Storytelling for Learning in a Diagnostic Radiography Community of Practice.

Amy Robertson FHEA. MSc. BSc (Hons).

April 2019.

This thesis is submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

Department of Educational Research, Lancaster University, UK.

Storytelling for Learning in a Diagnostic Radiography Community of Practice.

Amy Robertson FHEA. MSc. BSc (Hons).

Doctor of Philosophy, April 2019.

This thesis results entirely from my own work and has not been offered previously for any other degree or diploma. The word-length conforms to the permitted maximum of 45000.

Word count – 45010.

Signature:

Amy Robertson FHEA. MSc. BSc (Hons).

Doctor of Philosophy, April 2019.

Abstract

Background: There is a noted lack of definition in storytelling practice. The definitions that are present in the literature are slippery at best. Stories fit under the umbrella term of narrative and can be reflective, creative and value laden – often revealing underlying importance about the human condition. Research in the discipline of Radiography concerning educational storytelling is novel. The concepts of storytelling for adult teaching, assessment and learning in other areas of health and wider practice do not appear to follow a logical pattern of development. Storytelling has potential to impact the learning and teaching practices in Radiography can be transformative, reflective and powerful.

Research Question: How is the practice of 'storytelling for teaching' understood and perceived by a community of practice within Diagnostic Radiography HE?

Method: The research incorporated a two-stage process that enabled exploration of the existing research base in a 'new' collective way and how this was articulated in a local community of practice. The two parts were:

Part 1. A systematic review of the literature - a meta-ethnographic review. To establish a collective understanding from the work of others to create a new understanding.

Part 2. A collaborative process - Appreciative inquiry action research (n=18). To explore, understand and develop ideas for storytelling for teaching's integration into a community of practice with a range of stakeholders in the learning environment.

Findings: There were six overarching common themes relating to the practical applications of storytelling and exactly how it could be incorporated into teaching and

learning in Part one of the research. These were grouped as: Relatability; Analogies and contrast; Reflective practice; Setting and the visual; Practicalities of the ‘how’; and, Common pitfalls. In part two there were six overt themes identified from the AI working group discussions: Intrinsic story skill; Emotions; Real, Clinical world; Story practices; and, Resources.

Conclusion: A model for storytelling practice for teaching is proposed and can be used as a toolkit to enhance learning and teaching practices using story. The model should be approached as a tool not a panacea and used when classroom conditions are developed (collaborative, personal and community focussed) for transformative experiences to occur. There are some key contextual features which need to be considered when implementing story practices such as; transformative focussed leadership, school-wide culture and de-centralised ownership. Storytelling may have a large role to play in developing 21st century ready learners who can think critically but who remain open to identity changes in a changeable and unpredictable future. This is critically important in the fast evolving and changeable field of healthcare not least Radiography.

Acknowledgements

This work would not have been possible without the support of my supervisor Kirsty Finn. Her constant support, despite not always being reciprocated, has without doubt enabled me to arrive at this point. I need to also acknowledge the whole academic and administrative team at Lancaster for their teaching and efforts. Distance learning presents challenges for support and academic staff. I have had a really positive student experience.

I also wish to acknowledge of all my colleagues and friends both past and present. I have been so fortunate to have had such inspirational, professional and personal support in my clinical and educational career. To my now retired manager who afforded me every opportunity possible and to my current manager, Rachel, who gave me a fantastic opportunity in the institution to make my passion my vocation. Becoming a member of staff in DELTA (Department for the Enhancement of Learning, Teaching and Access) has been the highlight of this doctoral journey and just would not have been possible without all the study and support through the programme. Thanks again to all my friends that I work alongside; for putting up with my complaints and covering my teaching and marking when they could. Also, to those at lunch club – my welcome distraction. I will never forget your kindness which will be repaid, in part, during the celebration process (hopefully!).

Finally, to those I categorise as nearest and dearest. My husband Iain - who remains my Scottish, stoic, super fan despite my best efforts to the contrary. Also, all my love to my ever-present family whose enduring faith kept me going through some very dark places. You know who you are.

This work is dedicated to my Nan. I hope you feel that the considerable investment in that laptop for my school projects was worth it.

Publications derived from work on the Doctoral Programme

WAREING, A. 2017. Storytelling for teaching: initial findings from a meta-ethnography. Higher Education Academy Annual Conference 2017: Generation TEF Teaching in the spotlight, Oral Presentation July 2017 - Manchester. DOI: 10.13140/RG.2.2.13447.29600

List of Abbreviations

AI – Appreciative Inquiry

BC – Before Christ

CEO – Chief Executive Officer

COREQ – Consolidated criteria for reporting qualitative research

CI – Collaborative Inquiry

CT – Computed Tomography

ERIC – Educational Resources Information Centre

HCPC – Health Care Professions Council

HE – Higher Education

HEA – Higher Education Academy

HEI – Higher Education Institution

IPL – Inter-professional learning

LTA – Learning, teaching and assessment

NHS – National Health Service

n – Number

ODL – Online Distance Leaning

PPCC – Principles of person-centred care

PDP – Personal Development Portfolio

PDP[1]- Personal Development Plan

Ph.D. – Doctor of Philosophy

PG – Postgraduate

Pt - Patient

UK – United Kingdom

UKPSF - United Kingdom Professional Standards Framework

REC – Research Ethics Committee

Resus – Resuscitation environment.

SBE – Simulated Based Education

SMOT™ - Scotia medical observation and training system

TMSA - Transformational Model of Social Activity

UG – Undergraduate

VEL – Visual Expression Learning

4D – four dimensions

List of Figures and Tables

Figures

Tables

Chapter 1: Storytelling for teaching

Introduction

Storytelling is a concept widely referred to, researched and believed to be 'understood' within higher education (HE). However definitive description of how, why and when it 'works' in teaching *practice* remains elusive. Despite a body of publications available concerning storytelling for education, there seems to be a surprising gap around storytelling teaching *practices* in healthcare and indeed the wider educational domain; thus, this area requires further investigation (Moon & Fowler 2007; Schwarz & Abbott 2007; Haigh & Hardy 2011; Karim 2014).

Storytelling practice has arguably been marginalised as a 'pedagogy' of its own standing. It is often referred to as a simple add-on or entertainment vehicle; downplaying any central potential role that storytelling may have in learning design or strategy. This may due to multiple reasons; the slippery nature of storytelling definition, loose theoretical foundation, and uncertainties of the practice of good storytelling. Using stories for teaching, learning and assessment however may have significance across several key work streams within the UK HE arena (Higher Education Academy 2015a; Higher Education Academy 2015b). Research publications pertaining to storytelling in healthcare are sparse, however; usually referring only to nursing and medicine. Importantly, there is no literature relating to storytelling practice and Radiography, either clinical or educational. It is probable that the reason for this gap is, in part, not because the practice of storytelling is not occurring in Radiographer interactions, but rather that the research evidence base in the Radiography profession itself is growing (Snaith, Harris & Harris 2016; Harris 2015). Radiography as a 'degree' level discipline only came into fruition in the early 1990's, being previously a work-based diploma (Hammick 1995). The research-base is indeed growing in Radiography but remains smaller than many other allied health disciplines. Interestingly I

have noted anecdotal evidence of storytelling teaching practice in Radiography clinical environments and in Radiography education in the higher education institution (HEI) where I work. On a personal level, storytelling for teaching is a familiar practice. Working as a clinical Radiographer for some seven years prior to academia, I found story to be a key method to connect with people in a very short space of time – gaining trust and instilling confidence with patients in less than a minute or so is challenging. There are numerous research publications each year in Radiography dedicated to communication in clinical practice, with thirty-eight published in 2017 thus far (Radiography 2017). None of the literature pertains to stories per se, however reflective practice in Radiography is being developed with varying level of reference to 'story' (Chapman et al 2009; Henwood & Booth 2015). Both Chapman et al. and Henwood & Booth include stories (told, shared and inner); but there is no explicit discussion about their significance pedagogically. It is clear that stories are being used and that interestingly students engage with them. This was documented recently in student feedback for one of the sessions my colleague had facilitated:

> *"One of the teaching team used stories all the time. I really like it when you (the teaching staff) tell the stories from hospital and about patients…really interesting."*
>
> Student module evaluation feedback BSc (Hons) Diagnostic Radiography.

It is from my personal experiences of working as a Radiographer and then as a Radiography lecturer that the idea for this research first originated. Stories, both fictional (scenario based – imagine if) and non-fictional (personal experience - I remember a time in

practice when) integrated in sessions with students felt comfortable. Students seem genuinely interested in them; prompting questions and talking points. These personal experiences overlay a body of literature to be reviewed in this thesis, providing the motivations for this project and the more specific aim to develop real world teaching practices that have meaning for Radiography educators. This will then be developed locally with Radiography education stakeholders (lecturers, students, clinical practitioners, management and learning co-ordinators) and articulated into practice.

Research Question.

The questions that drive this research forward are:

> **How is 'storytelling for teaching' understood and incorporated by a community of practice within Diagnostic Radiography HE?**

- ***RQ1.1*** How can existing research on storytelling in education be mobilised to inform a more robust model of storytelling for teaching in Radiography?
- ***RQ1.2*** How can this model be developed - building on the appreciative inquiry feedback at a local level involving stakeholders?
- ***RQ1.3*** What kinds of assumptions and tacit knowledge underpin storytelling practice in Radiography workgroups?
- ***RQ1.4*** What are the implications of the existing storytelling in education literature review and community feedback for developing a more robust and 'understood' practice for teaching in Radiography?

There are two overarching aims of the work which form an umbrella over the questions above. Developing an understanding or a 'doing' of practices concerning storytelling (RQ 1.1, 1.2). Storytelling as a transformative pedagogy (RQ 1.3, 1.4). These research aims, and questions will be explored through a mixed methodology, incorporating an umbrella meta-ethnography review and discipline specific appreciative inquiry action research process. The literature review will include a broad-stroke umbrella perspective of the practice of storytelling for teaching across the HE sector; meta-ethnography (Noblit & Hare 1988) involves following a seven-phase approach to literature synthesis culminating in a new synthesis expression. The action research phase will be developed using appreciative inquiry (Cooperrider & Srivastva 1987). With a focus of the positive power of change management, a working group of stakeholders will explore successful storytelling practices during two half day exploration sessions using the 'Four Dimension' (4D) cycle.

Thesis Layout

The main argument that discovery of 'practices' or the 'doing' of storytelling and storytelling as a vehicle for transformative learning are significant in Radiography education and is advanced in this thesis. In order to develop this line of reasoning, the thesis is organised in the following way:

In Chapter Two I will conceptualise storytelling for learning. I reflect on the practice of storytelling, its histories and evolution within different cultures and educational settings. The methods or 'doing' of storytelling will be critiqued to understand 'how' storytelling is happening in healthcare (in multiple spaces). I provide examples from multiple perspectives and argue that storytelling has and continues to have a large role in the sharing and preservation of human experience. These points are taken forward in later

chapters but are outlined in Chapter two to outline the 'transformative' potential of this practice.

I follow this discussion in Chapter Three with a detailed discussion of the theoretical basis of the work in this thesis. Storytelling practices and their foundations in transformative pedagogy and social practice theory are presented. This chapter will endeavour to provide a more 'robust' engagement of storytelling practice with the theoretical groundings.

Chapter Four considers the lens and focus of my world view by exploring my epistemological position and the theoretical design of the work. I will define the methodological considerations which have been explored to maximise the polyvocality of stakeholders involved in practices concerning storytelling in/and for Radiography.

The findings are considered in Chapter Five. This section aims to address the questions and wider aims through varying 'voices'; the literature voices, the workgroup voices and overlaid by my voice. Within these voices are the 'Other' voices which need to be championed and the relations of power within workgroups. This section also addresses the trustworthiness and integrity of the findings presented.

Chapter Six attempts to position or 'articulate' the research into a wider remit. Questions will be considered about the findings; how the voices articulate into and out with the community from which they were explored, can a more robust model of storytelling *practice* be mobilised, does it have implications as a transformative vehicle? A personal reflection will outline my cycle of experience and learning and aim to identify strengths and weakness in my role as the principal researcher and documenter of the thesis. This will lead onto limitations of the work and feasibility suggestions for future work in this area. Finally, space will be given to consider any potential implementation drivers and potential challenges to implementing practices which may arise.

Chapter Seven will conclude the work. Key points will be summarised - looking back from the start of the thesis all the way through to future horizons.

Chapter 2: Conceptualising storytelling

This chapter aims to conceptualise storytelling for learning and teaching. There is a noted lack of definition in storytelling practice. The definitions that are present in the literature are slippery at best. That is, story and the related practices of telling stories are elusive in meaning because the concept changes according to an individual's point of view. This chapter aims to make definitive understandings by exploring the practices of storytelling its role in formative learning and its histories and evolution within different cultures and educational settings. The 'doing' or methodological processes within educational practice research will be critiqued – what can be learnt from analysing what others have outlined as the *practice* of storytelling? Multiple perspectives will be considered in an attempt to understand how storytelling is used in diverse and emotively charged communications which are ever present in modern healthcare environments.

What is Story?

When we interact with one another we often engage with and make use of stories. We might want to bring a set of instructions to life or communicate a depth of context about a particular phenomenon or experience. In such cases, a story is a helpful tool because it provides a model through which others can relate to the information we are sharing. It is perhaps stating the obvious to outline what a story is here. There is huge variation of story types (for example; account, myth, legend, biographical, anecdote, joke, gossip, epic, tragedy, parody…etc.). In the context of the work in this thesis, story includes all 'types' there is particular importance placed on some types as they are relevant to the findings in this work. Interestingly, despite its common understanding and usage, story is often confused with other similar concepts, such as narrative. Whilst storytelling is closely

aligned, it should not be confused with narrative. Narrative can be defined as being predominately factual, whereas stories fit under the umbrella term of narrative and can be reflective, creative and value laden – often revealing underlying importance about the human condition (Haigh & Hardy 2011). The human condition is a broad topic, debated frequently and is contested from many different perspectives such as philosophical, religious and historical. In the use of this thesis, the human condition can be taken as human meaning making, morality and the underlying purpose of life. Gratch & Crick (2015: 307) in their assessment of applying the work of Walter Benjamin (1938-1940) state:

> *The storyteller, through gesture of embodied practice, invokes experience for his/her audience and then, through the invocation of experience, delivers counsel…requiring co-ordination among 'soul, eye & hand'.*

Thus, as Gratch and Crick (2015: 307) argue here, storytelling is much more than relating a set of facts or details. The emphasis here is on embodied practice or multiple modes; emotion and the relationship between the body and the spoken word. These modes may illicit an emotional response in the listener; they may be comforted or find the story harrowing. It is understandable therefore that when navigating the educational and psychological research domains, there is some degree of difficulty separating narrative from story. Consideration of this tangled relationship, of narrative and story needs to be applied when analysing previous work. There is an abundance of literature concerning storytelling in higher education, much applying some attempt at definition. When attempting analysis of this literature, it becomes apparent that over time the semantics of story and storytelling has changed; fable, shaman, tale for example but essentially the key

concepts can be considered the same. Several researchers have attempted to ascertain core components of story such as core characters and how a story is told in compartments - leading to the development of two particular models that are frequently cited as a historic founding for 'newly' adapted concepts. The first relates to Props (1928) irreducible narrative elements and six common 'characters'; the second is the Labovian model (Labov & Waletzky 1967). These are outlined below (Table 1 and Figure 1).

The villain	An evil character that creates struggles for the hero
The dispatcher	Any character that illustrates the need for the hero's quest and sends the hero off. This often overlaps with the princess's father.
The helper	A typically magical entity that comes to help the hero in their quest.
The princess or prize, and often her father	The hero deserves her throughout the story but is unable to marry her as a consequence of some evil or injustice, perhaps the work of the villain. The hero's journey is often ended when he marries the princess, which constitutes the villain's defeat.
The donor	A character that prepares the hero or gives the hero some magical object, sometimes after testing them.
The hero	The character that reacts to the dispatcher and donor characters, thwarts the villain, resolves any lacking or wrong hoods and weds the princess.
The false hero	A figure who takes credit for the hero's actions or tries to marry the princess

Table 1. Prop's (1928) six common character types in a fable (Kainan 1995).

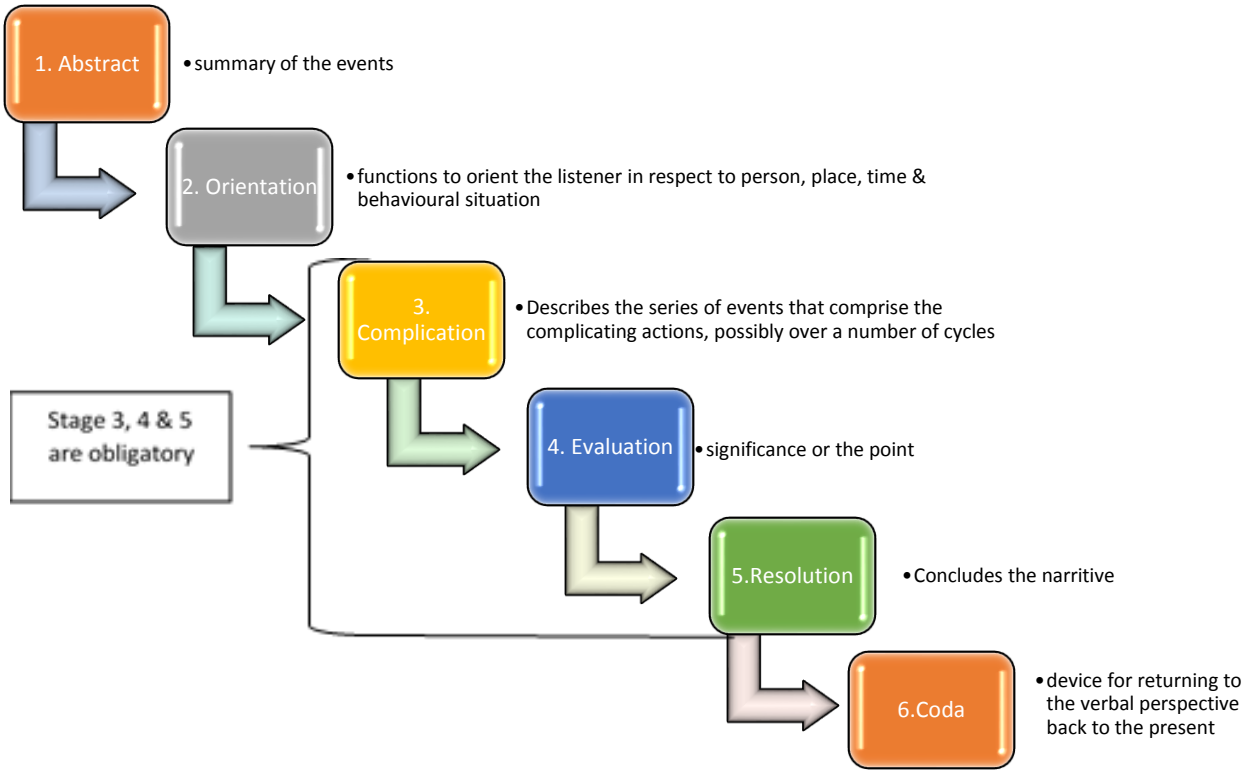


Figure 1. The Labovian Model (Labov & Waletzky 1967)

These two historic models are important for making sense of the construction and content of stories in their common usage. What we can derive from this set of parameters or components - characters, complications, evaluation and resolutions – that are necessary for a story to be understood as such. Whilst newer concepts have been proposed, the essential components remain unchanged and therefore relationships in the findings may well articulate to these common models – particularly the 'Resolution and Coda' (seen in Figure 1) or identifying characters in a story to emphasise a 'hero or a villain' (seen in Table 2).

Stories in Clinical Radiography

Radiographers are almost unique in their clinical practice in that they need to establish trust and rapport very quickly with patients. They do not have the time and multiple

interactions with individuals afforded to other allied health professionals and medics. In the ‘bread and butter’ work of a Radiographer (conventional x-ray musculoskeletal imaging) the relationship with the patient is fleeting. They are required to undertake a range of medical imaging examinations including occasional painful and difficult procedures with patients in a few short minutes. However, genuine trust has to be established quickly to produce diagnostic images which often additionally involves situational vulnerabilities or distractions for patients – for example being dressed in a gown, having bony surface markers palpated and unfamiliar technological environments. I felt that during my time as a clinical practitioner encouraging patients to share their stories established a more genuine connection and improved patient satisfaction and importantly where a diagnosis was needed, co-operation. This may be due, in part, to the embodied practice defined earlier in this chapter - the multiple modes of story sharing; not only a vehicle for facts but the comforting nature of storytelling in this environment. The proverb ‘a problem shared is a problem halved’ comes to mind here. I would encourage patients to share their ‘story’ of what happened to them during the examination. I would then share my own story experiences of practice, whilst of course maintaining patient confidentiality. This often served a dualistic purpose for patients of comforting and distraction during imaging examinations.

I have used story in academia to connect with students in reciprocal exchange of clinical experiences and reflection of practice. Perhaps this has been a result of deferral to a technique which I perceived as successful in a previous role, as outlined above in the clinical environment. Leaving a ‘comfort zone’ is well documented in the clinician to academia transition and to explain this Anderson (2009) offers the metaphor of the mermaid as a way to illuminate this often-challenging process. Anderson states that moving from the security and comfort of professional practice into academia is akin to a

'drowning' phase. Thus, to cope with the transition Nurses in the study drew on their real-life stories, which provided a basis to help students with difficult concepts on the course. Integrating their personal expertise into teaching sessions by sharing these real-life stories transcended the nurses into what Anderson: 207 called a 'throughout the waters' phase. This final phase defined the nurse's successful transition into the 'sea' of academia synonymous with personal well-being, mastery of new knowledge and skills and a sense of competence and confidence in the new role.

Stories are useful in Radiography, then, in two key ways: first, they can be useful in developing a rapport with patients in clinical practice and second, they are ways through which 'non-traditional' lecturers (i.e. those who enter academia via clinical practice) can develop pedagogies and a sense of identity within the academic workforce.

Storytelling Perspectives – timeless, ageless, diverse

Storytelling can also be considered as having timeless, ageless and culturally diverse perspectives. From the outset, it must be noted that in this work the focus concerns the oral tradition of storytelling. Stories, first via images on caves and later through language and writing, have been historically documented as a primary means of communicating to educate and transmit knowledge and skills. For example, early cave paintings, Egyptian tales (Anon. translated Parkinson 1997) and Homer's 'The Iliad' (translated Merril 2007). The historical accuracy of stories through the expanse of time have been generally unfounded. More recently however, a new momentum in the oral tradition field has appeared. Reid, Nunn and Sharpe (2014) found that oral tradition through stories in Indigenous languages can be repositories for factual knowledge. In their work in which they analysed prehistory Aboriginal stories of rising sea level, they accurately correlated

the geographical details of the stories to the melting of the last ice age (13,400–7,500 years before present). Perhaps then, stories can accurately translate across time periods far greater than previously imagined, forcing a rethink of the ways in which oral traditions have been previously dismissed (Reid, Nunn and Sharpe 2014). These examples demonstrate highly detailed and complex oral traditions that survived for tens of thousands of years. Kelly (2016) in her work with Aboriginal elders suggested that these stories were remembered through a process of multi-modal (e.g. song, verse, movement, dance etc.) 'encoding'. This has been mirrored in other oral tradition cultures - Celtic bards were famous for the sheer quantity of information they could memorise. Kelly (2016) suggested that this 'encoding' has importance for learning regarding recall. This finding is not isolated with much work around storytelling and memory.

Irrespective of the historical accuracy, stories (oral and early written) have been used from both non-fiction and indeed fiction to convey and recall with considerable detail, messages for learning. The tale of Sinuhe [Egyptian tales 1875BC (Anon. translated Parkinson 1997)] is probably one of the best early examples of storytelling with a 'learning' message. Several sources of archaeological artefacts refer to parts of the story (Figure 2).

Figure 2: limestone ostracon with the concluding group sets of the poem of 'The Tale of Sinuhe' (British Museum 2017).

The tale of Sinuhe (as seen in figure 2) is a timeless story of human development; reckless youth, forgiveness and ultimately learning to take responsibility for actions. The tale has been likened as an earlier 'Prodigal Son' (Luke 15; 11-32) pre-dating this by around 2000 years (Baines 1982). Perhaps works of fiction, perhaps not, what is important here for this work, is that each have been used throughout history to convey an important learning message for the capacity for human forgiveness.

There is a significance of the importance, longevity, accuracy and recall of story as a primary pedagogy in pre-history. It is unclear why this has been marginalised or perhaps trivialised in the adult learning environments of the 21st century given storytelling's importance in learning for thousands of years.

Story as a means of learning however is fully embraced in formative education domains. Storytelling in childhood learning has been researched since the 1980's (Egan 1988; Jackson 1987). It is a well-documented pedagogy for young learners, with the use of story enhancing new and difficult vocabulary (Hargrave and Sénéchal 2000; Reese et al. 2010; Wilkinson and Houston-Price 2013), language acquisition when repeating stories (Dunn et al. 1977) and even as a strong indicator for later academic success (Whitehurst et al. 1988; Rimm-Kaufman and Pianta 2000). The range and depth of story *practices* and educational research does not permeate through into adult education. Perhaps it is considered that we 'grow out of' the pedagogy of story. This seems strange given the almost universal application of story in formative education and the well-documented benefits.

Additionally, in certain fields, it has been argued that non-western societies with a strong storytelling tradition identify more with this pedagogy as a primary means of making sense of the world (Lee et al. 2016; Houston et al. 2011; Larkey et al. 2009). In healthcare disciplines, storytelling has historically met with caution. Greenhalgh (2001) cautioned against a 'panacea' for storytelling pedagogy in medical education. However, the population demographic has shifted considerably over the last few decades in the UK. This has implications when considering the healthcare needs of patients from more diverse communities with specialised care needs in the United Kingdom, creating the need for a new review of storytelling pedagogy in healthcare. In their work with Somalian patient's experiences of childbirth in the UK, Straus et al. (2009:184) found the culture of the oral tradition which is more embodied than narrative and often uses stories, was one of the most important yet overlooked aspect of communicative care. Below is a quotation from a midwife in their study; this reveals that some patients require information in a different format than just 'the facts'. This relates again to the nature of the embodied practice of oral tradition which may relate to stories told and shared.

> *"I have all the leaflets here, I translated them, but they are no use at all… it's oral in our culture…, that's why in my clinic I have to talk to them and talk, talk, talk, talk. When someone gives me a letter, book, reading, no, I don't want to read it, I want to see, and I want to hear it."*

This embodied oral tradition referred to previously is an important element of storytelling and may have implications for the classroom. Globalisation, beyond trade, encompasses the flow of people and information and has developed into the 'Internationalisation' touch-

word in HE. With a background of heightened focus on community integration in student populations (Abu-Nimer & Smith 2016), storytelling pedagogy could have wide reaching implications for HE social justice and community cohesion. Madden (2015) stated that academics from Indigenous backgrounds have historically appealed for changes to education to accommodate and support the educational needs of students from diverse communities. Sharing stories was cited amongst research in this area as a central theme for Indigenous learning and anti-racist education in Canada (Madden 2015; Tanaka 2009; Styres 2011; Strong-Wilson 2007).

Alsop, Moreton and Nesi (2013) suggested however that cultural variations need to be considered as a cautionary tale when using storytelling within teaching and learning. Whilst discovering that story was used in their research, they found that Malaysian lecturers' narratives relied heavily on the experiences of others in contrast to UK lecturers who utilised to a greater extent personal experiences in their stories. They suggested therefore that students from contexts where informing is the prime purpose of lectures may have difficulties adapting to a 'freer' storytelling style. There are however, limitations to their work including a small sample of lectures transcribed by a sole linguist in one subject. Additionally, it is important that both the storyteller and story listener connect through shared understandings or shared assumptions. In a more globalised world and with a changing nature of the healthcare workforce (in the UK) there are potential barriers which may impact on shared understandings. Examples of this may be a potential for language and meaning translations or a different value set which may impact the 'coda or resolution' elements to a story (as previously discussed). Without a 'shared' knowing, any potential impact of story as a key pedagogy would be greatly reduced.

Academic Conceptions of Storytelling

Hodgson (2005: 171) suggested that storytelling engages adult learners by promoting vicarious experiences – 'for the lecturer to help students to go beyond the outward demands of a learning situation and make connections between the content of the lecture and their understanding of the world around them'. There is little other research attempting to test this finding. Hodgson (2005) also discovered within this work that there had been some attempts to 'look' at lectures from the standpoint of the lecturer. This is useful for academics wanting to enhance their teaching practices. However, no definitive answers or outcomes were noted by Hodgson in this respect. This situation remains the same for storytelling for teaching, despite being noted as an issue over ten years ago.

Most of the sparse collection of pragmatic educational research within the area of storytelling for teaching has considered story on a more conceptual level (Forman 2007; Moon & Fowler 2007; Haigh & Hardy 2011; James, Martinez & Herbers 2015). A handful of studies have attempted micro level analyses - namely the lecturers' experiences (not specifically practices) and the experiences (on a very small scale) of students (Hunter & Hunter 2006; McKillop 2007; Miley 2009; Karim 2014; Flanagan 2015). Investigation of storytelling practices is very limited; that is, there are few studies that examine the actual 'doing' of storytelling for teaching. For example, Schwartz & Abbott (2007) carried out an analysis of the clinical application of storytelling in nursing; how storytelling techniques were implemented in the classroom and clinical settings as a means for teaching and learning. Examples of specific techniques implemented included case studies, journals, stories from practice, life reviews, and reminiscence therapy. The discussion was fairly superficial however with no discussion of 'how' to develop these practices – merely just a list of examples of 'where' it was utilised. The critical lens for exploring the *exact* methods or 'how to' is key to understanding the practice of storytelling. Additionally, Alsop,

Moreton & Nesi (2013) and Flanagan (2015) analysed to some degree the practice of story in terms of lecture/teaching content. Whilst interesting and developing the field, neither fully address the everyday practice-based doing of storytelling for teaching. This could be articulated for academics as teaching enhancements practices. Such as a 'how-to' guide for example, or perhaps a toolbox/toolkit to identify when and exactly how story could be used to enhance teaching, learning or assessments. This could be disseminated via citing good practice, examples or case studies of success. This would need to be matched with the values and personality of the academic. It is important to remember that suggested best practices of the academic need to acknowledge the wider context in which HE operates (Higher Education Academy 2011). There may often be individual, discipline and/or professional nuances – thus the tool must allow for adaptability. This relates to the previous discussions of 'shared understandings'.

Moon & Fowler (2007) attempted to define a story framework using previous examples from nursing practice, however there was no documented methodological approach of how literature was sourced, chosen or rejected from their review. This is unfortunate as a similar search run of their literature tool would have been useful to identify if any advancement of work has been published in this area. This is understandable however, researchers may be limited by the constraints of the publisher. The breadth of literature discussed was wider within a separate review by Haigh & Hardy (2011) but, likewise, no obvious methodological approach of literature selection was evident and therefore this work suffered from the same limitations as the work by Moon & Fowler. Likewise, this may be due to similar challenges regarding journal publishing restraints. The most recent review of literature considered only the writings of the Gospels within the Bible – yet interestingly followed a rigorous methodological approach of cataloguing, indexing and analysing themes. The authors themselves (James, Martinez & Herbers 2015: 135)

recognise the extremely sensitive nature and challenges associated with the transmission, interpretation and composition of religious texts – requiring absolute transparency and scrutiny of methodological processes. Whilst assisting the development of literature review in their area of study, the authors work is seen/presented through a limited lens and the findings are not well articulated when applied to general education and learning.

The reviews and similar narrative pieces of previous literature in the field have demonstrated that the methodological choice of research discussed is very much implicit. This may be due to a variety of reasons, namely publisher restrictions or word count maximised in other areas of the work such as the findings. This is problematic as it is not clear how the work has included 'Other' perhaps smaller voices in the research literature or the viewpoints of story from various stakeholders of the learning. Or indeed if research was selected or rejected for any particular reasons or limitations. The purpose of the research articles also is variable. It is also difficult for researchers wishing to build on the shoulders of those before to follow (such as myself) and perhaps improve searching of work in the area. Ideally a literature review could be explored which considers a different lens and is more explicit about the methodological processes which occurred to arrive at the findings. This could perhaps provide an understanding of the outcomes of others work in a new 'collective' way.

It could be argued that truth is only true from a certain point of view and research within higher education is no exception. Studies investigating storytelling in higher education include a variance of viewpoint or perspective from; the student (Hunter & Hunter 2006; McKillop 2007; Miley 2009; Flanagan 2015), the academic/lecturer (Forman 2007; Alsop, Moreton & Nesi 2013; Karim 2014) and loosely practices or storytelling (Schwartz & Abbott 2007; Moon & Fowler 2007; Haigh & Hardy 2011; James, Martinez & Herbers 2015). Articulating a study design from a learner or teacher perspective ultimately isolates

the respective other from the findings, whereas, analysing the area of research from a 'community of practice' often negates this limitation. This will be discussed in Chapter 3.

A collaborative approach of investigation was attempted by Schwartz & Abbott (2007) whereby, over a two-year period, five members of faculty met via group meetings, reviewing concepts they had determined with corresponding senior medical practitioners and sharing story practices via seminars. The details of their methodology are again vague, with little reference to community of practices. The reason for the critical lens for the purposes of this work is that the *exact practices* are central to understanding and developing a 'how to' guide to assist academics wishing to integrate storytelling practices into their classrooms. It is disappointing when methodological processes are reduced for the benefit of deeper exploration in other areas such as the findings of the research. It is understandable however having been in the situation of where words need to be edited to meet the requirements of publishers and this may in part explain this reoccurring finding. It would be impossible to reproduce the exact methods of Schwartz & Abbott, sadly this impacts upon the value of their study for the purposes of this work. The implicit nature of the methods is another example of the 'black-box' situation regarding the evidence base in this area for evaluation and sharing of practices. This highlights again the need for research into the 'how' of storytelling in a learning community.

More recently communities of practice models concerning storytelling have had some prominence within the literature. Ashwin (2016) has argued that current approaches to understanding the impact of learning, teaching and dissemination are individualised and ahistorical. This is in a way mirrored by Laurillard (2013) who advocated that academics must critically build on the work of others to collectively move forward the body of knowledge. Craig (2007) favoured an epistemology of practice based on the work of Dewey (1908, 1934) and Schön (1983) when developing the story constellations approach

to contextualize teachers' knowledge of a school reform (figure 3) in a move away from an individualised approach.

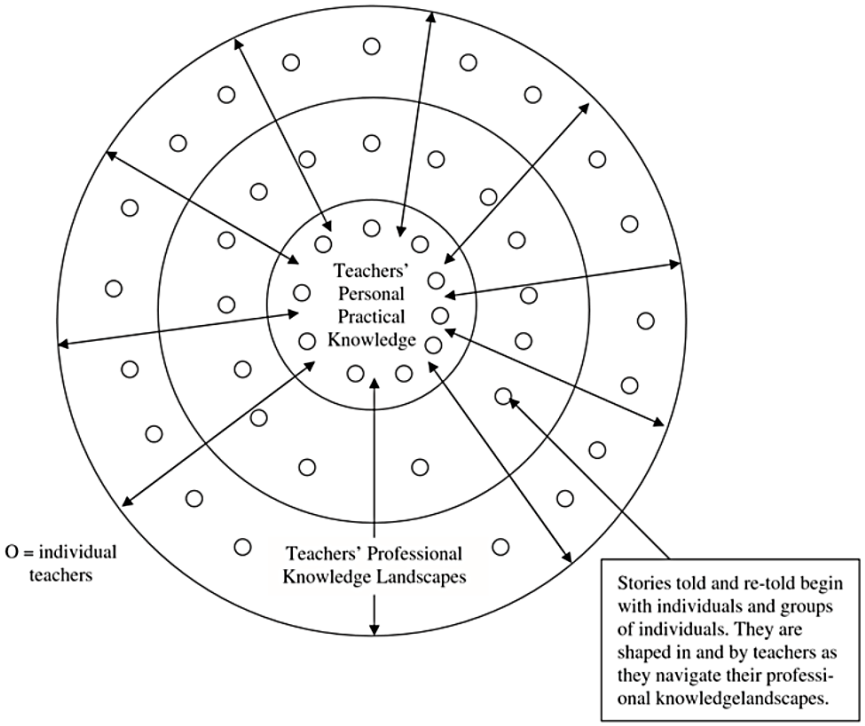


Figure 3: Story constellations approach Craig (2007).

In this approach (figure 3) the narratives of teachers in the work of Craig (2007) relate to one another like nests of boxes. Community of practice models are arguably less favoured explanations as they can be complex, are fluid and thus fluctuate (Craig 2007). They can however illuminate a 'constellation' of factors including moralities and mores of teachers (Schwab 1971) or the essential or characteristic customs and conventions of the Radiography community. It is important to note here that Radiographers rarely operate in isolation from one-another and therefore exploring the essential or characteristic customs and conventions of a particular Radiography community may allow for grouping/nests or lines to be applied between the community.

Research designs vary somewhat between studies - for example reviews of literature (as previously discussed), perception and attitudinal opinions (e.g. Hunter & Hunter 2006; Karim 2014), collaborative groups (Schwartz & Abbott 2007) and observations of practice (Alsop, Moreton & Nesi 2013; Flanagan 2015). A variety of methods have also been used by previous researchers to investigate storytelling practices, both quantitative (e.g. test-retest Hunter & Hunter 2006; Questionnaire – closed question Karim 2014) and qualitative (e.g. visual expressions of learning McKillop 2007; Observations Flanagan 2015). It is difficult to critique previously used methods as almost all do not discuss any limitations of their studies or provide suitably justifiable discussions regarding choice of data collection tools.

The validity of storytelling for teaching as a 'tool' has been questioned. Rossiter (2002) suggested that storytelling cannot possibly be reduced into a handy toolkit of teaching technique. Going further to add that a 'cookie-cutter' or 'copy and paste' approach remained elusive despite embryonic attempts to package story pedagogy. This may be due to, in part, the 'slippery' nature of definition and best practice of storytelling in learning, teaching and assessment. As discussed previously, story and the related practices of telling stories are elusive in meaning because the concept changes according to an individual's point of view. An individual understanding may therefore make a 'cookie-cutter' answer, or tool, challenging at best.

Finally, the issue of power relation and storytelling has been cited in the literature. With regards to story and power the relation is not insignificant, nor the morality of the storyteller. Gratch & Crick (2015) posed the three cumulative archetypes: the storyteller, novelist and charlatan. These three archetypes have re-emerged in the new digital age. Each with ultimately a story-message purpose. Whilst Gratch & Crick (2015) endorse the online environment performances of storytellers and novelists they highlight the dangers of

increasing incidences of charlatan performances. Charlatans are, as defined by Gratch & Crick (2015: 309), "concerned neither with giving counsel nor with revealing perspective…striving to mobilise people to action in the name of the charlatan's own interests and desires… exploiting fear and desire in other so his/her own will can be met."

Political – Education and Health

Exploration of the discourse within both policy texts and policy contexts is part of a process which assists in describing, conceptualising and creating an action/effect on the 'world' for which it is created (Saarinen, 2008). The effect on the 'world' is often very different to the original intention of a policy or enhancement strategy, at one and/or all levels of implementation (macro, meso and micro). There is a dualistic distinction between strategy/policy 'word' and strategy/policy 'action'; policies are textual interventions into practice (Ball 1993). The dynamics of post industrialist culture have led to structural economic change, with fast, dramatic shifts in work and consumer culture (Lash & Urry 1989). The HE domain is no exception; increasingly characterised by turbulence, competitiveness, lean resources, unpredictability and periodic decline (Ashar & Shapiro, 1990). In this background of 'normlessness', or sometimes referred to as 'storm' (Light, Calkins & Cox 2009) organisational HEI performance is increasingly measured by academic's performance and student satisfaction. Teaching quality had long been seen to be the poor relation to research excellence in UK HEI's (Drennan and Beck 2000). The introduction of development programmes however, for HE staff in the 1980s could be seen as the start of investment to enhance HE teaching practice for academics to become/remain competent (Higher Education Academy, 2013a) This driver culminated in the creation of the United Kingdom Professional Standards Framework (UKPSF) (Higher Education

Academy, 2011). An impetus remains on evaluating teaching evidence with rigour. It is however, a problematic metric to use to compare, evaluate and assess. It is clear therefore why using student (consumer) expectation and satisfaction was developed and dominates this measurement environment (Cameron, 1986; Kerridge & Mathews, 1998; Richardson, 2012; Sabri, 2013). Student satisfaction at HEI's has become one of the most important metrics for university management groups. Students as 'consumers' is not a new phenomenon (Eagle & Brennan 2007).

Several situational drivers have promoted the concentrated effort to improve student satisfaction with their learning:

- Introduction (and subsequent increases) of student fees (Department for Education and Employment (DfEE) 1998)
- Creation of the Teaching Excellence Framework (Business, Innovation and Skills Committee 2016)
- National Student Survey publication and access to student satisfaction (Unistats) (Higher Education Funding Council for England 2015).
- Internationalisation of Higher Education and university rankings (Shin & Toutkoushian 2011)

The marketization of HE has led to many challenges for all working in the sector macro, meso and micro level practices. There is increasing scrutiny of learning, teaching and assessment processes. Academics are searching for new and improved ways to enhance the learning experiences of students. Storytelling practices have, perhaps, an untapped potential to engage students vicariously and reach diverse student populations in more meaningful ways resulting in an improved experience for students and increased satisfaction in this consumer orientated environment.

Radiography undergraduate courses in the UK require students to undertake clinical placements for approximately 50% of their time (Society of Radiographers 2012). The clinical environment, interactions and learning, therefore has major importance for students in healthcare courses such as Radiography. There is an abundance of policy concerning conversations with patients and health care professionals which may have relevance to storytelling practices. The NHS Scotland Quality Strategy (Scottish Government 2010) has cited the importance of listening to patients to improve care:

> *"It is about putting people at the heart of our NHS. It will mean that our NHS will listen to peoples' views, gather information about their perceptions and personal experience of care and use that information to further improve care."*

The vision in this policy document is for caring and compassionate staff and services (Scottish Government 2010). The drive to improve standards in the NHS follows the findings of The Francis Report (2013). This report was a public inquiry into poor care standards that led to the deaths of patients in Mid Staffordshire hospitals. The report found communication deficits to be a main source of poor care outcomes for patients. As stated earlier, one of the main personal motivations for this work was the experiences of making connections with patients through story. It may be possible that other Radiographers also use this technique for good health outcomes for patients.

All Radiographers in the UK must be registered with the Health and Care Professions Council (HCPC) to be eligible to practice. The HCPC also states a duty of care to communicate appropriately and effectively. "You must listen to service users and carers and take account of their needs and wishes" (HCPC 2016). Listening to and using patient

stories for reflection with students and healthcare professionals is explored by a handful of researchers in the domain of nursing as previously discussed. The use of storytelling to facilitate effective communication between patients, clinicians and other stakeholders in Radiography is unknown. There are clear regulatory drivers in health to support improved communication, perhaps using story to provide good outcomes for patients.

The second area of healthcare policy surrounding the possibilities of storytelling is health literacy. Health literacy is the degree to which patients have the capacity to obtain, process, and understand basic health information and services needed to make informed health decisions. Autonomy or choice is one of the four principles of biomedical ethics and must be championed by healthcare practitioners. As highlighted previously in the work of Straus et al. (2009), healthcare professionals have a requirement to improve resources to support better health literacy (Scottish Government 2010). This is cited again as regulatory importance by the HCPC (2016), "You must give service users and carers the information they want or need, in a way they can understand." Straus et al. (2009) found that patients with a background of oral tradition preferred oral resources (such as story).

Summary

As previously highlighted, research in the discipline of Radiography concerning educational storytelling is novel. Therefore, literature from other fields has been extrapolated, on occasion and with caution. The concepts of storytelling for adult teaching, assessment and learning do not appear to follow a logical pattern of development over the last twenty years. The body of knowledge on the outset appears rather chaotic with little attempt to build on the work of previous researchers or define the teaching or practice application gap. Progression between concepts, environment (clinical or classroom) ideas

or strategies to move forward story pedagogy applicable to real world practice is lacking despite the large number of publications. The potential impact for learning is exciting and existing research, if re-considered or re-imagined could possibly be mobilised to inform a more robust model of storytelling for teaching in Radiography (RQ1.1). Investigation in this area is warranted to de-mystify storytelling process and subsequently propose tangible local practices (RQ1.2) which could have a substantial positive impact on teaching practice and student learning in healthcare (RQ1.4). Finally, a concerning body of work exists around the morals and power of storytellers. Identifying assumptions and tacit knowledge underpinning storytelling practice could reveal the relations of power that they reveal and or sustain (RQ1.3).

Chapter 3: Theoretical aspects of storytelling

This chapter provides a theoretical background for the pedagogy of storytelling. The theoretical underpinnings of transformative pedagogy and Social Practice Theory are interpreted against the milieu of Story. Educators are exploring ways in which to share experiences with learners in more meaningful ways. Transformative pedagogy may explain the theory and conditions required for these interactions to develop. It is also central to understand these interactions in 'realistic' settings, so often omitted in educational research. Social relationships, which are essential to successful transformative pedagogy, do not exist in a bubble between individuals but can be thought of as multi-faceted communities of practice. Social practice theory may offer an insight into these 'spaces' and understanding this in the context of story interactions is required.

Transformative pedagogy

Stanberry and Azria-Evans (2001) distinguished three main pedagogical positions of transmission, transaction, and transformation.

Transmission is the historical theoretical model of HE learning and typically involves the didactic processes of knowledge exchange from lecturer to student via platforms such as the 'lecture'. This method remains a mainstay of teaching techniques in HE due to speed and number of students who can learn simultaneously. There is a considerable opposition to this way of learning, arguing that,

> *'this style may not translate to learning for many students, and the material may not generalise past the lesson. Furthermore, this style encourages rote*

> *memorisation, which does not lend itself to application in real life or in other learning contexts and does not provide meaningful opportunities for critical assessment.'*
>
> (Harrell-Levy & Kerpelman 2010: 79).

Transaction pedagogies followed purely transmissive methods and attempt to engage the student actively in the learning process. For example, these types of pedagogies incorporate student-centred learning such as problem based learning and questioning techniques commonly cited as key 'modern' instructional techniques in Radiography (Higgins, Robinson & Hogg 2014; Baker 2015). The student has a more active role to the learning in these instructional methods and knowledge can be applied to varying contexts - which seems logical considering the myriad of clinical environments where Radiography students may be placed. However, there appears to be a need for more critical discussion and resultant insight amongst the spectrum of belief which can be lacking in these approaches. This has been particularly noted in secondary schooling with a plethora of publications recently surrounding critical literacy and fake news (Picton & Teravainen 2017). There is an urgent need therefore to include more critical pedagogies from the early stages of undergraduate learning - to incorporate students who may be school leavers. Additionally, a lack of an 'expert' presence, more likely in transactional pedagogies, can disadvantage students who have a limited or developing internal critical narrative. Critical thinking has been identified as crucial for graduates fit for the 21st Century (P21. Partnership for 21st Century Learning 2007). The interactions that exist between students and academics or support staff are intended to "help reinforce student understanding of the

material or elucidate meanings…helping students clarify nebulous points and reinforce ‘correct’ interpretation” (Mbwesa 2014: 178).

Transformative pedagogy provides opportunities to engage students in complex learning that can lead to changes in identity (Harrell-Levy & Kerpelman 2010). Specifically, the academic helps students to critically examine how they think about information and encourages them to constructively challenge one another's (and indeed the academics) perspectives. The transformative process has roots in the work of Freire (1970). The belief held by Freire was the liberation of the mind. In order to achieve this, learners have to understand that the biggest threat to this liberation is the inevitability that only they can only absorb their own reality. When the reality is co-constructed by learning communities through a reflexive lens, it can formulate how learners ‘position’ themselves and the world. Whilst co-constructed, it is also conversely uniquely personal, in that the process connects each individual student in a personal way to the learning (Stanberry & Azria-Evans, 2001). The transformative learning environment is powerful in that it can develop identity (Harrell-Levy & Kerpelman 2010) and change opinion between ‘possible selves’ (Markus & Nurius 1986).

This approach requires not only a developed discipline knowledge (Greene 2005) but most crucially a close relationship with learners that can open critical dialogue. The student remains central to the learning exchange (as in the transaction methods) but the academic also anticipates a change to themselves from the ‘shared’ process (Donnell 2007). Getting to know the students as unique individuals and using what academics can gain from this knowledge can develop strategies to encourage more empowered, authentic learners and learning (Greene 2005). This intimate reciprocal knowledge articulation is also collaborative within the particular learning community; for example, the class or, tutorial group. It is clear the crucial part to the transformative pedagogy is the shared relationships

that must exist concurrently. It is worth allowing space here to consider the link between transformative pedagogy and the relations to learning as a social phenomenon. The importance of understanding learning in a community of practice has been previously discussed. Perhaps then the parallels between these worlds could be termed 'transformative relations'. Learning relations in a transformative teaching class (Harrell-Levy & Kerpelman 2010: 80) can be summarised as:

- collaborative relations between teacher and students with particular emphasis on the students' role in constructing knowledge
- the personal relationship that is formed between the teacher and students
- the community formed between members of the class.

Creating transformative learning opportunities requires elements of ad-hoc and planning teaching practices. Simulation has been cited as a method to develop transformative opportunities in the classroom (Bonwell & Eison 1991) with perhaps accompanying reflective discussions (Mezirow 1996). Debates (Bonwell & Eison 1991) and critical incidents exploration (Brookfield 1987) are also documented in the literature as practices which may 'open' transformative doors for students and academics. Another development is suggested with qualitative research techniques and then using small group discussions to analyse. Subsequent interpretation of findings are often different amongst individuals (Bonwell & Eison 1991).

Storytelling practices incorporate many of the practices noted above that are associated with transformative relations. There is a clear link which is unfortunately not well understood or documented in the literature. Transformative pedagogies enable the learning process to go beyond mere knowledge and past problem - solving to new actions and new positions for both the self and the world, not only for the learner but also for the educator. Transformative pedagogy explains to a certain extent the challenges presented within story

'coda' and resolutions which may not be held by the individuals interpreting them. Discussions in shared learning environments whereby transformation relations are fostered, may then open up learners to shifting ideas and world views in ways that other pedagogies do not (Nagda et al. 2003).

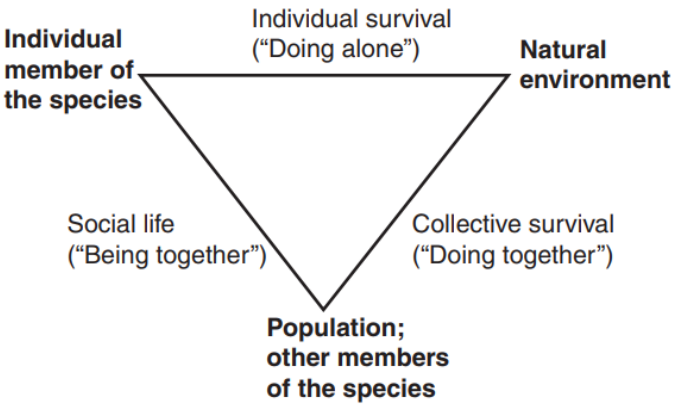
Social Practice Theory

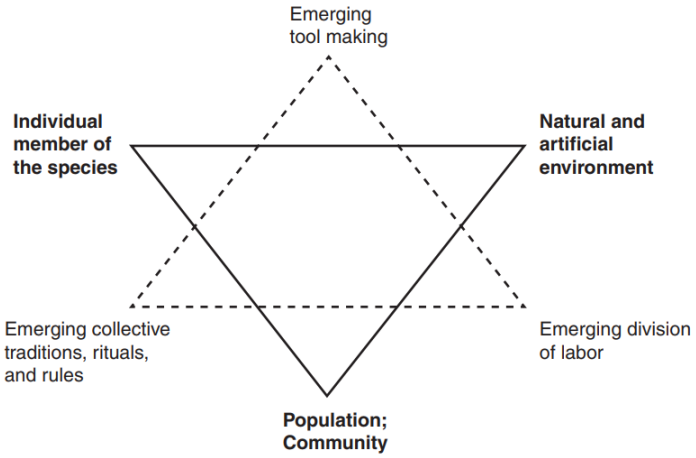
Social practice, such as teaching and learning practice "does not occur in a bubble between two people, or between one person and a group, but in a social situation" (Fanghanel & Trowler 2008 pp306). Socio-cultural theoretical perspectives may provide a more realistic understanding of the realities and difficulties to learning enhancement initiatives. Communities of practice (Lave & Wenger 1998) and activity systems (Engeström, 1999; Engeström, 2001) have been used in higher education to gain insight on a 'unit of practice' level. Unit can be understood here as single and complete but which can also form an individual component of a larger or more complex whole – such as HE. The 'unit of practice' level lies between the research conducted at micro-individual 'units' (for example academics or students) and more macro institutional or sector wide 'units.

The social practice approach is founded on attempts to incorporate the micro-practices and autonomy demonstrated by individuals or as literature commonly refers to as the 'actor' or the 'agent' (Giddens 1984) and macro 'system' level thinking to establish the social practices as a unit between the two (Balke et al 2014). "The basic domain of study of the social sciences is neither the experience of the individual actor, nor the existence of any form of societal totality, but social practices ordered across space and time." (Giddens 1984: 2). This thesis approaches storytelling as a teaching practice that maybe underpinned theoretically as 'transformational relations' in a learning community. Moreover, by

focusing on transformative relations this reflects the practices of those teaching and professional practicing in the Radiography community. Synthesising social practice theory with transformative pedagogy allows relational analysis of the learning community.

Engeström (2014) schematically identified a different conceptual model of human activity becoming increasing multi-faceted over the evolution of time (see figure 4). “The model suggests the possibility of analysing a multitude of relations within the triangular structure of activity. However, the essential task is always to grasp the systemic whole, not just separate connections” (Engeström 2014: 62). The model (figure 4) has the possibility to examine at a practice level and all the complex contradictions that surround an activity in the system.





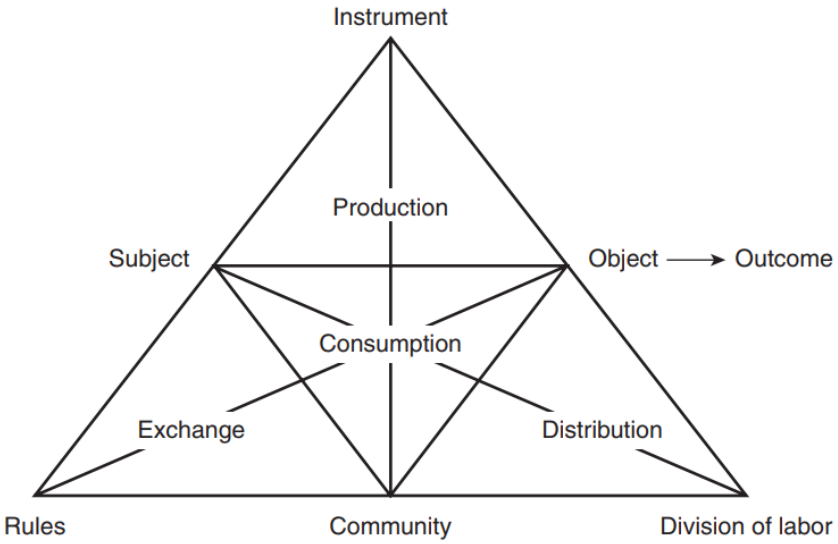


Figure 4. The structure of human activity (and evolutionary concepts) (Engeström 2014: 60, 61, 63)

Engeström (2014: 71) suggested that in this way units of the activity can be focussed upon and investigated whereby difficulties might arise - suggesting four levels of contradictions within the human activity system (See also Figure 5).

- Level 1: Primary inner contradiction (double nature) within each constituent component of the central activity.
- Level 2: Secondary contradictions between the constituents of the central activity.
- Level 3: Tertiary contradiction between the object/motive of the dominant form of the central activity and the object/motive of a culturally more advanced form of the central activity.
- Level 4: Quaternary contradictions between the central activity and its neighbour activities.

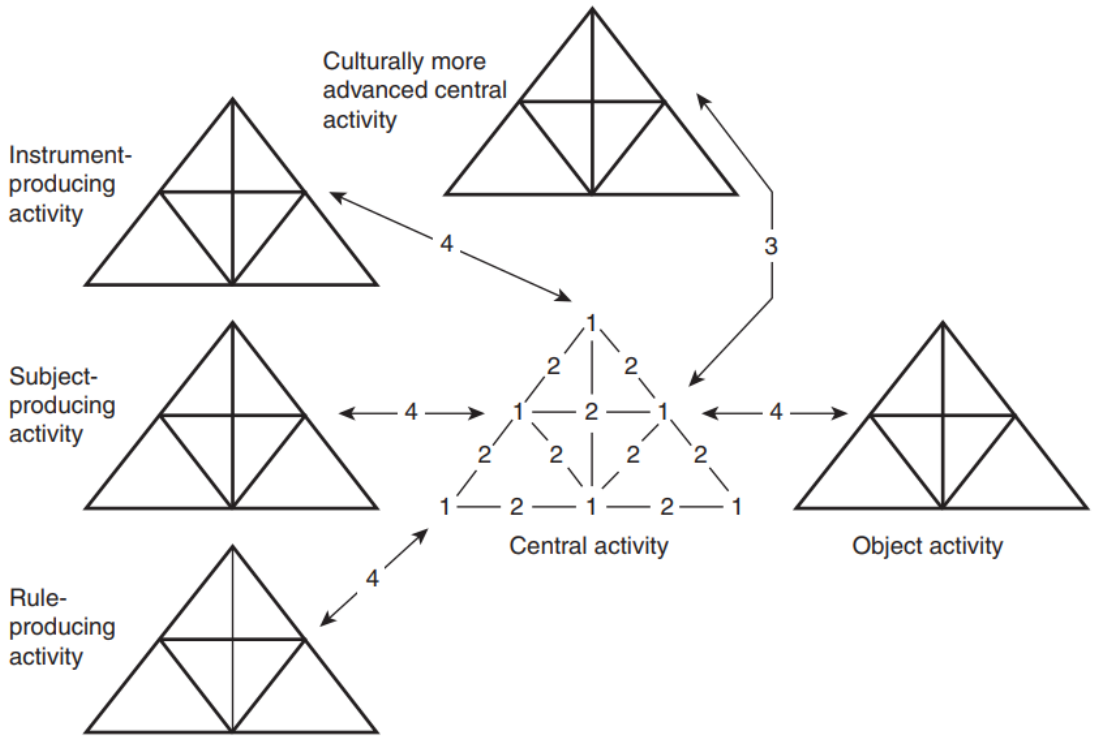


Figure 5. The four levels of contradictions within the human activity system.

Analysis at a practice level such as this (figure 5), does however add other limiting factors such as increased complexity and difficulties associated with creating non-hierarchical environments conducive to equal input from a range of stakeholders. The difficulties can arise with each new advancement of central activity, is the adaption again into a tertiary contraindication.

When a model for learning activity is considered using this framework, representation is made to take into account learnings 'transitional and expansive qualities' (Engeström 2014). This is schematically represented in figure 6.

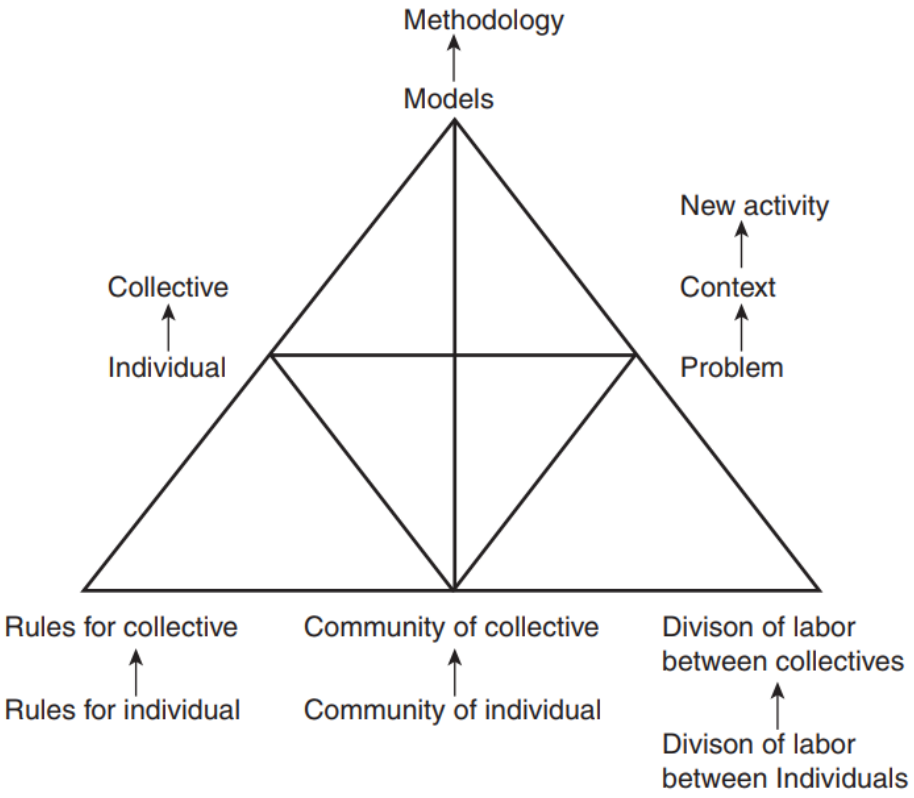


Figure 6. The structure of learning activity (Engeström 2014: 101)

In the context of this research, analysing storytelling practices as the central unit of activity (figure 6) may help to answer in part some of the research aims surrounding the stakeholders' involvement and motivations, assumptions and relations of power.

For example, when the central activity is defined as teaching in Radiography, there can be primary inner contradiction – here the instrument contradiction (Learning 'space' for example between allocation and requirement; one-hour lecture allocated when a requirement of a three-hour small group tutorial required). Secondary contradiction is a conflict between elements. For example, this may occur between the instrument (Learning 'space') and the object (learning requirements of students); this being perhaps the range of learning requirements of students is conflicted with the instrument used – a lecture for example. A tertiary contradiction arises when a more advanced central activity is proposed

such as ‘Radiographers as holistic practitioners’. Here for example the object (learning requirements of students) may contradict with this advancement leading to compliance from learners but not ‘buy in’. The quaternary contradiction is between the central activity and its neighbours. For example, teaching Radiography as a central activity and online and blended teaching and in this way these two activities can have their own contradictions.

Analysing the central activities of practice can illuminate the potential for contradictions in the system and help researchers to address and/or overcome these unit contestations when analysing practices.

Summary

When educators are exploring ways in which to have more meaningful teaching and learning sessions with students it is important that appropriate theoretical approaches are understood in order to underpin the practices being proposed or developed. Transformative pedagogy goes some way to explain ‘why’ storytelling might work in the context of shared and emotive relational experiences in the classroom – this was termed transformative relations. What is certainly interesting is the concept that transformative relational storytelling practices have the potential to lead to changes in identity. In a post-truth, populist climate, pedagogies which foster identity construct, and indeed challenges to these constructs for learners may become more prominent and more crucial in the current HE climate. Social practice theory is particularly useful in analysing central activities in practices and the underlying contestations in those systems or units of practice. It links to transformative theory because of the relational or socially constructed elements. Synthesising social practice theory with transformative pedagogy allows us to analyse transformative relations of practice. Reviewing any collated data in this research may

support some of the possible contestations as illuminated in the example in this chapter. Analysing activities in this way are, arguably, more relevant when a new or alternative teaching ‘practice/s’ are proposed as the domain is neither micro nor macro in its system analysis. Although careful and particular focus is required to ensure analysis in this way does not become too complex.

Chapter 4: Methodology

This chapter includes the epistemological position to the research questions and the resulting methodological design of the work. The chapter will begin by offering the practical definitions of ontology, epistemology and paradigm. This will be linked to my own assumptions regarding the 'ways of knowing' and the main thinkers of the proposed methodological paradigms. By discussing the strengths and weaknesses of the chosen methodological assumptions my own ways of 'knowing' and reality will be constructed. Finally, methodological design will be considered and explored. Explicitly considering the methodological framework will highlight the strengths and shortcomings of the approach and in turn will assist me to limit these wherever possible in the conducting of the research.

Theoretical framework - Philosophical World View

Ontological & Epistemological position

"Simply put, one's view of reality and being is called ontology and the view of how one acquires knowledge is termed epistemology" (Mack 2010: 1). These philosophical questions have great significance in this study. How a researcher builds and understands their reality will ultimately affect how they 'go about' uncovering relationship knowledge and related outcomes, participants behaviours such as their tacit knowledge, assumptions and related power issues. It also impacts how a researcher evaluates not only their own findings but also the findings of others. It is important to note here that philosophy, approaches and strategies used in a methodological approach are very much interlinked and this has been expressed as the research onion (See figure 7).

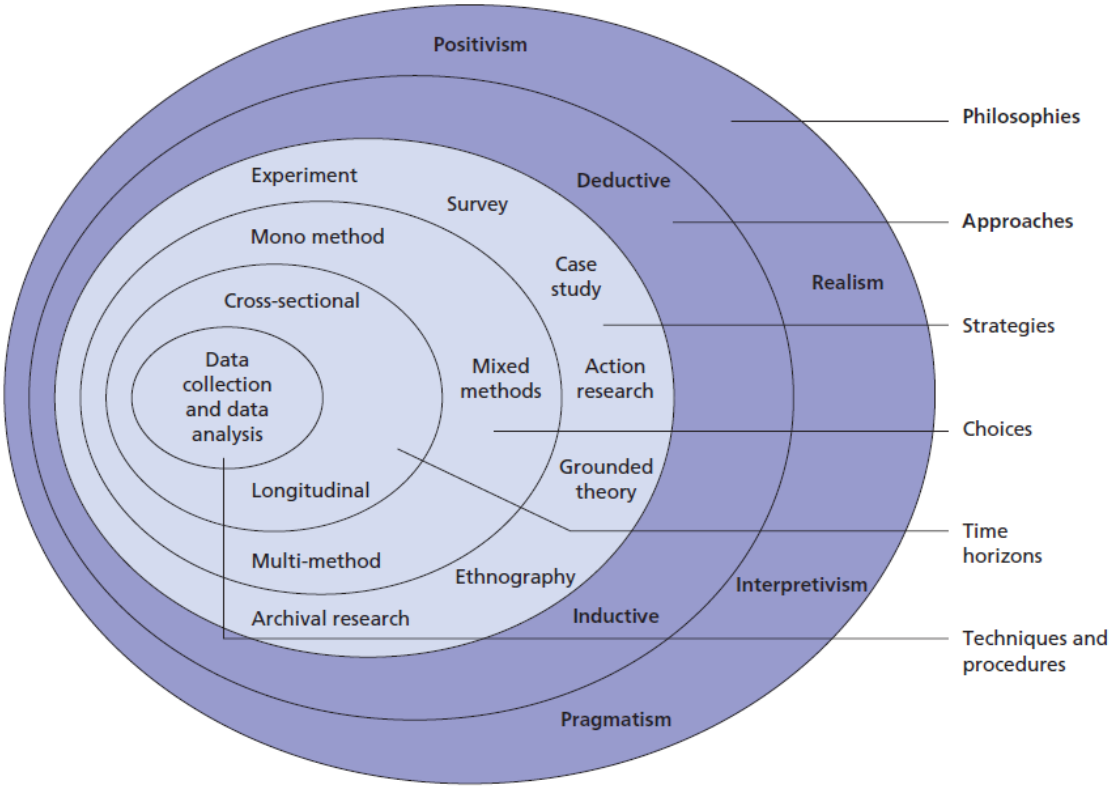


Figure 7. The research onion (Saunders et al. 2008:108)

The ontological lens of the researcher and cascading on through the work needs to tread a logical path as shown in figure 7. The interpretivist paradigm emphasises the ability of individuals to construct meaning through iterative processes (Ernest 1994). There is a need for me to champion a requirement to consider human beings subjective interpretations and their own worlds as a starting point to researching social phenomena (Ernest 1994: 25). I believe this also fits with the main tenet that research and 'meaning making' cannot possibly to observed from the outside in manufactured situations and/or environments rather it is 'observed from the inside through direct experiences of people' (Mack 2010: 4). This is certainly valid when meaning is co-constructed, such as in the classroom, where stakeholders of learning interact.

The related interpretivist epistemology considers how this knowledge is gained. Mack (2014: 4) states "the assumptions in this paradigm are that;

- Knowledge is gained through a strategy that "respects the differences between people and the objects of natural sciences and therefore requires the social scientist to grasp the subjective meaning of social action" (Bryman as cited in Grix, 2004: 64).
- Knowledge is gained inductively to create a theory.
- Knowledge arises from particular situations and is not reducible to simplistic interpretation.
- Knowledge is gained through personal experience."

There are some large shortcomings however identified around the interpretivist approach. Primarily for my identity in addition as a critical scientist by background, is the lack of change and/or challenge concerning social phenomena. This is known as shown in figure 7, the research onion as Realism and has been proposed as 'Critical Realism' or a 'third path' for social scientists (Harvey 2002). This matches with the underpinning theory concerning social construction as previously discussed and can be further understood in Figure 8.

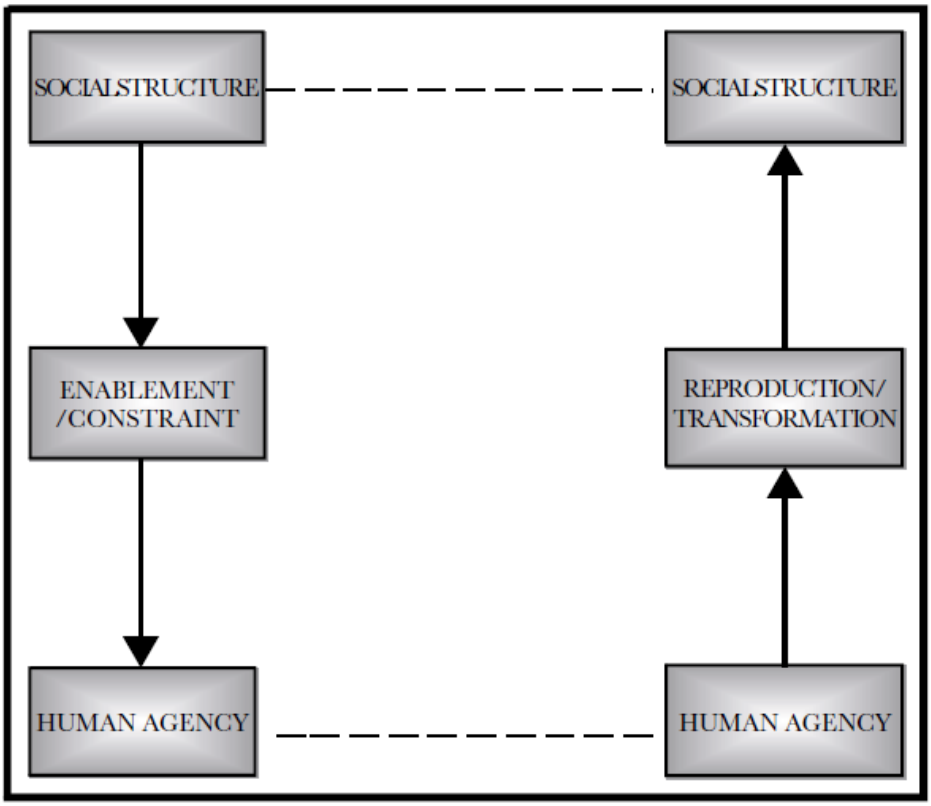


Figure 8. The critical realist conception of the social structure/agency relationship in Bhaskar's transformational model of social activity (TMSA) (cited in Harvey 2002: 171)

There have been various iterations of the TMSA (figure 8) and it can be simplified as a continuum with simple realism at one end and at the other chaos/complexity theory. I identify with a middle ground, an understanding that reality, knowledge and meaning making exist in a social context but in addition that this context is 'active' and can be changed or challenged. It is also closely connected to 'societies and social structure'. So whist this is not traditional interpretivism, nor realism this is accounted for in Bhaskar's model of critical realism. This paradigm is therefore continued into the research and follows through when exploring meaning in the findings and also the analyses/impact of the work.

Unfortunately, another large criticism of these ways of meaning making (Interpretivist, Realist) is that results are not strictly speaking generalisable to other situations. It is this lack of generalisability that positivists (the main antagonists) question the value and ultimate benefits of interpretivist perspectives. The 'third path' in some respects attempts to in part mitigate as quoted by Harvey (2002:163) the 'hopelessly fragmented' methodological and ontological foundations of social sciences. In response to this position, firstly it is probable that the findings of work done in this research will certainly resound with other educators working in HE and therefore illuminate how practices can be explored, addressed and ultimately evaluated in meaningful ways to them. Also, in addition, the frameworks of Engeström as previously discussed attempt to make theoretical underpinnings in this respect.

Another key limitation discussed by antagonists is the lack of objectivity in the interpretivist approach. However, this can be in part mitigated by acknowledging this relation and by 'bracketing' assumptions, such as using a reflective diary. Researchers may then look at the findings which inform what is going on in the study, instead of the researcher's own preconceptions (Mack 2014).

Theoretical design

Moving through to the inner layers of the 'research onion', it is important to remember the overarching position and that the design of the research remains consistent with the 'outer layers'. The research questions of the work require a mixed approach to the design of the inquiry; a literature review and collaborative research. This matches the interpretivist/realism as discussed previously.

Literature Reviews as Research

It has been frequently identified in research that despite an overwhelming increase in primary research articles disseminated amongst various platforms, it is concerning how little is known or articulated regarding the effectiveness of interventions across the range of publications (Bero et al. 1998). Literature syntheses have been proposed as a highly effective way to summate an intervention in a wide range of fields. There are multiple frameworks which are design for various types and epistemological viewpoints (figure 9).

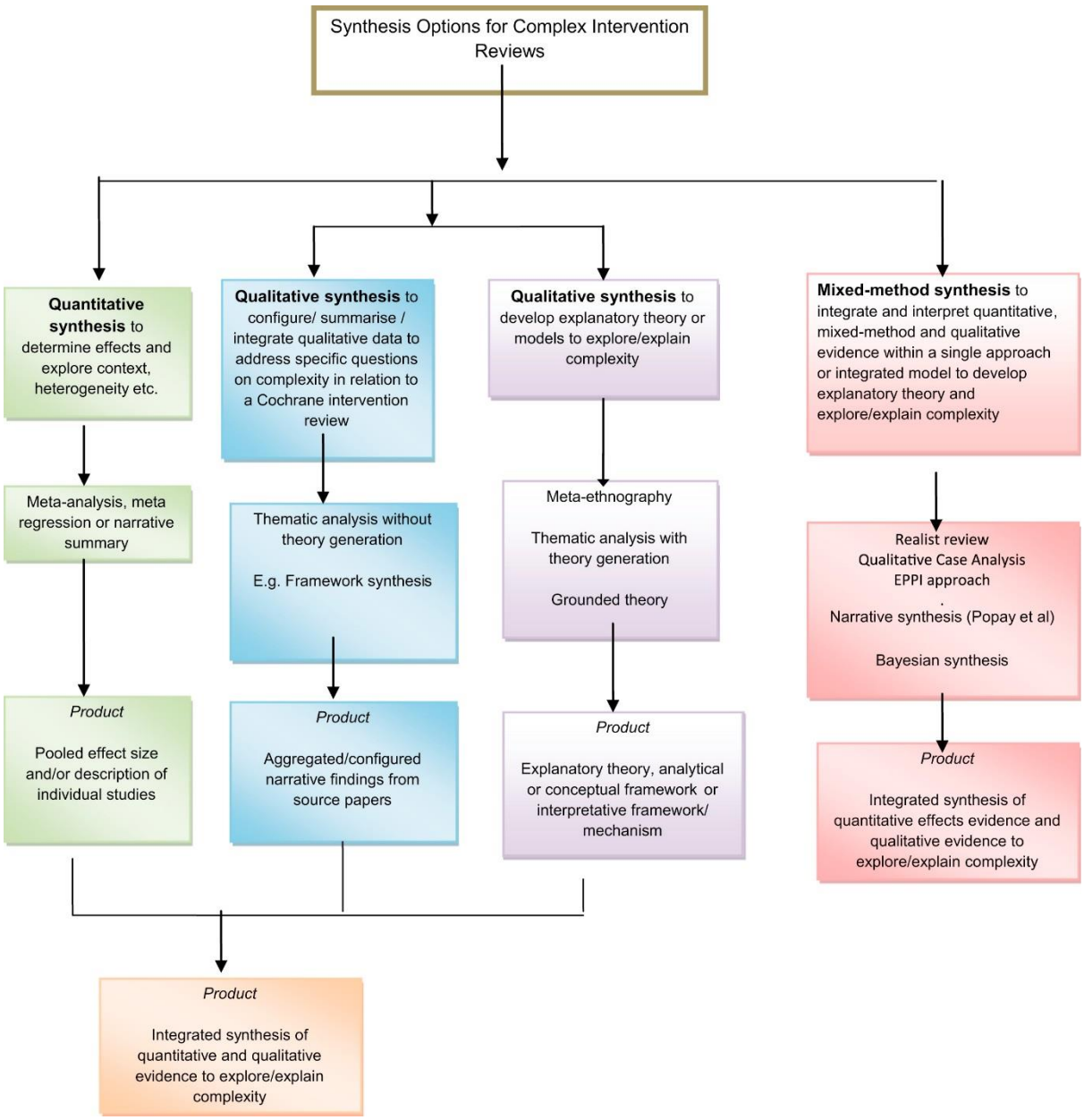


Figure 9. Synthesis strategy and synthesis method options for complex intervention reviews (Petticrew 2013: 1234)

Much of the work concerning educational interventions concerning ‘practice’ on the micro and meso level is qualitative. There is considerable debate over the use of literature as a way to generate a new way of thinking or implementing knowns in an identified qualitative literature base. They are given a broad stroke umbrella name of ‘meta-syntheses’. A meta-synthesis (seen as the purple strand in figure 9) brings qualitative data together to form new interpretations, insights, meanings and conclusions in an area of research (eMERGe 2018). It can be used to highlight implementations or explanations of learning interventions. Meta syntheses are best designed for re-interpretations of meaning across a range of qualitative studies (Atkins et al. 2008).

The synthesising of literature through a review such as meta-synthesis is not aggregative in the sense of 'adding studies together' as with a meta-analysis, which uses primarily quantitative studies. On the contrary, it is interpretative in broadening understanding of a particular phenomenon (Grant and Booth 2009). This fits with the wider epistemological position of the researcher. Meta-syntheses may also have an overlooked importance in terms of illuminating complex issues or a wide range of ‘Voices’; political, practitioner, and other stakeholders (France 2015).

Meta-syntheses of literature are not without its critics. It has been suggested that meta-syntheses are only suitable when a very constrained inclusion criterion is selected – including only high-quality qualitative studies (Petticrew et al. 2013). On reflection of this viewpoint this has a limit in itself that it may diminish some ‘voices’ in the literature which are vital when considering the stakeholders of learning who may have a lesser

voice. Therefore, this is considered less of a concern than volume en masse. Therefore, it is perhaps more prudent to accommodate a limited number of primary studies and consider carefully selecting articles with polyvocality as a primary objective. Other criticism has included extended time to develop 'new' insight, significant methodological skill and involvement from other stakeholders such as practitioners. Again, some of these concerns can be addressed. The time taken to conduct a successful meta-analysis has been proposed as taking around twelve months (Grant & Booth 2009). This is acceptable in terms of the planning framework for this project. Extra- consideration will be given to scrutinising the methodology of chosen pieces of literature to mitigate some of the novice aspects of skill with regard to methodological skill. Finally, it is proposed that the other design considers a 'collaborative' perspective to involve a range of stakeholders.

Collaborative Inquiry (CI)

The focus of the previous chapters has been centred on the importance of practice and social nature of educational processes and 'spaces' [learning is not constructed within a bubble]. Aligning with this way of meaning making has gained momentum as a primary way of including a range of stakeholders to collaboratively analyse and then impact upon the social practices of the group and indeed wider. Collaborative inquiry is a structure in which members of a unit of practice come together to systematically examine their practices (Donohoo 2013). "Collaborative inquiry (CI) has emerged as a dominant structure for educator professional learning in the twenty-first century" (DeLuca et al. 2013: 640). However, despite the growth in CI there is much contestation amongst CI frameworks. What is generally agreed is that CI almost always is founded in a socio-constructivist perspective:

> "*Collaborative inquiry involves a stance of 'knowledge negotiation' (Nelson 2005) among group members. Employing dialogue grounded in shared experiences and a shared focus, group members question ideas, actions, and artefacts; examine varying perspectives and beliefs; and work toward a co-construction of understanding about the focus of their collaborative work*"
>
> (Nelson et al. 2012: 1272).

Capturing the dialogue in these CI processes has been seen as key to understanding how socio-constructed knowledge is negotiated – specifically in contexts of learning whereby knowledge is shared and extended:

> *"A recognized place, in which professionals [can] 'hang the confusion and chaos' of the workplace for a time while they [think] through their practice (Britzman 2003); as a navigational space, a platform that allow[s] for travel in between and into different discourse communities and associated professional knowledge; and a conversational space, where the cultural, social, and epistemological change takes place as competing knowledges and discourses are translated, contested, and drawn closer together"*
>
> (Hulme et al. 2009: 541 cited in DeLuca et al. 2013: 645)

The main issue with CI is the lack of agreement concerning the various and extensive choice of frameworks for investigation. This is confounded by disagreement of analysis of data. This is probably in part due to the challenges involved with analysing at 'a unit of

practice' level as previously discussed. There are obvious benefits of CI however, it is important to maintain a level of constraint to ensure that analysis does not become overly complicated and complex.

Methods

The research is designed to incorporate a two-stage process that has enabled me to explore the existing research base in a new collective way which may uncover some of the known practices which are likely to exist in the research literature. Then to understand how this may or may not be articulated in a local community of practice. Therefore, this two-step process will enable findings from stage one to inform the coding and the articulation of the findings for part 2. The two stages are:

1. A systematic review of the literature - a Meta-ethnographic review. To establish a collective understanding from the work of others to create a new understanding.
2. A collaborative process - Appreciative inquiry. To explore, understand and develop ideas for storytelling for teaching's integration into a community of practice.

The rationale and process are outlined in more detail below along with the ethical dimensions of the research.

Ethical dimensions

The researcher is positioned as an 'insider' to the work. The insider is 'someone whose biography gives her a lived familiarity with the group being researched' while the outsider is 'a researcher who does not have any intimate knowledge of the group being researched, prior to entry into the group' (Griffith 1998: 361). This is unavoidable when research is

conducted internally within the researcher's local environment. It is accepted within the research paradigm that the relationship between knower and the known is inextricably connected (Yilmaz, 2013). This is also known as endogenous research (Maruyama 1974). Mercer (2007) and Hawkins (1990) used 'the double-edged sword' analogy, which is summarised in Table 2. The table does not claim to be exhaustive but merely demonstrable of the dichotomy of the 'insider' approach. What insider researchers gain from shared and intimate knowledge of workplace culture and 'presumed' understandings of the participants may be lost in terms of 'their myopia and their inability to make the familiar strange' (Hawkins 1990: 417 cited in Mercer 2007).

Pros	Cons
Can achieve a greater rapport due to 'shared experience' (Oakley 1981)	Unable to obtain objectivity (Simmel 1950)
Able to understand the emotive dimensions of behaviour (Ohnuki-Tierney 1984)	Access is constantly available, it is often harder to tell where research stops, and the rest of life begins (Scott 1985)
Has knowledge of the relevant patterns of social interaction required for gaining access and making meaning (Shah 2004)	Data collection from participant-observation can quickly become 'all-consuming' (Mercer 2007)
Access may be more easily granted to the insider researcher and that data collection is less time consuming (Mercer 2007)	Participant/observer who continues to perform his or her normal role within an institution may have more impact on the research than an outsider (Hawkins 1990)
No travelling involved and greater flexibility with regard to data collection (Mercer 2007)	Greater familiarity can make insiders more likely to take things for

	granted, develop myopia, and assume their own perspective is far more widespread than it actually is (Mercer 2007)
Able to blend into situations, making them less likely to alter the research setting' (Hockey 1993)	Seemingly shared norms might not be articulated and data might become thinner as a result (Platt 1981)
May have a better initial understanding of the social setting because they know the context (Griffiths 1985)	'Sensitive' topics might not be raised (Preedy & Riches 1988)

Table 2: Some examples of the pros and cons of insider research.

What has been surmised from the debate is that it is more balanced to think of the dichotomy as a continuum. To acknowledge the strengths and weaknesses without 'choosing' a one size fits all. Articulated another way, taking actions to nurture the strengths and attempt to control some of the limitations.

Making the position of the researcher clear, regarding the 'insider' nature is critical to the process. To some extent, considerable objectivity can be expected due to nature of the method of AI. It is not researcher led but researched facilitated - it relies on the relationship within working groups to drive and 'mine' for information. Both Oakley (1981) and Logan (1984) suggested that the researcher should not withhold their own views or resist friendship and involvement because sharing experiences and attitudes can develop trust. The topic and position of the researcher therefore will be overt.

There is also some ethical debate regarding the 'amount' of disclosure prior to collecting the data. The department where I work were aware of the nature of my interest and what I

was aiming to do regarding my PhD research. So, despite there being theoretical support for openness of research objectives with the participants, there was an inevitability. The 'baggage' or assumptions were transparent from the outset. This has been made clear throughout the discourse of this work and within the face to face data collection. It is stated in the start of the AI methodology that 'we will be researching storytelling - it *works*. What we are here to find out is what are we doing and how can we make it better?' This could be seen as positive bias to the work in this thesis however, the positive effects of story were shown in the results of the met-ethnography – that is the basis of the AI methodology. Powney and Watts (1987: 147) argue that research benefits from participants being 'fully informed from the start of what the researchers and the interviewees are trying to establish'. There are often objectors of this approach mostly concerned with the positivist objectivity epistemology. Silverman (2000) suggested that researchers need to avoid 'contaminating' their research 'by informing subjects too specifically about the research questions to be studied'. This is not the position I share. Platt (1981: 80) termed this behaviour as 'offensive' when researching peers, 'not to give some honest and reasonably full account of the rationale and purpose of one's study to such respondents [who are equals]'. Although they did go on to mention that this may introduce bias into the findings.

Another active strategy for the 'insider' researcher is to be reflexive. A reflective diary will be completed through data collection and from the very start of analysis. Braun & Clarke (2006) stated that writing should begin in the earliest phases of analysis, with the jotting down of ideas and potential coding schemes and continue right through the entire coding/analysis process and shared with the supervisor for agreement, contentions and criticality.

Ethical Approval process

Application for ethical approval was sought from the Faculty of Arts and Social Sciences and Management School Research Ethics Committee (REC) Lancaster University. Following approval from the REC via email reference number: FL16188, gatekeeper approval from the local department was gained from the line manager for the discipline of Radiography (Academic Strategic Lead) and the Head of School for stakeholders out with the discipline of Radiography (administration, students etc.).

Part 1 – Meta-ethnographic review

The broad scope literature review involved a conceptualising of storytelling (Chapter 2). The summary of the literature from the outset, whilst useful in context, did not appear to follow a logical pattern of development. There was very little concerning the practice gap and no noted literature in the Radiography discipline. In the previous chapter I reflected on many of the unknowns which underpin previous research and writing about storytelling in education, particularly with regards to methods and ways of knowing. Indeed, when literature is used to inform a question, it is vital to consider the approach that is used to acquire and make sense of the evidence base. Thus, Noblit and Hare (1988) propose an interpretivist based meta-ethnography as an alternative to meta-analysis by providing an alternative view for the collective use of 'cases' (Doyle 2003). The emphasis is on looking for commonalities amongst, rather than discrepancies between research outcomes. In the context of the present study, Meta-ethnography defines this process of synthesis as an activity in which separate parts are brought together to form a 'whole' (Strike & Posner 1983). The 'whole' is essentially a comparative understanding rather than aggregated data, characterised by some degree of innovation so that the result is greater than the sum of its

parts (Barnett-Page & Thomas 2009). This has been explored in Chapter 2 whereby this was explored as a way to arrive at a more comprehensive and less 'chaotic' way to review literature in the area. In this way, this kind of meta-ethnography falls under the umbrella term of *objective idealism* which asserts that there is a world of collectively shared understandings (Spencer et al. 2003.) This was explored in chapter three with relation to social practice theory.

Kearney (1998) argues for the near-universal applicability of a 'ready-to-wear' theory across contexts and populations. There are many possibilities when using a meta-ethnography approach including: expanding democratic practices and empowerment of 'Other' voices, facilitating praxis, weakening hierarchical roles, extending locally bound 'cases' and can be interdisciplinary (Doyle 2003). Thus, it is a method that makes for a study of storytelling in Radiography teaching/practice because as yet, so much is unknown and taken for granted. The process-based nature of a meta-ethnographic approach is essential for devising a robust framework in order to sufficiently answer RQ1.

Search Process

Meta-ethnography follows a seven-phased approach to reviewing the literature.

- Phase one: getting started
- Phase two: deciding what is relevant to the initial interest
- Phase three: reading the studies
- Phase four: determining how the studies are related
- Phase five: translating the studies into one another
- Phase six: synthesising the translation
- Phase seven: expressing the synthesis

Phase one involved a scoping process to provide an overview of the literature, key issues and subsequent development of the review question (Boland, Cherry & Dixon 2014). This involved an initial, non-specific internet search engine (Google™) enquiry around storytelling and adult education. No exclusion criteria were used in the scoping exercise; particular interest was given to UK education policy and guidelines and historical background information. Additional searching around the methodology of literature reviewing was also conducted.

The purpose of the scoping exercise was to refine and target for phase two. It was apparent that there were three main streams under the umbrella term of higher education & storytelling;

- Digital/technology application,
- Role in cultural diversity, gender and social justice
- Practical application – learning teaching and assessment.

The purpose of this stage was to determine what was outside the scope of this literature review. Taking account of context of the question regarding the 'practice' of storytelling, the third stream was selected as the focus for the review although it is acknowledged that the remaining areas warrant further exploration in the future. It should also be noted here that there was much literature in narrative theory, story typology, multimodal and visual storytelling. A basic inquiry is needed due to the fact that there is no literature base in Radiography concerning story. The model pursued in this thesis is about community conceptions, then the next stage would be to uncover exact methodology. This is outwith the parameters of this thesis.

Phase two involved a systematic selection of pertinent literature. Systematic approaches have clear definers and reproducible strategies. That is the major strength of systematic

approaches of selecting literature. Table 3 summarises the main search criterions/filtering techniques. For example; Three online search databases relevant to the topic were used to source literature; Google™ Scholar, Science Direct and ERIC (Education resources information centre). Keywords (Maltby et al. 2014) were used using Boolean operators to limit the number of articles along with other filtering techniques.

Time constraints	Publication date between January and May 2016
Online search databases	Google Scholar, Science Direct, ERIC
Search words and phrase combination/s	PICO search formulation used all in title search/ keyword search only: (P) Population = "Higher AND Education OR University" AND ("storytelling") (Story*) AND (Stori*) NOT digital (I) Intervention = education AND storytelling OR stories OR Stori* AND (academic) (lecturer) (classroom) (stud*) (C) Comparison = education AND storytelling OR stories OR Stori* AND (nurs*) (allied health) (arts) (health) (science) (technolog*) (O) Outcome = education AND storytelling OR stories OR Stori* AND (effective*) (experience) (impact) (implementation)
Search filter methods	• Boolean operators (AND, NOT, OR) – to apply additional filters between multiple terms simultaneously. • Truncation/ wildcard combination/root of word at terminus asterisk * - to broaden search to include various endings/spellings. • Brackets (+) = gives priority to bracketed term – ensuring no unrelated terms are included.

	• Quotations "+" = phrases are intact – to ensure no loss of meaning

Table 3: Search strategy filters

Only peer reviewed research studies, articles and vignettes published within the last 10 years (2006-2016) were accepted as primary review material. This was to ensure currency in a turbulent HE arena and apply a filter of peer rigour. Literature only written in the English language was permitted due to potential translation errors. The strategy was limited initially to UK centres due to the transferability of findings; producing limited results. Parameters were finally opened to include North American, Asia and Australasian authors/ journal publications due to similar HEI structure and education culture; where used within this review the findings from these publications were treated with caution in terms of transferability to the UK HE domain.

Application of the filtering and exclusion process resulted in 12 (Google Scholar), 66 (ERIC) and 10 (Science Direct) results. All 88 abstracts were considered for relevance to the question and topic area. Following final selection and dismissal by the author, taking account of the focus on the *practice* of storytelling, a combination of 11 publications were selected for the review. These literature publications were read and appraised (as understood within the meta-ethnography approach – phase three). The outcomes for the practical application of storytelling practices were summarised (see table 4).

AUTHOR & YEAR	Title/ topic area	Type of data/method	Number of participants	Findings +ive	Findings -ive
HUNTER & HUNTER 2006	Storytelling as an educational strategy for midwifery students ➢ Healthcare	Test – Retest Open ended probe questions	30	-Enhanced cognitive learning e.g. better clinical decision making -Emotional validation and support -Transition into first post competence	-Overlap between courses and this method in other modules -Felt the successful stories could be misconstrued as "bragging" -Took time away from traditional learning which was 'preferred'
SCHWARTZ & ABBOTT 2006	Storytelling: a clinical application for undergraduate nursing students ➢ Healthcare	Group meetings over 2 years	Not specified	-Storytelling a well embedded method in the classroom & clinical setting for teaching and learning -Specific examples of storytelling were: case studies, journals, stories about practice, life reviews and reminiscence therapy -Mastering listening, partnership, reciprocity & solidarity.	None noted.
FORMAN 2007	Leaders as storytellers: Finding Waldo ➢ Business Administration	Reflection on practice. Not scientific method	Not specified	-Leaders master story -Stories can enable leaders to connect with learners emotionally and personally	None noted.
MOON & FOWLER 2007	'There is a story to be told…'; a framework for the conception of story in higher education and professional development ➢ Healthcare	A proposal of storytelling methods/methodology	N/A	-Deconstruction of story into categories for further investigation -Various methods, groupings to enable a practical application	None noted.
MCKILLOP 2007	Imagining assessment in higher education through on-line storytelling and visual expressions of learning ➢ Art and Design	-Evaluation of student stories collected from around the UK about assessment (no specifics) -Visual expressions of learning analysed	Not specified	-Stories as a method of feedback regarding assessment enabled a more imaginative and creative approach -Allows students to engage emotionally	None noted.
MILEY 2009	The storytelling project: innovating to engage students in their learning ➢ Accounting/History	-Student led and lecturer led development of stories true and fictitious -survey: open and closed questions	Not specified	-97% of students found stories assisted with engagement in a difficult conceptual topic -78% storytelling gave them a deeper understanding -Marks and feedback increased since the introduction of this method	-Not enough stories were used -Other subjects did not use the storytelling method -Time taken to 'find' stories -Group working arguments

HAIGH & HARDY 2010	Tell me a story – a conceptual exploration of storytelling in healthcare education ➢ Healthcare	Literature review 1975-2007	NA	-Stories can contribute to effective leadership in complex cross-cultural environments -Workplace mentors use story to help students become accustomed to management, norms and moral frameworks	-Some voices can be repressed if they are different (counter stories) -Some students do not engage with stories or storytellers -Informal setting and approach is essential to participation
ALSOP, MORETON & NESI 2013	The uses of storytelling in university engineering lectures ➢ Engineering	-Analysis via discourse/thematic review of lectures by academics from the UK, Malaysia and New Zealand	78 lectures (252,000 words)	-Stories offer a vicarious experience of real-world engineering problems unlikely to occur in written course materials -Stories play an important role in lectures across a range of cultural contexts	-Students from contexts where 'informing' is the primary purpose of lectures may have difficulty adapting to storytelling style -Students may need 'acquainting' with the storytelling style to help engagement with this style
KARIM 2014	Storytelling as a pedagogical tool to learn English language in higher education: using reflection and experience to improve learning ➢ TEFL	-Questionnaire. Closed and Open question. Likert technique.	50 participants from 5 HEI's	-64% of participants strongly agreed that teaching and learning through storytelling was enjoyable -76% of lecturers strongly agreed that this method encourages engagement	-Lecturers find it hard or very hard to 'use' storytelling in their classes -Big class sizes cited as a barrier to storytelling
FLANAGAN 2015	How does storytelling within higher education contribute to the learning experience of early year's students? ➢ Education	Qualitative Semi structured interviews and non-participant observations	45	-Story facilitates learning and offers relaxation within lectures -Storytelling has a social function -Story stimulates reflective practice & quality of reflective practice -Events precipitate a story and interesting stories hold meaning for individuals	-Not all people are 'good' storytellers -Effective storytelling needs to be practiced and developed
JAMES, MARTINEZ & HERBERS 2015	What can Jesus teach us about student engagement? ➢ Religious Studies	Stein (1994) method used to catalogue story of student engagement in the Gospels (80 episodes). Stories indexed and thematically analysed	NA	-Narrative and analogies support engagement -Stories can be supported by a variety of methods – choice of setting, timing, visual aids, question and answer & case studies -The use of 'contrasts' is a powerful way to prompt openness to new ideas	-Transformational learning through story depends upon the relationship with the teacher and among peers -Learners might resist this style of learning especially in the initial stages -Stories may engage listeners but they may adamantly reject the message -Application of story/storytelling is difficult -Barriers to applying story identified as time, training and collaborative opportunity

Table 4. List of the literature selected and the main findings - Phase 3: reading

Part 2 – Appreciative Inquiry (AI)

To appreciate is to value or to recognise the best in people or the world around us. To inquire is to explore and discover; asking questions to seek out new potentials and possibilities. This is at its most basic, a summation of AI.

> *"AI concentrates on exploring ideas that people have about what is valuable in what they do and then tries to work out ways in which this can be built on-the emphasis is firmly on appreciating the activities and responses of people, rather than concentrating on their problems."* (Reed 2007: 2).

AI is associated with a range of models of research which are summated in table 5 and then explored.

Model	Links to AI	Concerns
Worldview		
Social constructionism	Concern with meaning and interpretation rather than measurable facts	Ensuring that the meanings the world has for participants are understood
Critical Theory	Interest in developing challenges to the ways of thinking	Searching for data that question assumption
Context		
Ethnography	Interest in complexity of the social world and understanding it in its entirety	Collecting diverse forms of naturally occurring data that encompass the social world
Case studies	Focus on specific settings or situations	Determining the boundary of the case
Change		
Narrative methodology	Interest in hearing stories of events and processes	Ensuring that stories are told and heard and that ideas of chronology are explored

Action research	Interest in facilitating change	Following the processes of change

Table 5. Connections between models of research and AI (Reed 2007).

With respect to worldview, AI is a type of CI and has roots in social constructivism; that knowledge is socially constructed through interactions/narrative within a social system (as previously explored). This idea that a social system creates its 'own' reality and then given a positive spin is the root of AI theory (Cooperrider, Whitney and Stavros 2008). Fry (2017) termed this phenomenon as 'words create worlds'. AI also empowers the 'other' voice of people in an organisation that can often be regarded as 'powerless'. Fontana (2004) stated that the commonality of critical theory proponents lies in the way they have challenged the established social order by pursuing them independently of the power structures that perpetuate them.

AI can be categorised under the umbrella of action research. The 'action' part of action research can be thought of as a demonstration of an improvement in learning to the development of critical thinking (McNiff 2016). Kemmis & McTaggart (1998) defined action research as, 'a form of collective enquiry undertaken by participants in social situations to improve the rationality and justice of their own social or educational practice, as well as their understanding of these practices and the situations in which these practices are carried out' (p.5). However, classical action research has been criticised because it is overly focused on problem solving – the first stage being identification of a problem to be solved (Egan & Lancaster 2005). This is mitigated somewhat by the AI approach because of the affirmation qualities held at the core of the AI process (Cooperrider & Whitney

2007). It is a 'strength-based' approach to change not problem orientated. In their concise, simple summation Cooperrider, Whitney & Stavros (2008: xv) state;

> *"Every organisation has something that works right-things that give it life when it is most alive, effective, successful, and connected in healthy ways to its stakeholders and communities. AI begins by identifying what is positive and connecting to it in ways that heighten energy, vision, and action for change."*

Hand in hand with a strength base of the AI method is its role in change processes. We live in a time of unimaginable change. This turbulent, unpredictable environment translates also to HE has been termed as a period of 'normlessness'. This has resulted in a dynamic working environment where change processes have become almost daily requirements. AI has been championed as a useful approach to change in any area, with any human systems and at any scale (Watkins, Mohr & Kelly 2011). This is in a large part due to the approach involving representatives or whole organisations with all stakeholders working in partnership; out with the bounds of 'normal' hierarchy. The changes in community understanding and consequently change in practice are greatly important to the profession of Radiography. It has been previously discussed in terms of a 'constellation' of practices amongst individuals. Analysis in communities of practice therefore is greatly important.

Sample and Recruitment

A requirement of the AI approach is collaboration; with representation from all stakeholders in the unit of inquiry or community of practice. Therefore, all individuals

involved within the ‘learning’ within the discipline of Radiography needed representation. Gatekeeper approval was requested via email correspondence from the Head of School and the Head of Department. This was granted. All final stage undergraduate students (n=28) in the 2017-2018 year were invited. All core members of the administration department (n=3) and learning support unit (n=4) for the School were included in the invitation along with all the academic team involved in the delivery of Diagnostic Radiography (n=5). School managers with responsibility concerning the Radiography LTA were also invited (n=2). Local practicing Diagnostic Radiographers (practice educators) were (n=12) invited via email networks. In total 54 individuals were asked to participate. Other undergraduate years were excluded from the project. One cohort (stage 3 UG) was conducting a clinical experience block and were geographically unable to attend the meetings. The other cohorts (Stage 1 & 2 UG) were in the early stage of transition into HE and perhaps limited in their exposure to story ‘experiences’. Exploring the experiences of stage 4 UG students would hopefully capture the range of storytelling practices throughout the four years as an undergraduate. The postgraduate students are in the majority distance-based learners and therefore for these reasons were unable to take part in the project.

An invitation email was sent to all 54 potential participants with a participant information leaflet and consent form. A recruitment poster was also displayed within the school and sent to the Diagnostic Radiography student society. Two reminder emails were sent at one week following the initial invite and at three weeks. These were sent at different times of the day to try and arrive at a time when they would be noticed by the potential participants.

Eighteen participants responded to the invitation to attend the AI sessions from a range of stakeholders (Figure 10). No clinical practitioners responded to the invite to attend the sessions.

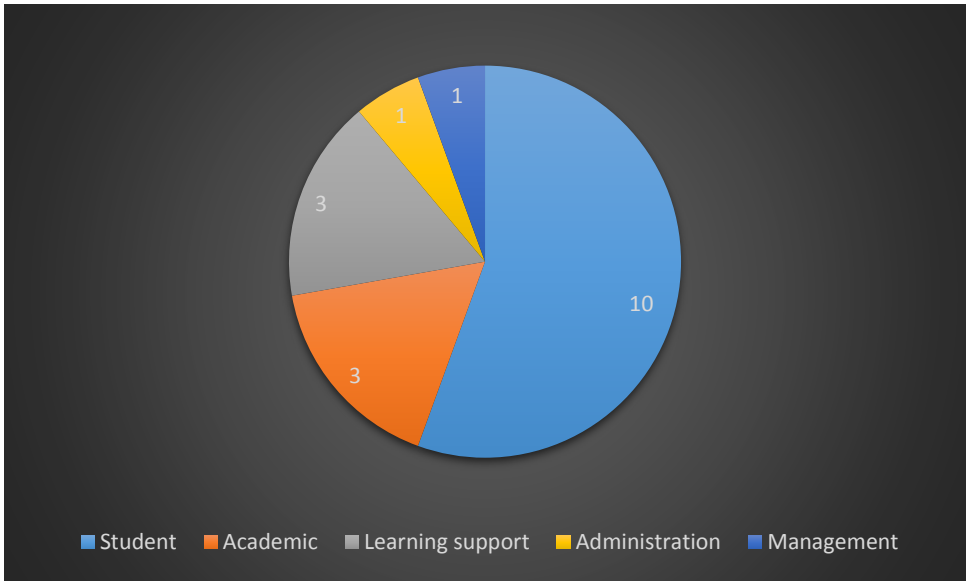


Figure 10: Demographic of stakeholders involved in the project.

The 4D AI sessions

It was acknowledged that the researcher was novice in change methodology such as AI. Training over a six-week period with final assessment in the method of AI was arranged prior to the sessions and successfully completed. The participants were invited to attend two, 2-hour sessions to explore the AI 4D cycle (figure 11). At the first session they were organised into three working groups each with six members of various stakeholders. Fry (2017) termed these 'mix-max' tables where stakeholders are intentionally mixed. They completed a consent form and were reminded once agree that they were free to withdraw from the project at any time without reason. Data collected until that point would be used in the project. Simple demographic information was also collected including: gender, age group, experience in higher education and clinical experience. Audio-recorders were set up within each group. Both sessions were facilitated by the researcher as well as a PowerPoint™ resource (appendix 1) to help guide participants.

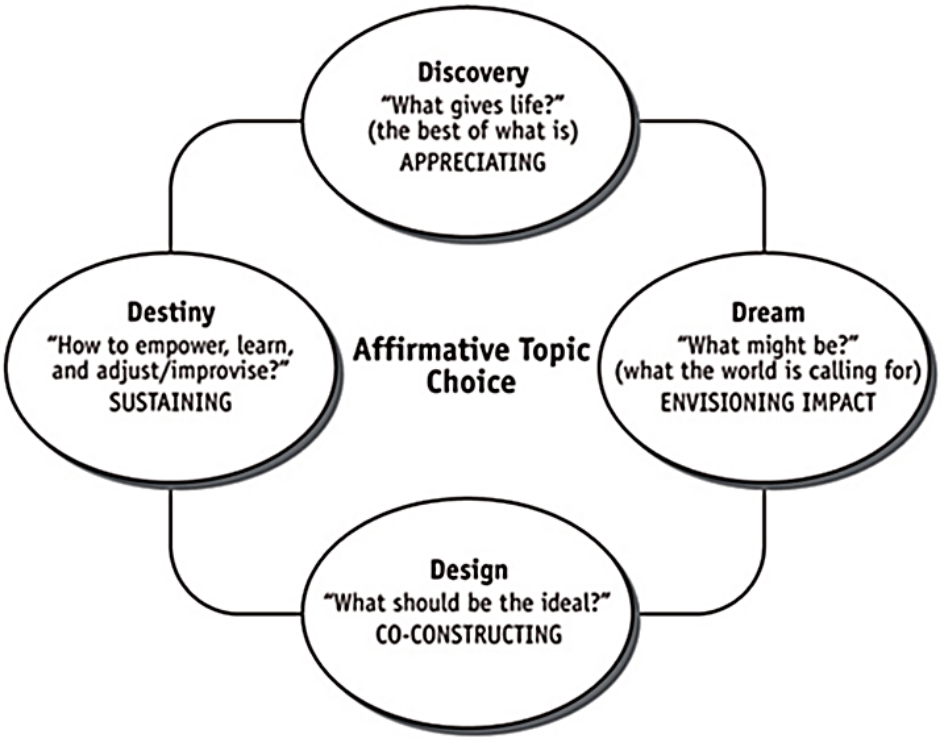


Figure 11: The appreciative inquiry model (pg. 106 Cooperrider & Whitney 2007)

The first phase 'Discovery' (figure 11) was to develop a narrative dialogue in the working groups. A discovery conversation was opened by asking the groups to each share a 'highpoint moment' concerning storytelling 'practice':

- Share the story: the most memorable parts of the initiative or project or practice, including challenges, innovations and any insights.
- Reflect together on: "root causes of success"
    - Things about YOU in the story
    - Things about another or OTHERS in the story
    - Things about the surrounding CONDITIONS, environment, system etc.

The second part of this phase was to look at continuity. The participants were again asked two discussion points this time documenting as a group:

- When is it that the people in our learning community are most passionate, engaged, effective-functioning at their highest, best. Use flipchart paper and describe outline a few examples.
- Based on stories like these, name 3 things that give life to high engagement/learning/teaching moments, or overall climate that we should keep and preserve even as we change and transform.

The second phase 'Dream' (figure 11) of the 4D cycle involved participants developing imagery of the ideal future. They were provided with a context: You wake up 6 months (years!) from now and come to class as if a miracle has occurred, everything is as you always wished it could be: everyone energised and engaged; everyone succeeding in their work/studies; you are being sought out to exercise your strengths to bring out the best on others. As groups the participants were then asked to discuss amongst them the following questions:

- What do you see that is new, different, changed, better?
- Complete this sentence: in six months from now I am most proud of the organisation's impact and the way we/I am viewed because_____.

After this narrative each group was asked to use imagery to showcase their collective vision. In the 'Design' phase (figure 11), actionable ideas and ways involving storytelling practices in learning and teaching were explored by the groups again by using imagery. They were asked to create an opportunity map or as Fry (2017) termed a co-created 'roadmap' with all stakeholders acting as co-constructors. The number of ideas was not limited. At the end of this phase all 'road-maps' were displayed in the room and

participants were asked to vote on any of the actionable ideas which they felt were the worthiest of taking into the next phase.

This final phase, 'Destiny' (figure 11), involved five stages. New working groups were formed with participants being allocated into the actionable outcomes which they voted for (the top three actionable outcomes were taken forward into this stage). These new working groups were tasked with turning the newly coined 'change initiatives' into implementation by creating prototypes. The groups were also required to legitimise their prototypes with an action plan and time frames. This was all recorded again using group imagery.

All imagery produced by the groups was photographed (see appendix 2) throughout along with the audio-recordings. The stages of AI although chronologically ordered were not strictly enforced, movements backwards and forwards between them were encouraged by documented supporting of the sessions. Following AI meetings, departmental dissemination via meetings and seminars were arranged by the researcher (as discussed in Schwartz & Abbott 2007) to encourage implementation of any change processes/interventions.

AI Cycle completion

As previously discussed all the sessions (the 4D cycle, with 3 groups done over two, 2-hour sessions) were audio-recorded and transcribed verbatim. The process of verbatim transcription, while may seem tedious, has been advocated as a useful way to begin to familiarisation with the data (Riessman 1993). It has been argued as a key phase of data analysis, coined 'as an interpretative act' within interpretative qualitative analysis (Bird 2005), and has been recognised where meanings can be discovered, rather than simply a mechanical one of putting spoken sounds on paper (Lapadat & Lindsay 1999). A six-phase

inductive thematic coding process (see figure 12) was used to identify first and second order themes.

Phase	Description of the process
1. Familiarising yourself with your data:	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking in the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells; generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Figure 12: Phases of coding (Clarke & Braun 2013).

As the process was inductive and remembering that it does not exist in an epistemological vacuum, both overt (semantic) themes were identified along with latent meaning and paired with meaning from the result of the meta-ethnographic literature review. This can also be interpreted visually by imagining the data three-dimensionally and discovering the inside (see figure 13).

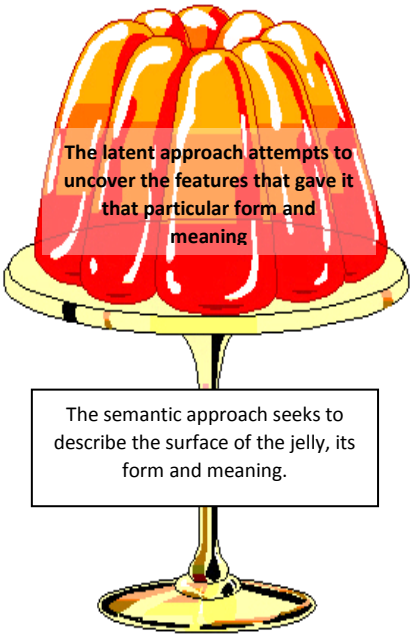


Figure 13: Figurative understanding of semantic and latent thematic generation (adapted from Braun & Clarke 2006).

Once first and second order themes were discovered, verbatim quotes from the working groups were used to support the findings in the first person. Braun & Clarke's (2006) checklist was used to further ensure rigour in determining the themes (see Table 6). Furthermore, a concordance check was completed once the themes had been established to map to the 'flipchart' compilations from the working groups (See Appendix 2 for flipchart data from working groups). Any omissions or additions between the researcher and the working groups was recorded in the reflexive diary and discussed with the supervisor.

Process	No.	Criteria
Transcription	1	The data have been transcribed to an appropriate level of detail, and the transcripts have been checked against the tapes for 'accuracy'.
Coding	2	Each data item has been given equal attention in the coding process.
	3	Themes have not been generated from a few vivid examples (an anecdotal approach), but instead the coding process has been thorough, inclusive and comprehensive.
	4	All relevant extracts for all each theme have been collated.
	5	Themes have been checked against each other and back to the original data set.
	6	Themes are internally coherent, consistent, and distinctive.
Analysis	7	Data have been analysed - interpreted, made sense of - rather than just paraphrased or described.
	8	Analysis and data match each other - the extracts illustrate the analytic claims.
	9	Analysis tells a convincing and well-organised story about the data and topic.
	10	A good balance between analytic narrative and illustrative extracts is provided.
Overall	11	Enough time has been allocated to complete all phases of the analysis adequately, without rushing a phase or giving it a once-over-lightly.
Written report	12	The assumptions about, and specific approach to, thematic analysis are clearly explicated.
	13	There is a good fit between what you claim you do, and what you show you have done - i.e., described method and reported analysis are consistent.
	14	The language and concepts used in the report are consistent with the epistemological position of the analysis.
	15	The researcher is positioned as *active* in the research process; themes do not just 'emerge'.

Table 6: Checklist for thematic processes.

Chapter 5: Findings

Meta-ethnographic literature review

The first stage of the study, the meta-ethnography, was designed to address the first of the research questions:

How is 'storytelling for teaching' understood and incorporated by a community of practice within Diagnostic Radiography Higher Education? (Overarching aim)

- RQ1.1 How can existing research on storytelling in education be mobilised to inform a more robust model of storytelling for teaching in Radiography?

In the previous chapter I outlined the outcomes and process of phases one to three of the seven-phased process of meta-ethnography. Phase four of the approach involved determining how the studies in this review were related. All eleven pieces were read and coded for themes. Themes were then collated, and cross referenced for concordance fulfilling phase five of this review approach. There were six overarching common themes relating to the 'practical applications' of storytelling and exactly how it can be incorporated into teaching and learning. These were grouped as:

- *Relatability,*
- *Analogies and contrast,*
- *Reflective practice,*
- *Setting and the visual,*
- *Practicalities of the 'how'*
- *Common pitfalls.*

To offer some demonstrable degree of consensus, themes had to be common to three separate pieces of literature amongst the review material to be considered as 'interrelated'.

A theme considered in only one of the eleven publications was understood as isolated and not used. Likewise, themes occurring in two of the literature articles can be explained as mere coincidence and therefore again rejected within the meta-ethnographic framework.

Despite the considerable amount of work published around storytelling, even in the carefully selected articles for the review, it was difficult to establish *exactly* the practices of storytelling. Some of the articles centred around models or frameworks of what is 'story' with some reference to practical techniques (Hunter and Hunter 2006; Moon and Fowler 2007; Alsop, Moreton and Nesi 2013), the potential impacts of using stories in teaching, learning and assessment again with some practical application (Haigh and Hardy 2011; Schwartz and Abbott 2006; McKillop 2007; Karim 2014) and only four focussed onto the practical application/s of story (Flanagan 2015; Forman 2007; Miley 2009; James, Martinez and Herbers 2015). Phase five of a meta-ethnography involved translating the studies into one another. This was done by exploring the themes in further depth within the co-relating literature articles, searched for overt reciprocal translation between them and the more latent ideas suggested.

Relatability

Analysis of the sample finds that, above all, stories should be relatable. This was found in almost all the literature if not in a semantic code, then inferred to latently. It is argued that, for stories to be effective, listeners should be able to associate with the characters, circumstances or meaning of the story on some level. In their work to evaluate the practices of biblical teachings, James, Martinez & Herbers (2015: 138) suggest that a key practice required for a master storyteller is to make 'concrete connections with the life experience of the learners and with topics familiar to the audience'. They compile a table

to highlight examples suggesting them as a useful starting point for 'modern instructors'. These include: the body, senses and life, nature and farming (an important occupation at the time), possessions and ownership, home, family and work life (figure 14).

Sampling of Jesus's Connections to Familiar Experiences

Experience	Narratives (n) and Analogies (a)	Chapter/Verse
The body, senses, and life	flavor of salt (a)	Mt 5:13
	burying the dead (a)	Mt 8:22
	darkness and light (a)	Mt 10:27
	hairs on your head (a)	Mt 10:30
	losing life for Jesus's sake (a)	Mt 10:39
	the mouth (a)	Mt 15:17-18
	the eye (a)	Mt 18:9
	blindness and sight (a)	Jn 9:1-41
Nature and farming	foxes and birds (a)	Mt 8:20
	laborers for the harvest (a)	Mt 9:37-38
	lost sheep of Israel (a)	Mt 10:6
	lightness of Jesus's yoke (a)	Mt 11:30
	fruit of a tree (a)	Mt 12:33
	what God plants (a)	Mt 15:13
	mustard seed (a)	Mt 17:20
	camel passing through the eye of a needle (a)	Mt 19:24
	mustard seed / bush (n)	Lk 13:18-19 Lk
	the good shepherd (n)	15:4-7
Possessions and ownership	laborer deserves his keep (a)	Mt 10:10
	more given to those who already have (a)	Mt 13:12
	woman seeking lost coin (n)	Lk 15:8-10
Home, family, and work	new cloth, old cloak (n)	Mt 9:16
	new wine, old wineskins (n)	Mt 9:17
	children who would not dance (a)	Mt 11:16-17
	safety of man's home (a)	Mt 12:29
	fishers of people (a)	Mk 1:17
	sower scattering seed (n)	Mk 4:26-29
	parents who provide (a)	Lk 11:11-13
	prodigal son (n)	Lk 15:11-32 Jn
	family apprenticeship (a)	5:19-20

Figure 14. Storytelling in the Bible: sampling of Jesus' connections to familiar human experience James, Martinez & Herbers (2015: 139)

Having a ‘real world’ meaning or context (as seen in figure 14) to learners was also seen as acutely important by Garrett (2006) discussed in Haigh and Hardy (2011). Garett (2006) found that learners valued highly the fact that the stories used in their teaching were derived from ‘real people’ in the ‘real world’ and this was their way of making students ‘relate’ to the stories. This finding is not isolated. The use of non-fiction storytelling in teaching and learning is well documented e.g. patient’s stories (Schwartz and Abbott 2006; Hunter and Hunter 2006). However, so is the use of fiction and fantasy stories in learning (Moon and Fowler 2007; Noddings 1996), therefore, it could be argued that perhaps learners engage with stories not because they are real but because learners can make their own personal connection; the key element concerning relatability, not whether stories are derived from truth or fiction. Miley (2009) emphasised this by suggesting that the essential element to engage learners does not seem to be that the story is intrinsically interesting but that finding their personal connection or link is the part that challenges students.

Analogies and contrast

This theme was the second most important in terms of reciprocal translation across the literature selected. An analogy can be defined as a cognitive process of transferring information or meaning from one particular subject to another. Analogies as a practical method of storytelling in teaching and learning are frequently cited in the literature. Forman (2007) in her consultations with learners from an investment firm highlighted the use of analogy used by a CEO. The example compared a ‘Where’s Waldo (Where’s Wally in the UK which is a game where a character (Wally) needs to be found in a densely populated illustration)’ story with his son to the company’s strategic differentiation from the competition; finding and employing “Waldo Hunters” - in this case ‘undervalued and

underdeveloped commercial properties, hotels and offices…to develop them and sell them at a substantial profit to the company and its investors' (Forman 2007: 370). This example was highlighted by Foreman to demonstrate the power of story analogies as 'instruments for personal, professional and organisational success'. Miley (2009) looked to military history for appropriate analogies with accounting students. Miley (2009) used the analogy between First World War naval vessels camouflage; by painting zebra-like stripes known as 'razzle dazzle' (Behrens 2003) to confuse enemy attacks. The camouflage assisting by making speed and direction calculations by the opposing force difficult. This was then likened to the present-day cohort and topic to be learnt - accounting annual reports; a great place to find information in plain view but the way data is 'presented' can make that information 'hard to see': 'Those who do not know what to look for will fail to 'see' accounting disclosures, just as it was hoped the enemy would fail to see the camouflaged ships' (Miley 2009: 361). This is another example of analogy as a vehicle to make 'vicarious' or 'real-world' connections with students which attempts to contextualise a theoretical idea into an applied context.

Dodd (1961) cited in James, Martinez and Herbers (2015) attempted to define learner's engagement with story because it left just enough doubt in the mind of the learner to tease it into active thought. James, Martinez and Herbers (2015) attempted to go further than Dodd (1961) by suggesting that analogy and 'relatability' was just the start for the learner when stories were used. A parable is a type of analogy; a short story which can be related to one or more instructive lessons. James, Martinez and Herbers (2015) found that when analysing the parables of the Gospels that they did not linger at the 'familiar and comfortable' (p. 138) but summated in often contrasting and contradictory endings.

> *Jesus forgave a woman caught in adultery, He silenced the mob by inviting anyone without sin to cast the first stone (Jn 8:3-11)… illustrating how Jesus's piercing use of contrast challenged His listeners to move beyond a simple dualistic world view* (James, Martinez and Herbers 2015: 140).

With reference to this James, Martinez and Herbers (2015) suggest that the use of contrasts can be a powerful tool to encourage a transformative process in the higher education domain. This was mirrored by Shaw (1999: 5) who stated that well communicated stories invite learners into a transformative realm, 'in which old ways of knowing may be opened up to new possibilities'. Ryan and Tilbury (2013: 5) have stated the importance of transformative capabilities of higher education in their work for the Higher Education Academy (HEA), 'creating an educational focus beyond an emphasis solely on knowledge and understanding…using pedagogies guided by engaged, 'whole-person' and transformative approaches to learning'. Stories with contrasts could therefore be considered as transformative pedagogies.

Reflective practice

The close connection between story and reflection is not considered to be new. Bruner (1987) and Ricoeur (1984) identified the potential benefits of story for reinterpretation and understanding not just recalling events. However, again the practical application of using story and reflection could be considered vague. Schön (1983) believed reflection to be crucial to professional practice development. This was evident in the literature considered within this review. There was a strong connection between using story for reflection and the more vocational areas of higher education such as healthcare and teaching. Using

reflective models (Kolb 1984; Gibbs 1988) is well established in vocational, professional undergraduate courses. Personal story has a considerable role within these reflective models. It is apparent however, that the integral role that story has within these well utilised methods is underplayed and not well understood.

In an example of story exploration in relation to reflection in educational context, education workers stated that story used in small group teaching helped to both stimulate and enhance the quality of their reflective practice (Flanagan 2015). Students in small groups were encouraged to 'share' stories from within the workplace. They then described how stories assisted in illustrating solutions to problems and how they could be useful in their own current or future dilemmas. Flanagan (2015) found that contrary to other researchers; pre-prepared or modelled (Kolb, 1984; Gibbs, 1988) stories were of equal usefulness to spontaneous stories told/shared within the classroom.

> *These responses are significant; they suggest that spontaneous storytelling where one story stimulates another should not be dismissed as just conversation occurring for purely cathartic purposes* (Flanagan 2015: 165).

Moon and Fowler (2007) additionally stated the importance of story and reflective practice. They developed a loose framework of methods that may prove useful to academics when attempting to explore story within their teaching and learning. Moon and Fowler (2007) accept that their discussion sought only to provide an initial scope of the use of story recognising that more development is needed to explore the practical usefulness of their framework. Nevertheless, as one part of their framework, they do discuss the importance that personal story has on reflective ability for learners building on the ideas of

other cited work out with the inclusion date criterion for this review: Bolton (1994); Bolton (1999); McDrury and Alterio (2003); Alterio and McDrury (2003); Drake and Elliot (2005).

In relation to practical application of stories for reflection in education, Moon and Fowler (2007) proposed two ways of practically using personal story in lesson planning to develop reflective skills: story incidents and story 'sculpting'. Story incidents are collated as part of a student's learning journal (also Schwartz and Abbott 2006) or reflective diary, perhaps kept whilst attending clinical placements or work experience. Viewing incidents as a story changes the context of the insert;

> *It is as if the incident can be turned over in the hands, examined from different sides, looked at from underneath or looked at afresh. It can be passed over to others for examination…other disciplines and what they can do with a personal story* (Moon and Fowler 2007: 234).

Story sculpting (Fowler and Rigby 1994 cited in Moon and Fowler 2007) is more practice based and presents an interesting adaptation of story to encourage reflection. A role play technique using a 'sculptor' (tutor or student) and other learners to 'act' out story and their emotions by using proximity to each other. Poses are changed for each new scenario or act within the story. The sculptor might use a story with characters to enact throughout a period of time, days sometimes years, reflecting real life experience. Learners are asked to reflect between each 'act'. Moon and Fowler (2007) suggest that students are able to revisit previous experiences in a new way, relating to emotional and psychological wellbeing.

Both of these techniques elude to the potential of reflective story as a means to creating alternative understanding for learners in a way that traditional reflective models (e.g. Gibbs 1988, Kolb 1984) require, but that students find challenging.

Hunter and Hunter (2006) used weekly sessions in their undergraduate midwifery program to dedicate to a storytelling intervention termed 'storytelling with a purpose'. This too was conducted within groups. They also found that this model allowed for enhanced reflective ability amongst the learners. In addition to this common ground they discovered that storytelling has a role in student transition, suggesting that reflective storytelling had enabled students to recognise growth into a 'competent and safe practitioner' from that of an undergraduate student (Hunter and Hunter 2006: 276). The HEA has an entire work stream dedicated to the continuing research and development around student transitions, highlighting its importance amongst access, retention, success and progression to employment or postgraduate education (HEA 2016). Storytelling pedagogy has perhaps been unappreciated within higher education as a useful, multi-faceted tool. It may prove important in many areas including, and not limited to, student transitions.

Setting and the visual

Much of the literature made multiple references to the importance of environment and the visual senses in story scene setting. The multi-modal nature (e.g. environment, learner's physical state, visual resources) of storytelling is an unexpected, yet interesting commonality amongst the literature. McKillop (2007), James, Martinez & Herbers (2015) and Moon and Fowler (2008) all discuss the impact of storytelling from a multi-modal perspective. This has importance for Radiography students who often have variable learning 'settings'; for example, the clinical environment.

Whilst ‘setting’ falls under the main umbrella of the visual domain, it is important to distinguish it as a separate component with relating emotional components. James, Martinez & Herbers (2015) in their analysis of biblical storytelling highlighted the innovative use of setting whilst using storytelling. To engage and promote attentiveness, they state that Jesus carefully selected content to fit the context for the lesson. For example, predicting the destruction of the temple in Jerusalem while visiting the temple area with disciples (Mt 24:1-2). Setting linked somewhat into what James, Martinez and Herbers (2015) stated as ‘timing’. They suggest that changing setting such as leading crowds up a mountain, taking students onto boats or down to the seashore allowed listeners to become uncomfortable – hungry, tired, disorientated or scared. Then allowing the crowds or students to eat, rest or rescue them from dangerous environments. They proposed that the listener is connected by these timings in a personal way, “creating just enough cognitive or physical dissonance to ready His students to be open to learning” (James, Martinez and Herbers 2015: 141). Meizrow (1991, 2000) cited in James, Martinez and Herbers (2015) suggest that exposing learners to ‘disorientating dilemmas’ perhaps challenge the mental state of a learner and could serve as a potential catalyst for transformative learning. Education can ‘open us up to the uncanny, the unsettling, and the unfamiliar rather than create cosy homely environments that lull us into a false sense of security (Quinn 2010: 96). This has links to simulated learning environments and may be used somewhat to explain the challenges experienced by Radiographers and students involved in high pressure or unfamiliar simulated scenarios (Naylor, Harcus & Elkington 2015; Naylor and Foulkes 2017).

As previously discussed, Moon and Fowler (2008) discuss ‘story sculpting’ role play as a physical and visual experience to reflect on emotional and psychological aspects of their personal stories. Moon and Fowler (2008) develop these ideas further by suggesting that

exploring story in a multi-modal way, such as ‘story sculpting’; students are able to learn skills of self-expression, posture and voice. This reinforces the argument that storytelling practice could be used as a transformational pedagogy. Interestingly they also suggest that learning story through a multi modal lens may also prove a skill for future professional situations such as their own teaching and coaching, or even as parents (Moon and Fowler 2008). This therefore, adds to previous discussion that storytelling practice is a useful tool for student transition into employment and/or further study requiring more complex learner attributes.

The role of the visual in storytelling is noted. James, Martinez and Herbers (2015) discussed the importance of visual aids to enhance biblical stories, for example asking to see a coin when challenged about taxes (Mt 22:15-22) and when encouraged to be childlike with faith, inviting a child to come forward (Mt 18:2). They suggest that supporting stories with visual aids can promote student interest such as using physical, photographic or other visual resources. McKillop (2007) analysed art and design student’s visual expressions in addition to personal stories regarding their experiences of assessments at a HEI. McKillop (2007) found that affective dimensions are often ignored, and visual expressions can be a powerful tool for students to express their assessment experiences more accurately than traditional techniques. McKillop (2007) found that in general students’ visual expressions of their assessment experiences were almost exclusively negative and when shown to members of the faculty teaching team provoked considerable debate. Visual forms can enhance story or can be used to ‘tell’ stories. They can trigger storytelling and reflection, which has been extensively used in visual research methods such as photo elicitation (Prosser & Loxley 2008; Harper 2002), where participants either create or are given visual data such as photographs which are then subject to interpretations during the interview. It is argued that eliciting responses with

photographs open up an access to interpreters' worldviews and deeper emotional and personal accounts than interviews alone. In essence, it is clear that images can have a powerful impact on learners and academics (Apple 2004). The exact mechanism of how this mode impacts on individuals is unclear and more research is required to fully understand this process for Radiography.

Practicalities of the 'how'

Integration into courses

Throughout the literature overall the way that story practice is integrated into teaching practice is variable, more often with no guide for other academics to apply and follow. There does not appear to be one standard application of a story 'intervention'. Table 7 shows some of the practical ways (where provided) story has been used in teaching and assessments.

Author	Student level	Theme or context	Method	Integration
Hunter and Hunter (2006)	Stage 2 Undergraduate	Reflective practice	Storytelling framework by learners – personal story facilitated by a tutor	Weekly 30 minutes' session of 4-hour core module Initially facilitated by a tutor, then student led Small groups
Schwartz and Abbott (2006)	Undergraduate	Practicalities of the 'how'	Clinical application of storytelling in practice Case studies, journals, stories from practice, life reviews, reminiscence therapy	Multiple modules and clinical placements. Integration not well defined.

Moon and Fowler (2007)	Undergraduate	Reflective practice	Emphasis on personal story – learning journals, PDP, case studies, story sculpting, patchwork texts.	Story sculpting – 2-hour classroom session Tutor led Small groups
Forman (2007)	Postgraduate	Analogies and contrasts	Series of questions/prompts in the classroom	Communication module Timing and frequency unclear Tutor led Full class
McKillop (2007)	Undergraduate	Setting and the visual	Visual expression of learning (VEL's) conducted following assessment. VEL's discussed amongst faculty for module evaluation.	Tutor led Part of post module meetings with faculty
Miley (2009)	Stage 1 Undergraduate	Analogies and contrasts	Using stories as analogies for accounting – tutor led, and student led	One lecture per week (2008) as part of a module Student-led Small groups

Table 7: Practical integration of storytelling and using stories in learning, teaching and assessment

Ethics

It should be noted that clearly there are important ethical issues regarding the dissemination of 'real' stories. Hunter and Hunter (2006) outlined 'safe talk guidelines' (table 8) identifying that learners could feel vulnerable sharing lived stories. In order to feel that they could share their stories creating a 'safe environment' was essential.

This is a safe place to speak.
What is said in this room stays in this room.
Stories/sharing is voluntary.
Faculty is part of the group process.
Gentle constructive criticism/comments only.
Everyone gets a chance to respond.

Table 8: Safe talk guidelines (Hunter and Hunter 2006)

Additionally, when using the stories of others, namely patients, confidentiality and anonymity was cited as essential (Schwartz and Abbott 2006).

Common Pitfalls

Academics cited specific barriers to using stories in their practice. These included large class sizes, time, training and collaborative opportunity (Karim 2014; James, Martinez and Herbers 2015). The most common thread however, appeared to be the notion that 'telling' stories can be difficult, requiring training, practice and development to ensure student engagement with this practice (Haigh and Hardy 2010; Alsop, Moreton and Nesi 2013; Karim 2014; Flanagan 2015; James, Martinez and Herbers 2015). Despite the frequency of this barrier, no solutions to this or the other issues were identified. It is clear that further work needs to be undertaken to help to identify solutions and what further training might incorporate.

Students also identified some difficulties with storytelling practices in teaching and learning. These included group working arguments (Miley 2009), stories being misconstrued or repressed depending on learner points of view (Hunter and Hunter 2006; Haigh and Hardy 2010) and time demands of this style of teaching (Hunter and Hunter 2006; Miley 2009). The literature identified some common ground with regards to 'inducting' students into this method of story teaching. Haigh and Hardy (2010) stated that in order for students to adapt to this way of teaching informal settings and approach were essential and the storytelling 'acquainting' may be useful in introductory sessions (Alsop, Moreton and Nesi 2013; James, Martinez and Herbers 2015; Miley 2009).

For a storytelling practice to be successfully integrated into a teaching, learning or assessment process these pitfalls should be taken into consideration. It is not apparent in the literature if practical methods in the past have adopted an approach to manage these pitfalls. Further work is needed to evaluate induction processes from both the viewpoint of the academic and the student.

Synthesising the literature

Phase six of a meta-ethnography approach involved a synthesising process of the inter-related themes to attempt translation into the current UK education policy and practice. The initial question posed at the start of the review – 'How is 'storytelling for teaching' understood and incorporated by educators within Diagnostic Radiography higher education? And, how can existing research on storytelling in education be mobilised to inform a more robust model of storytelling for teaching in Radiography, has been considered by exploring the recent literature. Several key streams relevant to current UK

education policy and practice and the 'practice' of storytelling have been uncovered during the exploration:

- Student led storytelling practice – students as partners (Hunter and Hunter 2006; Miley 2009),
- Storytelling promotes collaborative teaching and learning practices (Flanagan 2015; Schwartz and Abbott 2006),
- Stories can be a vehicle for transformative pedagogy (James, Martinez and Herbers 2015);
- Storytelling methods can support student transitions (Moon and Fowler 2007).

It is important to note to the reader here that, the literature thus far, has in the main shown positive outcomes of practicing with story. It should be stated however that the research area is underdeveloped, especially so when related to Radiography. More practice-based and research examples are needed to understand what (if any) are the weaknesses. Storytelling practice has arguably been marginalised as a pedagogy in its own right and, yet it could be argued to have significance across several key work streams within the UK higher education arena (HEA 2015b). This may be due to, in part, the 'slippery' nature of defining exactly the nature and best practice of storytelling and using stories in learning, teaching and assessment.

Expressing the synthesis

Storytelling practices in higher education have been explored as an under-researched area of practice to identify how and when they are being used to enhance learning, teaching and assessment. Storytelling practice in Radiography is novel; no research articles could be

found in the discipline. The reviewed literature suggests that storytelling could prove to be a key pedagogy to meet the demands of student engagement and deeper, transformative experiences as well as having a role in student transitions. The findings also suggest that storytelling has multiple aspects: Relatability, Analogies and contrast, Reflective practice, Setting and the visual, Practicalities of the 'how' and Common pitfalls. A storytelling practice schematic (figure 13) that synthesises these aspects is proposed to assist novice and experimental academics incorporate story and storytelling into their teaching. Lived experience research from Radiography stakeholders of learning practices is needed to evaluate the findings from this literature review and indeed the articulation of the synthesis presented in figure 15.

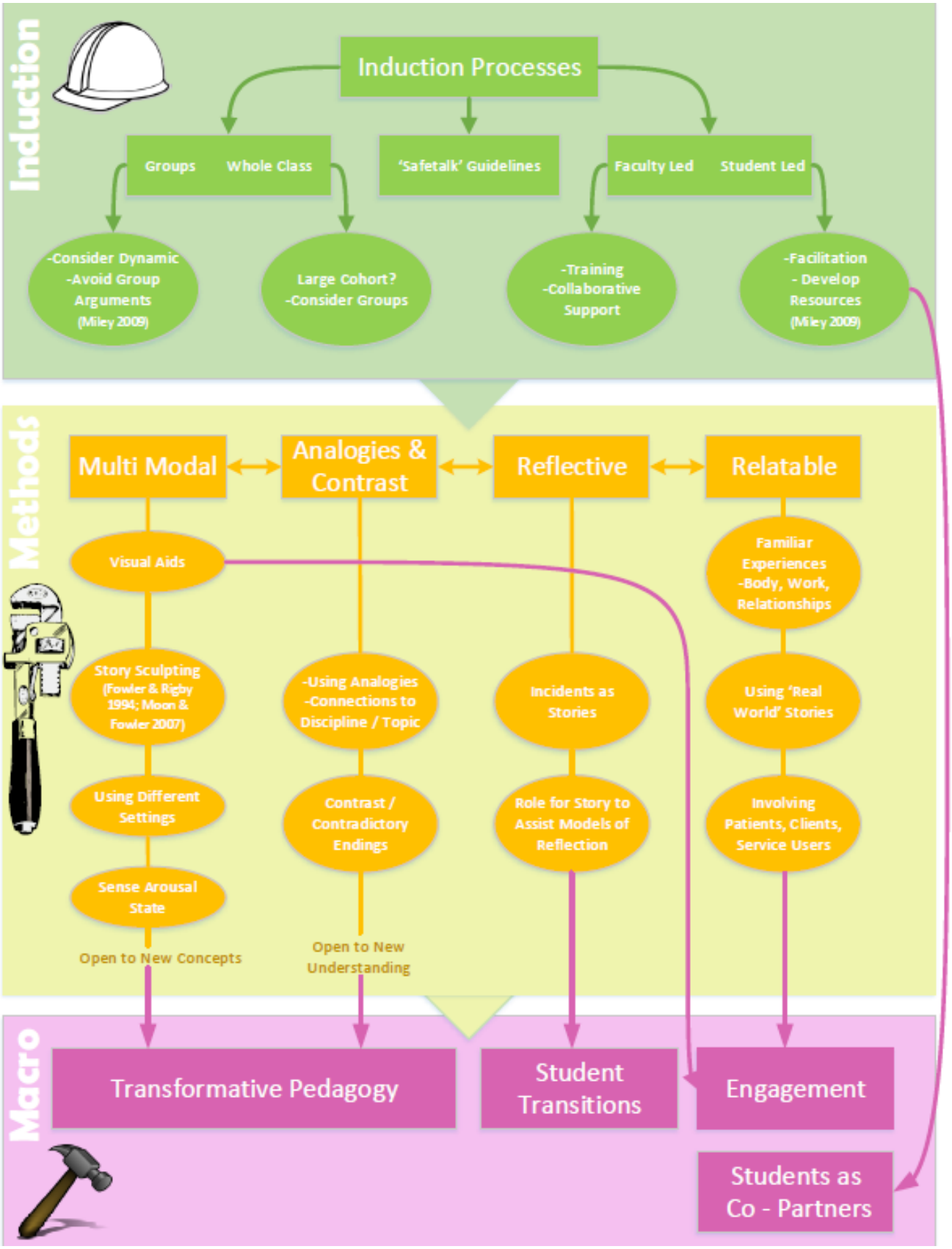


Figure 15: Storytelling synthesis schematic

Appreciative Inquiry

AI themes

The first stage of the AI qualitative analysis involved organisation and coding of the sessions. Each code was effectively a 'bin' into which a piece of transcribed data was placed. Codes were initially created following the meta-ethnography, a type of deduced coding. However, after several initial coding sessions it became apparent that much data did not fit with the pre-determined codes from the themes of the meta-ethnography. This was discussed with the supervisor (see also figure 23). A modified, more inductive approach, was used to improve the coding validity (that the codes accurately reflected what was being researched) – open coding. The verbatim data was analysed exhaustively – all relevant data discussed concerning learning, story or practices fit into a second order codes. There were twenty-two second order codes identified (Table 9). Clustering of second order themes (Biddle et al. 2001) meant that further grouping could take place. Second order codes were grouped together into six first order themes. Clustering also was undertaken of latent level themes were considered from stage 1 of the methodology (the meta-ethnography) and the previously discussed literature conceptualising story. It is important to also note that the six first order themes corroborated with the flipchart drawing from all stages and all working groups (Appendix 2). All of the first order and second order themes were common to each separate working group (Table 9). The latent themes were not common to each group and each will be discussed in turn.

Theme Identification		
First Order	Second Order	Latent Level Themes – Paired to Meta-ethnography literature review
Intrinsic story skill	Passion (also emotion) Relevance	The Story Charlatan/Wizard

	Timing Speciality	
Emotions	Passionate Positive Negative	Engagement Shared – Students as co-partners Transformative Learning
Real	Personal experience Relatability Analogies	Vicarious Learning
Clinical world	Debrief Preparation Reflection	Coping Transitions
Story practices	Sharing reciprocally Story sculpting Simulation Multi-modal use	Engagement Assessment
Resources	Money Equipment Learning 'spaces' Emotional state of academic and student Visual Aids	Recruitment/facilities – globalisation IPL – connected co-partners Emotional wellbeing/Transformative Vicarious Learning

Table 9: Theme identification from the AI sessions.

Thematic maps (Figure 16 and Figure 17) (phase 4 of the thematic coding process as outlined in Figure 14) were created to help to understand connections between themes and try to conceptualise a holistic overview of understanding.

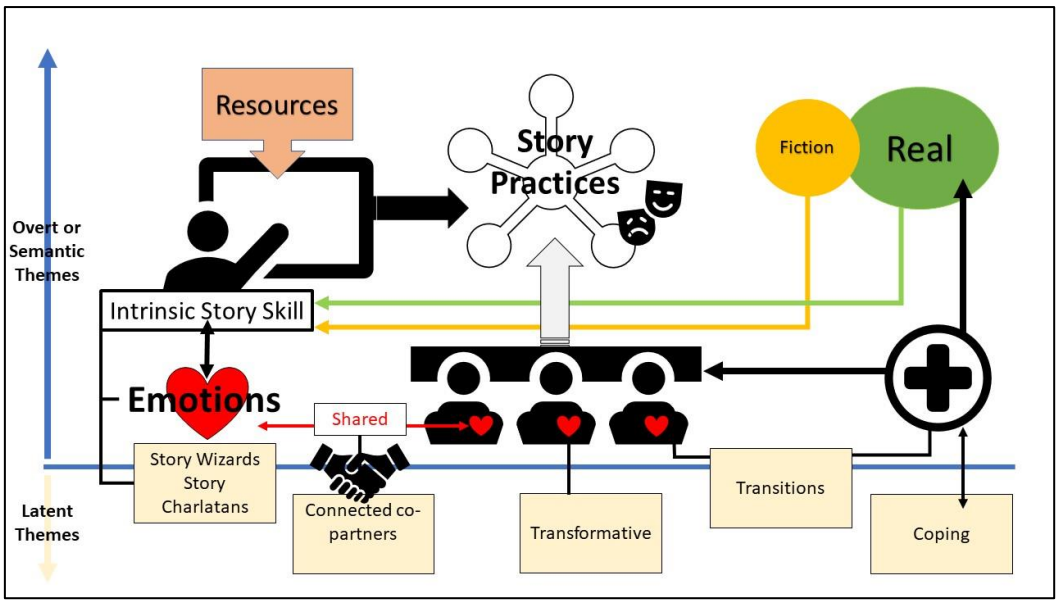


Figure 16: Overview thematic map of themes from AI sessions

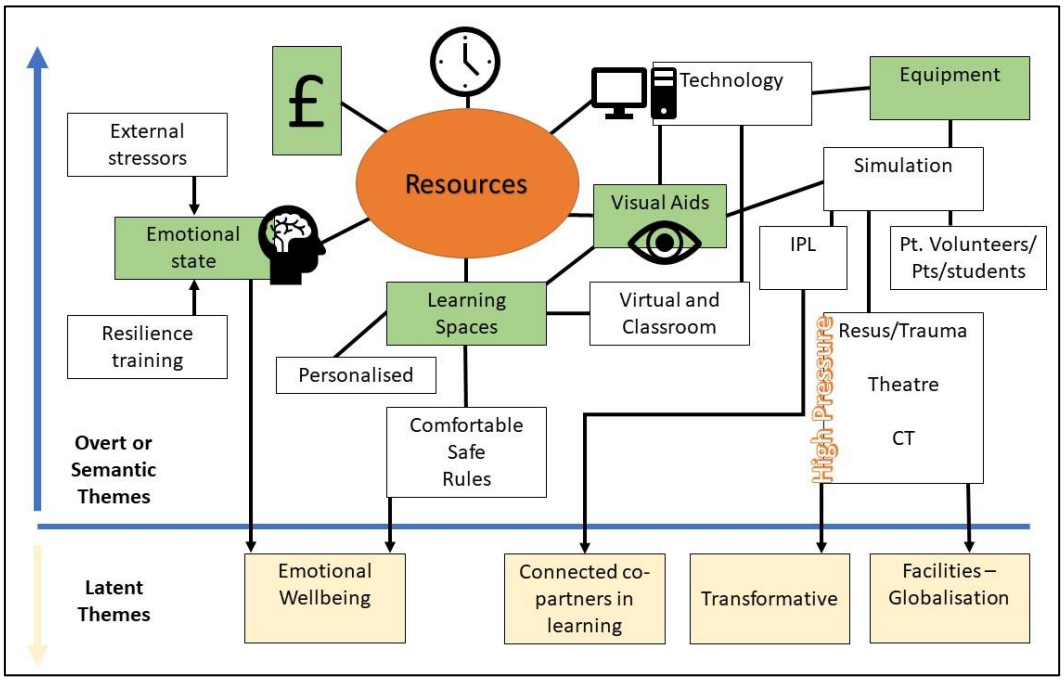


Figure 17: A developed thematic map of 'Resources' themes from AI sessions

The themes of the AI study are presented within the discussion as a narrative response series. This way of data presentation and discussion is believed to support oral exploratory research in Radiography domains (Decker & Iphofen 2005). Cordon and Sainsbury (2006)

also suggested that verbatim quotations were useful for presentation on the following bases:

- as the basis for their study, and the matter for enquiry
- as evidence contributing to an author's argument
- as illustration of an argument made by the author
- to illustrate how people understand and experience the world
- to illustrate how people express views and explain feelings
- to demonstrate difference or similarity in views and experiences
- to demonstrate the kind of language used
- to enable people to make their own points
- to make text vivid
- to demonstrate quantitative perspectives
- to provide exemplars from individual cases alongside statistical findings

Voice narratives are anonymised and are designated as: S (Student), A (Academic), M (Manager), L (Learning Support), Ad (Administrator). To demonstrate a degree of polyvocality different individuals were also given a numerical designator. For example; A1 or S7.

Intrinsic story skill

There appeared to be much discussion around a skill set that a teacher and people in the world have that makes them good storytellers. From the discussions that took place it was interesting to find that these were not seen as mysterious or 'born with'. The clear majority of them can be developed. These skills and personal attributes were categorised in the

findings as intrinsic story skills. These included outward passion for the session, delivery skills such as relevance, timing, tone and pace and having a knowledge of the topic area – i.e. being a specialist.

The most important skill was demonstrating an overt passion accompanying the story. In a simple content analysis ‘passion’ was stated seventeen times in the transcription of the sessions, the most common cited emotion.

S2: Like all the lecturers seem to have their own speciality. They’ll be like this is what I am really interested in and that they are really passionate about that. I really like that you go in and you know that you are going to get a lecturer like this.

L3: I also feel quite strongly that you can tell if someone is living and breathing what they are doing. No but just totally and utterly they are in that moment, it is passionate it is everything about their verbal and nonverbal and they want to draw you in and maybe they are using stories to do that, and I think that is a combination of a lot of factors.

S11: I think that the more passionate a lecturer is about something the more I am going listen and to be interested in it. You can totally tell when someone is not interested in teaching it. If they are not interested in it, then why should you be?

Arrive at your teaching session with a passion for the topic or the learning and you will be able to connect with the learners. The question therefore, is passion intrinsically a natural ability or is it performed? The question that arises here is also one around authenticity. Of course, there are many factors that contribute to this perceived 'passion'. Passion seems to be resonant in storytelling but it should be noted that educators can be passionate about their subject without telling stories. Perhaps then storytelling enhances the experience for learners because of the personal anecdote and/or personal experiences. It is the 'sharing' of the personal therefore that is therefore the added value in terms of passion.

It is important to note here, however, that with power comes a responsibility. Linking back to the literature surrounding the story and increasing incidences of charlatan performances "concerned neither with giving counsel nor with revealing perspective…striving to mobilise people to action in the name of the charlatan's own interests and desires… exploiting fear and desire in other so his/her own will can be met." (Gratch & Crick 2015: 309). The morality of the storyteller is not insignificant. One particular workgroup eluded to this play on story and demonstrable 'passion' albeit a more implicit way.

A4: you find that passion is sometimes infectious. If you hear someone so passionate about something it is almost infectious to you, you are like oh my god maybe I need to be passionate about this too.

L3: this makes me think are there sometimes circumstances where that is not good? Can someone be too passionate is that possible?

S8: I don't know?

S9: it can introduce bias.

S2: How she just loved physics, it almost tricks you into thinking that it is interesting because you are watching them. As much as you could sit thinking oh I don't find this interesting - but watching them seeing so interested in it.

Figure 18: cropped section of working group 1 Discovery Phase.

S4: what is the magic for? The trick?

S1: It's the trick, they trick you into liking it.

S4: but put a smiley face though.

L1: well they can trick you into remembering it as well? Like a trigger.

S1: put a positive spin on it?

Whilst the implications for this discussion are not as insidious as the true definition of the 'charlatan' the recognition of the power of story is evident and supports the findings of caution in the literature (see also figure 18). One of the students used the word 'convince'

rather than trick (figure 18), perhaps semantically this is the involvement of the power play here. This of course depends upon the point of view from the learner or the teacher and of the 'trick' that is deployed. Thus, it could be considered as a way of motivating and engaging (Wizard) rather than a self-seeking 'trick' (Charlatan).

Relevance and timing were also discussed amongst the participants as to deploying story practices and this again was viewed as skill that some lecturers were able to perform better than others.

L1: I think when it's relevant you know like give an example or telling stories when it is relevant.

S2: There has been times when the lecturers have told stories and you like did that make any sense, was that important, oh no.

L1: It is the timing of something, you know you are going off on placement and a lecturer stands up and tells you something about going out on placement and you know, that sort of thing. The timing of a story, I think must have an impact.

A4: do you think that a person might get frustrated you know if you go to the class and that person is giving you a story and then another story and then you might be going what is it we are meant to be doing right now.

L3: can it be tangential is my, you know I am just trying to throw it out there, whilst we really like them would we like it all the time.

S8: I guess that it is the balance between the stories and the known.

These skills again do not appear outwardly difficult to integrate but the workgroups mentioned at times that they were unable to see the importance at that time and lecturers admitted to 'going off on a tangent'. This correlated to the stage of training. Students recognised however that they were able to think back to stories told earlier in the course and then link back to the relevance in their present. One group called this 'linking' and drew it on their discovery visual (see figure 19). Reference back or 'linking' to stories previously told may help to facilitate these internal processes with learners and could situate the experience change or relevance over the learning journey.

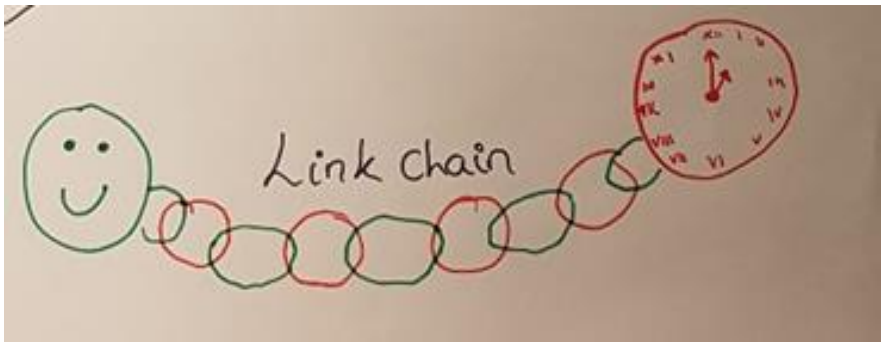


Figure 19: pictorial representation of the link between timing and student receptiveness (workgroup 1).

Tone and pace of delivery was also viewed as an intrinsic story skill amongst one of the working groups.

A4: and I think that it is tone as well, you know a serious tone if you are telling them a serious story you know.

A4: you know I suppose it has a lot to do with that, that whole non-verbal side you know.

A3: tone and pace, or that it changes?

S8: But then saying that listening to the radio you enjoy when they tell stories and you are laughing so it is the way that they say it.

A4: probably the biggest factor really.

A3: so that tone of voice that non-verbal stuff is actually really important.

This 'tone and pace' latently allures to the authenticity of the story with the academic being able to connect delivery of a story to the message of the story. This does require an element of skill. The danger of getting this wrong would affect the authenticity of emotion. Emotional aspects of the story or considered in the following section; however, it is apparent that some of the delivery skill is part of recognising and matching to the emotive intent.

Having a specialist knowledge was viewed as important within storytelling skills.

S9: I think that it is the story reinforcing the knowledge that is there.

S1: say something like share expertise – teaching students and yourself.

S2: Like all the lecturers seem to have their own speciality. They'll be like this is what I am really interested in and that they are really passionate about that. I really like that you go in and you know that you are going to get a lecturer like

this, I know that even by looking you know who is going to be teaching, whose ball game that is.

Academics were seen as 'experts' sharing stories linked to their professional experience and also the skill of creating analogies to explain difficult conceptual theories, this is discussed in a later section. Although not directly referred to the expertise and knowledge of the academic appears to assist the authenticity of the story.

A3: the sincerity, the genuineness.

S9: for me I think that it is the kind of openness. You feel like they are being totally honest and that they are telling you everything.

L3: and knowledgeable and I don't mean theoretically it is that they have bought into it as well because it happened to them perhaps or that they are relaying it on behalf of someone else.

This is mirrored in the appreciation of stories shared by 'expert' patients who were much valued by the students as 'authentic - to mean genuine or trustworthy, as opposed to 'spurious, counterfeit, or false' (Wyett, 1997: 13). Authenticity has been in part explained by perhaps showing a vulnerability in some way. In their work with field-based teachers Goodfellow and Sumsion (2000: 250) stated that in attempts to, "balance being a positive professional role model that gave student teachers something to aspire to with helping them to get a more realistic picture, and to see that it doesn't always go well, even for experienced, expert and wise practitioners." The expert patients in sharing the so called –

good, bad and ugly, were seen to have an authenticity. This is an important finding for educators who are developing or are novice. Pooling of a resource such as this ('expert' patients) could add to the authenticity of the learning experience.

The complexity of the topic of authenticity with educators is not wholly answered in the literature. This particular group of individuals in the project is interesting as the academics have had a previous 'discipline' or professional background which Goodfellow and Sumsion (2000) refer to as 'field-based teacher educators' (figure 20). They have been professionally working Diagnostic Radiographers. It is perhaps this skill that pre-disposes this group of academics to a level of authenticity also (see figure 20).

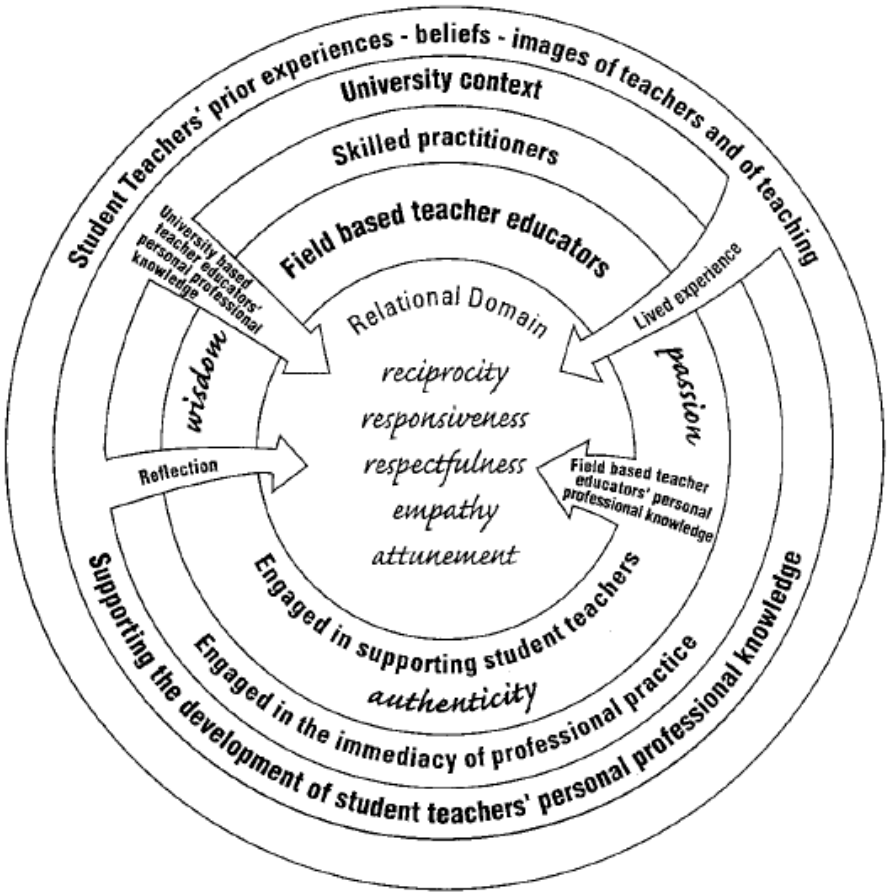


Figure 20. Representation of pathways in student teacher professional development (Goodfellow and Sumsion 2000: 251)

It would have been interesting to view this from the practice educator's perspective as a part of the Radiography learning community. Unfortunately this group did not engage with the study. This is recommended for exploration going forward in future research.

Some of the recurring 'intrinsic story skills' have been discussed and demystified. The skills referred to in the sessions can be developed as part of the embodied practice of storytelling. Morality issues regarding the power of stories was alluded to and this must be acknowledged as a warning flag. Students recognised that they had been convinced or even tricked. This seemingly was seen as a positive however 'as a way to engage'. This was described as being a wizard rather than a charlatan as the previous literature alludes to. Academics should practice some skills with this knowledge and if they deploy certain tactics too often they may be viewed as a 'charlatan' of learning, especially if the use is self-seeking. The complexity of authenticity is a challenge for educators. The use of 'expert' patients with lived experiences both good and bad were seen as authentic storytellers and valued in the learning of students. This has been explored to some extent in the Radiography community by involving expert patients in the learning experience (Bleiker et al. 2011 for example). This appears to be light tough though and does not include direct reference to the sharing of patient stories as a practice for learning. For academics to develop authenticity this is more challenging. Previous industry experience may be valuable in this respect, as may 'field' experience. This is not conclusive though and no definitive answers could be found in the literature.

Emotions

The emotional impact of storytelling was widely discussed in all working groups (frequency of 'emotion' = twenty-six times). As explored previously passion was the

primary motivating emotion for the engagement of learners. Emotions were powerful 'commanders' of engagement in classes.

L3: So, whether that situation is good for story, I think that the part of it is that individual is commanding the attention, I don't know if that is because of my profession and I can do that (laughs). It needs to be delivered and whether that be with emotion and that may be humour but it needs to be authoritative enough for me to be able to believe them. It has to be believable. It needs to command to draw them in.

There was a real range of emotions discussed. Although perhaps unsurprising given the healthcare field, examples of stories given often had a sad or shocking nature.

A2: I think that there is always an emotional response to a story, it doesn't always have to be a happy response. It can be thought provoking it can be quite sad and there can be some things like what we have been talking about here trauma and that has moved people to tears, because it is so emotional so yeah it can be very hard hitting.

A1: I told a story yesterday and with you guys as well back then, it's the one with the non-accidental injury, with the baby with the fractured skull - it was just horrible, and I told it yesterday. I could see that it moved the class, I could see

their faces. Some of them put their heads down and some of them put their heads in the hands. Some of them were almost in tears.

A1: and that was real, the stories that came out of the session were amazing because you remember the student had us all in tears… such a sad story but some folk told funny stories.

Academics appeared to tell stories that had a strong emotional impact. They even highlighted that they were able to illicit crying amongst the groups they were leading. It is possible that academics realise that in creating these emotive responses they are allowing listeners to become uncomfortable – emotionally disorientated as previously discussed by James, Martinez and Herbers (2015). This exposes learners to 'disorientating dilemmas' perhaps challenging the mental state of a learner as previously considered could serve as a potential catalyst for transformative learning. Crucially however, transformative identity paradigm shift also requires a shared element and associated discussions. There was some evidence of this, along with a recognition that some students and lecturers feel that the size of the group impacts the level of discussions that happen.

S9: I think that we do, do that anyway. We come back from placement and we can't wait to see everyone and speak about it.

A3: so, what you were saying there do you think it is better when you are prompted to talk about these things in the classroom? Because I do…bring it up in the

classroom and to talk about placements and I think…in small groups that they are happy to talk about things but perhaps…A4: not perhaps in front of the whole class?

It was evident that this was more of a concern for the academics though than it was for the learners. The students felt a close class bond, once formed (they were final year undergraduates), which allowed for an environment conducive to sharing.

S8: well it varies doesn't it because I think our class is really quite small because we are all quite close it probably doesn't make a difference but maybe for the other years, you know.

Academics may not want to 'open' the floor to emotively charged learning environments which create 'uncomfortable' situations. There are some professional aspects also to consider. Sharing personal or real experiences by those in a learning community may mean that they are unable to maintain a distance – both emotionally and with learner boundaries. This may be seen as some as a potential negative of storytelling practice. Indeed, there are some that argue that the learning environment has become preoccupied with emotional difficulties (Ecclestone & Hayes 2009). In their controversial work 'The dangerous rise of therapeutic education' Ecclestone & Hayes (2009) challenge the educational practices have become too focused on the fragile subject (the student) and in doing so neglect to deal with bigger issues. "Political interest in self-esteem resonates with a growing popular assumption that low self-esteem is the cause of a wide range of social and individual ills"

(Eccleston 2004: 113). The literature and the findings in this work however, suggests that emotions and the sharing of emotion specifically may be a key driver to transformative changes.

It is perhaps key then that academics do not 'shy away' from these situations but learn to engage in a way which is inclusive but manages respect and a shared learning. This can be achieved as captured in the literature as 'safe-spaces' discussed previously. It was evident however, that practically, this was discussed as not an 'easy' task. Examples of these practices were evident, granted only by the more experienced academics in the working groups and in clinical practice.

---

*A1: a five-week-old baby with a fractured skull em (*voice breaks) and it was a non-accidental injury and the parents had inflicted it on the wee baby. The baby actually died, and it was something that really affected me really deeply in my career…because it was so real, and I was standing at the front of the class crying and then you guy were crying. I suppose it was just kind of nice to share it there…*

S1: See speaking about it now, it actually reminds you what you have done, how you went about it, so perhaps if you do it again you do it or you know change it if you want.

S8: I suppose when you think of like a really serious person that I don't know in clinical whilst on placement and they have got loads of experience and you think you know them, but then they may be open up and tell you a story from their past in their clinical and you are like "oh wow", you then feel that connection that you

can learn from them as well and stuff and then you aren't just like oh they are the scary one, you find that they are really good at teaching because they told us things.

L3: so maybe it can break down a barrier perhaps?

This sharing of emotion is linked to a connected learning environment. With working group 1 (see appendix 2) writing, "Sharing teaches the students and the learners". Reciprocal sharing of both stories and difficult emotions appeared to be able to break down barriers in learning environments and in situations where students found tutors as 'scary'.

Humour in stories was also discussed although interestingly, it was clear that students liked the humour the academics were not sure if much learning had taken place and the emphasis was on the enjoyment rather than the story resolution or coda.

S9: It is how it feels. Humour is always good I don't know it makes you more jolt like more likely to remember it. Like makes it kind of stay there a bit longer.

A2: but I don't know if they are going down well because they are funny or that they are learning. I don't know do you learn better because you are laughing at something or do you not?

S6: yeah, I think so.

Students enjoyed the humorous stories, but academics were concerned that the 'edutainment' had the potential to hinder rather than emphasise the learning. This is an interesting finding. From the outset it would appear that lecturers perceive learning to be a 'serious' undertaking and that perhaps other emotive impact would be a distraction. Buckingham and Scanlon (2000) early 'coiners' of the term "Edu-tainment" stated that, "it is a hybrid genre that relies heavily on visual material, on narrative or game-like formats, and on more informal, less didactic styles of address" (Okan 2003: 255). This term has been linked more recently to technology for technology sake. There is certainly some compelling evidence to suggest that edutainment/enjoyment for learners has positive impact (Buckingham & Scanlon 2005; Isacsson & Gretzel 2011). However, another way of evaluating this issue is to flip it over - that if students are not enjoying themselves, they are not learning (Bloom & Hanych 2002). This is certainly not the case either. Perhaps rather than considering this as a dichotomy, one or the other, the question should be how much "edu" and how much "tainment"? (Mann 1996). It is clear that some 'edu' is certainly not something to be concerned about. Moreover, if this is an area which still remains a concern for academics, it could be another opportunity to open the discussion out at the end of the story and look at the resolution or coda of the story. This would ensure learning 'points' are included rather than in preference to an emotive component - satiating the 'edu-tainment' critics.

In summary of the emotional impact of storytelling is clear - associated emotions enhance the learning process whether positive or negative. They have the potential to be a transformative learning vehicle but must be understood and explored together in classroom situations. Taking advantage of the resolution and or coda of a story allows for discussion points and difference of opinion. It is also an opportunity to focus learners who may have experienced a range of emotions in a learning session. More experienced academics

appeared to feel more able to manage uncomfortable learning environments which may facilitate transformative learning.

Real

When stories were talked about, all the mix max groups discussed the value of 'real' stories (real life, real world).

S7: I think that helps us a lot some days when you talk about something that we have not experienced, to put it in a real-life situation that we could be in, it's helpful.

A2: because you can put yourself in that position?

S7: yeah.

L2: so, you might not have had the experience yourself but when you hear about someone else's you think well I have got a little bit of experience now, even though it is sort of second-hand experience.

S1: It's relatable.

S3/S4: yeah.

S1: like I take more when you're 'put into' real life situations?

A1: I think using real folk I think more would be good in class. I have started to do it in the PPCC module. I've got real people coming in to tell their stories.

Reality in the groups was expressed in practice via multiple channels; real experience from lecturers, real story that was shared onwards and real stories from 'expert' patients invited to speak on the courses. The reality helped to form a relation amongst learners in classes. Relatability was found to be a predominant factor in the literature concern storytelling practices. For example, James, Martinez and Herbers (2015) stated real stories created 'concrete connections with the life experience of the learners and with topics familiar to the audience'. Garett (2006) found that learners valued highly the fact that the stories used in their teaching were derived from 'real people' in the 'real world' and this was their way of making students 'relate' to the stories.

Relatability extends more to just 'real' stories and several groups mentioned the use of analogies in classes concerning some difficult conceptual teaching.

L2: A lot of my stories are often not about real events, so they are often made up stories to try and help people understand something. So, like yesterday we were talking about the respiratory system and about oxygen dissociation and about haemoglobins affinity for oxygen alters in different partial pressures of oxygen. See you have already forgotten what I have just said (laughs). So there is a story that is associated with it to try and help you remember about how optimal in high oxygen conditions you hang on to what you like, and in low conditions you get rid of it so, I use like a story… think of a night out with beer googles so when you are 100% saturated with a high level of 'oxygen' you are so attractive right now and 100%

want to be with them because they are just amazing as opposed to half way through the night you were like maybe, maybe you might have a bit of a flirt but when you were sober – no, no, not a cat in hells chance - pushing it away. So, I use stories like that about a night out to try and make you understand a scientific principle. So most of my stories are more like that. There are some like this has happened but there are some that make things you know that happen in everyday life to you, to allow you to understand things that you don't know about.

James, Herbers and Martinez suggested finding relatable analogies too in their analyses of practices. They also suggested them as a useful starting point for 'modern instructors'. Naturally the descriptors change over time (they discussed farming the main occupation of the time) and indeed with the group of learners in the session. Miley (2009) also provided explicit examples of analogies as a vehicle to make 'real-world' connections with students. In the quoted exert from the transcript above the lecturer was teaching in a class predominately comprised of school leavers – giving the analogy of a 'night out' and 'beer-goggles'. A word of caution needs to be applied regarding the relatability analogies. A certain set of assumptions are made to find 'relatable' analogies with learners. These may or may not be transferable across different cohorts and different contexts and therefore preparatory arrangements need to be made to accommodate these individual (societal, gender, cultural for example) differences when designing teaching plans. For example, the lecturer connected school leavers with 'hedonistic' lifestyles involving nights out and drinking. However, some time ago, Humfrey (1999) and more recently Thurnell-Read et al. (2018) have outlined the issues with these assumptions that activities centred on alcohol may exclude or make international students feel isolated who often come from cultures

marked by moderation or abstinence. Therefore ‘relatable’ analogies should be carefully contextualised for inclusivity and belonging.

The ‘relatability’ found here in the data, aligns to the literature – some analysis is required to ascertain why this is such an important topic in relation to teaching practices. There are links between real and relatable stories and the concept of ‘vicarious learning’ as discussed in the literature. As previously highlighted in the literature, Hodgson (2005: 171) suggested that storytelling engages adult learners by promoting vicarious experiences – ‘for the lecturer to help students to go beyond the outward demands of a learning situation and make connections between the content of the lecture and their understanding of the world around them’. What was also noted was the lack of corroboration with this finding in the research. The data in the transcripts of the participants would certainly support the work of Hodgson. Either by immersing the students into a ‘real’ scenario using story or by using analogy to orientate concepts in their ‘known’ world around them.

In summary, real stories are relatable to learners – these can be from personal experience, shared from others or can be the story narratives of expert patients. All appear to be valued equally. Story analogies can help situate students in known real-world concepts. Caution needs to be applied to ensure that the lecturer and the students have a ‘shared’ reality for vicarious learning to occur.

Clinical world

It is unsurprising that the groups discussed clinical stories given the discipline specific backgrounds of most of the participants. Some of the clinical stories were shared in a HEI setting and others remained shared and discussed solely in the clinical ‘world’. An

unexpected finding from the transcripts is the power that stories have in debrief mechanisms. This has not been reported in the story practices analysed in the literature.

A1: because it was so real, and I was standing at the front of the class crying and then you guys were crying. I suppose it was just kind of nice to share it there, I never got a chance to have a debrief after that incident...

A3: I like the stories in a department you know when you are in clinical and what the Radiographers talk about and sometimes it sort of happens in the staff room it is the kind of catch up sort of like a debrief in times when you recall or in horrible ways sorry, you know just thinking about it now where it has been really stressful kind of clinical situations and you recount it as a story.

S8: it's like what you said about debriefing after it has happened and sometimes you do, and you don't even think about it like that. On placement I would stay with someone else from my class and after work you would. Like when we had finished because we weren't even in the same departments you would catch up and tell each other the stories from the day. Whether it was good or bad and things like that. And on elective.

One participant even recalled sharing their story as a 'cathartic' release. Debriefing is an area devoid of research in Radiography which is surprising given the masses that exist in other healthcare related professions (Fey & Jenkins 2015; Neill & Wotton 2011; Salas et

al. 2008). It could be suggested that debrief practices happen on an informal and personal basis in contrast to the mechanised processes that exist in other health areas as cited above. Due to this procedural gap, Radiographers may have developed other ways to debrief themselves and their own practice teams in harrowing and stressful environments which are frequented in some imaging areas e.g. Trauma and CT.

Reflective practice was also closely tied to stories in the transcripts. Reflection was mentioned sixteen times in the data it is clear that it is a well embedded practice.

S5: I prefer stories like that, because they make you think. Like if something had happened differently and the outcome could have been different. It makes you consider the implications of what happened.

S7: if nothing went wrong then you wouldn't think about it.

M1: it just wasn't good you know at the time when you do look back and you reflect, and you have a debrief, and it is up there on the – 'yeah let's not do that again.'

S5: Sometimes if you have just seen a situation they would be like oh that happened last week. This happened, that happened, and you should have done that differently and they make you think about different aspects.

L2: so, they use them more like in debrief or in reflection when you are on placement? S5: yeah, they are more like reflective stories.

The reflective elements of story practice are an example of how the stories can be used to relate to the 'coda' part of story models – so what and future learning. Stories are seen as an easy and probably latent fit for reflective cycles for both staff and students. The literature matches these findings as previously discussed, Moon and Fowler (2007) proposed two ways of practically using personal story in lesson planning to develop reflective skills: story incidents and story 'sculpting'. Story incidents are collated as part of a student's learning journal (also Schwartz and Abbott 2006) or reflective diary, perhaps kept whilst attending clinical placements or work experience. What perhaps is a more novel finding is the close relation between the debriefing and the reflective process. It is evident that they are being used in practice as a 'coping' strategy. The coping strategies deployed by Radiographers is again not well covered in the literature with only a handful of studies coving the topic in an exploratory nature (Glaysher, Vallis & Reeves 2016; Turner & Ramlaul 2014). It is possible that Radiographers have developed story coping reflective strategies due to the lack of supporting frameworks in practice. It is certainly an area that therefore warrants further exploration and will be an important finding with regards to the impact of the research. Finally in this theme students discussed the use of storytelling in classes and with peers as a preparatory device for the clinical world.

S2: It was a good thing to help like prepare when you hear those stories, I didn't expect that, if that comes up I am not like completely shocked.

A4: from a student perspective I found that stories that your lecturer would tell you, you kind of always remembered them and if you ever felt you were even in a

slightly similar scenario it would always make you think oh well how did they deal with that and it always made me feel a little bit more prepared.

S5: we have been doing near peer teaching and I feel like all I have done is told stories. Like in the past couple of weeks when they have asked a question you sort of back up what you are saying with a story and you know it helps them understand what placement is like.

M1: this is for the first years that haven't been out on placement yet?

Students use stories in a variety of ways to deal with the 'transition' into the clinical world. The transition for students into clinical placements is again noted in the literature in a handful of studies, noteably Hyde (2015). However, none uncover the role of storytelling and sharing in the transition process. This has been mentioned a little in other disciplines in health, Hunter and Hunter (2006) used weekly sessions in their undergraduate midwifery program to dedicate to a storytelling intervention termed 'storytelling with a purpose'. As previously discussed they discovered that storytelling has a role in student transition, suggesting that reflective storytelling had enabled students to recognise growth into a 'competent and safe practitioner' from that of an undergraduate student (Hunter and Hunter 2006: 276). Also as previously mentioned, the HEA has an entire work stream dedicated to the continuing research and development around student transitions, highlighting its importance amongst access, retention, success and progression to employment or postgraduate education (HEA 2016). The findings advocate storytelling practices as a supporting pedagogy for student transitions.

To summarise, stories have an important role in relation to the clinical world. Both for providing a database from which to draw 'real' story and as discussed in the section for debrief, reflection and preparation. These findings illuminate the importance of stories in reflective practice and illustrate some novel conclusions of the use of storytelling in the areas of Radiographer debrief and student preparation. Story pedagogy has perhaps untapped potential in the role of student transitions.

Story practices

One of the main aims of the work was to try and ascertain some of the actual micro level 'practices' involved in storytelling in HE. A prevalent story practice in this part of the work appeared to be reciprocal story 'sharing' as previously discussed.

S1: something like share expertise – teaching students and yourself

---

A4: you have always got your opportunity to speak about your story one to one if it is a good or a bad experience you know you can share that with your peers you know there will be people in your class that you are uncomfortable sharing it with.

An interesting finding was that the 'retelling' of stories featured as a debriefing/reflective learning tool by students.

S8: On placement I would stay with someone else from my class and after work you would, like, when we had finished because we weren't even in the same departments you would catch up and tell each other the stories from the day. Whether it was good or bad and things like that. And on elective.

Sharing emotions, knowledge and experiences is a core component of transformative learning. Ideas and stories much first be 'shared' for others to critically examine how they think about information and encourage them to constructively challenge one another's (and indeed the academics) perspectives. Stories were 'shared' by students and educators, and by student to student. Sharing stories is therefore a major component of story practice. Educators drew from their 'real' experiences or indeed constructed relatable analogies to share their stories. Students appeared to share stories from their own learning experiences from the classroom and from clinical environments.

Story practices were thought of as extrinsic to the individual and was also largely connected to the 'environment' that the learning took place in. Academics, as previously discussed, used stories as an engagement tool again tapping into the 'edutainment' factor.

A1: Can I just ask a question of you guys. You know like when you are in class, as I know what I am like when I am in class. You feel yourself kinda drifting, especially if it's hot and that. Does a story wake you up? Or does it have a different kind of effect… rather than ramble, ramble, ramble, PowerPoint.

S4: Yeah, rather than watch something that is being read out in front of you cause then you start to think like I can do these notes at home. I don't have to listen I can just rest my hand on my chin.

S3: Word for word, so you see this slide here… it's difficult.

S4: …when someone tells a story it's interesting.

A1: oh, I've got a story…

S4: that's my favourite (chatter laughs)

A1: and then once I see you sort of all engaged am happy then and…

L1: and then you go for it!

All: (laughs)

Some environmental concerns however had a large impact on the story practices and, it could be framed, story *practise* that was taking place.

L2: I genuinely think that the better mood I am in the better my teaching is.

A2: absolutely, without a doubt.

L2: but then sometimes it can work the other way I could be in a bad mood and teaching can put me in a good mood because it kind of forces you to be.

A2: yeah but for ease of process, it is easier to go in feeling great and have a great lesson than it is going in feeling humph… I have had to park six miles away I am actually at the other side of the campus. I have arrived as a sweaty heap. Definitely, mood.

Parking was mentioned in the transcripts in 11 separate occasions from multiple stakeholders (A3; L2; S5; M1; S8; S9). It is really important not to overlook these perhaps 'trivial' experiences. They have an impact on the resultant teaching practices of staff – noticeable and felt by students, teaching staff and managers alike. Stress and mood upon arrival at work is well researched with car travel and subsequent car parking associated with higher levels of stress than other methods, such as cycling or walking (Brutus et al. 2017; Scott-Parker et al 2018). It is also important to note here the geographical location of the university and the travelling distances required by some students. In an institutional report, Waldron and Wilson (2015) found that over 550 of campus-based students lived more than 50 miles away from the institution, citing "how they underestimated the toll that regular attendance has on them in terms of tiredness."

Teaching staff should be mindful of their mood prior to teaching students, their resultant delivery may be impaired according to the findings of this study. Although parking permits for commuting students and staff can be requested, it may not be having an impact in term of the 'mood' of those in the learning community. It may be worthwhile evaluating whether additional support such as preferential parking could alleviate some stress for staff and students commuting large distances (whereby it is not possible to travel by other less stressful ways) to improve the 'readiness' to learn and teach.

Resources

The AI method incorporates a design phase and therefore it was no real surprise that the main discussion point concerning storytelling practices in reality was the resources surrounding them. Five resource second order themes were common to all groups; financial, emotional states, learning spaces, equipment and visual aids.

The marketization of HE, as previously discussed has led to many challenges for all working in the sector macro, meso and micro level practices. Its effects in action were apparent in the mix max discussions, interestingly, from all stakeholders including students:

S9: Implement it. So, first thing would be money?

A4: realistically what you would need is like a mock operating theatre…A CT scanner would be nice. You know shake that money tree. So, grants, fundraising.

L1: design phase so… money we would need money.

However, on the flip side of the barrier nature of money, it was also recognised that investment in successful learning enhancements could lead to income generation for the department:

A2: the training thing could definitely be a money maker.

A4: like a training academy.

A3: well it depends what kind of scanner you could get but you can get a scanner that you can use in a sort of slowed down environment for new graduates, clinical staff. A1: you can make money out of that for CPD.

This resource closely linked to the acquisition in new equipment and technology for use in the department. Radiography is a technology based medical profession involving the use of multi-million-pound equipment. Both students and staff valued 'hands-on' experience with the equipment for learning in a safe environment – simulated spaces in addition to the 'real world' placements.

S2: As much as we could tell stories about theatre it would not compare to if we had our own simulation which you could go do yourself. It's like stories can only take you so far, you have to experience it for yourself.

M1: back to the CT and you know it's so much better to be able to spool and go from top to bottom that would be fabulous something like that. Well you know the fact that we are very lucky to have the x-ray suite, but we are limited to what we can actually simulate down there, whereas if we had something like that, [CT equipment] it would be so much easier.

Facilities for learning are an asset for a vocational course such as Radiography. They allow students to orientate themselves to high pressure environments but in a 'safer' way, without the real-world consequences of the clinical environment. This links to the previous meta-ethnography findings in that 'setting and the visual' is of a key importance in story. It adds to the multi-modal embodied experience of a story.

Time was also seen as a finite resource and frequently discussed in a partnership with money. That the two appeared to be tied in a resource partnership is not co-incidental.

L1: ok so the design phase a significant amount of money - we need time.

L1: but if it is the virtual hospital we would need time and money.

S3: I suppose you need money for the running of it like peoples time.

It is apparent that the 'marketization' of HE is evident in the findings, and indeed reported from various stakeholders in the HEI, including students. It is closely aligned to the situational drivers already discussed for example the TEF. It is a surprise, however, that students are also concerning themselves with this consumer orientated environment. This was unexpected, especially since the research was carried out in Scotland whereby resident students are exempt from tuition fees. Tomlinson (2016) coined term 'positioned consumerism' which on the whole is represented in the views of the students in the study. Despite exemption from tuition fees, students are still financially challenged by attending HEI's in Scotland with current estimates of up to £10K annually for living costs (The

University of Edinburgh 2018). Allied health care students are also liable for some placement costs. Therefore, students often "question the value of their formal learning experiences and whether they were getting 'good value for money'" (Tomlinson 2016: 460) whilst on the whole a rejection of traditional consumer ideologies or as Ashwin et al. (2016) stated as the 'McUniversity' rejection. In other words, students question the value of higher education but reject wholesale consumerist ideologies.

Academics were acutely aware of the resources required of them in this HEI. They responded that equipment resources would help the 'marketability' and income generation of courses thus impacting on the recruitment, student numbers and retention. In their work concerning consumerism in the UK particularly from the viewpoint of the academic, Jabbar et al. (2018) found the themes and connections as in Figure 21, somewhat mapping to some of the comments made by academics in the AI groups.

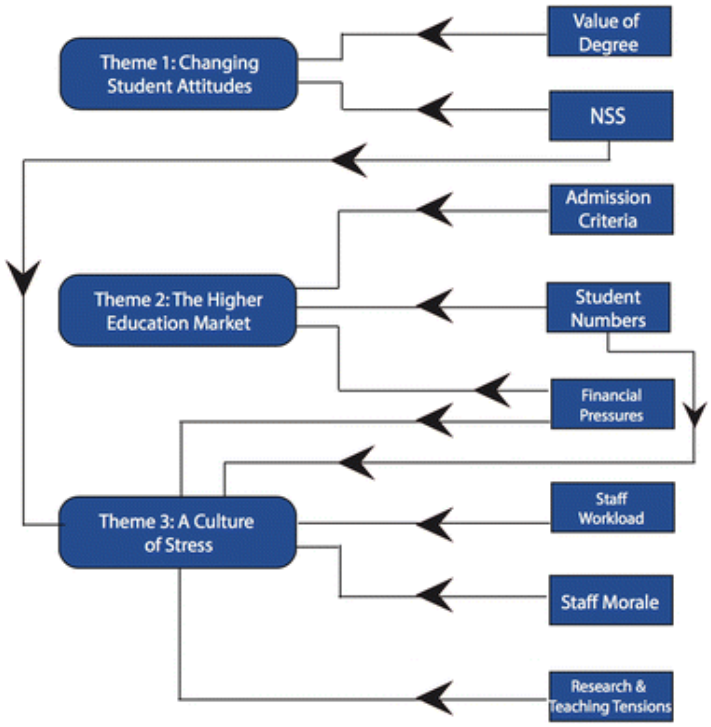


Figure 21. Emergent themes from academics' perspectives of consumerism in UK HE (Jabbar et al. 2018: 92).

This links to multiple comments made from different stakeholders and indeed different groups concerning the emotional state of the academic and the student. This has been discussed previously in this thesis. These external stressors (for example - parking) are not insignificant and impact upon the actual 'teaching practices' happening in the classroom. HEI management could see potential benefits to teaching and learning interactions by alleviating external stressors 'felt' by academics or providing support such as resilience training – coined by Martin (2013) as 'academic buoyancy'.

Learning spaces were identified as very important within the AI sessions, with one group choosing a customised learning room as an actionable outcome.

S6: so, the idea was that each year group would have their own room. So, like this is our room we could put like things up and posters so every day we would come up and remember it you know?

S4: then that means so you could also well one of our exams is where you talk about how you have progressed over the years, but you would physically see that because you would see what you did in first year compared to what you have done in fourth year.

L1: so, work to be shown in the year classroom from years one to four so how do we pull it in where is the stories. Do you take the opportunity to sort of talk about it?

S6: a story corner where you talk about placements.

S6: somewhere you can come even when you are not scheduled for class and be consumed by the content.

S4: instead of coming in and out and in and out you can really focus on what you are doing.

Personalising the rooms linked closely to the students being able to 'visualise' their own journeys and stories throughout the years. One voice even going as far as being 'consumed by the content'.

References to a 'safe-space' were also implied:

S4: in case people don't want to tell their stories, we could have a storybook, it could be online it could be you know anonymous, but you could send in things and you could tell your story. I didn't have a very good time because of this or this was really good.

This links back to previous literature findings from Hunter and Hunter (2006) and their 'safe talk guidelines' (table 7). It is important that psychological safety is considered when sharing stories. It has been discussed that they can be highly emotive, perhaps controversial and a vehicle for sharing experiences which may not have been positive.

In summary, emotional wellbeing could be considered a resource. It is an implicit but important dimension of storytelling. Creating environments which are conducive to learning through creation of 'safe-spaces', reduction of external stressors and supportive training is important for student satisfaction. The marketization of HE also cannot be

ignored. Students want a value-laden experience and there are considerable pressures on academic staff to market their courses. Storytelling practices are not immune to this resource need and time and money were highlighted as essential resources to creating effective storytelling practices.

A second important dimension for resourcing was the prevalence of equipment procurement. There was a clear appetite for equipment to enhance real world experiences for students without the real-world consequences in their learning. This was expressed through the medium of 'simulation or simulated practice'. In terms of frequency content analysis 'simulation' was discussed twenty-three times and in all groups.

S2: as much as we could tell stories about theatre. It would not compare to if we had our own simulation which you could go do yourself. It's like stories can only take you so far, you have to experience it for yourself.

S1: Patient volunteers like when we had the lecturer that was dressed up simulating the burns and stuff, more like that.

S7: it is so you get to know what protocols are there is real life and then you can simulate the same.

A3: I was thinking about a room you could adapt and do paediatric examinations, sort of talk about stories and simulations that you could set up and you could do

children of different ages you know how you decorate with them as part of a paediatric event of some kind for paediatrics.

Simulated practice or as commonly expressed as simulation-based education (SBE) is relatively well researched in Radiography (Shiner 2018; Aura et al. 2016; Shanahan 2016). However, what is a new and exciting development is the central role that the story and storytelling have in SBE. Rather than just a process of practicing techniques which are unconnected, a central story may enhance the learning experience. Providing a 'back-story', revolving characters, contexts and outcomes could potentially enhance the learning experiences for students, with regards to increased engagement. Additionally, and as discussed previously the role of adapting 'real' stories into simulations was seen as extremely valuable learning experiences, especially since the actual or real-world outcomes may be altered in some way with the simulations. Students also discussed their desire, during experienced simulations on the course, to engage more with other health professionals.

S2: and so we were thinking like downstairs of having a simulated trauma room. It's like a resus/trauma sort of place and A1 she said she would love that thing and then we could have our classes in there.

S7: does anyone else use do that, do like the nurses use it?

S3: and that is another side it's getting to work with the nurses, because that is who we will probably meet when we go to resus.

S2: yep we were saying that we wanted to do more IPE but with other people rather than just Physio and OT.

S7: rather than sitting in lecturers/classes together actually doing things.

Simulated story environments could allow for more of a 'co-connection' for learners – that they are indeed communities of learners with a common objective – the care of the patient. Fostering ongoing working relationships once learners enter the clinical world such as this are vital for patient safety. IPE enhanced with simulated stories could create connected communities of learners which may advance into the working world. This is speculative but is worthy of further investigation given the absolute importance of patient safety.

Tied almost in partnership with equipment is the use of visual aids. This was demonstrated through the visual impact of simulation (e.g. 'seeing burns' with simulated make-up or *moulage*; 'seeing images' using current technologies; 'seeing' previous work in personalised classrooms). The visual impact of resources should not be marginalised. It would appear that in order to have a high impact there needed to be a 'visual' mode. This relates directly to the stage one literature review whereby 'the visual or setting' was highlighted by McKillop (2007), James, Martinez & Herbers (2015) and Moon and Fowler (2008). As previously discussed the impact of storytelling from a multi-modal perspective was imperative for the learning experience. It is important to make the connection again that this has importance for Radiography students who often have variable learning 'settings and simulations'; for example, the clinical environment.

It may be considered that 'seeing' or the visual element of a story simulation is a non-negotiable element for a transformative experience. Several students from the all groups in

the AI groups remembered a session and subsequent learning/recall whereby burns *moulage* was used to simulate a patient with burns (Shiner 2016).

S5: Yeah I think we can tell when you are telling a story that you really care about it and like if it is something that has affected you when you were in practice years ago and I remember when A1 was telling us about one of her first nightshifts then and it was all about burns patients and she said it was really upsetting and you felt upset because you could see that she was still really affected by it. It is clear to us and makes us appreciate the story a bit more I think.

L2: I think that is what we are saying in terms of the learning community is that if the person that is telling the story the academic, is engaged and is passionate about what they are saying. You then as the learners pick up on that and that's say if someone just came and was just sort of told on a lesson plan, oh this is the story. You are actually probably not remember it at all even though it might have been a really good story or example.

Transformative opportunities for learning are difficult to 'create'. In this example here, the 'burns' story developed into a sharing of emotions and mutual appreciation. It is 'engaging' due to the perceived authenticity. These factors culminate to a memorable recollection. Linking back to the literature in this thesis, it is noteworthy to mention that the simulation experiences students frequented were of 'high-pressure' contexts. They were either environments associated with stress such as Resus and Theatre for example or challenging immediate situations; patients presenting with severe/life-threatening injuries

e.g. burns. ‘Disorientating dilemmas’ perhaps challenge the mental state of a learner and could serve as a potential catalyst for transformative learning as previously discussed. The findings in the AI sessions further support this claim. Simulated based education with central storytelling could ‘open us up to the uncanny, the unsettling, and the unfamiliar rather than create cosy homely environments that lull us into a false sense of security (Quinn 2010: 96). This could potentially enhance and open the possibility of transformative learning.

In summary, resourcing has a fundamental role in contemporary HE. Emotional wellbeing may have more of an important role in the face to face delivery and facilitation of classroom sessions then previously reported. What senior employees of a HEI might consider menial, such as access and ease of parking, were stated to have a large effect on the delivery of teaching due to impacted emotional states – this was noted by both staff and students. Consideration and reduction of external stressors and supporting resilience training may be strategies to ensure emotional wellbeing in our learning communities. Equipment for simulated learning may enhance the ‘marketability’ of a course (with a strong vocational core) and may ultimately increase the number of transformative learning experiences. Radiography educators should therefore, consider using central ‘stories’ with emotive dimensions in their simulations potentially with a visual impact to enhance further the learning experiences.

Trustworthiness and integrity

Researching in social sciences and qualitative domains requires; relational, social, personal, political and linguistic situational insight (Cormier 2017). It can be noted here that there is some agreement that “what seems to be more important for research is not

whether researchers are insiders or outsiders, a combination of both or somewhere in between but rather if they are aware of their positionalities" (Cormier 2017: 331). Adopting an upfront and reflexive position can then allow the reader to situate the research and ultimately the findings adding an element of trustworthiness to the research (Reyes 2005).

The positionality, ontological and epistemological considerations of position of the researcher have been previously discussed. Insider status carries certain advantages and disadvantages. There is a common argument that persists in the literature that insider research is perceived as less rigorous and 'valid' as researchers have a personal stake and substantive emotional investment (Alvesson 2003 for example). However, what these researchers do not state, is that in some way "we are all insiders of many systems-our families, communities and organisations-and the knowledge we have of these systems is rich and complex" (Brannick & Coghlan 2007: 60).

Reflexivity can be thought of as pertaining to two contexts; the population group and the issues under study. The social and personal relations with all of the participants, including the students, has been fostered over a period of years of working within the discipline of Radiography. This 'pre-understanding' of the people involved in the research has been illuminated both as advantageous and disadvantageous. With the aims of this research project it could be argued that being native to the setting uncovers what communities of learning are 'really like' - traditional approaches may not have been able to uncover some of these 'truths (Brannick & Coghlan 2007). It has been suggested, Fontes (1998) for example that researchers cannot fully comprehend what it is to be 'like' in situations whereby they have no personal lived experiences. Having worked as a clinical Radiographer in several departments across England, Wales and Scotland and then as an

academic for eight years therefore adds to a shared understanding of the situational and emotional components that were discussed in the AI sessions.

Relating to the second dimension 'the issues under study', Berger (2015: 230) suggested "three practical measures for maintaining the necessary balance between the researcher's own experience and that of the participants include;

- the use of a log
- repeated review
- seeking peer consultation"

Throughout the project, communications with the supervisor were reflected upon using Gibbs (1988) reflective cycle (Figure 22) and documented in a reflective journal.

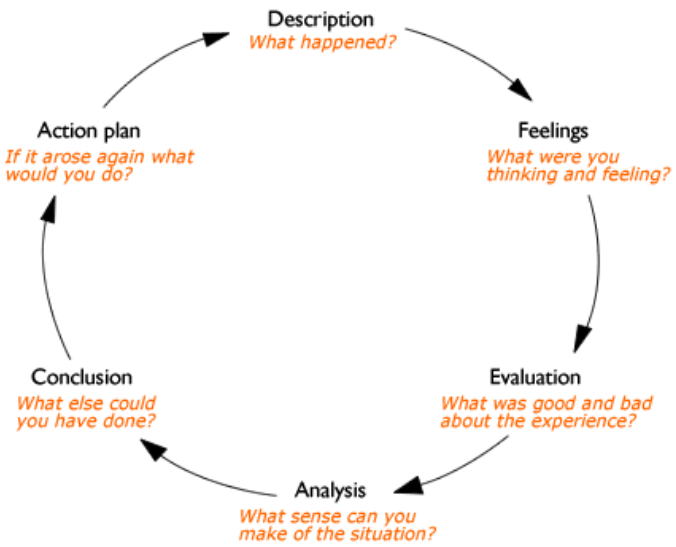


Figure 22. Gibbs reflective cycle (1988).

Reflexivity, for example, helped in the analysis of the transcripts at the beginning of the coding process. I felt that the NVivo coding software was not particularly useful and this was noted in my diary dated from December 2017 (see figure 23).

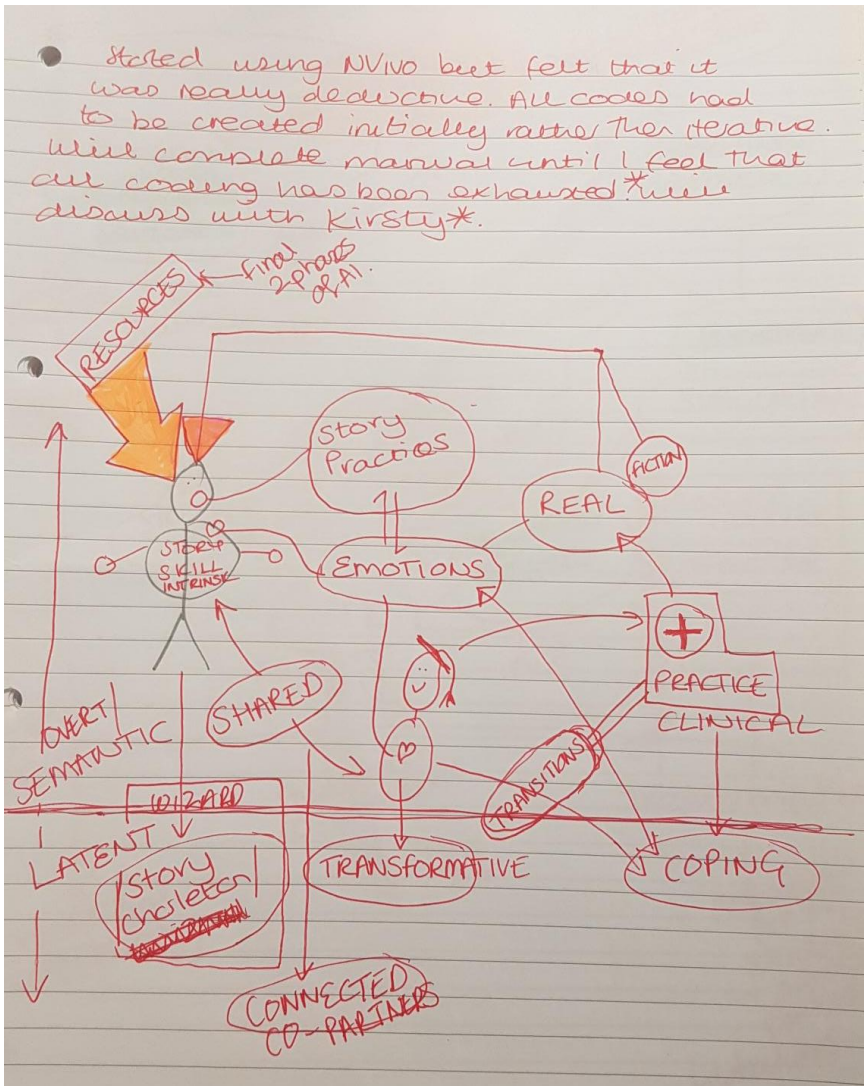


Figure 23: Diary entry for reflexivity.

I discussed this with my supervisor the following week and a more inductive coding process was followed shown also in figure 23.

Looking for evidence of reflexivity was done through a process I defined as ‘possibility reflexivity’. This I based on the assumption that an absence of reflexivity could lead to an acceptance of apparent linearity, obscuring all sorts of unexpected possibilities (Russel & Kelly 2002; Berger 2015). Many unexpected findings/possibilities were uncovered, with most involving discussion with my research supervisor. For example; the concept of the

‘story charlatan’ was discovered in the literature but then changed to a ‘wizard’ from analysis of the findings. It was interesting and indeed novel that the learners acknowledge the ‘trick’ but also recognised that it was in ‘the spirit’ of learning.

In addition to the reflexivity component of trustworthiness, member checking was used to add integrity to the results analysis. All participants were sent via email a full verbatim transcript of the AI group sessions. Member checking is whereby qualitative data is returned to participants to check for accuracy and resonance with their experiences prior to analysis or ‘at the source’ (Birt et al. 2016). Overall findings/discussion sections were not sent out for member checking as group findings were pooled and some parts may not have been representative for all individuals or indeed groups. Transcript return (member checking) also features in the COREQ (Consolidated criteria for reporting qualitative research) checklist (Booth et al. 2014). Several participants responded to the request to confirm that they felt it was an accurate translation of the sessions. No changes were requested. There was the potential for some linguistic translation errors as I am not from the locale where the research was conducted. Linguistic differences in the trustworthiness of qualitative research have been known to cause potential errors (Cormier 2017). The region where the research was conducted was from the North-east of Scotland, whereby a unique dialect known as ‘Doric’ is used. This was apparent in some of the verbatim transcription. Some degree of integrity can be made as ‘Doric’ participants verified that my transcriptions were accurate also.

To complete the findings chapter presented here, the findings of the AI study have been compared and on occasion contrasted to the meta-ethnographic literature concerning storytelling ‘practices’. These have been explored and analysed for both overt and latent meaning. The processes for assuring credible and trustworthy reporting have also been reported, to assure the reader of transparency of process.

Chapter 6: Articulation

> *"The ability to translate research into practice is fundamental to assuring the quality of the healthcare delivery system."* (Bradley et al. 2004: 1875)

Articulating the findings of the research into the education of the Radiography workforce may have direct and indirect consequences on future clinical practice. Price (2015) argues that responsibility for embedding research (and therefore resulting evidence-based practice) within the Radiography profession ultimately lies with university departments and the academics working in those departments. It was apparent from the start of this process through to this point, that Storytelling for teaching in Radiography is best explained as 'practice creep' (Snaith 2016). Whereby a "gradual, often imperceptible, change in practice occurs with, or without, a grounded theory or evidence base. The evolution slowly becomes accepted as the 'norm' with Radiographers sharing innovations with colleagues" (Snaith 2016: 267). There is no documented research that could be found concerning storytelling for teaching in Radiography. Practical articulation of the findings is paramount to shed light and encourage a movement in this area of education.

Articulation of the findings

It may be useful to return to the research question when looking to articulate the findings:

> *How is 'storytelling for teaching' understood and incorporated by educators within Diagnostic Radiography?*

The purpose now is to relate the findings back to contemporary education and practice occurring within HEIs delivering Radiography programmes. In terms of pragmatic

articulation three main areas of development will be explored; Simulation Based Education (SBE); Classroom Practices; and, Nurturing of Intrinsic Story Skills – Authenticity.

SBE is becoming big business (Maloney & Haines 2016); a buzzword in allied health professional and medical training programmes. Setting and the visual effects of simulation was seen as an opportunity for transformative learning in the findings of this study. NHS Health Education England (2018) has committed to developing "a national strategy…to ensure that we can continue to ensure equity of access to simulation education and training across England that provides value for money and delivers patient-centred and high-quality educational outcomes." It should be noted here that NHS Scotland is devolved from NHS England but map and mirror to many practices within their organisations. In the 'Association for Simulated Practice in Healthcare (ASPiH)' (2016) documentation (Figure 24) - whilst context is a central feature, as seen in figure 24, there is no mention of story.

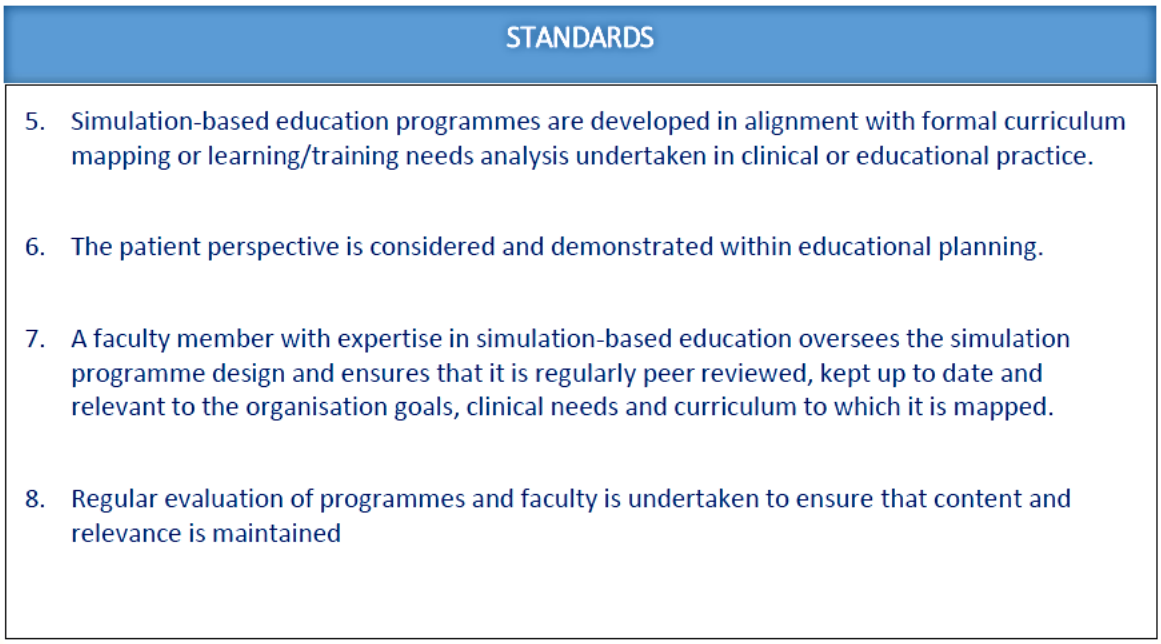


Figure 24. Standards for simulation-based education in healthcare (3. Activity Context) (ASPiH 2016).

Storytelling was seen as a key ‘enhancement of simulation’ of the participants in this study. This is unsurprising given the literatures multiple referencing to ‘relatability’ as found in the meta-ethnographic literature review. Educators working in Radiography SBE (and indeed perhaps other AHP disciplines) should make efforts to incorporate ‘expert patients’ with lived experiences in the pathologies/situations being simulated. There should also be a realistic ‘backstory’ of the patient and the scenario which is relatable to learners in some way. Teaching sessions could be centred around a ‘story’ with simulation being incorporated into the practical elements of treatment at the ‘end’ of the patient’s story, rather than being centred on the ‘simulation’ practice and set-up itself. Training in SBE for Radiography educators has been recommended as an area for development (Shiner 2018) but there has been no mention of ‘story’ within this field in education. Storytelling has been found to be of key importance in the scenarios and discussions centred on simulation in this project and the importance of this should not be downplayed in the field of SBE going forward. It is increasingly noted in the literature that, even if SBE is effective, it does not mean that the cost of providing it is justified (Haines et al. 2014). Delivering SBE with explicit storytelling could be a potentially cost-effective enhancement requiring further exploration.

One of the main driving forces personally for the research project was the ‘how’ to incorporate storytelling into LTA sessions – what are the actual storytelling practices? And can they be shaped into a ‘cookie-cutter’ model? The main articulation for practice here is to give pragmatic ‘practices’ that educators can use to create learning environment whereby storytelling is successful. This includes a commitment to ‘safe spaces’ (Hunter and Hunter 2006) and setting up clear ‘storytelling’ rationales, inductions or acquaintances into story pedagogy (Haigh and Hardy 2010; Alsop, Moreton and Nesi 2013 for example).

Deliberate attention to resources can also enhance the storytelling practices. SBE using technologies which have a visual impact (e.g. Large CT equipment, *moulage*) can create environments which open transformative learning experiences for example which may be uncomfortable, emotive and unexpected. Educators should also be mindful of their emotional state in HE, there was some references made in the discussions that external stressors had an impact on how 'well' an educator felt they were able to deliver sessions. Resilience training for academic staff may be useful to enable educators to 'edu-tain' and share experiences effectively. Management of HEI's could work more effectively with staff and student bodies to highlight what may be considered 'small' issues which impact both learner and educator emotional states.

With reference to practices of storytelling perhaps the most relevant information for articulation of findings is the nurturing of one of the intrinsic story skills: authenticity. Not all educators have the capacity to be viewed as authentic however. Studies have shown that perceived 'authenticity' of academic staff by students may be heavily biased by gender and race (Boring 2017; Ray 2018). Student evaluations of teaching, despite apparent bias, appear set to remain. Outwith of these biases, educators can develop their own authenticity by demonstrating external practices such as passion (based on subject expertise), enthusiasm and sharing emotions (humour, shock and/or sadness in the findings of this project). Student satisfaction has been discussed with regard to central importance now and into the future. Authentic educators are regarded positively by students. Focussing efforts on these practices could enhance the learning experiences despite the literature highlighting the concerns regarding 'lacking in skill concerning story practices' (Haigh and Hardy 2010; Alsop, Moreton and Nesi 2013; Karim 2014; Flanagan 2015; James, Martinez and Herbers 2015). Academic development support concerning storytelling

practices for staff should be centred on developing authenticity via passion, enthusiasm and emotive sharing as discussed.

Limitations

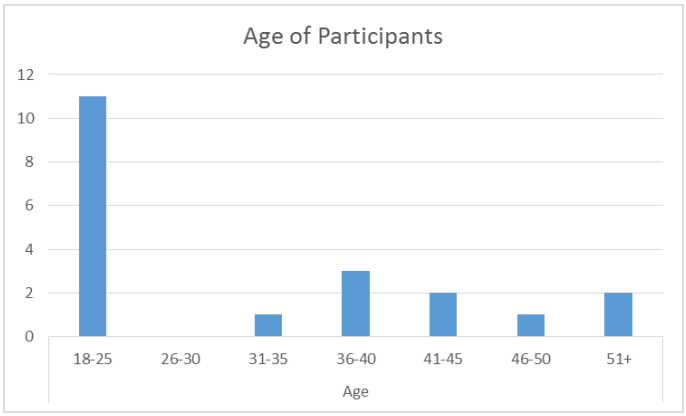
There were some limitations identified in the planning, execution and analysis of the research.

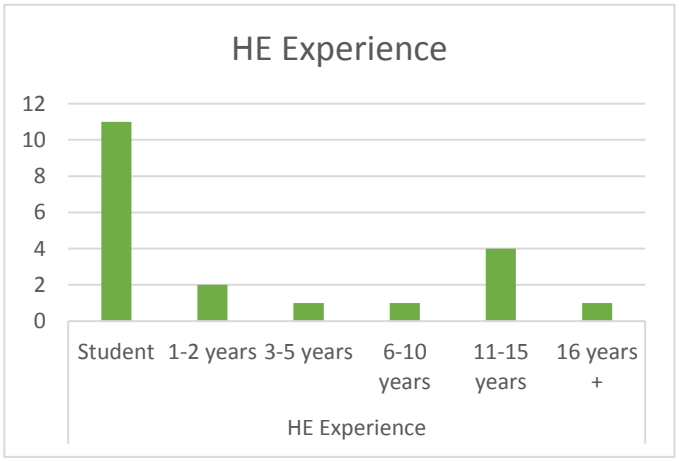
There are some methodological criticisms of meta-ethnographic literature reviews as previously discussed. It is possible that there were some 'grey' research pieces or perhaps some varying semantic use of the word 'practice' which meant that some literature was excluded from the database searching. The main objective of the literature review phase was to understand a more 'robust' view of storytelling practice. This was realised with a synthesised model. There were many common themes which interlinked with the 'active' stage of the research; the AI groups.

It is important to state here again that AI is not a 'panacea' of approach. AI focuses primarily on 'best practice' and what gives life. Critique of appreciative inquiry is indeed rare, it can however be found (Dick, 2004) and it centres on this 'too Pollyanna-ish' or excessive focus on 'warm, fuzzy group hugs' (Fitzgerald, Murrell & Newman, 2001). The largest methodological limitation therefore could be centred on a potential to omit 'problems' or the 'realities' involved with the practice of storytelling. This was to some extent mitigated by the meta-ethnographic literature review which was centred on practice - that allowed for the positives and the negatives surrounding storytelling practice. Nevertheless, some responses in the AI groups did concern the challenges of story practice but it should be highlighted that these were in the minority. An attempt was made to

highlight the pitfalls in the reporting of the meta-ethnography literature review to balance for the methodology of AI.

It was hoped to recruit more participants to the second stage of the project. An important limitation to note in the project was the absence of any clinical Radiography educators/practitioners in the research sample in stage 2. The decision was taken to transfer findings to ‘actual’ clinical practice therefore in a marginal capacity. There are major translations into the actual clinical practice, but further work is required to make any detailed articulation. The sample size whilst including 18 participants was not large enough to further categorise into smaller components. There was additionally and therefore expectably no-normal distribution of age, HE experiences and clinical experience also (Figure 25).





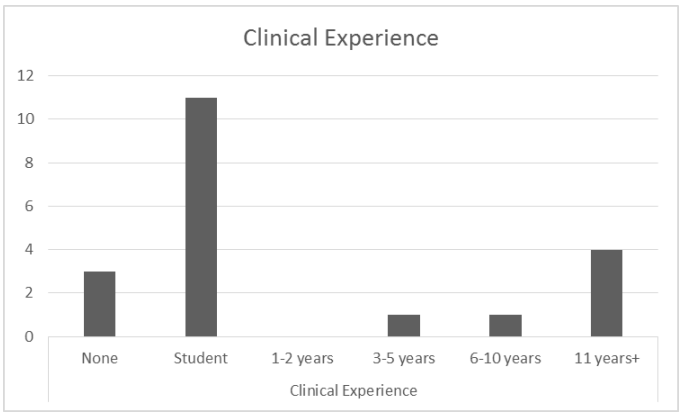


Figure 25: Distribution of age, HE and Clinical experience of participants

There was also an overwhelming female ‘voice’ for the second stage of the research project as see in figure 26.

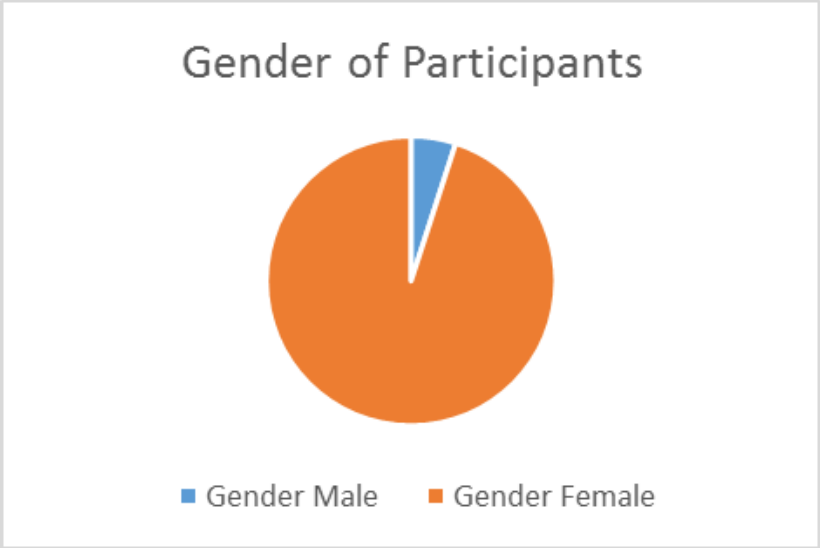


Figure 26: Gender of participants

The gender split shown in figure 26, however is fairly representative of the Radiography workforce. From a large study involving 1845 Diagnostic Radiographers in 2009, females accounted for 84% of Diagnostic Radiographers in the study, with only 16% being male (Edwards et al. 2009). Diagnostic Radiography is predominately a 'female' profession similarly to other AHPs (Bogg and Hussain 2010).

The study population of the project is another area whereby caution should be applied when attempting to make extrapolations to other learning communities in the discipline of imaging and in other allied health professional practice and education. However, in terms of representation of the 'school' learning communities targeted in the study population, the participation was:

- 53% of the UG stage 4 Radiography student group
- 100% of the Diagnostic Radiography academic team
- 0% of the practice educators for Radiography
- 75% of the learning enhancement co-ordination team for the school
- 100% of the e-learning development team

- 33% of the support/administration for the school

Potentially the ‘numbers’ of each group in the AI sessions could have caused some potential power imbalances. Attempts were made to mitigate this by using as termed by Fry (2017) ‘Mix-Max’ groups as previously discussed. On reflection it was observed that this was on the most part successful with a few exceptions, for example administrative support power imbalance (discussed further in Implementation) and perhaps from a ‘pragmatics’ perspective with the second workshop dedicated to designing the change. Participants were permitted to ‘choose’ the change intervention they wanted to design and develop. It transpired that Group one in this phase consisted of all ‘student’ participants – contrasting the careful ‘Mix-max’ design deployed in the first workshop. The ‘choice’ part is central to the AI ethos in that when individuals are motivated and passionate they are inspired to engage and create. It was apparent on analysis of this groups transcribed conversations that they did not have the ‘project management’ knowledge and skills required to deliver and plan the idea that they had chosen.

It is perhaps important to evaluate here whether the method of AI ‘did’ contribute to educational change. The over-riding limitation of this part of the research is that none of the planned interventions have yet been realised fully – although it must be noted that all have been realised in part. These were:

1. Theatre and trauma simulation suite
2. CT Scanner
3. Personalised classroom

Updates from the change interventions is that the HEI has an institutional commitment to upgrading and increasing the clinical simulation environments (1) which started in June 2018 and will be completed by September 2019. This will include updated equipment and

SMOT™ recording facilities and a large increase in space to incorporate more varied simulation environments such as trauma and theatre. This may include the procurement of specialised imaging equipment such as cross-sectional imaging equipment (2). The imaging department has been involved in the planning so far and has been able to feedback the student voice from this research. Intervention 3 has not been implemented for the session beginning in September 2018. The lack of implementation of the AI groups could be argued a large limitation since the purpose of the method is to 'enact' change.

There are several factors however which contributed to some of the change interventions 'losing' momentum. The students in the study were stage four final year undergraduates and in the 3 months following the AI groups graduated from the institution. Additionally, the imaging team themselves have faced several challenges; institutional role change and review, two members of the team departing and a programme re-validation. Without key group members to continue to change 'drive' the progress would inevitably slow. Additionally, with competing priorities such as a re-validation of the programme, efforts are inevitably shifted into those areas. Regarding analysis, reasonable and practicable steps were taken to ensure the integrity and trustworthiness of the reporting of the findings as discussed.

In summary, the main limitations of the work have been reviewed with explanations and further considerations as explained.

Implementation

Implementing learning, teaching and assessment (LTA) 'interventions' requires knowledge of a range of contexts within the learning community to be enacted upon. Heitink et al. (2016: 59) developed a model for implementation regarding a classroom practice

intervention – in that work concerning ‘assessment for learning’. However, the model appears to be a useful starting point when considering implementing storytelling into learning, teaching and assessment and was adapted from Heitink e al. (2016) in figure 27.

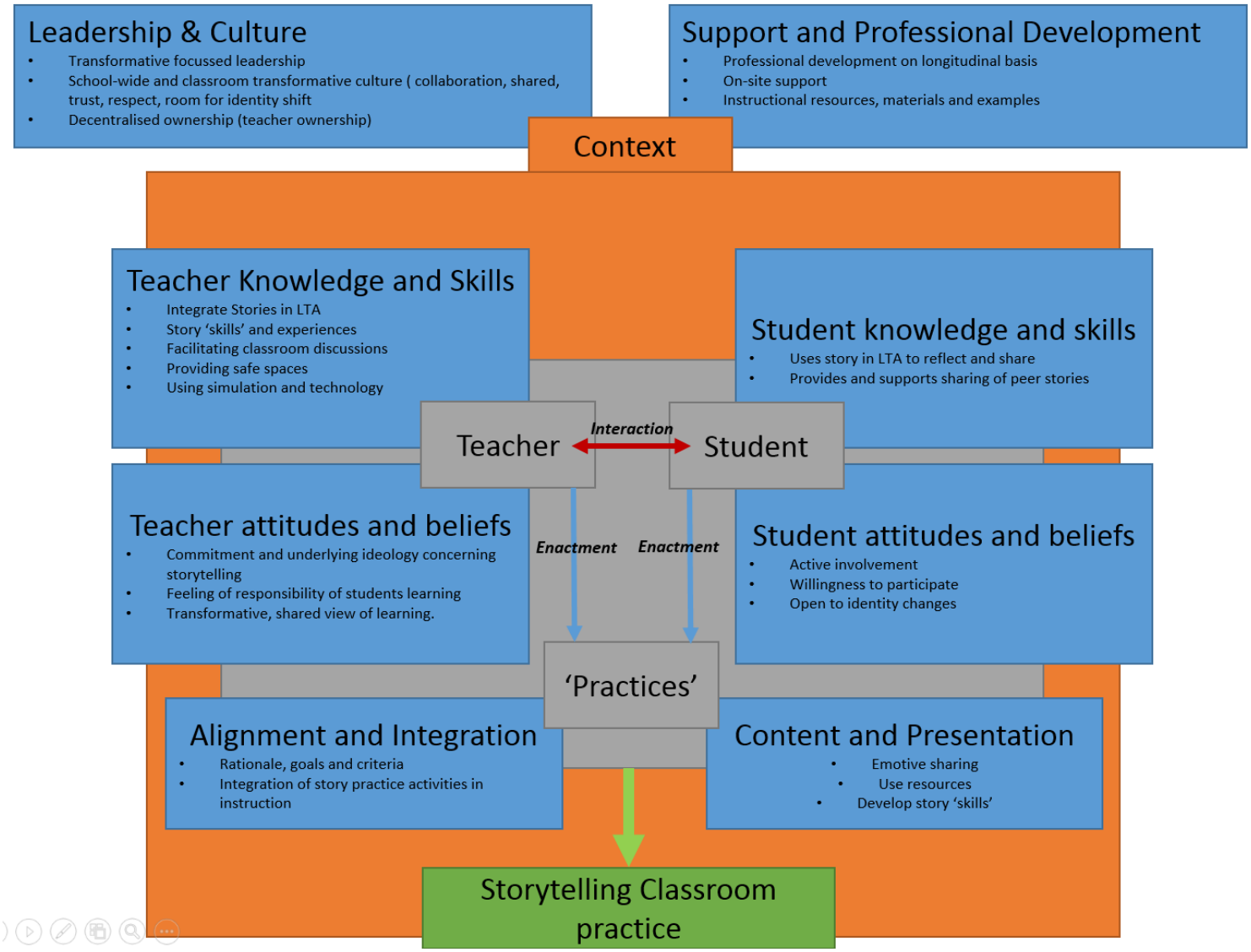


Figure 27. Implementation conceptual model for classroom practices for storytelling for teaching. Adapted from Heitink et al. (2016: 59)

‘Leadership and culture’ and ‘support and professional development’ is an important context to consider in the community whereby LTA practices are to be implemented (as shown in figure 27). They overarch the success of implementation. With reference to the significance of the findings it needs to be highlighted here that there was very limited input regarding the support services/administration participant in the AI groups. In terms of dialogue the administration participant only introduced themselves to the group and did not contribute to the discussions. They did not attend the second session. “Administrative support, which has previously been seen as a peripheral function, has now become more central…and has also become essential for the success of teaching and research” (Ryttbery & Geschwind 2017: 335). This is not in keeping with current ‘thought vignettes’ on the topic; “students, and academic staff, appreciate the “departmental” professional service staff with whom they interact on a daily basis, who are their first, second and even third point of contact, and who, in the main, are a constant in the organisation, holding a wealth of useful and practical knowledge” (Fowler 2015: 1). It is vital therefore, to include and value contributions towards learning changes and community by support and administration staff. There is apparent ‘power’ issue/s occurring here in this study which needs to be explored for the implementation of LTA practices to be successful. This can be explored using Engeström (2014) contradictions within human activity systems. There is a potential primary inner contradiction within the subject or the rules/traditions/rituals. This ultimately has an effect on the secondary contradiction between the constituents of the central activity (storytelling practices) – the individuals, the rules and the communities (The AI group). There have been some agitators to the relationships amongst HEI staff though, with Ginsberg (2011) suggesting that support staff are in fact responsible in some way for the ‘fall of the faculty’; that is, they are absorbing valuable resources away from academic departments. It is suggested therefore that the support staff in departments are

included more into the ‘every-day’ LTA activities to foster a more collegiate community and stabilise any potential power imbalances.

The leadership and culture of the teaching team also needs to be transformative focussed pedagogically with de-centralised ownership. There was a wide array of classroom practices occurring on analysis of the AI group transcriptions. This is evidence somewhat of the autonomy of practice that educators have concerning their ownership of their teaching. The level or ‘use of’ of practices through storytelling were somewhat limited however - with a correlation to more experienced staff (L3, A1, M1 combined experience 50+ years)

A4: yeah, I suppose you couldn’t really speak about a story teaching a story [concerning] radiographic physics you know…

L3: …would you not need to? Sorry to jump in here and I am not a Radiographer but to make it possible to engage with. I am just putting that round the table.

Providing additional support concerning transformative pedagogies may be required with more junior academic staff to provide a learning environment suitable to implement storytelling practices. It is also important to note here the debate concerning opening the floor to the emotional components of learning as previously discussed. This may be an important cultural difference amongst academic disciplines, which may in some part explain why storytelling practices may not be well received by some staff and or students.

Additionally, with regards to the other implementation features, much has been discussed previously concerning the knowledge and skills and attitudes and beliefs of both staff and students, as has the content and the ‘authenticity’ of presentation. Another important

dimension of implementation is ‘alignment and integration’. Students appreciate goals and rationales for storytelling practices - as found in the work of Haigh and Hardy (2010), discussed previously in this thesis. They stated that in order for students to adapt to this way of teaching informal settings and approach were essential and the storytelling ‘acquainting’ may be useful in introductory sessions (Alsop, Moreton and Nesi 2013; James, Martinez and Herbers 2015; Miley 2009).

The two ‘context’ features of implementation are often mitigated in the planning of classroom practices. It is important that they are fully considered, and strategies put in place to ensure an LTA intervention such as storytelling for teaching is well received.

Reflection

Reflective writing is evidence of reflective thinking. This section will reflect upon both the research and my personal journey over the last four years using Gibbs (1988) model to implicitly, and on occasion explicitly, frame the reflection and, as critically demands a forward look to the horizon. The powerful imagery of the Janus head (figure 28) remains as a mainstay for the reflective process.

Figure 28 Janus imagery.

The first section will describe the research journey, this reflection will primarily focus on 'the research project phase' of the journey. I decided to apply onto the Ph.D. programme in January 2014. An exert of my personal statement for the application process demonstrates my 'disbelief' perhaps at undertaking this level of study;

> *"If asked about my ten-year development plan on exiting my first degree, I certainly would not have envisioned embarking on a PhD. I would whole heartedly say that my professional development over these last 11 years has been opportunistic and explorative. Although meandering, this approach has introduced me to fascinating individuals, distant places and rewarding job roles."*

The Ph.D. programme was undertaken via the online distance learning (ODL) route. The first two years involved structured modular learning, followed by a confirmation period and then the 'research' phase and thesis completion over the final two years.

It is quite challenging looking at this whole journey to articulate how I was feeling and thinking. It is balanced to say that the 'personal' journey has been very difficult emotionally. Doctoral research has been found to be at times a lonely, demanding, creative and, not least, emotional venture (Boucher and Smyth, 2004; Hockey, 1995). I have attempted to look back with my 'balance' glasses. I think that I started the research process with a degree of excitement. I had positive and constructive feedback following the confirmation process and enthusiasm for the next stages of the programme having achieved good grades from part one of the programme. I do not think I was adequately resilient both academically and personally for the next phases of the research. I felt that towards the end of the first study I began to have huge self-doubt regarding the process,

perhaps triggered by a rejection from a journal for part one of the research, the literature review. I remember still vividly the response from a Journal editor:

> *"You will see that although the referees find some merit in the paper it is required that substantial revisions be done before we can consider it further. Indeed, my judgement is that this is very close to a 'reject'. However, with VERY thorough revision it may be possible to turn this into an interesting and worthwhile article."*

I felt unprepared for this level of rejection and it is certainly something which is common place in academia. Looking at this now I am able to see the 'worthwhile' and 'merit' in the work. However, at the time, along with other personal issues I slipped into a difficult time with my mental health. The progress, academically, of the research reached a hiatus whereby I felt I disengaged from the planning of the 'active' part or stage two of the research. In part due to feelings of self-doubt, I reacted uncharacteristically – feeling that it was the institution and supervisors 'fault' for my situation. It is surprising for me to write now with hindsight the effect that psychological well-being has on altered 'thinking' and acting. However, I was encouraged by my supervisor to seek support for my mental health and wellbeing and began again to plan and engage with the second part of the study. I can again remember, with much detail, the very point that I felt I could perhaps get to the end of this journey.

When I am evaluating the research journey I can reflect on the experiences both positively and the challenges it presented. The 'good' points predominately were the ones I was most concerned with! The AI groups went very positively, I enjoyed a six-week AI training programme which supported resources I used in the session. Additionally, a group of the students saw me after the session to tell me how valued the process itself made them feel in terms of their 'voices'. Several participants also emailed me after the member checking

process. They confirmed not only the accuracy of the transcripts but the effect and continuing effects the 'process' had on them and that the AI model itself was going to be used when planning future changes. The difficult parts of the research journey was the constant questioning of not only the 'work' but also, and to a much larger extent, of self.

What sense can be made of the situation? I had read recently the perhaps oversight of the 'grit' required to come through a Ph.D. process (Wolos 2018). Perhaps, it is relieving to discover that my experiences were not unique and that the resilience I have developed looking back will further prepare me for future life in academia. For the 'academic' component - the hiatus of progress I believe enhanced the development of the work as the space it afforded helped me to critically think and plan.

In conclusion I think that adhering more closely to the Gantt chart plan would have been more helpful for my wellbeing. However perhaps the plan itself was a little unrealistic in its time frames and this is something that I will take forward. The chart itself lacked 'milestone trophies' used in gamification of project progress. Milestones would have helped me to celebrate stages of completion rather than feeling at times overwhelmed by the amount of work still remaining. This is certainly something I will do going forward. Concerning the actual execution of the two studies as part of the project they were a success, measured by a legacy of practice and skills learnt throughout the research journey. For example, I used the meta-ethnographic review methodology in a European project I began following study one – which was ultimately published and awarded a highly commended award from the publisher (Wareing et. al 2018; Nightingale 2018). I also review for an academic journal 'The Internet and Higher Education' as a result of the feedback I received as discussed in the reflection I always balance any comments I make regarding changes with highlights of good practice and interesting findings. I think as a learning community reviewer feedback should be fair but also balanced. Finally, as a

result of this doctoral journey I recently was successful at being appointed to the role of academic practice developer for the institution. The level of critical ability and theoretical knowledge was commended on my application and this is wholly due to this programme of study.

In summary the Janus looking forward remains the final reflections of the process. I felt it was most meaningful for me to complete a personal development plan (PDP[1]) as a result of the Ph.D. process. Arguably the most important process of a reflection is the resulting action plan or as Rolfe (2002) states the 'now what or where now'. In the short term the objectives will be to successfully defend the thesis and disseminate the work to the wider community. I will need to ask for and follow guidance and advice from co-workers and my supervisor and look for support from the Radiography community to disseminate at the work via publication and conference. In the medium term the plan would be to use the skills and knowledge from the research process to undertake high quality research for the institution regarding academic development being mindful of previous successes when inevitable rejection occurs. I often find the long term difficult to visualise. It has been an incredibly useful exercise to go back to the start of the journey for this reflection. Perhaps an over-arching theme that I can see is that I will need to develop more self-belief and confidence in my abilities. The move into the new role will certainly allow for a great deal of career flexibility and the attributes of 'grit' and determination will no doubt need to be re-visited in the future. I have valued the reflective component of this chapter and have found it to be a cathartic exercise. It has also required me to review my thesis and the journey process in its entirety which has made me appreciate the distance travelled.

Future work

Several interesting and novel findings have been illuminated in the undertaking of this work that warrant future development. The recommendations are centred on the suggestions for the main articulations from this work. This includes storytelling in SBE, educator authenticity and stories and the emotional impact on classroom learning for both staff and student. Further contexts and wider application will need to be undertaken in 'actual' clinical situations.

Research concerning the addition of storytelling into Radiography SBE is seen as a primary articulation of this work (as discussed in the articulation of findings section). Further research concerning this domain would measure the 'impact' and practicalities of the importance eluded to in this research. SBE in Radiography is a developing area of research in Radiography therefore adding the dimension of storytelling could further enhance this field – for Radiography education and beyond.

Authenticity of Radiography educators is also seen as important by students and closely aligned to their satisfaction with teaching. Research further exploring an educator's subject expertise, emotive sharing and enthusiasm could validate this finding. Finally, and interestingly, further work concerning the emotional impact on classroom practices has been suggested in the findings. Radiography academics have more competing priorities than perhaps ever before and the effects of this warrants further exploration. This is perhaps more important than ever due to ambitious targets for doctoral study and research in the profession (Snaith 2016) morale and retention of the academic workforce will be central to achieving these targets.

Further work will also need to look at the wider clinical practice with research undertaken in the clinical environment. This work articulates in the main part only to the education of

Radiography due to sampling limitations as previously discussed. Stories occurring in clinical situations were discussed in the findings and there are certainly implications made but any translation or findings regarding actual clinical practice have been applied and discussed with caution given the lack of any participants who are 'working' clinical educators. An interesting area has illuminated the potentially important role that storytelling and sharing plays in Radiography debrief. Clinical debrief is an under researched area in Radiography generally. There is no research concerning stories and their effects on debrief of research in Radiography. There is much potential to pursue this avenue further. Additionally, storytelling may have a central role in the transition for students from academic to clinical placement sites (page 111).

Some areas of storytelling practice were identified as important but were considered out with the parameters of this thesis (page 51) they were; digital/technology application, role in cultural diversity, gender and social justice and practical application – learning, teaching and assessment. In some superficial way perhaps, discussion has concerned these fields within this thesis, but future work could be pursued with particular relation to these areas such as digital and multimodal storytelling.

Chapter 7: Conclusion

The overarching aim of this thesis was to explore and develop storytelling for teaching in Radiography: Research Question: How is 'storytelling for teaching' understood and incorporated by educators within Diagnostic Radiography HE?

A robust 'model' of storytelling for teaching in Radiography (RQ1.1 & 1.2)

The findings of this work in the AI have been overlaid with current literature in the field to provide a meta-synthesised approach. For example, the process elements of story from the Labovian model (summary of events, orientation, complication etc.) have been incorporated into the transformative elements (as discussed in the literature) and the key findings of the meta-ethnography and AI stages (emotive, shared, story skill and resources/visuals). These have been amalgamated into a visual tool (Figure 29).

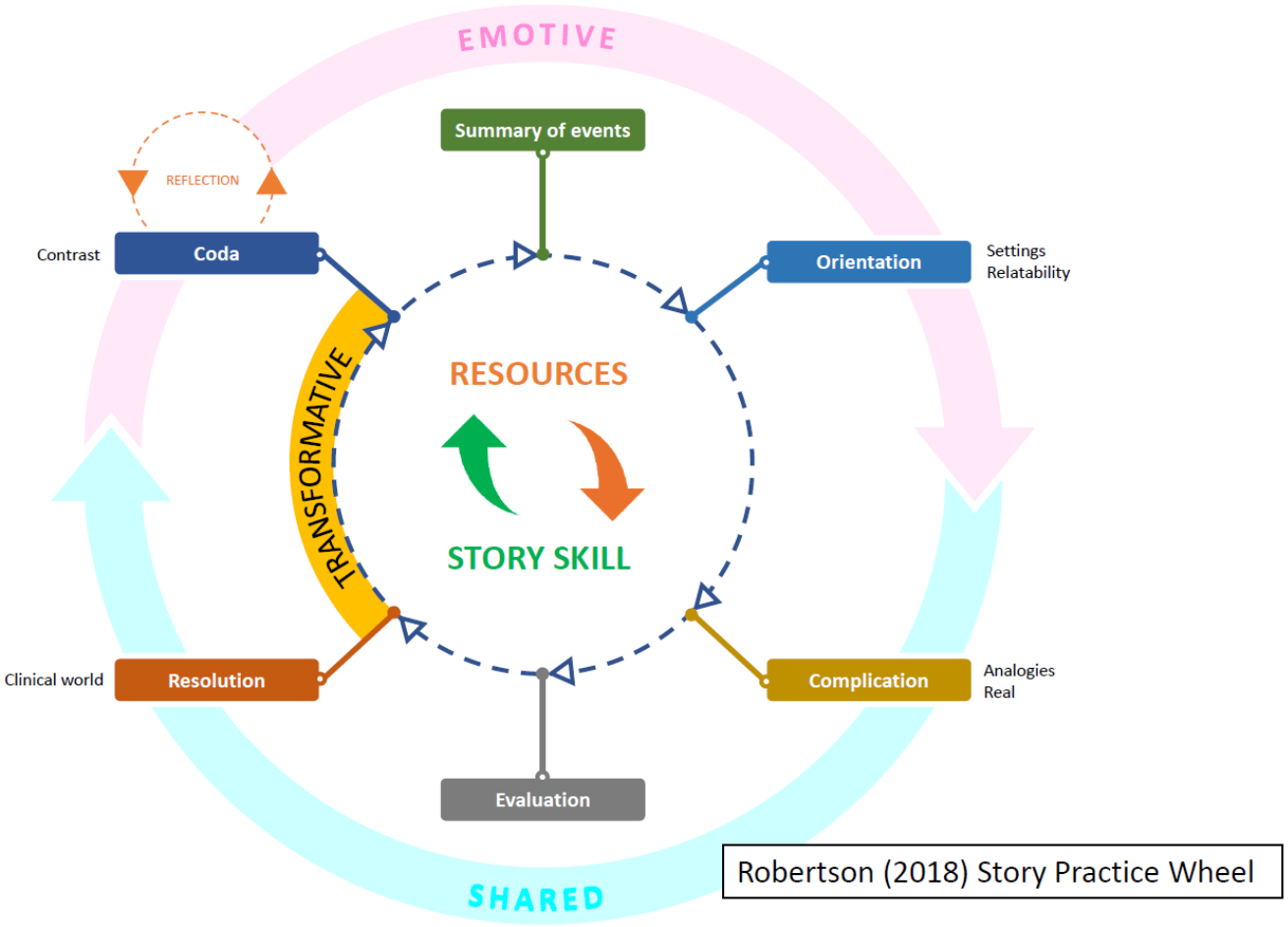


Figure 29. A model of Storytelling for Teaching in Radiography.

The important themes identified in both phases of the research can be slotted around the original Labovian model (see figure 1 and also discussed on page 9) however the 'novel' aspect is using this framework for academics to use to help support their story skills and plan ways to incorporate stories for more novice practitioners supporting learning. Practicing teaching with components such as the ones in the proposed model may support the 'vicarious experiences' highlighted in the literature (Hodgson 2005: 171) as previously discussed, "for the lecturer to help students to go beyond the outward demands of a learning situation and make connections between the content of the lecture and their

understanding of the world around them". Students felt able to link their learning through story to their own worlds (See page 90) – to learn vicariously through the shared story experiences. The concept of vicarious learning is not well researched (as highlighted by Hodgson 2005) with the addition of the use of stories - it is certainly novel.

Appreciative inquiry (AI) was perceived both personally and by the participants to be a truly 'collaborative' action research method. The proposed model (Figure 29) has incorporated within it the findings in the thematic analysis of the sessions. The model is enhanced by the trustworthiness and integrity of the participant voices. With regards to the 'change management' evaluation the findings are mixed. It is possible that this is the product of circumstances other than the methodology itself (for example – competing priorities and staff/student changes as previously discussed). It is based on these discussions that in conclusion the methodology of AI cannot be conclusively evaluated at this time. Further research in this method in Radiography and in other allied health disciplines may need to take a longer chronological plan in order to fully capture the effectiveness, or not, of this methodology.

Underpinning the integrity of the proposed model of practice (figure 29) is the importance of a 'shared' and 'emotive' experience and this is captured as a more understood definition of the meaning of an 'embodied' practice. "The storyteller, through gesture of *embodied* practice, invokes experience for his/her audience and then, through the invocation of experience, delivers counsel" (Gratch & Crick 2015: 307). This discovered knowledge helps somewhat to un-pick what is meant by some of the slippery '*practices or doings'* of storytelling. The pedagogical underpinnings of the research – transformative learning has been found as principally important to support the practices of storytelling. When educators create environments which drive sharing and emotive environments, they are more likely to create transformative learning experiences. It is important to reflect here

that there needs to be a developed close relationship between academic and learner (Greene 2005) in place. Transformative learning can 'open' up learners to shifting ideas and world views in ways that other pedagogies do not. When academics reciprocally share their emotions through story, this can create transformative learning experiences. There is a growing body of evidence which support the need to incorporate more transformative pedagogy to combat the rise of 'fake news' and to encourage more critical thinking skill. Critical thinking has been identified as crucial for 21st Century learner preparedness as previously discussed. Storytelling has transformative learning potential and may be used to encourage critical thinking skills.

Resource perhaps unsurprisingly, remains central to enhancing teaching and learning practice through storytelling. It is closely linked to story skill through the emotional resource required to 'perform' in classes. Physical resources such as money, time, spaces and equipment were viewed by participants as critical to drive change management. This is perhaps a reflection of an increasingly marketized HE arena. Interestingly emotional resources were also viewed as important in the findings. Participants discussed being less able to 'perform' if their emotional state had been impaired by external stressors. The performance is seen as students as part of the 'authenticity' of an academic along with other important criteria such as subject expertise and real world or vicarious 'linking'. This conclusion is important for HEI managers hoping to improve student experiences through the teaching and learning practices at the 'coal-face'. Regular surveys of staff delivering the support of learning could help illuminate the external stressors (in this work travel and parking arrangements on campus). They may or may not be easily remedied but they hold importance in the edu-tainment factor happening in the class – this potentially could impact on the student experience.

Assumptions, tacit knowledge and power relations underpinning storytelling practice in Radiography (RQ 1.3 & 1.4)

There are certain assumptions which should be highlighted again for the successful practice conditions for storytelling for teaching. This includes but is not limited to particular established learning relations; collaborative, personal and class community focussed (Harrell-Levy & Kerpelman 2010). Students as co-partners of learning is frequented in the literature and implicitly in the findings of this thesis. Storytelling practices need to be delivered in such a way that fosters class communities and creates opportunities for students to co-create their learning.

The tacit knowledge uncovered throughout this research journey has been framed as latent level themes. Authenticity of the educator remains central and includes openly discussed components such as emotion, relevance, timing and subject expertise or 'speciality'. Story skills also related to an academics ability to relate to the learners by using personal experiences and/or analogies with meaning for learners. In the parameters of this work academics with more experience in HE were able to use analogies with more 'ease' than their more junior counterparts. However, more work would need to be carried out to support this finding in different communities. 'Real' was latently related to vicarious experience, however the research in this area of learning remains limited to corroborate this claim. Student transitions were tacitly discussed in both stages of the research. Storytelling was used by students and educator led practice in 'transitional' situations such as in preparedness for clinical placement and through reflective practice for critical incidents. Future work with regard to this area is fairly wide reaching, with much potential in various areas but particularly SBE and storytelling practices in clinical environments – namely debrief.

There remains an interesting 'power' relation with the practice of story – that of the story charlatan/story wizard. The morality of the storyteller is not insignificant. Gratch & Crick (2015) posed the three cumulative archetypes: the storyteller, novelist and charlatan. Gratch & Crick (2015) highlighted the dangers of increasing incidences of charlatan performances. Charlatans are, as defined by Gratch & Crick (2015: 309), "concerned neither with giving counsel nor with revealing perspective…striving to mobilise people to action in the name of the charlatan's own interests and desires… exploiting fear and desire in other so his/her own will can be met." Interestingly this topic was directly discussed in one of the AI working groups by student participants. It was interesting for the reason that whilst the implications for their discussion was not as insidious as the true definition of the 'charlatan' the recognition of the power of story is evident and supports the findings of caution in the literature. The word 'convince' rather than trick, perhaps semantically this is the involvement of the power play here. This of course depends upon the point of view from the learner or the teacher and of the 'trick' that is deployed. Thus, it could be considered as a way of motivating and engaging (Wizard) rather than a self-seeking 'trick' (Charlatan). It is apparent that stories can be 'powerful' in the way that they can be transformative but as in a well-known Marvel™ saying, 'with great power comes great responsibility'. Further research into this area would corroborate this finding and the potential wide-reaching implications this may have.

Another finding previously discussed but worth highlighting in the conclusion was the 'power' distribution amongst working groups and the voices in the findings relevant to implications for practice. It became apparent that support staff in the learning community (administrator role participant) had a limited voice in the AI working group. This is incongruent to the literature available whereby in the main, the support staff are a constant in the organisation, holding a wealth of useful and practical knowledge (Fowler 2015).

There have been some agitators to the relationships amongst HEI staff though with Ginsberg (2011) suggesting that support staff are responsible in some way for the 'fall of the faculty' and represent excessive cost to output ratios. It is suggested therefore that the support staff in departments are included more into the 'every-day' LTA activities to foster a more collegiate community and stabilise any potential power imbalances. This student-centred approach would place power in the relationships to the students and equalise any imbalance amongst other stakeholders.

In summary for theoretical advancements for the field, a model for storytelling practice for teaching is proposed (figure 29) and can be used as a framework or indeed toolkit (selection of pertinent parts) to enhance learning and teaching practices using story. The model should be approached as a tool not a panacea and used when classroom conditions are developed (collaborative, personal and community focussed) for transformative experiences to occur. There are some key contextual features which need to be considered when implementing story practices. In other words; transformative focussed leadership, transformative school-wide culture and de-centralised ownership (amongst other context specific features in figure 27) are circumstances that form the setting or background for successful storytelling teaching and learning practices. Support and professional development services should be included in the practices of learning.

The work in this thesis makes a substantial methodological contribution to the field of Radiography education. There were no research articles that could be found to date (last checked October 2018) that utilised AI as a primary method in the journal 'Radiography'. Only two research articles were found which used AI but were primarily published for other communities (Nursing and Education) featuring 'health science students': Naidoo,

Lawrence, & Stein (2018) and Clouder et al. (2016). AI is being employed with increasing frequency, especially Nursing. It appears that the Nursing discipline is often an early adopter of more 'novel' methodological approaches used in other fields. This may be in part to the size of the profession and indeed the changeable and unpredictable environment of health (as previously discussed). AI has been championed as a useful approach to change in any area, with any human systems and indeed at all scales (Watkins, Mohr & Kelly 2011). The Radiography profession is somewhat similar to the Nursing discipline, but in some ways even more exposed to turbulent and fast paced environments due to the central importance of technology in imaging. Therefore, the AI method may have, as yet, unrealised potential for Radiography research. The AI method in this study supports the approach as a collaborative, empowering and change-driving action research method. However, for sustained change key team members need to be permanently involved. Longitudinal exploration concerning the change power of AI in the Radiography discipline is needed to confirm these findings.

To finalise, Storytelling may have a large role to play in developing 21st century ready learners who can think critically but who remain open to identity changes in a changeable and unpredictable future. Appreciative Inquiry (AI) could have a positive impact on change processes in healthcare. This is critically important in the fast evolving and techno-centric field of Radiography.

References

ABU-NIMER, M., & SMITH, R., M. 2016. Interreligious and intercultural education for dialogue, peace and social cohesion. International Review of Education 62; 393-405.

ALSOP, S., MORETON, E., & NESI, H. 2013. The uses of storytelling in university engineering lectures. ESP across Cultures, volume 10 Available from: https://curve.coventry.ac.uk/open/file/2943bf81-229e-4b86-a111-cfa05f0da25e/1/moretoncomb1.pdf - Last accessed 30/04/2016

ALTERIO, M., McDRURY, J. 2003. Collaborative learning using reflective storytelling. In: ZEPKE, N., NUGENT, D., LEACH, L. (Eds), Reflection to transformation. Published by Dunmore press ltd, Palmerston North UK.

ALVESSON, M. 2003. Methodology for close up studies—struggling with closeness and closure. Higher Education, 46, 167-193.

ANDERSON, J., K. 2009. The work-role transition of expert clinician to novice academic educator. Journal of Nursing Education 48 (4); 203-208

ANON. 1997. The tale of Sinuhe. PARKINSON, R. B. (Trans). Oxford University Press.

APPLE, M. W. 2004. Ideology and curriculum. Routledge.

ASHAR, J., & SHAPIRO, J. Z. 1990. Are retrenchment decisions rational? Journal of higher education, 61; 121-141.

ASHWIN, P. 2016. From a teaching perspective, 'impact' looks very different. Blog series based on the opening seminar of the Centre for Global Higher Education. Times Higher Education: March 21, 2016. Available from: https://www.timeshighereducation.com/blog/teaching-perspective-impactlooks-very-different Last accessed 24/03/2016.

ASHWIN, P., ABBAS, A., & MCLEAN, M. 2016. Conceptualising transformative undergraduate experiences: a phenomenographic exploration of students' personal projects. British Educational Research Journal, 42(6), 962–977.

ASPiH. 2016. Standards for simulation-based education in healthcare. Published with NHS Health Education England. Available from: http://aspih.org.uk/wp-content/uploads/2017/07/standards-framework.pdf Last accessed 20/07/2018.

ATKINS, S. et al. 2008. Conducting a meta-ethnography of qualitative literature: lessons learnt. BMC medical research methodology, 8(1), 21.

AURA, S., JORDAN, S., SAANO, S., TOSSAVAINEN, K., & TURUNEN, H. 2016. Transfer of learning: Radiographers' perceptions of simulation-based educational intervention. Radiography, 22(3), 228-236.

BAINES, J. 198). Interpreting Sinuhe. The Journal of Egyptian Archaeology, 68(1), 31-44

BAKER, D. 2016. Designing a curriculum for the assistant practitioner of the future: Ensuring interprofessional care aspects and other stakeholder requirements are met. Radiography, 22(2), 161-165

BALKE, T., ROBERTS, T., XENITIDOU, M., & GILBERT, N. 2014. Modelling energy-consuming social practices as agents. Social Simulation Conference - University of Barcelona 2014

BALL. S 1993. What is policy? Texts, trajectories and tool boxes. Discourse 13(1); 45-57

BARNETT-PAGE, E., & THOMAS, J. 2009. Methods for the synthesis of qualitative research: a critical review. BMC Medical Research Methodology, 9(1); 59

BEHRENS, R., R. 2003. False colours: art, design and modern camouflage. Dysart, IA: Bobolink Books.

BENJAMIN, W. 1938-1940. Review of Francesco's Macht des Charlatans. Selected writings (4) 1938-1940. Trans. JEPHCOTT, E. et al. Cambridge, M.A. 2002; 123-25.

BERGER, R. 2015. Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. Qualitative research, 15(2), 219-234.

BERO, L. A. et al. 1998. Closing the gap between research and practice: an overview of systematic reviews of interventions to promote the implementation of research findings. The Cochrane Effective Practice and Organization of Care Review Group. British Medical Journal (Clinical research ed.), 317(7156), 465-468.

BIDDLE, S. J. et al. 2001. Research methods in sport and exercise psychology: Quantitative and qualitative issues. Journal of sports sciences, 19(10), 777-809.

BIRD, C. M. 2005. How I stopped dreading and learned to love transcription. Qualitative Inquiry, 11(2), 226-248.

BIRT, L., SCOTT, S., CAVERS, D., CAMPBELL, C., & WALTER, F. 2016. Member checking: a tool to enhance trustworthiness or merely a nod to validation? Qualitative Health Research, 26(13), 1802-1811.

BLEIKER, J., KNAPP, K. M., & FRAMPTON, I. 2011. Teaching patient care to students: a blended learning approach in radiography education. Radiography, 17(3), 235-240.

BLOOM. M., V. & HANYCH. D., A. 2002. Sceptics and true believers hash it out Community College Week 4, 14.

BOGG, J., & HUSSAIN, Z. 2010. Equality, diversity and career progression: perceptions of Radiographers working in the National Health Service. Radiography, 16(4), 262-267.

BOLAND, A. M., CHERRY, G. & DICKSON, R. 2014. Doing a systematic review. A student's guide. London: Sage publications Ltd.

BOLTON, G. 1994. Stories at work. Fictional – critical writing as a means of professional development. British Journal of Educational Research 20(1); 55-68

BOLTON, G. 1999. The therapeutic potential of creative writing myself. Published by Jessica Kingsley, London.

BONWELL, C. C., & EISON, J. A. 1991. Active Learning: Creating Excitement in the Classroom. 1991 ASHE-ERIC Higher Education Reports. ERIC Clearinghouse on Higher Education, The George Washington University, One Dupont Circle, Suite 630, Washington, DC 20036-1183.

BOOTH, A., HANNES, K., HARDEN, A., NOYES, J., & HARRIS, J. 2014. COREQ (consolidated criteria for reporting qualitative studies). Available from: http://cdn.elsevier.com/promis_misc/ISSM_COREQ_Checklist.pdf Last accessed 18/07/2018

BORING, A, 2017. Gender biases in student evaluations of teaching. Journal of Public Economics 145; 27-41.

BOUCHER, C. and SMYTH, A. 2004. Up close and personal: reflections on our experience of supervising research candidates who are using personal reflective techniques", Reflective Practice, Vol. 5 No. 3, pp. 345-56.

BRADLEY, E. H., et al. 2004. Translating research into clinical practice: making change happen. Journal of the American Geriatrics Society, 52(11), 1875-1882.

BRANNICK, T., & COGHLAN, D. 2007. In defence of being "native": The case for insider academic research. Organizational research methods, 10(1), 59-74.

BRAUN, V., & CLARKE, V. 2006. Using thematic analysis in psychology. Qualitative research in psychology, 3(2), 77-101.

BRITISH MUSEUM 2017. Museum number: EA5629 – Image of Ostracon of 'The Tale of Sinuhe': a limestone ostracon with the concluding stanzas of 'The Tale of Sinuhe'. Available from: http://www.britishmuseum.org/research/collection_online/collection_object_details/collection_image_gallery.aspx?assetId=968575001&objectId=176707&partId=1#more-views Last accessed 24/09/2017

BRITZMAN, D., 2003. Practice makes practice: a critical study of learning to teach. New York, NY: SUNY Press.

BROOKFIELD, S. 1987. Developing critical thinkers. Published by Open University Press, Milton Keynes.

BRUNER, J. 1987. Life as narrative. Social research, 54, 1; 11-32

BRUNER, J. 2002. Making Stories. New York: Farrar, Strauss and Giroux, 2002.

BRUTUS, S., JAVADIAN, R., & PANACCIO, A. J. (2017). Cycling, car, or public transit: a study of stress and mood upon arrival at work. International journal of workplace health management, 10(1), 13-24.

BUCKINGHAM, D. & SCANLON, M. 2000. That is edutainment: media, pedagogy and the market place. Paper presented to the International Forum of Researchers on Young People and the Media, Sydney.

BUCKINGHAM, D. & SCANLON, M. 2005. Selling learning: Towards a political economy of edutainment media. Media, Culture & Society, 27(1), 41-58.

CAMERON, K. S. 1986. Assessing organizational effectiveness in institutions of higher education. Administrative science quarterly, 23; 604-632.

CLOUDER, L., ADEFILA, A., JACKSON, C., OPIE, J., & ODEDRA, S. 2016. The discourse of disability in higher education: insights from a health and social care perspective. International Journal of Educational Research, 79, 10-20.

COOPERRIDER, D. L., & SRIVASTA, S. 1987. Appreciative inquiry in organizational life. Research in Organizational Change and Development, 1(1), 129-169.

COOPERRIDER, D.L., & WHITNEY, D. 2007. Appreciative Inquiry: A Positive Revolution in Change: 73-88.

COOPERRIDER, D. L., WHITNEY, D., & STAVROS, J.M. 2008. Appreciative Inquiry Handbook for leaders of change, 2nd edition. Published by Crown Custom Publishing.

CORDEN, A., & SAINSBURY, R. 2006. Using verbatim quotations in reporting qualitative social research: researchers' views (pp. 11-14). York: University of York.

CORMIER, G. 2018. The language variable in educational research: an exploration of researcher positionality, translation, and interpretation. International Journal of Research & Method in Education, 41(3), 328-341.

CHAPMAN, N., DEMPSEY, S. E., & WARREN-FORWARD, H. M. (2009). Workplace diaries promoting reflective practice in radiation therapy. Radiography, 15(2), 166-170

CLARKE, V., & BRAUN, V. 2013. Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. The Psychologist, 26(2), 120-123.

CRAIG, C., J. 2007. Story constellations: a narrative approach to contextualising teachers' knowledge of school reform. Teaching and Teacher education. 23 2007; 172-188

DECKER, S., & IPHOFEN, R. 2005. Developing the profession of Radiography: making use of oral history. Radiography, 11(4), 262-271.

DELUCA, C., et al. 2015. Collaborative inquiry as a professional learning structure for educators: a scoping review. Professional development in education, 41(4), 640-670.

DEPARTMENT FOR BUSINESS, INNOVATION AND SKILLS 2015. Fulfilling our potential: Teaching excellence, social mobility and student choice. Sheffield; London.

DEPARTMENT FOR EDUCATION AND EMPLOYMENT (DfES) 1998. The Government's Response to Higher Education in the Learning Society – the Report of the National Committee of Inquiry into Higher Education. London: DfEE.

DEWEY, J. 1908. The practical character of reality. In MCDERMOTT, J. (Ed.) The philosophy of John Dewey. University of Chicago Press, Chicago

DEWEY, J. 1934. Art as experience. Capricorn Books, Toms River New Jersey

DICK, B. 2004. Action research literature. Action Research, 2(4), 425–444.

DODD, C., H. 1961. The parables of the kingdom (Rev. Ed.). Published by Charles Scribner, New York.

DONNELL, K. 2007. Getting to we: Developing a transformative urban teaching practice. Urban Education, 42(3), 223-249

DONOHOO, J. 2013. Collaborative inquiry for educators: A facilitator's guide to school improvement. Corwin Press.

DOYLE, L. H. 2003. Synthesis through meta-ethnography: paradoxes, enhancements and possibilities. Qualitative research 3(3): 321-344.

DRAKE, S., ELLIOT, A. 2005. Creating a new story to live through collaborative reflection, concentric storytelling and using old/new story framework. Scenario based learning conference, Institute for reflective practice, Gloucester 2005.

DRENNAN, L. T., & BECK, M. 2000. Teaching and research-equal partners or poor relations? Qualitative Evidence Based Practices Conference 15–17 May, Coventry University

DUNN J., WOODING C., HERMANN, J. 1977. Mothers' speech to young children: variation in context. Dev. Med. Child Neurol. 19, 629–63

EAGLE, L., & BRENNAN, R. 2007. Are students customers? TQM and marketing perspectives. Quality Assurance in Education 15, no. 1: 44–60. doi: 10.1108/09684880710723025

ECCLESTON, K. 2004. Learning or therapy? The demoralisation of education. British Journal of Educational Studies, 52(2), 112-137.

ECCLESTON, K., & HAYES, D. 2009. The dangerous rise of therapeutic education. Routledge.

EDWARDS, H. et al. 2009. The effect of agenda for change on career progression of the radiographic workforce. Society of Radiographers, London.

EGAN, K. 1988. Teaching as storytelling. Routledge, London.

EGAN, T. M., & LANCASTER, C. M. 2005. Comparing appreciative inquiry to action research: OD practitioner perspectives. Organizational Development Journal, 23 (2), 29-49. Finegold, MA, Holland, BM & Lingham, T.(2002). Appreciative inquiry and public dialogue: an approach to community change. Public Organization Review, 2, 235-252.

eMERGe. 2018. eMERGe Project. Meta-ethnography Reporting Guidance. Available from: http://emergeproject.org/ Last accessed 24/05/2018.

ENGESTRÖM, Y. 1999. Activity theory and individual social transformation in: Y. ENGESTRÖM, R. MIETTINEN & R. L. PUNAMÖKI (eds) Perspectives on activity theory pp. 19-52. Published by Cambridge University Press, Cambridge

ENGESTRÖM, Y. 2001. Expansive learning at work: toward an activity theoretical reconceptualization, 14; 133-156.

ENGESTRÖM, Y. 2014. Learning by expanding. Cambridge University Press.

ERNEST, P. 1994. An introduction to research methodology and paradigms. Exeter, Devon: RSU, University of Exeter.

FANGHANEL, J., & TROWLER, P. 2008. Exploring academic identities and practices in a competitive enhancement context: a UK-based case study. European Journal of Education, 43(3), 301-313.

FEY, M. K., & JENKINS, L. S. 2015. Debriefing practices in nursing education programs: Results from a national study. Nursing Education Perspectives, 36(6), 361-366.

FITZGERALD, S. P., MURRELL, K. L., & NEWMAN, H. L. 2001. Appreciative inquiry: The new frontier. In J. Waclawski & A. H. Church (Eds.), Organizational development: Data driven methods for change (pp. 203–221). San Francisco, CA: Jossey-Bass.

FLANAGAN, S. 2015. How does storytelling within higher education contribute to the learning experience of early year's students? Journal of practice teaching and learning 13(2-3); 156-168

FONTANA, J. S. 2004. A methodology for critical science in nursing. Advances in nursing science 27(2); 93-101.

FONTES, L. A. 1998. Ethics in family violence research: cross-cultural issues. Family relations 47(1); 53-61

FORMAN, J. 2007. Leaders as storytellers: finding Waldo. Business Communication Quarterly 70(3); 369-374

FOWLER, K. 2015. There is no contest between academic and administrative staff. Times Higher Education blog. Available from: https://www.timeshighereducation.com/blog/there-no-contest-between-academic-and-administrative-staff#node-comments Last accessed 19/07/2018.

FOWLER, J., RIGBY, P. 1994. Sculpting with people – an experiential learning experience. Nurse education today, 14; 400-405

FRANCE, E. F. et al. 2015. Protocol-developing meta-ethnography reporting guidelines (eMERGe). BMC medical research methodology, 15(1), 103.

FRANCIS, R. 2013. Report of the Mid Staffordshire NHS Foundation Trust public inquiry: executive summary (Vol. 947). The Stationery Office.

FREIR, P. 1970. Pedagogy of the oppressed. Published by Continuum, New York.

FRY, R. 2017. Leading positive change through appreciative inquiry. Coursera resources in partnership with Case Western Reserve University.

GARRETT, R. 2006. Critical storytelling as a teaching strategy in physical education teacher education. European physical education review 12(3); 339-360.

GIBBS, G. 1988. Learning by doing: a guide to teaching and learning methods. F.E.U, London.

GIDDENS, A. 1984. The Constitution of Society: Outline of the Theory of Structuration. The Polity Press.

GINSBERG, B. 2011. The fall of the faculty. Oxford University Press, London.

GLAYSHER, E., VALLIS, J., & REEVES, P. 2016. Post-traumatic stress disorder and the forensic Radiographer. Radiography, 22(3), e212-e215.

GOODFELLOW, J., & SUMSION, J. 2000. Transformative pathways: Field-based teacher educators' perceptions. Journal of Education for Teaching: International research and pedagogy, 26(3), 245-257.

GRANT, M. J., & BOOTH, A. 2009. A typology of reviews: an analysis of 14 review types and associated methodologies. Health Information & Libraries Journal, 26(2), 91-108.

GRATCH, A. & CRICK, N. 2015. The storyteller, novelist and charlatan: forms of performance in the age of digital reproduction. Text and performance quarterly 35(4); 305-322

GREENE, C. 2005. Education as the practice of freedom. educational HORIZONS, 84(1), 50-53

GREENHALGH, T. 2001. Storytelling should be targeted where it is known to have greatest added value. Medical education, 35(9), 818-819.

GRIFFITH, A. I. 1998. Insider/outsider: epistemological privilege and mothering work, Human Studies, 21, 361–376.

GRIFFITHS, G. 1985. Doubts, dilemmas and diary-keeping: some reflections on teacher-based research, in: R. Burgess (Ed.) Issues in educational research: qualitative methods. Published by Falmer Press, London.

GRIX, J. 2004. The foundations of research. London: Palgrave Macmillan.

HAIGH, C., & HARDY, P. 2011. Tell me a story – a conceptual exploration of storytelling in healthcare education. Nurse Education Today. 31 (2011); 408-411

HAINES, T. et al. 2014. A novel research design can aid disinvestment from existing health technologies with uncertain effectiveness, cost-effectiveness and/or safety. Journal of clinical epidemiology 67 (2); 144-151

HAMMICK, M. 1995. Radiography research and the qualitative approach: a paradigm and a discourse. Radiography (1995) 1; 135-143.

HARGRAVE A. C., SENECHAL M. 2000. A book reading intervention with preschool children who have limited vocabularies: the benefits of regular reading and dialogic reading. Early Child. Res. Q. 15, 75–90

HARPER, D. 2002. Talking About Pictures: A Case for Photo-elicitation. Visual Studies, Vol. 17, No. 1, pp 13 – 26. Routledge

HARRELL-LEVY, M. K., & KERPELMAN, J. L. 2010. Identity process and transformative pedagogy: Teachers as agents of identity formation. Identity: An international journal of theory and research, 10(2), 76-91

HARRIS, R. 2015. Society and College of Radiographers Research strategy 2016-2021. Published by the Society of Radiographers, London.

HARVEY, D. L. 2002. Agency and community: A critical realist paradigm. Journal for the theory of social behaviour, 32(2), 163-194.

HAWKINS, B. S. R. 1990. The management of staff development in a contracting education service. Unpublished Ph.D. thesis, Birmingham Polytechnic. Cited in MERCER, J. 2007. The challenges of insider research in educational institutions: wielding a double-edged sword and resolving delicate dilemmas, Oxford Review of Education, 33:1, 1-17.

HEALTH AND CARE PROFESSIONS COUNCIL (HCPC) 2016. Standards of conduct performance and ethics. Available from: http://www.hcpc-uk.org/assets/documents/10004EDFStandardsofconduct,performanceandethics.pdf last accessed: 25/09/2017.

HEITINK, M. C. et al. 2016. A systematic review of prerequisites for implementing assessment for learning in classroom practice. Educational research review, 17, 50-62.

HENWOOD, S., & BOOTH, L. 2016. On becoming a consultant: a study exploring the journey to consultant practice. Radiography, 22(1), 32-37

HIGGINS, R., ROBINSON, L., & HOGG, P. 2014. Integrating research-informed teaching within an undergraduate diagnostic Radiography curriculum: Results from a level 4 (year 1) student cohort. Radiography, 20(2), 100-106

HIGHER EDUCATION ACADEMY. 2011. The UK Professional standards framework for teaching and supporting learning in higher education. Published by the Higher Education Academy, York.

HIGHER EDUCATION ACADEMY. 2013a. Measuring the impact of the UK professional standards framework for teaching and supporting learning (UKPSF). Staff and educational development association higher education academy funded project. Published by the Higher education academy, York.

HIGHER EDUCATION ACADEMY. 2015a. Student transitions. Published on Higher Education Academy (http://www.heacademy.ac.uk) accessible from: http://www.heacademy.ac.uk/workstreams-research/workstreams/student-transitions Last accessed 12-05-2016

HIGHER EDUCATION ACADEMY. 2015b. Research and policy. Published on Higher Education Academy (http://www.heacademy.ac.uk) accessible from: https://www.heacademy.ac.uk/workstreams-research/research-and-policy

HIGHER EDUCATION FUNDING COUNCIL FOR ENGLAND 2015. Unistats and the key information set. Retrieved from http://www.hefce.ac.uk/lt/unikis/

HOCKEY, J. 1993. Research methods—researching peers and familiar settings, Research Papers in Education, 8(2), 199–225.

HOCKEY, J. 1995. Getting too close: a problem and possible solution in social science PhD supervision, British Journal of Guidance & Counselling, Vol. 23 No. 2, pp. 199-210.

HODGSON, V. 2005. Lectures and the experience of relevance. In: MARTON, F., HOUNSELL, D. and ENTWISTLE, N., (eds.) The Experience of Learning: Implications for teaching and studying in higher education. 3rd (Internet) edition. Edinburgh: University of Edinburgh, Centre for Teaching, Learning and Assessment. pp. 159-171

HOMER. 2007. The Iliad. MERRILL, S. (Trans). University of Michigan.

HOUSTON, T.K., et al. 2011. Culturally appropriate storytelling to improve blood pressure: A randomized trial. Annals of Internal Medicine, 18 (154) (2011), pp. 77–84

HULME, R., et al. 2009. Learning in third spaces: developing trans professional understanding through practitioner enquiry. Educational action research, 17 (4), 537–550

HUMFREY, C. 1999. Managing International Students: Recruitment to Graduation. Buckingham: Open University Press.

HUNTER, L. P. & HUNTER, L. A. 2006. Storytelling as an Educational Strategy for Midwifery Students. Journal of Midwifery & Women's Health, 51: 273–278. doi: 10.1016/j.jmwh.2005.12.004

HYDE, E. 2015. A critical evaluation of student Radiographers' experience of the transition from the classroom to their first clinical placement. Radiography, 21(3), 242-247.

ISACSSON, A., & GRETZEL, U. 2011. Facebook as an edutainment medium to engage students in sustainability and tourism. Journal of Hospitality and Tourism Technology, 2(1), 81-90.

JABBAR. A., ANALOUI, B., KONG, K., MIRZA, M. 2018. Consumerisation in UK higher education business schools: higher fees, greater stress and debatable outcomes. Higher Education 76 (1); 85-100.

JACKSON, P. 1987. On the place of narrative in teaching. In D. Berliner and B. Rosenshire (Ed), Talk to teachers. Random house, New York.

JAMES, G., MARTINEZ, E., & HERBERS. S 2015. What can Jesus teach us about student engagement? Journal of Catholic Education 19(1); 129-154

KAINAN, A. 1995. Forms and functions of storytelling by teachers. Teaching & teacher education, 11(2); 163-172

KARIM, B., H. H. 2014. Storytelling as a pedagogical tool to learn English language in higher education: using reflection and experience to improve learning. 18th International Conference on Education ICE, Barcelona, Spain Oct 27-28, 2014.

KEARNEY, M. H. 1998. Ready- to- wear: Discovering grounded formal theory. Research in nursing & health, 21(2), 179-186.

KELLY, L. 2016. The Memory Code: The traditional Aboriginal memory technique that unlocks the secrets of Stonehenge, Easter Island and ancient monuments the world over. Crows Nest: Allen & Unwin.

KEMMIS, S., & McTAGGART, R. (Eds) 1998. The action research planner (3rd Edition) Published by Deakin University Press, Victoria.

KERRIDGE, J.B. & MATHEWS, B.P. 1998. Student rating of courses in HE: further challenges and opportunities. Assessment and Evaluation in Higher Education, 23 (1998); 71–82

KOLB, D. 1984. Experiential learning; experience as the source of learning and development. Published by Prentice Hall, Englewood Cliffs, New Jersey USA

LABOV, W. & WALETZKY, J. 1967. Narrative analysis. Oral versions of personal experience. Cited in BRATT PAUSTON, C. & TUCKER, G., R. (eds.) 2003. Sociolinguistics: the essential readings. Wiley-Blackwell, Oxford; 74-104

LAPADAT, J. C., & LINDSAY, A. C. 1999. Transcription in Research and Practice: From Standardization of Technique to Interpretive Positioning's. Qualitative Inquiry, 5(1), 64-86

LARKEY, L. K. et al. 2007. Storytelling for promoting colorectal cancer screening amongst underserved Latvian women: a randomised pilot study. Cancer control, 16; 79-87

LASH, S., & URRY, J. 1989. The end of organized capitalism. Published by Polity Press, Cambridge.

LAURILLARD, D. 2013. Rethinking university teaching: A conversational framework for the effective use of learning technologies. Routledge.

LAVE, J., & WENDER, E. 1998. Communities of practice. Retrieved June, 9, 2008.

LEE, H., FAWCETT, J., & DEMARCO, R. 2016. Storytelling/narrative theory to address health communication with minority populations. Applied nursing research. 30 (2016); 58-60

LIGHT, G., CALKINS, S. & COX, R., 2009. Learning and teaching in higher education: The reflective professional. Sage.

LOGAN, T. 1984. Learning through interviewing. Cited in SCHOSLAK, J. & T. LOGAN (Eds) Pupil perspectives, Published by Croom Helm, London.

MACK, L. 2010. The philosophical underpinnings of educational research. Accessible from: https://secure.apu.ac.jp/rcaps/uploads/fckeditor/publications/polyglossia/Polyglossia_V19_Lindsay.pdf

MADDEN, B. 2015. Pedagogical pathways for Indigenous education with/in teacher education. Teaching and teacher education, 51, 1-15.

MALONEY, S. & HAINES, T. 2016. Issues of cost -benefit and cost-effectiveness for simulation in health professions education. Advances in simulation 1:13

MALTBY, J et al. 2014. Research methods for nursing and healthcare. Routledge Taylor and Francis group, London.

MANN. D. 1996. Serious play Teachers College Record 97, 3, 446–470.

MARKUS, H., & NURIUS, P. 1986. Possible selves. American psychologist, 41(9), 954.

MARTIN, A. J. 2013. Academic buoyancy and academic resilience: Exploring 'everyday' and 'classic' resilience in the face of academic adversity. School Psychology International, 34(5), 488-500

MARUYAMA, M. 1974. Endogenous research vs "experts" from outside. Futures, 6(5), 389-394.

MBWESA, J. K. 2014. Transactional distance as a predictor of perceived learner satisfaction in distance learning courses: a case study of Bachelor of Education Arts program. Journal of education and training studies 2 (2); 176-188

McDRURY, J., ALTERIO, M. 2003. Learning through storytelling. Published by Routledge Falmer, London.

McKILLOP, C. 2007. Imagining assessment in higher education through on-line storytelling and visual expressions of learning. 2nd annual research symposium on imaginative education, Vancouver, Canada 18-21 July 2007.

McNIFF, J. 2016. You and your action research project. Routledge, London.

MEZIROW, J. 1991. Fostering critical reflection in adulthood: a guide to transformative and emancipatory learning. Published by Jossey-Bass, San Francisco USA.

MEZIROW, J. 1996. Contemporary paradigms of learning. Adult education quarterly, 46(3), 158-172.

MEZIROW, J. 2000. Learning as transformation: critical perspectives on a theory in progress. Published by Jossey-Bass, San Francisco USA.

MERCER, J. 2007. The challenges of insider research in educational institutions: wielding a double- edged sword and resolving delicate dilemmas, Oxford Review of Education, 33:1, 1-17.

MILEY, F. 2009. The storytelling project: innovating to engage students in their learning. Higher education research and development 28(4); 357-369

MOON, J., & FOWLER, J. 2007. ‘There is a story to be told…’; A framework for the conception of story in higher education and professional development. Nurse education today 28; 232-239

NAGDA, B. R. A., GURIN, P., & LOPEZ, G. E. 2003. Transformative pedagogy for democracy and social justice. Race, ethnicity and education, 6(2), 165-191.

NAIDOO, K., LAWRENCE, H., & STEIN, C. 2018. The concept of caring amongst first year diagnostic radiography students. Nurse education today.

NAYLOR, S., & FOULKES, D. 2017. Diagnostic Radiographers working in the operating theatre: An action research project. Radiography, 2017 article in press.

NAYLOR, S., HARCUS, J., & ELKINGTON, M. 2015. An exploration of service user involvement in the assessment of students. Radiography, 21(3), 269-272.

NEILL, M. A., & WOTTON, K. 2011. High-fidelity simulation debriefing in nursing education: A literature review. Clinical Simulation in Nursing, 7(5), e161-e168.

NELSON, T.H., 2005. Knowledge interactions in teacher-scientist partnerships: negotiation, consultation, and rejection. Journal of teacher education, 56 (4), 382–395.

NELSON, T.H. et al. 2012. Two dimensions of an inquiry stance toward student-learning data. Teachers college record, 114 (8), 1–42.

NHS EDUCATION ENGLAND. 2018. Our Work – Simulation. Available from: https://www.hee.nhs.uk/our-work/simulation . Last accessed 05/03/2019

NIGHTINGALE, J. 2018. Editors' choice paper. Radiography 23, 2017

NOBLIT, G.W., & HARE, R. D. 1988. Meta-Ethnography: Synthesizing Qualitative Studies. London: Sage

NODDINGS, N. 1996. Stories and affect in teacher education. Cambridge journal of education 26(3); 435-447

OAKLEY, A. 1981. Interviewing women, in: H. Roberts (Ed.) Doing feminist research. Published by Routledge & Kegan Paul, London.

OHNUKI-TIERNEY, E. 1984. 'Native' anthropologists, American Ethnologist, 11(3), 584–586.

OKAN, Z. 2003. Edutainment: is learning at risk? British Journal of Educational Technology, 34(3), 255-264.

P21. Partnership for 21st Century Learning. 2007. Framework for 21st Century Learning. Available from: http://www.p21.org/storage/documents/docs/P21_framework_0816.pdf Last accessed 31/07/2018.

PETTICREW, M. et al. 2013. Synthesizing evidence on complex interventions: how meta-analytical, qualitative, and mixed-method approaches can contribute. Journal of clinical epidemiology, 66(11), 1230-1243.

PICTON, A., & TERAVAINEN, A. 2017. Fake news and critical literacy. An evidence review. Published by The National Literacy Trust 2017. Available from: https://literacytrust.org.uk/documents/1278/Fake_news_and_critical_literacy_evidence_review_Sep_17.pdf

PLATT, J. 1981. On interviewing one's peers, The British Journal of Sociology, 32(1), 75–91

POWNEY, J. & WATTS, M. 1987. Interviewing in educational research. Published by Routledge & Kegan Paul, London.

PREEDY, M. & RICHES, C. 1988. Practitioner research in school management: an analysis of research studies undertaken for an Open University course, in: NIAS, J & GOUNDWATERSMITH, S. (Eds) The enquiring teacher: supporting and sustaining teacher research. Published by Falmer Press, Lewes.

PRICE, R. 2015. What about the REF–Lessons to be learned? Radiography, 21(2), 110-111.

PROP, V. 1928. The morphology of the folktale (English translation). Research centre in anthropology, Indiana University. Cited in KAINAN, A. 1995. Forms and Functions of storytelling by teachers. Teaching and teacher education 11(2); 163-172

PROSSER, J. & LOXLEY, A. 2008. Introducing visual methods. Discussion Paper. NCRM. (Unpublished)

QUINN, J. 2010. Learning communities and imagined social capital: Learning to belong. Bloomsbury Publishing.

RADIOGRAPHY. 2017. International Journal of Radiography and Imaging Therapy: search results [communication]. Available from: http://www.Radiographyonline.com/action/doSearch?searchType=quick&searchText=communication&occurrences=all&journalCode=yradi&searchScope=fullSite Last accessed: 25/09/2017

RAY, V. 2018. Is gender bias an intended feature of teaching evaluations. Inside Higher Ed. Available from: https://www.insidehighered.com/advice/2018/02/09/teaching-evaluations-are-often-used-confirm-worst-stereotypes-about-women-faculty Last accessed 09/10/2018.

REED, J. 2007. Appreciative Inquiry. Research for Change. Published by Sage Publications Ltd, London.

REESE, E., SPARKS, A., LEYVA, D. 2010. A review of parent interventions for preschool children's language and emergent literacy. J. Early Child. Lit. 10, 97–117

REID, N., NUNN, P., & SHARPE, M. 2014. Indigenous Australian stories and sea-level change. Proceedings of the 18th Conference of the Foundation for Endangered Languages, pp. 82–87.

REYES, A.X. 2005. How the Language and Culture of Scholars Affects the Choice of Their Subjects and Methods of Research: Investigating the Researcher's Habit of Mind. Lewiston, NY: EMellen Press.

RICHARDSON, J., T., E. 2012. The role of response biases in the relationship between students' perceptions of their courses and their approaches to studying in higher education. British Educational Research Journal, 38(3); 339–418

RICOEUR, P. 1984. Time and narrative volume 1. Published by the University of Chicago Press, Chicago USA

RIESSMAN, C. K. 1993. Narrative Analysis. Published by Sage, Newbury Park, CA.

RIMM-KAUFMAN, S. E., & PIANTA, R. C. 2000. An ecological perspective on the transition to kindergarten: a theoretical framework to guide empirical research. J. Appl. Dev. Psychol. 21, 491–511

ROLFE, G. 2002. Reflective practice: where now? Nurse Education in Practice, 2(1), 21-29.

ROSSITER, M. 2002. Narrative and stories in adult teaching and learning. ERIC digest no.241.

RUSSELL, G. M., & KELLY, N. H. 2002. Research as interacting dialogic processes: Implications for reflexivity. Qualitative Social Research (Vol. 3, No. 3).

RYAN, A. & TILBURY, D. 2013. Flexible pedagogies: new pedagogical ideas. Higher Education Academy, York.

RYTTBERG, M., & GESCHWIND, L. 2017. Professional support staff at higher education institutions in Sweden: roles and success factors for the job. Tertiary Education and Management, 23(4), 334-346.

SAARINEN, T. 2008. Position and text and discourse analysis in higher education policy and research. Studies in higher education, 33(6); 719-728.

SABRI, D. 2013. Student Evaluations of Teaching as 'Fact-Totems': The Case of the UK National Student Survey. Sociological Research Online, 18 (4) 15

SALAS, E. et al. 2008. Debriefing medical teams: 12 evidence-based best practices and tips. Joint Commission Journal on Quality and Patient Safety, 34(9), 518-527.

SAUNDERS, M., LEWIS, P., THORNHILL, A. 2008. Research methods for business students. 5th Edition. Published by Pearson, London

SCHÖN, D. 1983. The reflective practitioner. Published by Jossey Bass, San Francisco, USA.

SCHWAB, J. 1971. The practical: Arts of eclectic. School Review, 81, 461–489

SCHWARTZ, M., & ABBOTT, A. 2007. Storytelling: a clinical application for undergraduate nursing students, Nurse Education in Practice, vol. 7, no. 3, pp. 181–186

SCOTTISH GOVERNMENT 2010. NHS Scotland Quality Strategy - putting people at the heart of our NHS, Edinburgh.

SCOTT, S. 1985. Working through the contradictions in researching postgraduate education, cited in BURGESS, R (Ed.) Field methods in the study of education. Published by Falmer Press, Lewes.

SCOTT-PARKER, B., JONES, C. M., RUNE, K., & TUCKER, J. (2018). A qualitative exploration of driving stress and driving discourtesy. Accident Analysis & Prevention, 118, 38-53.

SHANAHAN, M. 2016. Student perspective on using a virtual Radiography simulation. Radiography, 22(3), 217-222.

SHAH, S. 2004. The researcher/interviewer in intercultural context: a social intruder! British Educational Research Journal, 30(4), 549–575

SHAW, S., M. 1999. Storytelling in religious education. Published by Religious Education Press, Birmingham, Alabama

SILVERMAN, D. 2000. Doing qualitative research: a practical handbook. Published by Sage, London.

SHIN, J. C., & TOUTKOUSHIAN, R. K. (2011). The past, present, and future of university rankings. In University Rankings (pp. 1-16). Springer Netherlands.

SHINER, N. 2016. 6 The use of simulation makeup in undergraduate diagnostic Radiography education. BMJ Simulation and Technology Enhanced Learning 2016;2:A13.

SHINER, N. 2018. Is there a role for simulation-based education within conventional diagnostic Radiography? A literature review. Radiography 24 (3): 262-271.

SIMMEL, G. 1950. The sociology of Georg Simmel. Published by Free Press, New York.

SNAITH, B., HARRIS, M. A., & HARRIS, R. 2016. Radiographers as doctors: A profile of UK doctoral achievement. Radiography, 22(4), 282-286.

SNAITH, B. 2016 Evidence based Radiography: Is it happening or are we experiencing practice creep and drift? Radiography 22(4); 267-268

SOCIETY OF RADIOGRAPHERS 2012. Quality Standards for Practice Placements. Available from: https://www.sor.org/system/files/section/201702/approval_and_accreditation_-_quality_standards_for_practice_placements.pdf last accessed: 25/09/2017

SPENCER, L., RITCHIE, J., LEWIS, J., & DILLON, L. 2003. Quality in Qualitative Evaluation: a Framework for Assessing Research Evidence. London: Government Chief Social Researcher's Office

STANBERRY, A. M. & AZRIA-EVANS, M. 2001. Perspectives in teaching gerontology: Matching strategies with purpose and context. Educational Gerontology, 27: 637–656.

STRAUS, L., MCEWEN, A., & HUSSEIN, F. M. 2009. Somali women's experience of childbirth in the UK: perspectives from Somali health workers. Midwifery 25; 181-186

STRIKE, K., & POSNER, G. 1983. Types of synthesis and their criteria. Knowledge Structure and Use. Edited by: Ward S, Reed L. 1983, Philadelphia: Temple University Press

STRONG-WILSON, T. 2007. Moving horizons: exploring the role of stories in decolonizing the literacy education of white teachers. International Education, 37 (1) (2007), pp. 114-131

STYRES, S. 2011. Land as first teacher: a philosophical journeying Reflective Practice: International and Multidisciplinary Perspectives, 12 (6) (2011), pp. 717-731

TANAKA, M. 2009. Transforming perspectives: The immersion of student teachers in indigenous ways of knowing (Unpublished doctoral dissertation) University of Victoria, Victoria, BC (2009) Retrieved from http://hdl.handle.net/1828/1664

THE UNIVERSITY OF EDINBURGH. 2018. Living costs. Available from: https://www.ed.ac.uk/studying/international/finance/cost-of-living Last accessed 17th July 2018.

THURNELL-READ, T. et al. 2018. International Students' Perceptions and Experiences of British Drinking Cultures. Sociological Research Online, 1360780418761207.

TOMLINSON, M. Student perceptions of themselves as ‘consumers’ of higher education. British journal of sociology of education 38(4); 450-467.

TURNER, J., & RAMLAUL, A. 2014. An investigation of diagnostic Radiography students’ perception of stress and coping mechanisms in clinical placement.

WALDRON, L. & WILSON, R. 2015. Supporting commuting students. DELTA publication for Robert Gordon University. Available from: http://campusmoodle.rgu.ac.uk/course/view.php?id=88436#rgumymoodle_outertabs_143253 last accessed 09/10/2018.

WAREING, A. et al. 2017. Continuing professional development (CPD) in Radiography: A collaborative European meta-ethnography literature review. Radiography, 23, S58-S63.

WATKINS, J. M., MOHR, B. J., & KELLY, R. 2011. Appreciative inquiry: Change at the speed of imagination (Vol. 35). John Wiley & Sons.

WHITEHURST, G. J., et al. 1988. Accelerating language development through picture book reading. Dev. Psychol. 24, 552–559

WILKINSON, K. S., HOUSTON-PRICE, C. 2013. Once upon a time, there was a pulchritudinous princess…: the role of word definitions and multiple story contexts in children's learning of difficult vocabulary. Applied Psycholinguist. 34, 591–613

WOLOS, J. 2018. A PhD's grit credential shouldn't be undervalued. Times Higher Education. Available from: https://www.timeshighereducation.com/blog/phds-grit-credential-shouldnt-be-undervalued Last accessed 19/07/2018.

WYETT, J.L. 1997. New teachers for a new mission, paper presented at the Association of Teacher Educators Conference, Washington, DC, February (ERIC Document Reproduction Service No. ED 413 305).

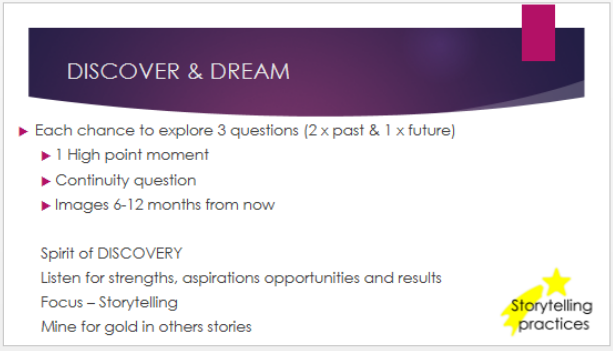
YILMAZ. K. 2013. Comparison of quantitative and qualitative research traditions; epistemological, theoretical and methodological differences. European journal of education, 48(2); 311-325.

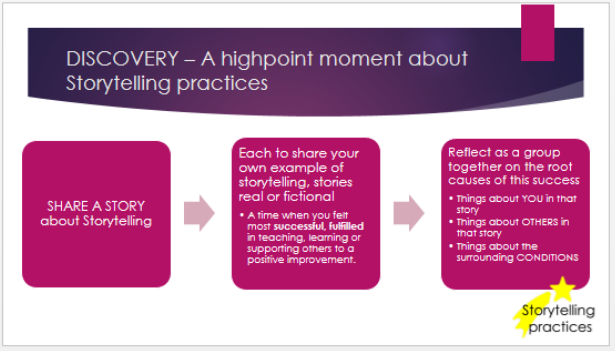
Appendices

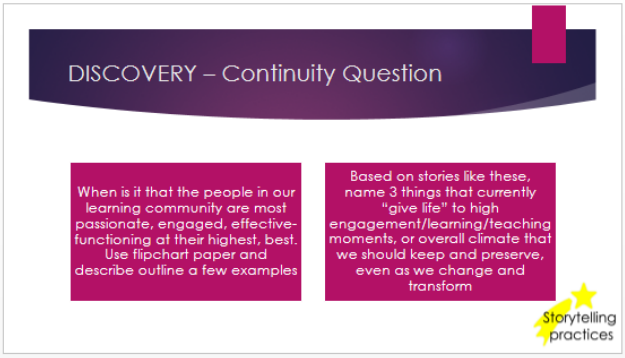
Appendix 1 Appreciative Inquiry PowerPoint™ Resource

1

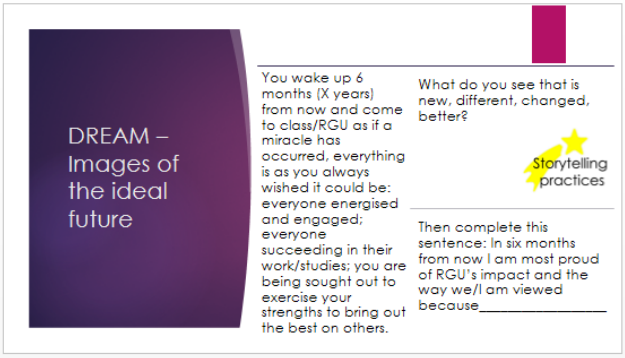
2



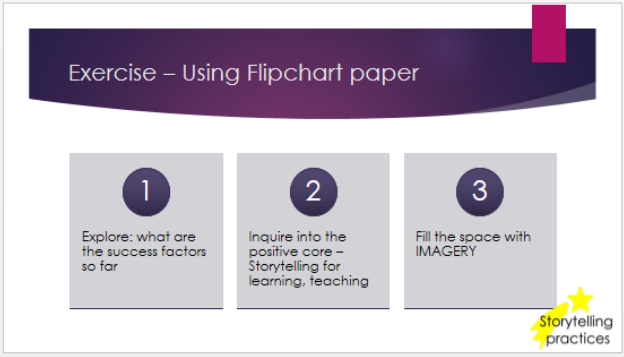


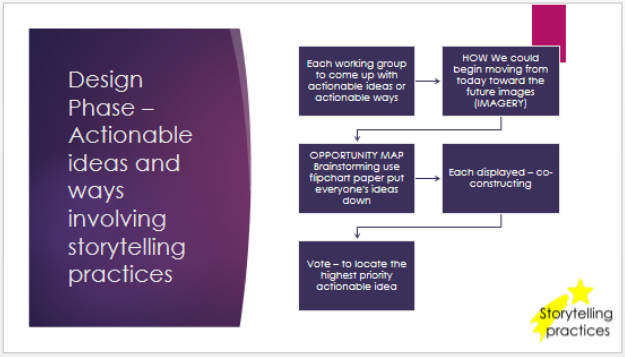


5



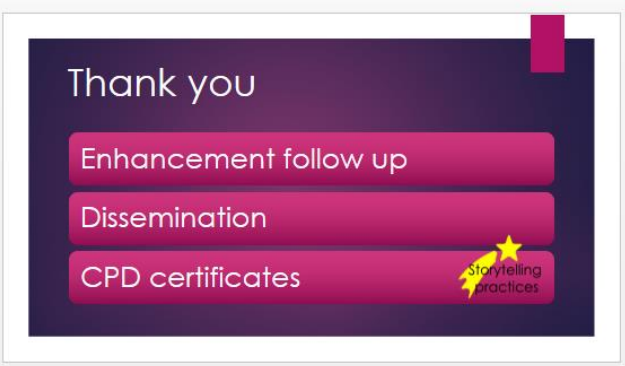
6






Destiny - How to empower, learn and improvise?
New working groups – Top 3 ideas
Change initiatives into implementation
Creating - Prototype
Action planning – what are we going to do next, when, who
New images of possibility
Storytelling practices

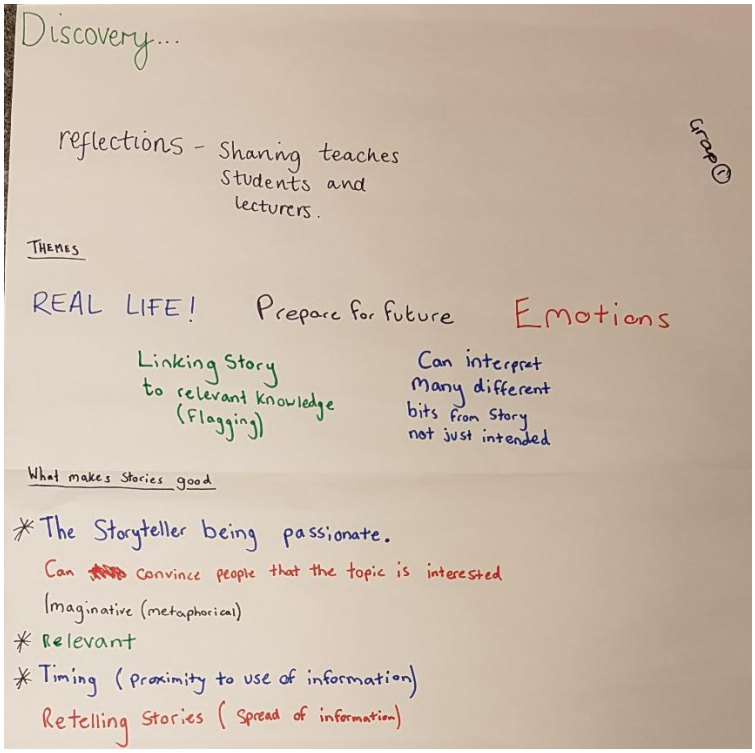
9

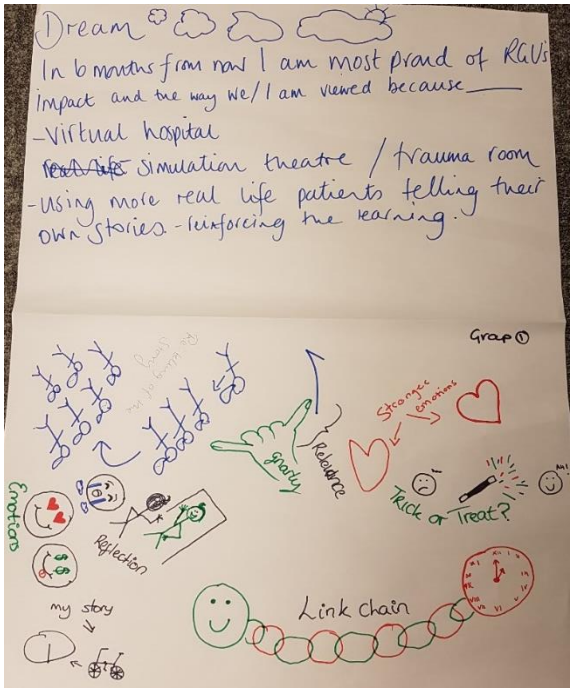

Thank you
Enhancement follow up
Dissemination
CPD certificates
Storytelling practices

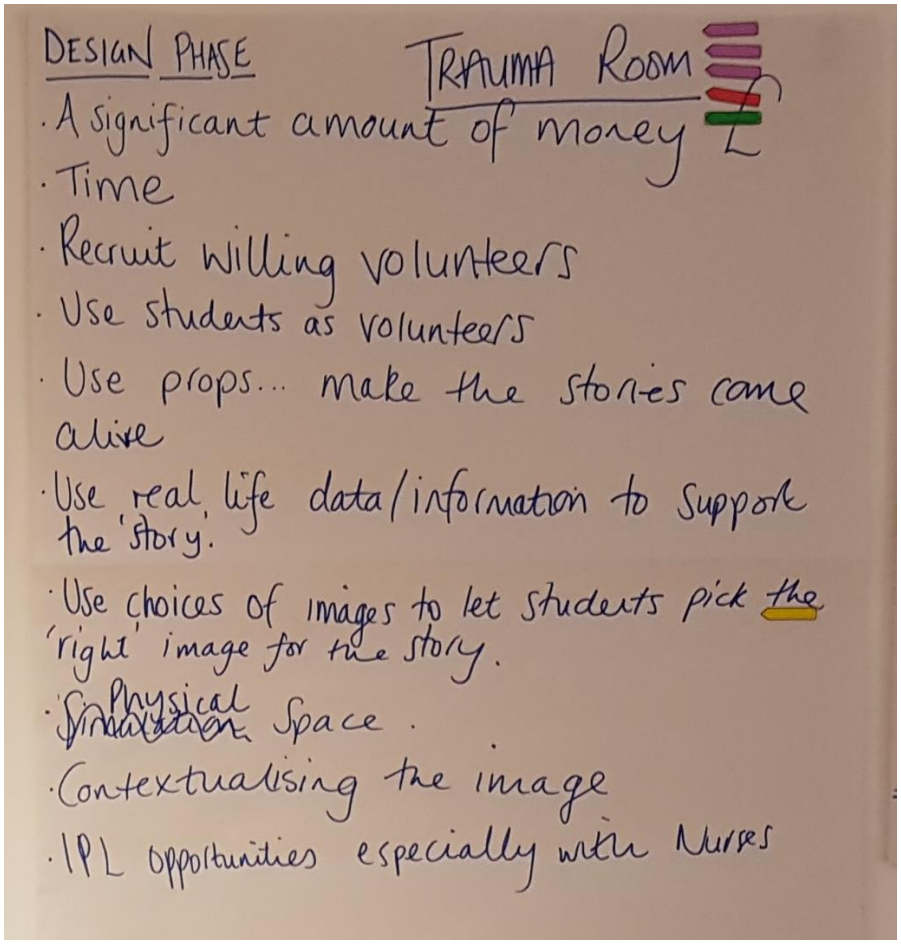
10

Appendix 2: Flipchart compilations from each working group and each stage of the AI process.

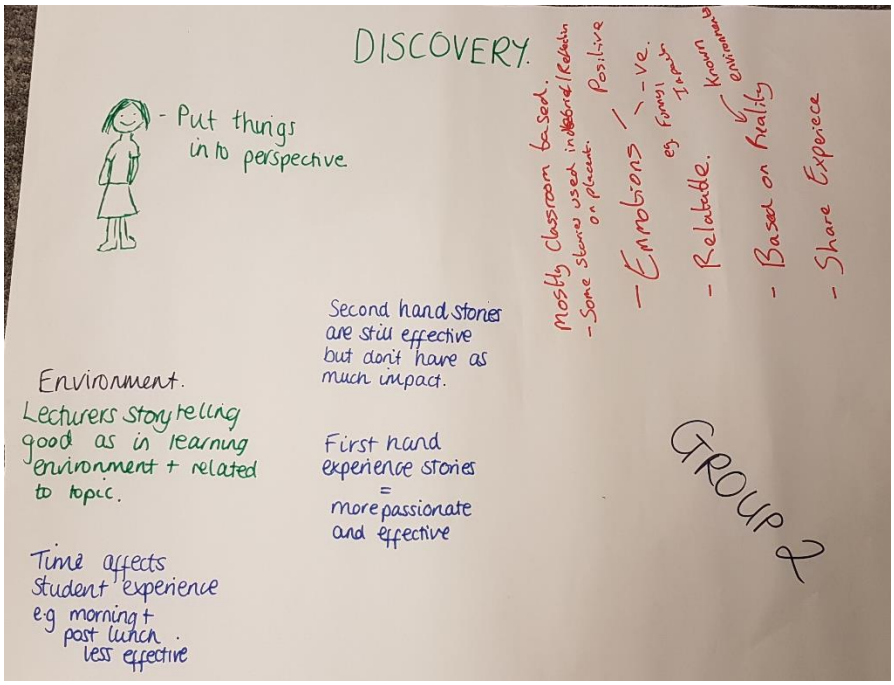
Group 1

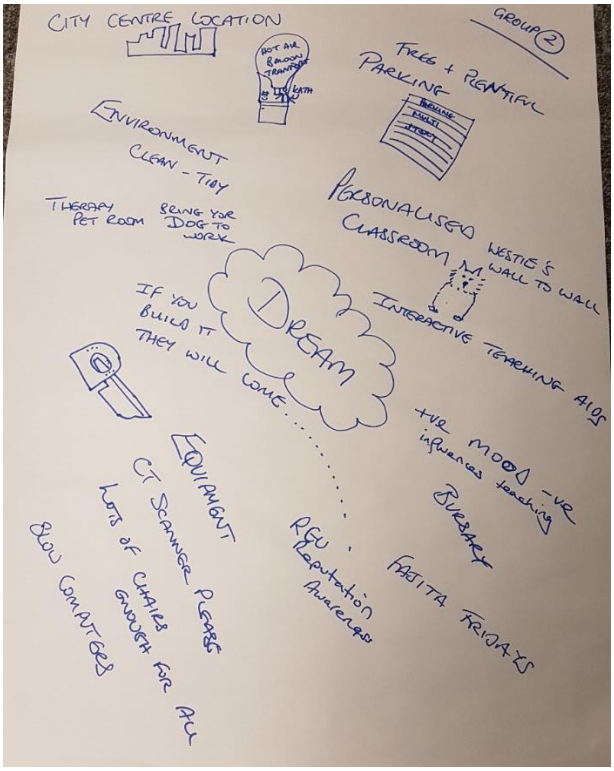


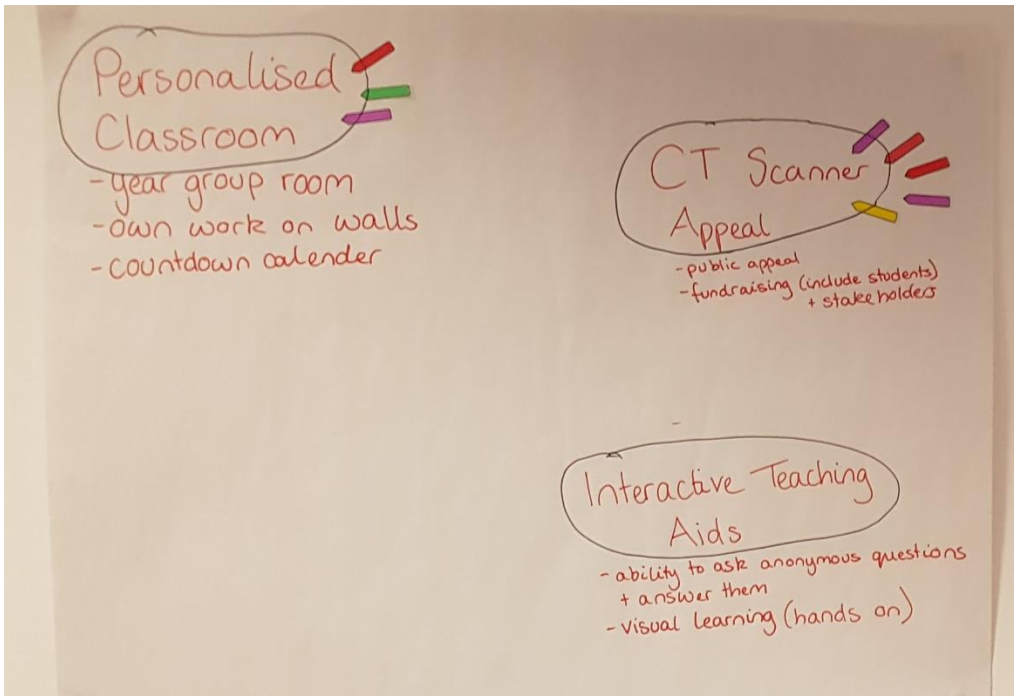



DESIGN PHASE
TRAUMA Room
· A significant amount of money
· Time
· Recruit willing volunteers
· Use students as volunteers
· Use props... make the stories come alive
· Use real life data/information to support the 'story'.
· Use choices of images to let students pick the 'right' image for the story.
· Physical Space.
· Contextualising the image
· IPL opportunities especially with Nurses

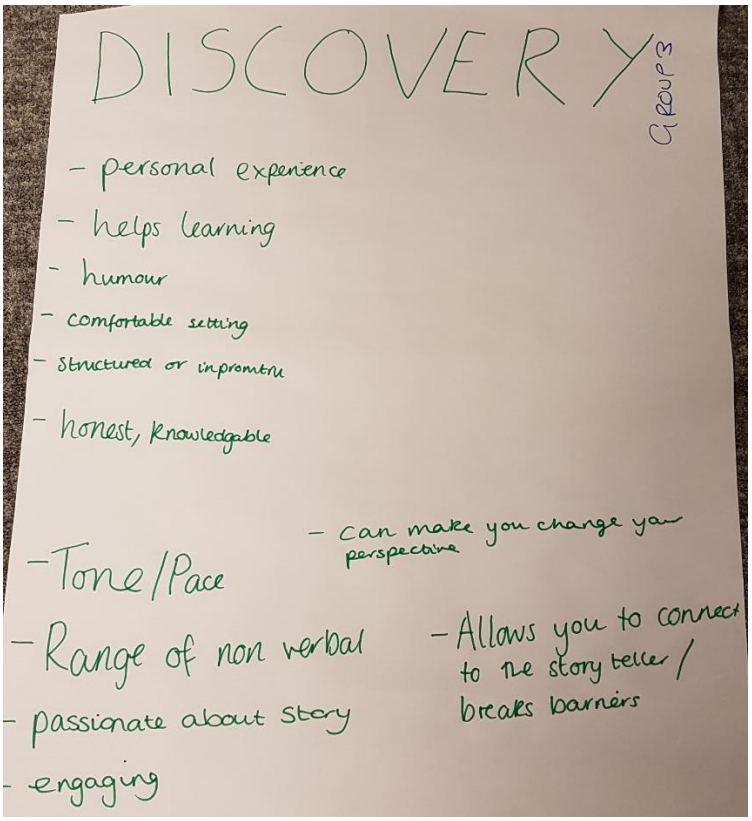
Group 2

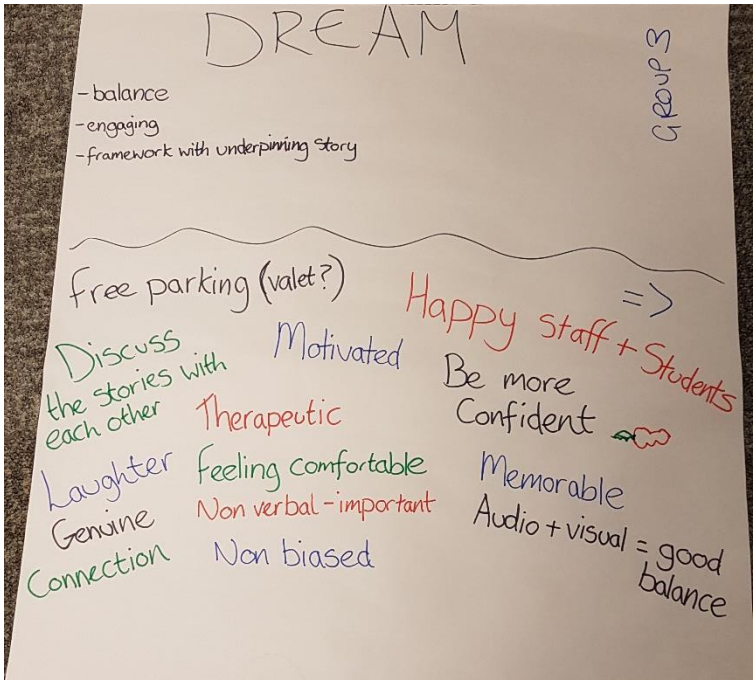

DISCOVERY.
- Put things in to perspective
Environment.
Lecturers storytelling good as in learning environment + related to topic.
Time affects student experience e.g morning + post lunch. less effective
Second hand stories are still effective but don't have as much impact.
First hand experience stories = more passionate and effective
- Share Experience
- Based on reality
- Relatable.
- Emotions +/- ve.
- Mostly classroom based.
GROUP 2

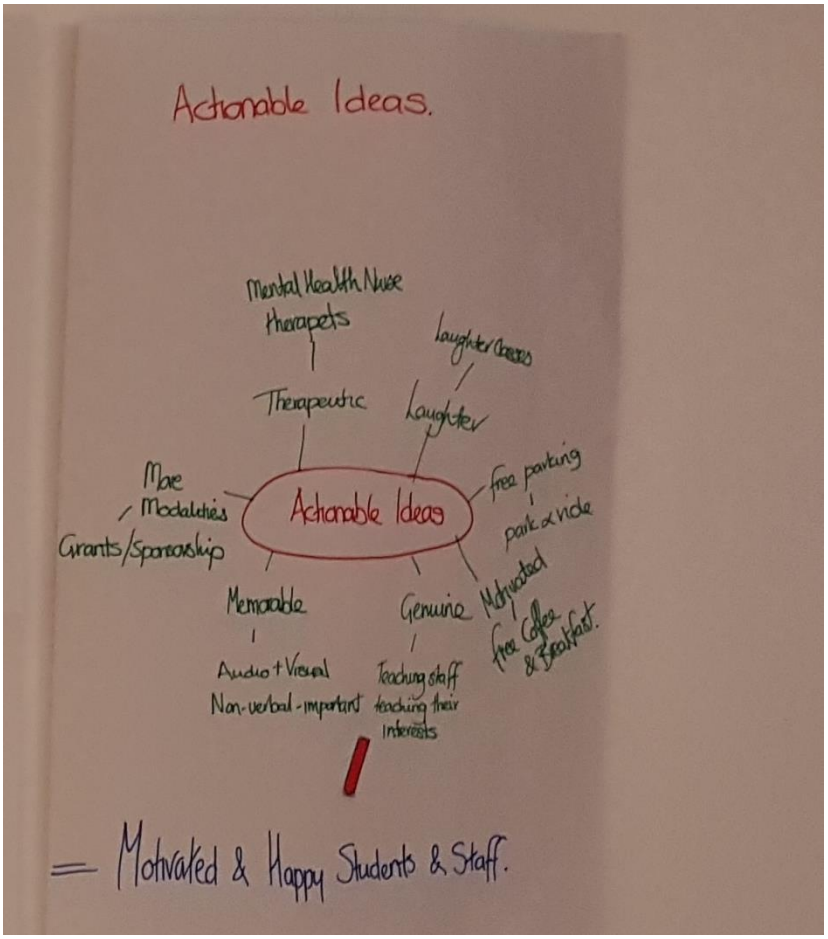

CITY CENTRE LOCATION
GROUP 2
FREE + PLENTIFUL PARKING
ENVIRONMENT CLEAN - TIDY
THERAPY PET ROOM
BRING YOR DOG TO WORK
PERSONALISED CLASSROOM
WESTIE'S WALL TO WALL
INTERACTIVE TEACHING AIDS
DREAM
IF YOU BUILD IT THEY WILL COME.....
THE MOOD -VE influences teaching
BURSARY
EQUIPMENT
CT SCANNER PLEASE
LOTS OF CHAIRS ENOUGH FOR ALL
BLOW COMPUTERS
REU Reputation Awareness
FAJITA FRIDAYS


Personalised Classroom
- year group room
- own work on walls
- countdown calender
CT Scanner Appeal
- public appeal
- fundraising (include students + stakeholders
Interactive Teaching Aids
- ability to ask anonymous questions + answer them
- visual learning (hands on)

Group 3


DISCOVERY
GROUP 3
- personal experience
- helps learning
- humour
- comfortable setting
- structured or impromtu
- honest, knowledgable
- can make you change your perspective
-Tone/Pace
-Range of non verbal
- passionate about story
- engaging
-Allows you to connect to the story teller / breaks barriers


DREAM
GROUP 3
-balance
-engaging
-framework with underpinning story
free parking (valet?)
=>
Happy staff + Students
Discuss the stories with each other
Motivated
Be more Confident
Therapeutic
Laughter
Feeling comfortable
Memorable
Genuine
Non verbal - important
Audio + visual = good balance
Connection
Non biased


Actionable Ideas.
Mental Health Nurse
therapists
Therapeutic
Laughter classes
Laughter
More
Modalities
Grants/Sponsorship
Actionable Ideas
free parking
park & ride
Memorable
Audio + Visual
Non-verbal - important
Genuine
Teaching staff
teaching their
interests
Motivated
free Coffee
& Breakfast.
= Motivated & Happy Students & Staff.