C. (1982), *Reasoning, Learning, and Action: Individual and Organizational*. 1st ed. Jossey-Bass, San Francisco, CA.

Argyris, C. (1990), *Overcoming Organizational Defenses: Facilitating Organizational Learning*. Allyn & Bacon, Needham, MA.

Argyris, C. (2002), *Double Loop Learning Teaching and Research*, Academy of Management Learning and Education, Vol. 1, No. 22, pp. 206 – 218.

Argyris, C. & Schön, D.A. (1978), *Organizational Learning*, Addison Wesley. Reading, MA.

Argyris, C. & Schön, D.A. (1996), *Organizational Learning II: Theory, Method and Practice*,: Addison-Wesley, Reading, MA.

Australian National Statement on Ethical Conduct in Human Research (NH&MRC, 1999) Australian National Statement on Ethical Conduct in Human Research (NH&MRC, 1999).

Bawden, R.J. (1991), *Toward Action Researching Systems*, In Action Research for Change and Development, Ortrun Zuber-Skerrit (Ed). John Wiley, Sydney.

Bechky, B.A. (2003a), *Sharing meaning across occupational communities: the transformation of understanding on a production floor*. Org. Sci. 14(3) pp. 312–330.

Bechky, B.A. (2003b), *Object lessons: workplace artifacts as representations of occupational jurisdiction*, Amer. J. Soc. 109(3) pp. 720-752.

Benkler, Y. (2006), *The Wealth of Networks. How Social Protection Transforms Markets and Freedom*. Yale University Press, New Haven and London.

Beninger J. R. (1987), *Personalization of Mass Media and the Growth of Pseudo-Community*. Communication Research, pp. 352-37.

Bereiter, C. (2002), *Education and Mind in the Knowledge Age*. Mahwah, NJ.

- Blichfeldt, B. S., & Andersen, J. R. (2006), *Creating a wider audience for action research: Learning from case-study research*. Journal of Research Practice, 2(1), Article D2. Retrieved July 12, 2012, from: <http://jrp.icaap.org/index.php/jrp/article/view/23/43>
- Bonwell, C. & Eison, J. (1991), *Active learning: Creating excitement in the classroom*, ASHEERIC Higher Education Report No. 1 The George Washington University, School of Education and Higher Education, Washington DC.
- Callon, M. and Latour, B. (1981), *Unscrewing the Big Leviathan: how actors macrostructure reality and how sociologists help them to do so*, in K. D. Knorr-Cetina and A. V. Cicourel (Eds.) *Advances in Social Theory and Methodology: Toward an Integration of Micro- and Macro-Sociologies*. Routledge and Kegan Paul, Boston, Mass. pp 277-303.
- Callon, M. and Latour, B. (1992), *Don't Throw the Baby Out with the Bath School! A Reply to Collins and Yearley*, in A. Pickering (Ed.) *Science as Practice and Culture*, Chicago University Press, Chicago, pp. 343-368.
- Candy, L. (2006), CCS Report: 2006-V1.0 November. Retrieved September 29, 2013 from http://www.mangold-international.com/fileadmin/Media/References/Publications/Downloads/Practice_Based_Research_A_Guide.pdf
- Candy, L. (2011), *Research and Creative Practice*. In Candy, L. and Edmonds, E.A. (Eds) *Interacting: Art, Research and the Creative Practitioner*, Libri Publishing Ltd: Farringdon, UK pp. 33-59.
- Candy, L. (2012), *Evaluating Creativity*, in Carroll, J. M.(ed). *Creativity and Rationale: Enhancing Human Experience by Design*, Springer.
- Candy, L. and Edmonds, E.A. (2010), *The Role of the Artefact and Frameworks for Practice-based Research*. The Routledge Companion to Research in the Arts, M. Biggs and H. Larsson (Eds),
- Candy, L. and Edmonds, E.A. (2011), *Interacting: Art, Research and the Creative Practitioner*, Libri Publishing Ltd: Farringdon, UK.
- Chandler, D. and Torbert, W. (2003), *Transforming inquiry and action: interweaving 27 flavors of action research*, Journal of Action Research', 1 (2) pp. 133–52.
- Checkland, P. (1999), *Systems thinking, systems practice*, Wiley, Chichester, UK.
- Checkland, P.B. and Holwell, S.E. (1998), *Action Research: Its Nature and Validity, Systemic Practice and Action Research* (11:1).
- Christiansen, E. *Boundary Objects, please rise! On the role of boundary objects in distributed collaboration and how to design for them*, Retrieved January 22, 2013 from: <http://redesignresearch.com/chi05/EC%20Boundary%20Objects.pdf>
- Clark, H.H., Brennan, S. E., Resnick, L. B.; Levine, J. M. (1991), eds. *Perspectives on socially shared cognition*, American Psychological Association.

Coghlan, D. (1994), *Research as a process of change: Action science in organisations*. Irish Business and Administrative Research, 15, 119-130.

Coghlan, D. (2002a), *Putting "research" back into OD and action research: A call to OD practitioners*. Organizational Development Journal, 20(1), 62-66.

Coghlan, D. (2002b), *Facilitating learning and change: Perspectives on the helping process*, Organizational Development Journal, 20(2), 116-120.

Coghlan, D. & Brannick, T. (2001), *Doing action research in your own organization*, London: Sage.

Colasante, M. (2011), 'Using a Video Annotation Tool for Authentic Learning: A Case Study'. In Proceedings of Global Learn Asia Pacific 2011 (pp. 981-988). AACE.

Dick, B. (1990a), *Convergent interviewing*, (v3 Ed). Interchange, Brisbane, Australia.

Dick, B. (1990b), *Rigour without numbers: The potential of dialectical processes as qualitative research tools*. Interchange, Brisbane, Australia.

Dick, B. (1993), *So you want to do an action research thesis? How to conduct and report action research*, (v2.06) Interchange, Brisbane, Australia:

Dick, B. (1996), "Managing Change", Retrieved May 6, 2012, from <http://www.scu.edu.au/schools/gcm/ar/arp/change.html>

Dick, B. (2002), *Action research: Action and research*. Retrieved September 29, 2013, from <http://www.aral.com.au/resources/aandr.html>.

Dick, B., Passfield, R. and Wildman, P. (1995), *Action research for beginners*, ARCS Newsletter3 (1) pp.3-6.

Dormans, S. (2009), *Collaboratories: from natural sciences to social sciences and humanities. Literature review for HUBLAB2*. Retrieved June 20, 2012 from <http://www.virtualknowledgestudio.nl/documents/literature-review-hublab2.pdf>

Dowling, B. (2004), *Conceptualising successful partnerships*. Health and Social Care in the Community, 12(4), pp. 309-317.

Eliot, T.S. (1942), *Little Gidding*. London: Faber.

Enfield, N. J. (2008), *Common ground as a resource for social affiliation*. In I. Kecskes, & J. L. Mey (Eds.), *Intention, common ground and the egocentric speaker-hearer* Mouton de Gruyter, Berlin, pp. 223 – 254.

Gibson, C. & Cohen, S. (2003), *Virtual teams that work; Creating conditions for virtual team effectiveness*. San Francisco, CA: Jossey-Bass.

Greenwood, D.J. & Levin, M. (2006), *Introduction to action research: Social research for social change* (2nd ed.) Sage, Thousand Oaks, CA.

Hammersley, M. (2000), *Taking sides in social research*, Routledge, London.

Handy, C. (1995), *Trust and the virtual organization*. Harvard Business Review, 73(3), pp 40-50.

- Hearn, G. and Foth, M. (2005), *Action Research in the Design of New Media and ICT Systems*, in Kwansah-Aidoo, Kwamena, Eds. Topical Issues in Communications and Media Research, Nova Science, pp.79 – 94.
- Hearn, G., Tacchi, J., Foth, M. and Lennie, J. (2008), *Action research and new media: concepts, methods and cases*. Cresskill, NJ: Hampton Press.
- Himmelman, A. (2002), *Collaboration For A Change*. Retrieved September 29, 2013 from http://depts.washington.edu/ccph/pdf_files/4achange.pdf
- Hinds, P. & Kiesler, S. (1995), *Communication across boundaries: Work, structure, and use of communication technologies in a large organization*. Organization Science, 6, 373-393.
- Hinds, P. & Kiesler, S. (2002), *Distributed Work*. MIT Press, Cambridge, MA.
- Holwell, S. (2004), *Themes, iteration and recoverability in action research*. In: Kaplan, B; Truex, D.P; Wastell, D; Wood-Harper, A.T and DeGross, J.I eds. Information Systems Research: Relevant Theory and Informed Practice. Boston, USA: Kluwer Academic Publishers.
- Humphrey, C. (2007), *Insider-outsider: Activating the hyphen*. Action Research, 5(1), 11-26.
- Huotari, M-L & Livonen, M (2004), *Managing knowledge-based organizations through trust*. In M-L Huotari & M Livonen (Eds.), *Trust in Knowledge Management and Systems in Organizations* Idea Group Publishing, Hershey, PA, PP.1 – 29.
- Ingram, A. and Hathorn, L. (2004), *Methods for analyzing collaboration in online communications*. In *Online collaborative learning*. Theory and Practice, Ed; Roberts TS. 2009.
- Jacucci, G. and Wagner, I. (2003), *Supporting Collaboration Ubiquitously: An augmented learning environment for architecture students*. In Proceedings of the 8th European Conference of Computer-supported Cooperative Work, ECSCW '03, Helsinki, Finland, 14-18 September 2003. Pp. 139-158.
- Jacucci, G. and Wagner, I. (2007), *Performative Roles of Materiality for Collective Creativity*, Leonardo Journal, Special Issue.
- Jarvenpaa, S. L. & Leidner, D. (1998), *Communication and Trust in Global Virtual Teams*. Journal of Computer Mediated Communication.
- Jenkins, H. (2006), *Convergence Culture. Where old and new media collide*. New York, London, New York University Press.
- Kilduff, M. (2006), *Editor's comments: Publishing theory*. Academy of Management Review, pp. 252–255.
- Kemmis S. & McTaggart, R (1988), *The Action Research Planner*, Deakin University Press, Vic. Australia.

Kim, H., Kim, G.J., Park, H.W. and Rice, R.E. (2007), *Configurations of relationships in different media: FtF, email, messenger, mobile phone, and SMS*. Journal of Computer Mediated Communication, 12. Retrieved October 4, 2011 from <http://jcmc.indiana.edu/vol12/issue4/kim.html>.

Kolb, D. A. (1984), *Experiential learning: Experience as the source of learning and development*. Prentice Hall, Englewood Cliffs, NJ.

Kraut, R., Fussell S., Brennan S. and Siegel J. (2002), *Understanding effects of proximity on collaboration: Implications for technologies to support remote collaborative work*. In Hinds and Kiesler (Eds.) Distributed Work, Cambridge MIT Press.

Latour, B. (1991), *Technology is society made durable in J. Law (Ed.) A Sociology of Monsters? Essays on Power, Technology and Domination*. Sociological Review Monograph, Routledge, London.

Lee, C.P. (2007), *Negotiating Artifacts: Unbinding the Routine of Boundary Objects and Embracing Chaos in Collaborative Work*, • Journal Computer Supported Cooperative Work archive Volume 16 Issue 3 California Institute for Telecommunications and Information Technology, University of California Irvine, Irvine, USA.

Levy, P. (1997), *Collective Intelligence: Mankind's Emerging World in Cyberspace*, Trans R. Bononno, Plenum, New York.

Lewis, P.M.(2000), *'Private passion, public neglect: the cultural status of radio'* International Journal of Cultural Studies Vol 3 No 2, August 2000, pp.160-167.

Lewis, P.M. (2002), *'Radio Theory and Community Radio'* in Jankowski, N. & Prehn, O. (eds) Community Media in the Information Age: Perspectives, Findings and Policies. Catskill, NJ: Hampton Press.

Lewis, P. (2008a), *Promoting Social Cohesion: the role of community media*. Report prepared for the Council of Europe's Group of Specialists on Media Diversity (MC-S-MD) Retrieved September 29, 2013 from [http://www.coe.int/t/dghl/standardsetting/media/Doc/H-Inf\(2008\)013_en.pdf](http://www.coe.int/t/dghl/standardsetting/media/Doc/H-Inf(2008)013_en.pdf)

Lewis, P. M. & Booth, J. (1989), *The Invisible Medium: Public, Commercial and Community Radio*, Macmillan, London.

Lewis, P.M. & Jones, S. (2006), (eds) *From the Margins to the Cutting Edge - Community Media and Empowerment*. Hampton Press, Catskill, NJ.

Linden, R. M. (2002), *Working across boundaries: Making collaboration work in government and nonprofit organizations*. Jossey-Bass, San Francisco.

Lindgren, M. (2011), *Journalism as research; developing radio documentary theory from practice*. Murdoch University. Faculty of Arts, Education and Creative Media.

Livonen, M. & Huotari, M. L. (2000), *The impact of Trust on the Practice of Knowledge Management*. In: Proceedings of the 63rd ASIS Annual Meeting. Chicago, IL, November 12-16, 37, 421-450.

Lunsford, K. J., & Bruce, B. C. (2001), *Collaboratories: Working together on the web*. Journal of Adolescent and Adult Literacy, 45(1), 52-58.

- Maglaughlin, K.L. & Sonnenwald, D.H. (2005), *Factors that impact interdisciplinary scientific research collaboration: Focus on the natural sciences in academia*. Proceedings of the 10th International Conference of the International Society for Scientometrics and Informetrics.
- Mattessich, P.W. and Monsey, B.R. (1992), *Collaboration: What makes it work?* St. Paul, MN: Amherst H. Wilder Foundation.
- McAllister D.J. (1995), *Affect and Cognition Based Trust as Foundations for Interpersonal Cooperation in Organizations*, *The Academy of Management Journal* Vol. 38, No. 1 (Feb., 1995), pp. 24-59.
- Melrose, M. J. (2001). *Maximizing the rigor of action research: Why would you want to? How could you?* *Field Methods*, 13(2), 160–180.
- Mizrachi, T. & Rosenthal, B. (2002), *Complexities of coalition building: Leaders' successes, strategies, struggles, and solutions*. *Social Work*, 46(1), 63-78.
- Meyerson, D., Weick, K. E & Kramer, R. M. (1996), *Swift trust and temporary groups*. In R. M. Kramer and T. R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research* (pp. 166-195). Sage Publications, Thousand Oaks, CA.
- Niblock, S. (2007), *'From "Knowing How" to "Being Able"'*, *Journalism Practice*, vol. 1, no. 1, pp 20-32.
- Olson, G.M., & Olson, J.S. (2000), *Distance matters*. *Human-Computer Interaction*, 15(2-3), pp. 139-178.
- Olson, J. S., and Olson, G. M. (2006), *Bridging Distance: Empirical Studies of Distributed Teams*, in Dennis Galletta and Ping Zhang, (eds.) *Human-Computer Interaction in Management Information Systems: Volume II: Applications*. M. E. Sharpe, Inc.
- Olson, J.S., Hofer, E., Bos, N., Zimmerman, A., Olson, G.M., Cooney, D., et al. (2008), *A theory of remote scientific collaboration (TORSC)*. In Gary M. Olson, Ann Zimmerman & Nathan Bos, (Eds.) (2008). *Scientific collaboration on the Internet*. Cambridge, MA: The MIT Press.
- Olson, J. S., S. Teasley, S., Covi, L., and Olson, G.M., (2002), *The (currently) unique advantages of being collocated*. In *Distributed Work*, ed. P. Hinds and S. Kiesler, 113–135. Cambridge, MA: MIT Press.
- Olson, G.M., Olson, J.S. and Venolia, G. (2009), *What Still Matters About Distance?* University of California, Irvine; Microsoft Research. Retrieved July 23, 2012 from: <http://research.microsoft.com/pubs/78697/olson9370.pdf>
- Ottinger, U. Notes for Belgian Biennial Exhibition. Retrieved November 12th, 2012 from <http://www.ulrikeottinger.com/index.php/848.html>
- Phillips M. (2006), *Radio City – the first 30 years of 3RRR*, Melbourne, Vulgar Press.
- Pipek, V., Rosson, M. B., Ruyter, B. de, & Wulf, V. (Eds.) (2009), *Lecture Notes in Computer Science. End-User Development: 2nd International Symposium, IS-EUD 2009*, Siegen, Germany, March 2-4, 2009, Proceedings. Springer, London.

Plesner, U. (2009), *An Actor-Network Perspective on Changing Work Practices: Communication Technologies as Actants in Newswork*. *Journalism - Theory, Practice & Criticism*, 10(5).

Ponti, M. (2010), *Actors in Collaboration: Sociotechnical Influence on Practice-Research Collaboration*. Valfrid.

Priestman, C. (2002), *Web Radio – Radio production for Internet Streaming*. Focal Press, London

Reason, P., & Bradbury, H. (Eds.) (2001), *Handbook of action research*. London: Sage
Reason, P. (1998) *Political, Epistemological, Ecological and Spiritual Dimensions of Participation Studies in Cultures, Organizations and Societies*, 4(2), 147-167.

Reason, P., & Bradbury, H. (Eds.). (2001), *Handbook of Action Research: Participative Inquiry and Practice*. Sage, London.

Rees D, (2011), *The Challenge of Building Positive Boundary Objects*. Retrieved on December 12th, 2012 from:
<http://instructionaldesignfusions.wordpress.com/2011/04/23/the-challenge-of-building-positive-boundary-objects/>

Rocco, E., Finholt, T., Hofer, E., Herbsleb, J. (2000), *Designing as if trust mattered*. CREW Technical Report, University of Michigan.

Rocco, E., Finholt, T., Hofer, E., & Herbsleb, J. (2001), *Out of sight, short of trust*. Presentation at the Founding Conference of the European Academy of Management, Barcelona, Spain.

Rogers, E. M. (1995), *Diffusion of innovations* (4th ed.) Free Press, New York.

Rushkoff, D (2007), *Commons: Creating an alternative value system*. Retrieved May 8th, 2012 from On-line journal Re-public at:
<http://www.re-public.gr/en/?p=85> (Answer1 Para 1)

Schön, D. A. (1983), *The reflective practitioner: How professionals think in action*. Basic Books, Inc. New York.

Schön, D. A. (1987), *Educating the Reflective Practitioner: Toward a new design for teaching and learning in the profession* Jossey-Bass, San Francisco.

Shrum, W., Chompalov, I. & Genuth, J. (2001), *Trust, conflict and performance in scientific collaborations*. *Social Studies of Science*, 31(4), 681-730.

Senge, P. M. (1990), *The Fifth Discipline: The art and practice of the learning organization*. New York: Doubleday.

Senge P (1990b), *The leader's new work: building the learning organization*. *Sloan Management Rev* 32(1) pp. 7–23.

Senge, P., Kleiner, A., Roberts, C., Ross R., Smith, B. (1994), *The Fifth Discipline Fieldbook*, Doubleday/Currency, N.Y.

Senge, P., Kleiner, A., Roberts, C., Ross, R., Roth, G. and Smith, B. (1999), *The Dance of Change: The Challenges of Sustaining Momentum in Learning Organizations*, Doubleday/Currency, N.Y.

Senge, P., Cambron-McCabe, N., Lucas, T., Smith, B., Dutton, J. and Kleiner, A. (2000), *Schools That Learn. A Fifth Discipline Fieldbook for Educators, Parents, and Everyone Who Cares About Education*, New York: Doubleday/Currency.

Slater, D., & Tacchi, J. (2004), Research: ICT Innovations for Poverty Reduction. Retrieved June 15, 2012, from <http://eprints.gut.edu.au/4398/1/4398.pdf>.

Sonnenwald, D.H. (2003), *Expectations for a scientific collaboratory: a case study*. In Proceedings of the 2003 international ACM SIGGROUP conference on supporting group work. ACM Press, New York, NY pp. 68 – 74.

Sonnenwald, D.H. (2003), *Managing cognitive and affective trust in the conceptual R&D organization*. In M. Livonen and M. Huotari (Eds.), *Trust in Knowledge Management and Systems in Organizations* (pp. 82-106). Hershey, PA: Idea Publishing.

Sonnenwald, Diane H. (2007), '*Scientific Collaboration* ', in B. Cronin (ed), *Annual review of information science and technology* (Medford, NJ: Information Today): 643-82.

Sonnenwald, D.H., Lassi, M., Olson, N., Ponti, M., & Axelsson, A. (2009), '*Exploring new ways of working using virtual research environments in library and information science*'. *Library Hi Tech*, 27 (2).

Sonnenwald, D.H., Maglaughlin, K.L., & Whitton, M.C. (2004), '*Designing to support situational awareness across distances: An example from a scientific collaboratory*'. *Information Processing & Management*, 40 (6) pp. 989-1011.

Sonnenwald, D.H., & Pierce, L. (2000), '*Information behavior in dynamic group work contexts: Interwoven situational awareness, dense social networks, and contested collaboration in command and control*'. *Information Processing & Management*, 36 (3) pp.461-479.

Spurgeon, Christina I., Rennie, Elinor M., & Ming Fung, Yat (2011), *Community participation in the development of digital radio: the Australian experience*. In Abad, Cristina (Ed.) *Record of Communications Policy and Research Forum 2011*, Network Insight Institute, Sydney, pp. 166-179.

Star, S.L. & Griesemer, J.R. (1989), *Institutional Ecology, 'Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39*' in *Social Studies of Science*, vol. 19, pp. 387-420.

Tacchi, J. (2005a), *Finding a voice: The potential of creative ICT literacy and voice in community multimedia centres in South Asia*. Information Society Research Group Working Paper, No 3.

Tacchi, J. (2005b), *Radio and new media technologies: Making technological change socially effective and culturally empowering*. Paper presented at the Radio in the World: Radio Conference 2005.

Tacchi, J. (2005c), *Supporting the democratic voice through community media centres in South Asia*. 3CMedia: Journal of Community, Citizen's and Third Sector Media and Communication, 1, 25-35.

Tacchi, J. (2006), *Studying communicative ecologies: An ethnographic approach to information and communication technologies*. Paper presented at the 56th Annual Conference of the International Communication Association.

Tacchi, J., Hearn, G., & Ninan, A. (2004), Ethnographic action research: A method for implementing and evaluating new media technologies. In K. Prasad (Ed.), *Information and communication technology: Recasting development* (pp. 253–274). Knoxville, TN: B.R. Publishing Corporation.

Tacchi, J., Fildes, J., Martin, K., Kiran, MS., Baulch, E. and Skuse, A. (2007), *Ethnographic action research: Training handbook*. New Delhi: UNESCO.

Tacchi, J., & Watkins, J. (2007), *Participatory research and creative engagement with ICTs*. Paper presented at the ACM Sensys Conference.

Tapscott, D. and Williams, A. (2007), *Wikinomics: How Mass Collaboration Changes Everything*, Penguin,

Tinnirello, P. C. (2002), (Editor) *New Directions in Project Management – Auerbach Publications / CRC Press*, New York.

Torbert, W. (2001), *The practice of action inquiry*. In P. Reason & H. Bradbury (Eds.), *Handbook of action research: Participative inquiry and practice* (pp. 250–260), Sage, London.

Tuckman, Bruce W. (1965), 'Developmental sequence in small groups', *Psychological Bulletin*, 63, 384-399.

Turner, T., Qvarfordt, P., Biehl, J.TI, Golovchinsky, G., & Back, M. (2010), *Exploring the workplace communication ecology*. CHI 2010, April 10-15.

Uzzi, Brian and Jarrett Spiro (2005), "Collaboration and Creativity: The Small World Problem." *American Journal of Sociology* 111(2): pp. 447-504.

Vyas, D., Nijholt, A., and van der Veer, G. (2010), *Supporting Cooperative Design through "Living" Artefacts*. In Proceedings of 6th Nordic Conference on Human-Computer Interaction (NordiCHI '10), Reykjavik, Iceland.

Vyas, D., Nijholt, A., Heylen, D., Kröner, A. and van der Veer, G. *Remarkable Objects: Supporting Collaboration in a Creative Environment*. In Proceedings of 12th ACM International Conference on Ubiquitous Computing (UbiComp '10), Copenhagen, Denmark.

Vyas, D., and Nijholt, A. *Building boundaries on Boundary Objects: A Field study of a Ubicomp tool in a Design Studio*. A workshop paper at the 9th International Conference on the Design of Cooperative Systems (COOP '10). In Press at International Reports on Socio-Informatics (an online journal). ISSN 1861-4280.

Vyas, D., Heylen, D., Nijholt, A. and van der Veer, G. *Collaborative Practices that Support Creativity in Design*. In Proceedings of 2009 11th European Conference on

Computer Supported Cooperative Work (ECSCW' 09). Vienna, Austria. 7-11 September. (Springer Book).

Yin, R. (1994), *Case study research: Design and methods (2nd ed.)*. Thousand Oaks, CA: Sage Publishing Page 13.

Zand, D. E. (1972), *Trust and managerial problem solving*. Administrative Science Quarterly, 17, pp. 229-239.

Zheng, J., Veinott, E., Bos, N., Olson, J., and Olson, G. M. (2002), *Trust without touch: Jumpstarting trust with initial social activities*. *Proceedings of the Conference on Human Factors in Computing Systems*, CHI-2002, pp. 141-146.

Zuber-Skerritt, O. (1992), *Professional development in higher education—A theoretical framework for action research*, Kogan Page, London.

Zucker, D. (2009), *"How to Do Case Study Research"* Teaching Research Methods in the Humanities and Social Sciences. Ed. M. Gardner, B. Kawulich & C. Wagner. Ashgate Publishing, Surrey, U.K.

Appendix One

2008
Application for ethics approval of research involving human participants

1. This form is to be used by students and academic staff undertaking research in the 'Risk level 1' and 'Risk level 2' categories as [described](#). All applications must be emailed to: DSCethics@rmit.edu.au They are then registered by the Portfolio office, and considered at the next available meeting. A signed hardcopy of the form is also required by the secretary before the [meeting date](#). Enquiries should be directed to the secretary, [Cheryl de Leon](#), on 9925 2974.
2. 'Risk level 3' applications must be completed on the RMIT Human Research Ethics Committee [HREC Form 1](#).
3. **Please insert the version number and date in the footer of the document.**

Section A: Approvals and declarations

1.

Project Title: Digital On A Shoestring: an investigation of community based and independent radio in the digital environment

<i>Research Degree</i>	Staff Research Project
Complete this column if you are undertaking research for a degree at RMIT or another university.	Complete this column if your research is not for any degree.
Investigator	Principal investigator
Name: Bruce Berryman Student No: 9501227V Qualifications Masters in Communication by research School: Applied Communication Address: 206 Tennyson St Elwood 3184 Phone: 613 9925 3065 Email bruce.berryman@rmit.edu.au Degree for which research is being undertaken: PhD (Communication Studies) – part time	Name: Qualifications: School: Phone: Email:
Senior Supervisor	Other investigator/s

Name: Associate Professor Cathy Greenfield	Name/s:
Qualifications: PhD	Qualifications:
School: Applied Communication	School:
Phone: 613 9925 5038	Phone:
Email: cathy.greenfield@rmit.edu.au	Email:

2. Declaration by the investigator(s)

I/We have read the current NH&MRC National Statement on Ethical Conduct in Research Involving Humans 1999, and accept responsibility for the conduct of the research detailed in this application in accordance with the principles contained in the National Statement and any other conditions laid down by the RMIT Human Research Ethics Committee.

Signed: _____ Date: _____
(Signature of investigator)

Signed: _____ Date: _____
(Signature of senior supervisor if applicable)

3. Declaration by the Head of School/Centre

The research project set out in the attached application, including the adequacy of its research design and compliance with recognised ethical standards, has the approval of the School/Portfolio. I certify that I am prepared to have this project undertaken in my School/Centre/Unit.

Signed: _____ Date: _____
(Signature of Head of School or approved delegate)

Comments:

School/Centre: _____ Extn: _____

Section B: Project particulars

NB: The bolded headings and numbering in this form must remain in your completed application for ethics approval. Please leave these headings and delete the detailed guidelines as you go through and complete the form. If a heading is not relevant write 'Not applicable' underneath it.

1. Title of Project

Digital On A Shoestring: an investigation of community based and independent radio in the digital environment

2. Project description: for HREC assessment of ethical issues

Aims and significance

Throughout the world, the radio industry is undergoing substantial change in the production and distribution of material through the use of digital technologies. Graduates entering the workforce as radio producers are expected to fulfil the tasks associated with conventional radio production, but also to re-purpose this content for distribution online and via digital audio broadcasting (DAB). An issue being confronted by industry worldwide is how radio, the oldest of the electronic media, adapts to this digital environment through the development of new forms of radio and hybrid services.

Community radio in Australia has been a site of program innovation, access and diversity for over thirty years. Although it is the least resourced sector of the broadcast industries, community radio has developed popular formats and programs that connect with communities of interest. Commencing in January 2009, Digital Audio Broadcasting (DAB) will be introduced to Australia. Alongside other evolving forms of audio distributed online, DAB will have an impact on listening patterns and the ways in which radio is produced and distributed.

This project will investigate the ways in which communities of interest use digital technologies and the ways in which licensed community radio stations and independent producers are responding to emerging digital distribution platforms.

At the centre of the project is the design, development and implementation of ROAR: Radio Online At RMIT. ROAR will be a website and online publishing tool to act as a repository for and distribution of material produced at RMIT. This digital distribution platform will allow the archiving of audio content and through a self managing upload system and administration console allow timely publishing of audio works, produced alongside associated text, images and links. ROAR will consolidate a range of theoretical and technical issues relevant to contemporary media production.

The project will model forms of production and programming, using the ROAR site as a laboratory for the development of resource effective, sustainable forms of content appropriate to community based applications. Two significant characteristics of digital modes of production, distribution and reception of radio will be addressed in this project.

- Timeshifting radio works through archives and podcasting
- Networked production

These characteristics will be investigated through the development of ROAR and the production of a number of radio based audio works. "Shared Stories" is a series that involves students from universities in different parts of the world deciding upon a theme, recording interviews locally and uploading material to a shared server. This will form the source material for collaborative documentaries and features produced in a networked environment that explore issues relevant to communities of interest, locally and globally.

The research will also involve the production of "Digital On A Shoestring" a series of radio /audio documentaries and features, based on interviews with radio practitioners, management,

policy makers and volunteers. This series is intended to provide information, analysis and further discourse in this area of radio studies.

Methodology/research methods

Formal critique:

Using practice to generate theory, the investigation into the formal properties of online audio will be conducted through audio productions in combination with audio field interviews with relevant practitioners.

Cultural critique/fieldwork:

The Cultural critique will be conducted using fieldwork to evaluate key issues that are emerging around the independent production and distribution of online audio content. With regard to this research, the objective of this fieldwork is to achieve two key aims. Firstly, to provide context that includes a broader understanding of the current developments occurring around Internet audio. Secondly, to identify specific issues that will become focal points in the research and the development of a critical audio practice.

Most of this information will be located in discussions and developments currently evolving on the Internet. Research outcomes are based on the establishment of networks with people and organisations that are interested or involved in the development of independent audio production on the Internet. Participants in discussions will be aware that their contributions may be used in research. These people may include academics, theorists, journalists, artists and radio practitioners. An integral aspect of this process is both the sharing of information and collective engagement, using the social networking potential of the Internet.

The research extends and develops ideas investigated through my Masters thesis, "Radio production in the digital era: towards a new training paradigm". It was concerned with the broad changes occurring within the industry internationally, focussing on appropriate training of radio producers in the digital environment.

Much of the doctoral project will be situated within an educational, independent and community context. However the research will have relevance to all sectors of the industry and connect with shared concerns about the types of radio services likely to be produced in a converged environment and media forms that are audio based, interacting with other media elements.

ROAR is being developed with the support of RMIT Learning and Teaching Investment Funding that I have received in 2008 and has university wide applications. Within the ROAR site will be discreet areas used to develop, produce and later publish audio productions. These production spaces will be closed to public access until the point of publication and following a moderation process. In this part of the project interviews will be conducted with Educational Media Group designers and developers funded to undertake the technical development of ROAR. These interviews do not need to identify the individuals and will not be published online.

Distinct from ROAR is Shared Stories: a series of collaborative networked radio documentary and feature productions. The first shared story involves a production in collaboration with Lincoln University in the UK. Shared Stories involves volunteer participants who are students at RMIT. They are not a part of any courses that I teach and Shared Stories is being undertaken in conjunction with the ACID CRC for interaction design. The project will use a digital collaboration tool (Protospace) that is currently under development. Students working as production team participants will be invited to reflect upon the process and their experience working with Protospace. Student participants will be informed of this and will not be identified in any of the Protospace documentation. These students will be covered by consent form for team participants and will make a part of the 40 people identified in Section C1.

A third, distinct area of work is involved in Digital On A Shoestring: The project will involve interviews with personnel throughout the community radio sector and independent producers to investigate policy issues, the types of services being developed and the ways in which digital

technologies are presently being used in program-making and connecting communities. This primary research will be the basis of content for a range of radio programs and media that will investigate and model emerging forms of digital radio and audio on the internet.

3. Research timetable

Duration of degree (enrolled part-time): 6 years
Commencement of degree: March, 2007
Commencement of project involving human participants: October 2008
Development of ROAR site: April – December 2008
Shared Stories recruitment: March 2009
Shared Stories production: April – June 2009
Shared Stories reflection interviews: July 2009
Documentary production involving industry stakeholders: January – October 2009
Follow up interviews with industry stakeholders for Exergesis: October 2009 – March 2010
Completion of project involving human participants: March, 2010
Completion of degree: March, 2011

4. Research funding

2008 Learning and Teaching Investment Fund support for the development of ROAR and online collaborative projects.

Section C: Details of participants

1. Number, type, age range, and any special characteristics of participants

Number: approximately 40 people
Type: A broad range of people is required, including university academics, university students, community radio personnel, and independent radio practitioners.
Age Range: 18 – 60
Special characteristics: Comfortable in discussing their area of expertise in an audio record.

2. Source of participants (attach written permission where appropriate)

The key to this group of participants is obtaining people with the relevant expertise and knowledge in the area of Internet audio production and critique. Therefore these participants will come from a wide range of sources:
RMIT along with other Victorian and Australian universities
Other universities worldwide
Other relevant industry locations worldwide

3. Means by which participants are to be recruited

Participants will be recruited by the investigator. All recruitment will follow standard professional practice of recruitment in the radio industry. This practice observes academic ethics regarding recruitment.

Students involved in the project will not be a part of any courses that I teach. The method of recruitment will involve initial explanation of the project and an invitation to be involved in the production during a third year production course lecture. Students in their final year will possess the necessary production skills required by the project. A meeting with those interested in participation will then be held to provide further information about the project and to clarify the production process. In these sessions it will be made clear that their participation is voluntary and that it is not a part of their course work.

The status of the project as academic research will be explained to the potential participant. The plain language statement will be provided to potential participants at the start of the recruitment process. There will be two plain language statements to cover involvement in the project as a production team participant and interviewee. (Appendix 3.1). Or as an interviewee only (Appendix 3.2) The prescribed consent form will be signed before any chosen participants begin work on the project. (refer to the appendix items below)

Appendix 1 – Consent Form For Persons Participating In Research Projects Involving Interviews, Questionnaires, Focus Groups or Disclosure of Personal Information

Appendix 2.1 - Plain Language Statement (Production team participant and interviewee)

Appendix 2.2 - Plain Language Statement (Interviewee)

Potential participants will be identified through research and individually approached by the investigator. They will be approached initially by phone or email to assess their interest in the project. If they express interest, they will be provided with the plain language statement.

Appendix 3 – Interview themes

4. **Are any of the participants ‘vulnerable’ or in a dependent relationship with any of the investigators, particularly those involved in recruiting for or conducting the project?**

No, all participants will be non-dependent. Students at RMIT involved in the research are not in any of the courses I teach or assess. I will not be using any participants who are under 18, disabled, prisoners, the elderly, and those who are mentally or physically ill.

Section D: Estimation of potential risk to participants & project classification

Please refer to the guidelines for [Risk classification of research projects](#)

1. **Please identify the project classification by assessing the level of risk to participants**

Level 2

2. **If you believe the project should be classified category ‘Risk level 1’ or category ‘Risk level 2’ please explain why you believe there are no risks or minimal to the participants.**

I believe this project has a minimal level of risk. Most participants will wish to be involved because they are interested in the project for the professional development opportunities it provides and relevance to the industries they are involved in. The project will be produced in a way that is generally consistent with professional practice in broadcasting (radio and media arts), but adapted for a no-budget environment. Although the industry contains projects that take this approach in an exploitative way, it is an essential part of this project to model an approach that is ethical, viable and respects the rights of all participants. The research will fail on its own terms if this is not the case.

Risk factors that can arise in this environment are:

1) Participants being asked to commit an unreasonable amount of time:

Participants will have right of withdrawal at any time, if they feel the time or workload is more than they wish to provide.

2) Participants wishing to have their audio excluded from the finished program, because they are not happy with the way they are represented.

Participants will have right of withdrawal at any time and their audio excluded from the finished program.

This research project has two outcomes:

i) A series of academic papers, presentations and media texts will be produced in relation to the research completed on this project.

ii) Audio works and online documentary distributed on the Internet.

3) Participants wishing to have their names removed from the credits.

It is industry convention that all participants in a radio production for public distribution are acknowledged. Because this is a no-budget production, a primary motivation for many participants to be involved will be the public recognition of their contribution, which can be used in the professional development of their career. However, if for any reason a participant wants their name removed from the credits, this will be done. They will be told this in the Plain Language Statement.

In relation to any other published material emerging from the research (for example, journal articles or conference papers), participants will hold the right to not have their identities disclosed.

Anonymity – Some participants are participating in the research to provide quantitative or qualitative data through completing interviews. It will be clear at all stages that they are participating as either creative collaborators in an audio production project for public distribution or as part of quantitative or qualitative data collection, or both. Any personal information will only be revealed with consent.

Confidentiality – While the production components of the project are for public distribution, the project is also intended to produce published articles out of the research undertaken. Details identifying individual participants will only be included in these publications with the participants consent. As described in the Plain Language Statement.

I have rated my project Risk Level 2 because the first and last name of my participants plus their occupation will be revealed in the subsequent research findings and thus, I cannot guarantee complete anonymity. Personal information will be revealed through audio and or text (footnotes & Bibliography) however, this will be done with the participants' consent. I will not reveal personal information such as phone numbers, home/work addresses or e-mail. I will supply interviewees with a transcript of the interview questions prior to the interview taking place and edits of the interviews for publication. This project is based upon research into professional practice, as opposed to sensitive, more personal topics.

3. Please detail any other ethical issues which may be particularly associated with this project.

Where you have marked 'YES' to any of the tabled questions, **please give details in the table stating** what action you intend to take to ensure that no difficulties arise for your participants.

Cross X in the appropriate boxes (Do not delete any questions in this section).

	Yes	No
a) Does the data collection process involve access to confidential data without the prior consent of participants? If 'Yes' please give details of any actions you will take to ensure that participants are not compromised by this:		X
b) Will participants have pictures taken of them eg, photographs or videos? If 'Yes' please give details of any actions you will take to ensure that participants are not compromised by this:		X
c) If interviews are to be conducted will they be tape-recorded? If 'Yes' please give details of any actions you will take to ensure that participants are not compromised by this: Yes using audio formats. Participants will be informed prior to involvement that interviews will be recorded. These interviews will only be recorded with the consent of the participant. Participant will have the right to anonymity and withdrawal from the project at any time. Participants will have access to any recordings they have been involved in. Audio recording will be stored in a secure cabinet. NB if interviews are being conducted please attach a list of proposed interview questions/themes to this application. (Attachment 3)	X	
d) Are the participants in a dependent relationship with the investigator/s? If 'Yes' please give details of any actions you will take to ensure that participants are not compromised by this:		X
e) Is deception to be used? If 'Yes' please give details of any actions you will take to ensure that participants are not compromised by this:		X
f) Do you plan to use an interpreter? If 'Yes' please give details of any actions you will take to ensure that participants are not compromised by this:		X
g) Does the research involve any tasks or processes which participants may experience as stressful or unpleasant during or after the data collection? If 'Yes' please give details of any actions you will take to ensure that participants are not compromised by this:		X
h) Does your research involve the participation from anyone from an ATSI (Aboriginal and Torres Strait Islander) community? If so refer to the guidelines at: www.aiatsis.gov.au/research_program/publications If 'Yes' please give details of any actions you will take to ensure that participants are not compromised by this:		X
i) Are participants asked to disclose information that may leave them		X

feeling vulnerable or embarrassed? If 'Yes' please give details of any actions you will take to ensure that participants are not compromised by this:		
j) Are there in your opinion any other ethical issues involved in the research eg is it possible that you will be collecting/disclosing information about a third party not involved in the research? If 'Yes' please give details of any actions you will take to ensure that participants are not compromised by this:		X

Section E: Informed consent

NB: The numbered bolded headings in this form must remain in your completed application for ethics approval. Please leave these headings and delete the detailed guidelines as you go through and complete the form. If a heading is not relevant write 'Not applicable' underneath it.

1. Attach to your application

- (a) a copy of the letter to participants providing plain language information about the research. This will often be the letter inviting people's participation. This should normally be on RMIT letterhead. (see attached guideline for the Plain Language Statement (PLS) at Appendix 2)
- (b) a copy of the *Consent form* (see Appendix 1) for research participants. If you are not obtaining consent in writing please explain why.

2. Dissemination of results

It is envisaged that a series of academic papers, presentations and media texts will be produced in relation to the research completed on this project. Participants first and last name will be acknowledged as part of the bibliographical and referencing in these publications. Participants are informed in the (Plain Language Statement) that results from the study may appear in other publications and/or in a media text.

A generic statement will be provided on all online websites used by the principal investigator as per the *Guidelines for those planning to conduct research on the Web*.

Section F: Research Involving Collection, Use Or Disclosure Of Information

Please note that if you propose to collect information about an individual from a source other than the individual, or to use or disclose information without the consent of the individual whose information it is, you will also have to complete the Special Privacy Module as well as the questions below. Under statutory guidelines a HREC may approve some research where the public interest outweighs considerations of privacy, however a researcher must make a special case for such approval. The [Special Privacy Module](#) is the starting point for preparing such a case.

For a more detailed guidance and definitions for each of the question below, see [Notes to assist in completing HREC Form 1](#). They are applicable to the DSC form as well as the University form.

1 Does this Section have to be completed?

Does the project involve the collection, use or disclosure of personal information (includes names & contact details), health information including genetic information, or sensitive information?

- No – you do not have to answer any questions in this section. Go to Section G.
- Yes – you must answer questions in this section. Go to Question F2.

2 Type of activity proposed

Are you seeking approval from this HRESC for:

- (a) collection of information?
 Yes – go to Question F3
 No – go to Question F4
- (b) use of information?
 Yes No
- (c) disclosure of information?
 Yes No

3 **Collection of Information**

(a) Does the project involve collection of information directly from individuals about themselves?

- No – (ie -collected from a third party/existing records). You must fill out the [Special Privacy Form](#) as well as this form.
 Yes – answer the following questions:

(b) What type of information will be collected? (Tick as many as apply)

- personal information (eg name, contact details etc)
 sensitive information (eg affiliations, income values, attitudes etc)
 health information

(c) Does the plain language statement explain the following:

The identity of the organisation collecting the information and how to contact it?

Yes No

The purposes for which the information is being collected?

Yes No

The period for which the records relating to the participant will be kept?

Yes No

The steps taken to ensure confidentiality and secure storage of data?

Yes No

How privacy will be protected in any publication of the information (ie how is anonymity of participants is guaranteed)?

Yes No

The fact that the individual may access that information?

Yes No

If you answered “No” to any of these questions, give the reasons why this information has not been included in the plain language statement:

4 **Use or Disclosure of Information About Individuals**

(a) Does the project involve the use or disclosure of identified or potentially identifiable information?

No – go to Question F5.

Yes, answer the following questions.

(b) Does the project involve use or disclosure of information without the consent of the individual whose information it is?

No - go to Question F5.

Yes, you must fill out the [Special Privacy Form](#), as well as this form.

5 General Issues

(a) How many records will be collected, used or disclosed? Specify the information that will be collected, used or disclosed (e.g. date of birth, medical history, number of convictions, etc)

Number of records: 40
Type of information: Collected & Used: Names, addresses and phone numbers; audio recordings
Disclosed: Names (with consent); audio recordings (with consent)

(b) For what period of time will the information be retained? How will the information be disposed of at the end of this period?

Audio and other information will be kept for a period of seven years then destroyed

(c) Describe the security arrangements for storage of the information. Where will the information be stored? Who will have access to the information?

Audio and other data for this research project will be stored locked in my office at RMIT University. No-one but myself as investigator and my supervisor will have access to this material.

(d) How will the privacy of individuals be respected in any publication arising from this project?

Participants will be informed in the Plain Language Statement that journal articles, conference papers and other publications may arise from this research and that their identities will be disclosed in these publications, with their consent.

(e) Will the project data be transferred to a person/organisation either interstate or overseas?

(If you are a researcher sending data to, for example, another researcher or institution in another state then you will need to tick 'yes'. Normally, a research student transferring data to their supervisor is not subject to these principles, whether or not the transfer is across state or national borders.)

Yes No

If yes, give details of how this will be carried out in accordance with relevant Privacy Principles (e.g. HPP 9, VIPP 9 or NPP 9).

There will be trans-border data flow between the investigator and the interviewee with the principles regarding privacy upheld. This involves the exchange of interview material (email, audio) through the Internet. The data exchange involved before the interviews will be personal information in the form of a Curriculum Vitae or short bio. All interviewee participants will receive the plain language statement and performer release form and agree in writing before an interview is conducted.

(f) Does the project involve the adoption of unique identifiers assigned to individuals by other agencies or organisations?

Yes No

If yes, give details of how this will be carried out in accordance with relevant Privacy Principles (e.g. HPP 7, VIPP 7 or NPP 7).

6 Adverse Events

Are procedures in place to manage, monitor and report adverse and/or unforeseen events relating to the collection, use or disclosure of information?

Yes No

Give details.

If a person becomes upset I will stop the interview immediately. I will offer counseling. I will tell my supervisor and my supervisor will advise me as to whether I should advise the Ethics Committee or not, if appropriate.

7 Other Ethical Issues

Not applicable.

Section G: Other issues

NB: If a question is not relevant write 'Not applicable' underneath it.

1. Do you propose to pay participants? If so, how much and for what purpose?

Not applicable.

2. Where will the project be conducted?

The project will be conducted at the City Campus of RMIT University. Some interview components of the research may be at various locations relevant to the content of the program. These will primarily be domestic (houses and apartments), or in workplaces (office, studios).

3. Is this project being submitted to another human research ethics committee, or has it been previously submitted to a human research ethics committee?

No

Appendix 1

RMIT HUMAN RESEARCH ETHICS COMMITTEE

Prescribed Consent Form For Persons Participating In Research Projects Involving Interviews, Questionnaires, Focus Groups or Disclosure of Personal Information

PORTFOLIO OF Design and Social Context
SCHOOL/CENTRE OF Applied Communication
Name of participant: _____
Project Title: Digital On A Shoestring
Name(s) of investigators: (1) Bruce Berryman Phone: 613 99253065
(2) _____ Phone: _____

1. I have received a statement explaining the interview/questionnaire involved in this project.
2. I consent to participate in the above project, the particulars of which - including details of the interviews or questionnaires - have been explained to me.
3. I authorise the investigator or his or her assistant to interview me or administer a questionnaire.
4. I give my permission to be audio taped Yes No (delete if inapplicable)
5. I give my permission for my name or identity to be used Yes No
6. I acknowledge that:
 - a) Having read the Plain Language Statement, I agree to the general purpose, methods and demands of the study.
 - b) I have been informed that I am free to withdraw from the project at any time and to withdraw any unprocessed data previously supplied.
 - c) The project is for the purpose of research and/or teaching. It may not be of direct benefit to me. The privacy of the information I provide will be safeguarded. The privacy of the personal information I provide will be safeguarded and only disclosed where I have consented to the disclosure or as required by law. If I participate in a focus group I understand that whilst all participants will be asked to keep the conversation confidential, the researcher cannot guarantee that other participants will do this.
 - d) The security of the research data is assured during and after completion of the study. The data collected during the study may be published, and a report of the project outcomes will be provided upon request. Any information which may be used to identify me will not be used unless I have given my permission (see point 5).

Participant's Consent

Name: _____ Date: _____
(Participant)

Name: _____ Date: _____
(Witness to signature)

Where participant is under 18 years of age:

I consent to the participation of _____ in the above project.

Signature: (1) _____ (2) _____ Date: _____
(Signatures of parents or guardians)

Name: _____ Date: _____
(Witness to signature)

Participants should be given a photocopy of this consent form after it has been signed.

Any complaints about your participation in this project may be directed to the Executive Officer, RMIT Human Research Ethics Committee, Research & Innovation, RMIT, GPO Box 2476V, Melbourne, 3001. Details of the complaints procedure are available at: http://www.rmit.edu.au/rd/hrec_complaints

Appendix 2.1 - Plain Language Statement (Production team participation and interviewee)



SCHOOL OF
APPLIED COMMUNICATION

**Portfolio of Design and
Social Context**

City Campus
GPO Box 2476V
Melbourne 3001
Victoria Australia

Tel +61 3 9925 3146
Fax +61 3 9639 1685

Dear

My name is Bruce Berryman. I am undertaking a Doctor of Philosophy (PhD) in (Communication Studies) degree within the School of Applied Communication and the Portfolio of Design and Social Context at RMIT University.

The title of my research is *Digital On A Shoestring*, a critique of audio/radio practice on the Internet, which examines how people are using radio and audio forms on the Internet as an independent form of media.

I would like to invite you to participate in a project that is part of this research.

This information sheet describes the project in straightforward language, or 'plain English'. Please read this sheet carefully and be confident that you understand its content before deciding whether to participate. If you have any questions about the project, please ask me. This research has been approved by the RMIT Human Research Ethics Committee.

Why this research is being done.

I am a lecturer in Media at RMIT University in Melbourne, Australia. My teaching role involves developing connections between the Internet and radio. I have a background in radio production focusing in particular on the Community sector. In this research, I am interested in the way online services can extend the storytelling possibilities of radio and the ways in which communities of interest can be supported in this environment.

Number of people involved:

The research involves audio field interviews with university academics, radio industry personnel, and audio practitioners. The project requires around 40 interviewees.

Why you have been approached

You have been approached as a possible participant in this project, working as a volunteer production team member.

What is expected of you?

Initially, I would like to talk to you about your past experience and listen to examples of your radio and audio work, if they are available. I will answer all your questions about your involvement in the production. If we both agree that it would be good for you to participate, your involvement will be similar to if you were working as a producer on a professional radio production with one key difference – you will not be paid. This is a non-commercial production towards academic research. Upon completion of the project I may ask you to reflect on the production process through an interview. Whether you agree to be interviewed is entirely your decision.

How long it will take

The entire production period will be small scale in most cases, around 40 – 50 hours. The extent to which crew can participate for this time is entirely negotiable. As a no-budget production, there is no expectation that any individual can devote this much time to a project. If we both agree your involvement is a good idea, the duration of your involvement will be negotiated. If you commit to a duration and, for whatever reason, change your mind, you are not obliged to honour that commitment. You also have the right to withdraw from the project at any time. If you accidentally injure yourself or others on the project: As a participant on an RMIT student production, you will be covered by the university's insurance policies.

Privacy and Disclosure of Information

Your name and role will appear in the credits of the program. However, you can ask for this information to be removed and that will be done. It is also envisaged that a series of academic papers, presentations and media texts will be produced in relation to the research completed on this project. Your first and last name will be acknowledged as part of the bibliographical and referencing in these publications.

Audio and other information will be kept for seven years. You can access material that you participated in recording at any time. Audio and other data for this research project will be stored locked in my office at RMIT University. No-one but myself as investigator and my supervisor will have access to this material.

No data will be disclosed directly to any other persons, with the exception of possible academic publication in conference papers, articles and book chapters and media texts. As a participant, you may also view any publication that arises as a result of this research project. You are also able to view the recorded information you have given to the project before it is finished. Your involvement in this project is entirely up to you. Please ask for as much information as you wish to make an informed decision to participate.

If you would like further information or have any questions/problems, please contact either the investigator Bruce Berryman (+61 03 9925 3065) Email: bruce.berryman@rmit.edu.au or the supervisor Cathy Greenfield (+61 03 9925 5038): Email: cathy.greenfield@rmit.edu.au

Bruce Berryman
PhD Postgraduate Student, School of Applied Communication

Any complaints about your participation in this project may be directed to the Secretary, RMIT Human Research Ethics Committee, University Secretariat, RMIT, GPO Box 2476V, Melbourne, 3001. The telephone number is (03) 9925 1745. Details of the complaints procedure are available from: www.rmit.edu.au/council/hrec
--

Appendix 2 – ROAR Wireframe

Radio Online At RMIT (ROAR): Wireframes

Home Page : Not Logged In

ROAR

Login

Username

Password

Welcome to ROAR

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis eleifend massa sit amet eros. Vestibulum erat diam, cursus in, facilisis vitae, imperdiet eget, nisi. Fusce sem turpis, tincidunt at, dapibus at, fringilla et, turpis. Vivamus nunc enim, congue pharetra, sagittis at, ultrices vel, turpis. Duis pellentesque purus sed dolor. Nam purus. Vivamus volutpat, ante ac sodales tempus, mi mi imperdiet metus, et sodales augue lorem eget urna. Integer bibendum eros ut quam. Maecenas vehicula. Vestibulum adipiscing, mi vel rhoncus suscipit, odio tellus gravida justo, eget tempor nibh sapien a nulla. Etiam vel ipsum in libero porttitor lacinia. In hac habitasse platea dictumst. Ut interdum nulla eget dui. Duis ligula dolor, tincidunt eu, tincidunt sit amet, laoreet at, elit. Maecenas vitae ligula.

Proin laoreet placerat sem. Maecenas velit sem, ultrices a, dapibus nec, ultrices vitae, augue. Nullam bibendum lobortis quam. Proin erat. Quisque ornare. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos himenaeos. Vivamus tristique velit nec magna. Quisque ipsum diam, tempus at, volutpat a, elementum eu, justo. Cras ut enim eget nibh porttitor vestibulum. Aenean ipsum turpis, ornare id, scelerisque vitae, molestie eu, nisi. Integer ut ipsum. Quisque dignissim dignissim sapien. Duis nec odio sed tellus fringilla suscipit.

Featured Projects

Duis pellentesque

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis eleifend massa sit amet eros. Vestibulum erat diam, cursus in, facilisis vitae, imperdiet eget, nisi. Fusce sem turpis, tincidunt at, dapibus at, fringilla et, turpis.

More...

Advanced Search

Popular Projects

- * Tristique nec
- * Maecenas
- * Aliquam

More

Popular Tags

- * Media (10)
- * Television (5)
- * Business (2)
- * Science (4)

More

Latest Additions

- * Aenean sit amet

More

Latest Comments

- * Aenean sit amet
- * Tortor in ullamcorper
- * Vulputate lacinia purus
- * Class aptent taciti

More

All RMIT staff can login and create Projects. Students can login after they have been added to a project

Searches descriptions and tags of all posted media & projects

Advanced Search allows user to select criteria (i.e only projects) for search. Shows in content area of page

Displays number of items with this tag and orders by this number

More links to a summary page of all available tags (not included in wireframes).

Top 5 - 10 projects sorted by activity. More links to page with full list of projects and their descriptions. Same as project page (pg 2) except it lists projects rather than media

Radio Online At RMIT (ROAR): Wireframes

Project Page : Not Logged In

ROAR

Login

Username

Password

Projects > Maecenas

Project description

Advanced Search

Popular Projects

- * Tristique nec
- * Maecenas
- * Aliquam

More

Popular Tags

- * Media (10)
- * Television (5)
- * Business (2)
- * Science (4)

More

Latest Additions

- * Aenean sit amet
- * Tortor in ullamcorper
- * Vulputate lacinia purus
- * Class aptent taciti

More

Latest Comments

- * Aenean sit amet
- * Tortor in ullamcorper
- * Vulputate lacinia purus
- * Class aptent taciti

More

Project media with description

Aenean sit amet

Sed sed risus a diam aliquam ornare. Donec vitae nulla. Donec leo leo, tempor ut, malesuada ut, porttitor in, risus. Aenean diam nulla, cursus at, consectetur sed, pretium id, lorem. Sed laoreet, augue sed pellentesque imperdiet, ipsum turpis aliquam tellus, ut molestie turpis massa id turpis.

More

Tortor in ullamcorper

Sed sed risus a diam aliquam ornare. Donec vitae nulla. Donec leo leo, tempor ut, malesuada ut, porttitor in, risus. Aenean diam nulla, cursus at, consectetur sed, pretium id, lorem. Sed laoreet, augue sed pellentesque imperdiet, ipsum turpis aliquam tellus, ut molestie turpis massa id turpis.

More

Vulputate lacinia purus

Sed sed risus a diam aliquam ornare. Donec vitae nulla. Donec leo leo, tempor ut, malesuada ut, porttitor in, risus. Aenean diam nulla, cursus at, consectetur sed, pretium id, lorem. Sed laoreet, augue sed pellentesque imperdiet, ipsum turpis aliquam tellus, ut molestie turpis massa id turpis.

More

Project media with description

Project specific pages list Project members with links to their media

ROAR
Logged in users with appropriate permissions see admin buttons

My Projects

- * Tristique nec
- * Maecenas

Add Project

Add Media

My Account

Logout

Projects > Maecenas

View Edit Members Content Blog 🔗

Search

Advanced Search

Popular Projects

- * Tristique nec
- * Maecenas
- * Aliquam

More

Project Members

- * Fred Williams (10)
- * Cindy Sherman (5)
- * Frank Stella (2)
- * Frida Kahlo (4)

Popular Tags

- * Media (10)
- * Television (5)
- * Business (2)
- * Science (4)

More

Latest Additions

- * Aenean sit amet
- * Tortor in ullamcorper
- * Vulputate lacinia purus
- * Nulla sagittis
- * Class aptent taciti

More

Projects > Maecenas

View Edit Members Content Blog 🔗

Search

Advanced Search

Popular Projects

- * Tristique nec
- * Maecenas
- * Aliquam

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Project Members

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- * Frank Stella (2)
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Popular Tags

- * Media (10)
- * Television (5)
- * Business (2)
- * Science (4)

More

Latest Additions

- * Aenean sit amet
- * Tortor in ullamcorper
- * Vulputate lacinia purus
- * Nulla sagittis
- * Class aptent taciti

More

Project Blog

Aenean sit amet

Sed sed risus a diam aliquam ornare. Donec vitae nulla. Donec leo leo, tempor ut, malesuada ut, porttitor in, risus. Aenean diam nulla, cursus at, consectetur sed, pretium id, lorem.

More

Tortor in ullamcorper

Sed sed risus a diam aliquam ornare. Donec vitae nulla. Donec leo leo, tempor ut, malesuada ut, porttitor in, risus. Aenean diam nulla, cursus at, consectetur sed, pretium id, lorem.

More

Project Media

Aenean sit amet

Sed sed risus a diam aliquam ornare. Donec vitae nulla. Donec leo leo, tempor ut, malesuada ut, porttitor in, risus. Aenean diam nulla, cursus at, consectetur sed, pretium id, lorem.

More

Tortor in ullamcorper

Sed sed risus a diam aliquam ornare. Donec vitae nulla. Donec leo leo, tempor ut, malesuada ut, porttitor in, risus. Aenean diam nulla, cursus at, consectetur sed, pretium id, lorem.

More

ROAR

My Projects

- * Tristique nec
- * Maecenas

Add Project

Add Media

My Account

Logout

[Link to new media page](#)

Projects >

View Edit Members Content Blog 🔗

Search

Advanced Search

Popular Projects

- * Tristique nec
- * Maecenas
- * Aliquam

More

Project Members

- * Fred Williams (10)
- * Cindy Sherman (5)
- * Frank Stella (2)
- * Frida Kahlo (4)

Popular Tags

- * Media (10)
- * Television (5)
- * Business (2)
- * Science (4)

More

Latest Additions

- * Aenean sit amet
- * Tortor in ullamcorper
- * Vulputate lacinia purus
- * Nulla sagittis
- * Class aptent taciti

More

Project Name:

Description:

Preview Submit Delete

Add Media Content Add Project Member Link to new member page

Tortor in ullamcorper

Sed sed risus a diam aliquam ornare. Donec vitae nulla. Donec leo leo, tempor ut, malesuada ut, porttitor in, risus.

More

Vulputate lacinia purus

Sed sed risus a diam aliquam ornare. Donec vitae nulla. Donec leo leo, tempor ut, malesuada ut, porttitor in, risus.

More

Popular Projects

- * Tristique nec
- * Maecenas
- * Aliquam

More

Project Members

- * Fred Williams (10)
- * Cindy Sherman (5)
- * Frank Stella (2)
- * Frida Kahlo (4)

Popular Tags

- * Media (10)
- * Television (5)
- * Business (2)
- * Science (4)

More

Latest Additions

- * Aenean sit amet
- * Tortor in ullamcorper
- * Vulputate lacinia purus
- * Nulla sagittis
- * Class aptent taciti

More

ROAR

My Projects

- * Tristique nec
- * Maecenas

Add Project

Add Media

My Account

Logout

Projects > Maecenas

View
Edit
Members
Content
Blog

Search

Advanced Search

Content

Title	Type	Author	Status	Operations
Acnean sit amet	Media Page	Fred Williams	published	edit
Tortor in ullamcorper	Media Page	Fred Williams	published	edit
Vulputate lacinia purus	Media Page	Cindy Sherman	published	edit
Nulla sagittis	Media Page	Frank Stella	published	edit
Class aptent taciti	Media Page	Frida Kahlo	published	edit

Popular Projects

- * Tristique nec
- * Maecenas
- * Aliquam
- More

Project Members

- * Fred Williams (10)
- * Cindy Sherman (5)
- * Frank Stella (2)
- * Frida Kahlo (4)

Popular Tags

- * Media (10)
- * Television (5)
- * Business (2)
- * Science (4)
- More

Latest Additions

- * Acnean sit amet
- * Tortor in ullamcorper
- * Vulputate lacinia purus
- * Nulla sagittis
- * Class aptent taciti
- More

ROAR

My Projects

- * Tristique nec
- * Maecenas

Add Project

Add Media

My Account

Logout

Projects > Maecenas

View
Edit
Members
Content
Blog

Search

Advanced Search

Members:

Username	Status	Roles	Member for	Last access	Operations
e58992	active	Admin	2 weeks	24 min	edit
e58992	active	Admin	2 weeks	24 min	edit
e58992	active	Admin	2 weeks	24 min	edit
e58992	active	Admin	2 weeks	24 min	edit
e58992	active	Admin	2 weeks	24 min	edit

Add Member

External

RMIT

RMIT ID:

Email:

Status

Blocked

Active

Roles

Project Owner

Contributor

Popular Projects

- * Tristique nec
- * Maecenas
- * Aliquam
- More

Project Members

- * Fred Williams (10)
- * Cindy Sherman (5)
- * Frank Stella (2)
- * Frida Kahlo (4)

Popular Tags

- * Media (10)
- * Television (5)
- * Business (2)
- * Science (4)
- More

Latest Additions

- * Acnean sit amet
- * Tortor in ullamcorper
- * Vulputate lacinia purus
- * Nulla sagittis
- * Class aptent taciti
- More

ROAR

Login

Username

Password

Logged in users can

add comments

Projects > Maecenas > Aenean sit amet



Sed sed risus a diam aliquam ornare. Donec vitae nulla. Donec leo leo, tempor ut, malesuada ut, porttitor in, risus. Aenean diam nulla, cursus at, consectetur sed, pretium id, lorem. Sed laoreet, augue sed pellentesque imperdiet, ipsum turpis aliquam tellus, ut molestie turpis massa id turpis.

> Login to post comments

Comments



Duis a sem ut ipsum feugiat placerat. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos himenaeos. Aliquam lobortis pellentesque arcu. Fusce magna magna, rhoncus vitae, convallis a, porta nec, neque. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos himenaeos.



Duis a sem ut ipsum feugiat placerat. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos himenaeos. Aliquam lobortis pellentesque arcu. Fusce magna magna, rhoncus vitae, convallis a, porta nec, neque. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos himenaeos.

Advanced Search

Popular Projects

- * Tristique nec
- * Maecenas
- * Aliquam

More

Popular Tags

- * Media (10)
- * Television (5)
- * Business (2)
- * Science (4)

More

Latest Additions

- * Aenean sit amet
- * Tortor in ullamcorper
- * Vulputate lacinia purus
- * Class aptent taciti

More

Latest Comments

- * Aenean sit amet
- * Tortor in ullamcorper
- * Vulputate lacinia purus
- * Class aptent taciti

More

ROAR

My Projects

- * Tristique nec
- * Maecenas

Add Project


Add Media

My Account

Logout

[Link to tag pages](#)

Projects > Maecenas > Aenean sit amet



Sed sed risus a diam aliquam ornare. Donec vitae nulla. Donec leo leo, tempor ut, malesuada ut, porttitor in, risus. Aenean diam nulla, cursus at, consectetur sed, pretium id, lorem. Sed laoreet, augue sed pellentesque imperdiet, ipsum turpis aliquam tellus, ut molestie turpis massa id turpis.

Tags

Media, Television

Comments

Reply

Subject:

Comment:

Advanced Search

Popular Projects

- * Tristique nec
- * Maecenas
- * Aliquam

More

Project Members

- * Fred Williams (10)
- * Cindy Sherman (5)
- * Frank Stella (2)
- * Frida Kahlo (4)

Popular Tags

- * Media (10)
- * Television (5)
- * Business (2)
- * Science (4)

More

Latest Additions

- * Aenean sit amet
- * Tortor in ullamcorper
- * Vulputate lacinia purus
- * Nulla sagittis
- * Class aptent taciti

More

ROAR

My Projects

- * Tristique nec
- * Maecenas

Add Project

Add Media

My Account

Logout

Member > Fred Williams

Fred Williams

Sed sed risus a diam aliquam ornare. Donec vitae nulla. Donec leo leo, tempor ut, malesuada ut, porttitor in, risus. Aenean diam nulla, cursus at, consectetur sed, pretium id, lorem. Sed laoreet, augue sed pellentesque imperdiet.

Projects

Aenean sit amet

Sed sed risus a diam aliquam ornare. Donec vitae nulla. Donec leo leo, tempor ut, malesuada ut, porttitor in, risus. Aenean diam nulla, cursus at, consectetur sed, pretium id, lorem.

More

Tortor in ullamcorper

Sed sed risus a diam aliquam ornare. Donec vitae nulla. Donec leo leo, tempor ut, malesuada ut, porttitor in, risus. Aenean diam nulla, cursus at, consectetur sed, pretium id, lorem.

More

Media

Aenean sit amet

Sed sed risus a diam aliquam ornare. Donec vitae nulla. Donec leo leo, tempor ut, malesuada ut, porttitor in, risus. Aenean diam nulla, cursus at, consectetur sed, pretium id, lorem.

More

Tortor in ullamcorper

Sed sed risus a diam aliquam ornare. Donec vitae nulla. Donec leo leo, tempor ut, malesuada ut, porttitor in, risus. Aenean diam nulla, cursus at, consectetur sed, pretium id, lorem.

More

Advanced Search

Popular Projects

- * Tristique nec
- * Maecenas
- * Aliquam

More

Project Members

- * Fred Williams (10)
- * Cindy Sherman (5)
- * Frank Stella (2)
- * Frida Kahlo (4)

Popular Tags

- * Media (10)
- * Television (5)
- * Business (2)
- * Science (4)

More

Latest Additions

- * Aenean sit amet
- * Tortor in ullamcorper
- * Vulputate lacinia purus
- * Nulla sagittis
- * Class aptent taciti

More

ROAR

My Projects

- * Tristique nec
- * Maecenas

Add Project

Add Media

My Account

Logout

User Account

[Account settings](#) | [About Me](#)

Email Address

Password

Confirm Password

Picture

Upload

Advanced Search

Popular Projects

- * Tristique nec
- * Maecenas
- * Aliquam

More

Project Members

- * Fred Williams (10)
- * Cindy Sherman (5)
- * Frank Stella (2)
- * Frida Kahlo (4)

Popular Tags

- * Media (10)
- * Television (5)
- * Business (2)
- * Science (4)

More

Latest Additions

- * Aenean sit amet
- * Tortor in ullamcorper
- * Vulputate lacinia purus
- * Nulla sagittis
- * Class aptent taciti

More

Appendix Three – ROAR Final Report

RMIT University
Learning and Teaching Investment Fund 2008
Final Report

Due date is February 20, 2009 to your LTIF College Coordinator

Project title	ROAR: Radio Online At RMIT
Project leader	Bruce Berryman
Team members	EMG: Bill Lane, Jody Fenn, Darren Smith Researchers: Emily Naismith, Kim Jirik, Jessica Langmair
Funds approved	\$15,000
Funds acquitted (attach financial statement)	As attached
Introduction	<p>Throughout the world, the radio industry is undergoing substantial change in the production and distribution of material through the use of digital technologies. Graduates entering the workforce as radio producers are expected to fulfil the tasks associated with conventional radio production, but also to re-purpose this content for distribution online and via digital audio broadcasting (DAB). An issue being confronted by industry worldwide is how radio, the oldest of the electronic media, adapts to this digital environment through the development of new forms of radio and hybrid services. Combined issues related to globalisation, new ways of listening and virtual / networked production, make this project relevant to our students, other universities and industry. This area of research also relates strongly to my PhD project, “Digital On A Shoestring - community and independent radio in the digital environment”. The project has been informed by my broader research into the area of online radio production and programming and has fed into my studies through a critical reflection of the process.</p> <p>ROAR: Radio Online At RMIT addresses contemporary issues in the production and distribution of radio content in an online environment. The development of this online publishing tool develops the radio production courses at RMIT to provide new ways of learning, improve employability and help create a global passport for graduates.</p> <p>There are two components to the project.</p> <p>1: A website that publishes audio material produced throughout RMIT</p>

	<p>and specifically showcases the work of radio production students in the Media and Professional Communication programs of the School of Applied Communication, through the development of an Online publishing tool: ROAR</p> <p>2: Online collaborative radio production projects between RMIT and other universities</p>
<p>Detailed project description and outline of what was done</p>	<p>The LTIF funding supported two related projects. The development of the ROAR online content management system in partnership with the Educational Media Group of RMIT and the production of a collaborative online radio documentary in partnership with an overseas university.</p> <p>The two projects are related in a number of respects. ROAR is an innovative content management system that is to be implemented in the teaching of semester one 2009 radio courses. The production of “Shared Stories” a collaborative online radio documentary, models the ways in which content development and delivery platforms like ROAR can be optimised to become virtual production facilities.</p> <p>These two areas are detailed below.</p> <p>Part 1: The development of a website and online publishing tool to act as a repository for and distribution of material produced by RMIT radio students is essential in the contemporary media environment. There is a need for radio students to understand the processes involved in producing audio pieces that can be distributed online, in combination with text, images and links to further the storytelling possibilities. Over recent years our students have worked collaboratively to produce websites that can air their work on-demand and provide some biographic information to potential employers. However, the sites have been limited in both graphic and database design. There is a need for students to be able to direct future employers to their work online and for RMIT to profile the best work of our students.</p> <p>The development of ROAR was initially envisaged as a system for use in the Media and Professional Communication programs, but through it’s realisation it became apparent that the tool would also facilitate the publication and sharing of audio files for many courses across colleges and activities throughout the university. Within the School of Applied Communication, Journalism students will also be able to publish material on ROAR and in the early stage of development I liaised with Journalism staff to ensure the participation of this student cohort. As a result, the RMIT daily news bulletin produced by Journalism students will be streamed on the site and archived for future reference. Similarly, the 3RRR weekly radio program produced and presented by Media and Professional Communication students “Room With A</p>

View” is archived on the site and available for streamed listening. Now that the site is operational, there is scope for involvement with other schools to enrich and diversify the content available on ROAR.

Working in partnership with the university’s Educational Media Group, an online content management tool was developed that publishes student radio/audio work. The ROAR site enables radio and digital audio work produced by students in the Media, Journalism and Professional Communication programs to be showcased and archived online. Through ROAR, the public can now listen to the documentaries and features, interviews, drama and comedy, soundscapes and reviews produced by RMIT Radio students. Audio content and associated text and images on the website are updated and archived to reflect the variety of material produced in RMIT radio-based courses. Through ROAR potential employers can access biographical information on individual producers and search for material by genre and producer.

Within ROAR there are also internal student project spaces where students use weblogs to develop story ideas, post research material, discuss production issues and comment on the finished pieces. In this way ROAR is also a learning and teaching tool that assists in the research, and development of student radio works. These internal project spaces will be used by the teaching staff to feedback and assess work. Students will also engage in processes of peer and self assessment.

This was the first time that I had worked with the EMG (Educational Media Group) and from early discussions it was clear that there were several aspects of ROAR that were aligned with other projects being conducted by that group throughout the university.

It was exciting and stimulating working with programmers and designers to create a tool that would have concrete learning and teaching benefits for my students. It was also satisfying to know that the work EMG were doing through the development of the ROAR environment could be adapted to other streamed media through the SMPL system. (ROAR sits within SMPL, using the Drupal database as a basis for design.)

Whilst the project team worked on a wireframe design for ROAR, another project was being developed by EMG. This project, MAT (Media Annotation Tool) was initially devised to assist staff and students in the Physical Education program at RMIT. As we worked on the specifications of ROAR and I worked on the development of the collaborative online documentary, it became clear that MAT should be incorporated into the ROAR project. In so doing a system has been created where students are able to post audio interviews onto MAT and mark points along a timeline. These markers are associated with comments about the content, made by project collaborators and staff.

At the time of writing, ROAR has content uploaded from the RMIT radio production courses conducted in 2007 and 2008. In semester one

	<p>2009, ROAR will be used for the delivery of material produced in the Radio 1, Production Projects1 and Broadcast Journalism courses. The Radio 1 course has been modified to allow students to peer assess work produced and uploaded. They will also be instructed on how to upload audio and related text and images onto the site</p> <p>Part 2: the development of collaborative online productions draws upon previous work conducted in partnership with Ryerson University in Toronto through “The Bouncing Story”. The Bouncing Story developed a radio serial over a number of weeks, with episodes produced alternately from students of the two universities. Episode one is produced and uploaded to a website and the group from the other country then have a week to respond by producing the next instalment. The story bounces from one side of the world to the other each week, with many twists and turns (and changes in accent.)</p> <p>As a development of this form of networked production, I presented the concept of student centred online collaborative documentary production at The Radio Conference in Lincoln UK, in 2007. (RMIT hosted this international conference in 2005.) The project known as Shared Stories completed stage one in July 2008. It involved students from Lincoln University and RMIT University deciding upon a theme, recording interviews locally and uploading material to a shared server. This formed the source material for a collaboratively produced documentary that explored issues relevant to communities of interest, locally and globally. In the first collaboration, the students decided upon the theme of emigration between Australia and the UK. A 30 minute documentary was produced over 10 weeks in semester one and has since been broadcast on radio stations in the UK and Australia. The final mix of the documentary is available as a streamed piece on ROAR.</p> <p>At the conclusion of stage 1, I met with the project partners in Lincoln UK and interviewed all of the participants as a part of a process of critical reflection. Analysis of the data produced has informed my research and is the basis for the next stage of development. (See Appendix 1 for a full account of Shared Stories stage 1)</p>
<p>Attach the full and detailed report and evaluation of your project outcomes including evidence of the impact the project has had. Also make reference to how the outcomes address the five key objectives:</p> <ul style="list-style-type: none"> Improved student learning experiences, 	<p>The project has already achieved a number of concrete outcomes.</p> <ul style="list-style-type: none"> ROAR - A web based interface that showcases work produced through international collaborative projects, pieces produced by radio students at RMIT. The site incorporates a backend database to sort works by genre and producer and a self managing upload system to allow ease in publishing material. <p>The self managing upload system and administration console allows timely publishing of the audio, produced alongside associated text, images and links. ROAR consolidates the range of theoretical and technical issues studied throughout the student’s undergraduate program and provide real world skills in contemporary media production.</p>

<p>outcomes and employment opportunities</p> <ul style="list-style-type: none"> • Innovation • Strategic alignment • University wide application • Value for money 	<p>At the time of writing the programming and design of the ROAR site has been completed. With research assistance a body of radio material produced throughout 2007 and 2008 has been uploaded. This process allowed an opportunity to beta test the system prior to 2009 semester one teaching. This period also allowed the project team to make minor changes to the functionality of the site and to develop templates that allow students to readily upload additional information that extends the storytelling experience.</p> <p>One of the areas of difference between analog and digital forms of publishing radio, is the ability to provide the central audio work alongside images, text and links to further contextualise the themes explored. In the contemporary media environment the capacity to translate conventional radio broadcasts into a media rich piece delivered online is a mandatory skill for producers in most sectors. ROAR is an environment in which students are able to work through the issues associated this type of delivery and through the associated coursework, model ways in which radio content can be re-purposed for different platforms. Until the launch of ROAR radio students at RMIT have not been able to fully explore through practice, this emerging role of the radio producer. The value of this type of learning experience cannot be underestimated. Whilst Media students around the globe develop a theoretical understanding of the interaction between conventional and emerging digital forms of publishing/broadcasting, students come to RMIT because vocational literacies are developed through a combination of practice and theory. Learning through doing is a point of difference between our university and many others. ROAR ensures that at a time of rapid change our position as a leading institution in the provision of radio industry ready graduates is maintained.</p> <p>Working with EMG on this project has been a highlight of my career at RMIT. I felt privileged to work with a team of highly skilled professionals in both the technical and design areas. Importantly, bringing the concept to a team who understood and valued each other's contribution was fairly unique for me. This type of collaboration models the type of industry practice that our graduates are entering in the emerging field of digital radio production. For me it provided valuable professional development in my teaching and research.</p> <p>Throughout the development period the project team were able to discuss the requirements of the system through the different lenses of emerging media practice. In the early conceptual stage (see appendix 2: Wireframe PDF), the emphasis was on the technical functionality of the system. This period involved a fairly steep learning curve for me, in an attempt to articulate the many components of the site that needed building in a language we all understood. In some instances this period required a recognition on my part of the established protocols within the University's IT policies. Later issues related to usability were highlighted. Within this area the site needed to balance what was possible within the system with ease of use on the part of the students. It is important that now the system is available, students are able to readily navigate their way through the public and private spaces. They</p>
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need to be able to switch between these areas and to effectively use the functions within ROAR to collaborate on the development of productions through the weblogs associated with each project. To be able to upload the finished work and to tag it for the use of the search function. They need to be able to publish appropriate associated data to increase the understanding of the piece for a general global audience. The students also need to understand the ways in which the system is used for reflecting on their work and commenting on the work of their peers. (see appendix 3: user manual)

One unexpected outcome of the project has been the inclusion of the media annotation tool MAT. Media annotation tools have been used in a variety of media production contexts for the last few years. The difference with MAT is the way in which the design has been tailored by EMG for ease of use by students. In the context of ROAR, this system will allow students collaborating on a project through a weblog, to upload works in progress and to discuss tagged points along a timeline. Tagging or marking a point in the audio is a useful way to identify a specific production concern and to make comments. This might be a point relating to a technical consideration (volume or an edit point) or it could have to do with scripting, narration or another part of the production. This type of tool has clear benefits for students working in different geographic locations, but also for lecturers and peers in the assessment process. At the time of writing MAT has been built and in the next two months will be linked to ROAR. At that point, information generated on MAT will be synchronised with the project weblogs and the publishing capabilities of ROAR.

From this point, the system will be used in semester one 2009 teaching to model the production of radio that explores the possibilities of the digital environment. All of the assignments in the Radio Production courses at RMIT will be uploaded onto the site. Radio productions from 2007 and 2008 are now available through ROAR for streamed listening online in the following genres: Interviews; features; documentaries; collaborations; reviews; creative audio

Following discussion with staff in the Journalism program, student work from this cohort will also be uploaded. Importantly, the Journalism staff had been trying to find a way to publish their daily news bulletins online. ROAR will commence streaming a daily news bulletin produced by RMIT Journalism students in May. The Journalism student's involvement in ROAR will assist in the teaching of the recently introduced Online Journalism courses developed as a part of that program's curriculum review in 2008.

The recent College of Design and Social Context review of three schools and resulting amalgamation of the Schools of Applied Communication and Creative Media into the School of Media and Communication provides an exciting new environment in which our learning and teaching and research operates. At present content on ROAR is being generated by students in the School of Applied Communication. The new school structure will assist the next stage of the project by extending the reach of ROAR to other areas of audio

production in the university. To this end I will be establishing an editorial group/management committee to oversee the development of a coherent and ongoing programming policy for ROAR. This group will include representatives of EMG and the program areas in the university with a focus on radio/audio production.

The other area that was supported by the university through LTIF funding was:

- The production of collaborative documentary pieces appropriate for on-air and online distribution in partnership with international universities.

This aspect of the project has been realised through a partnership with Lincoln University in the UK. It involved the collaboration between two groups of students in an online documentary. This collaboration forms a part of a series of documentaries under the heading of “Shared Stories”.

Stage 1 of “Shared Stories” was the production of a 30 minute documentary on Emigration that has been aired on Community radio in Australia and the UK. It is also streamed through the ROAR website.

One of the things we are constantly told about the internet is that the world becomes a smaller place. We are more easily able to communicate with like minded individuals through virtual communication. For radio practitioners this connectivity should allow people with common interests and skills to collaborate more effectively on radio-like productions. “Shared Stories” is about this type of collaborative production of documentaries and features.

The concept behind Shared Stories is for radio producers with shared interests but situated in different geographic locations to use weblogs, online production tools and servers to create a collaboratively produced documentary. The weblog is the primary form of mediation employed throughout the production process. It is used initially to generate discussion and identify a theme, discuss production methodology, to post research material and production plans. Interviews are recorded locally and uploaded to a shared server through the weblog. With the use of a media annotation tool, this audio material is reviewed and edit decisions are made. Scripts and rough cuts of the documentary are posted and at the end of the process a documentary is produced that reflects the shared stories of a particular group of individuals from different parts of the world, for a community of interest that recognizes and values the shared concerns from both a local and global perspective.

Shared Stories version 1 was produced in the first half of 2008 as a collaboration between Lincoln University in England and RMIT University in Australia. It involved the participation of three final year Media students at RMIT and two final year Media students at Lincoln,

	<p>working over 10 weeks to plan and produce a 30 minute documentary on the theme of emigration between Australia and the UK.</p> <p>The project extends the ways in which radio students learn about media production and distribution in a networked environment. An active process involving reflective practice theory is encouraged through the use of web journals and the material is peer assessed internationally and locally.</p> <p>The project went a lot further towards modelling the production of a collaborative produced online radio documentary than proposed. Originally the expectation was that two short locally produced pieces would be made, based on the shared interview material of the two cohorts. Instead, one 30 x minute documentary was produced collaboratively. There were however, several challenges encountered in the process. Some of which were a result of the mixed expectations and skills levels of the participants. Others were related to technical issues encountered throughout production. It was very important to reflect upon the process in order to develop this emerging mode of production further. One of outcomes of the project has been a shift in my own theoretical research. Although much was accomplished, it has been as interesting to investigate what didn't work and why. The issues encountered in the project that relate to the politics of collaboration are shared in many vocational settings. The "Shared Stories" series will continue to evolve, with plans for second version in 2010 with Lincoln. I am also hoping that we can collaborate with other universities in Australia and New Zealand. Working with partners sharing our timezone and academic calendar will alleviate some of the logistical issues confronted in version 1.</p> <p>For a detailed analysis and evaluation of "Shared Stories" in 2008 see Appendix 1.</p>
<p>Dissemination of project outcomes both completed and planned. This should include both within RMIT and externally.</p>	<p>The Shared Stories documentary on emigration has been aired on Community radio in both Australia and the UK. It is also streamed through the ROAR website.</p> <p>As a part of my PhD research, I presented a paper at RMIT's 2008 Graduate Research Conference on Shared Stories and ROAR.</p> <p>Presentation of a conference paper at the 2009 ANZCA conference on Shared Stories and another on the politics of collaboration in a networked environment at the 2009 International Radio Confernece in Toronto, Canada.</p> <p>Interview on 3RRR about the Shared Stories project in September 2008</p> <p>Participation in a Community Media consultation group on ROAR</p>

	<p>I am listed as a principle investigator and will contribute to the re-design and development of The Pool an ABC online production initiative on the basis (in part) of my experience in the ROAR project.</p> <p>Consultation with RMIT Journalism staff on ways in which to use ROAR for the publication of student work.</p> <p>Presentation of the project at an RMIT L & T event</p>
<p>Summary of the project, outcomes, impacts and dissemination</p>	<p>ROAR – Radio Online At RMIT http://emedia.rmit.edu.au/smpl/roar</p> <p>The ROAR project enables radio and digital audio work produced by students in the Media, Journalism and Professional Communication programs to be showcased and archived online. Through ROAR, the public can now listen to the documentaries and features, interviews, drama and comedy, soundscapes and reviews produced by RMIT Radio students. Also accessible online are daily news bulletins produced by RMIT journalism students and the weekly Room With A View magazine show produced by Media and Professional Communication students.</p> <p>Through ROAR potential employers can access biographical information on individual producers and search for material by genre and producer.</p> <p>Within ROAR there are also student only internal spaces where students use weblogs to develop story ideas, post research material, discuss production issues and comment on the finished pieces. In this way ROAR is also a learning and teaching tool that assists in the research, and development of student radio works</p> <p>ROAR is also a site for collaborative online radio production. The site allows producers in different geographic locations to produce documentaries in a virtual environment. The first of these collaborations was “Shared Stories” an online documentary produced by Media students from RMIT and Lincoln University in the UK on the theme of emigration.</p>