Digital storytelling for interprofessional collaborative practice to develop quality and service improvements

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Submission for Special issue: The delivery of social work education through distance learning; challenges and opportunities: IDEAS IN ACTION

Title: Digital storytelling for interprofessional collaborative practice to develop quality and service improvements

Abstract: 'Service Development and Quality Improvement' is a continuous professional development module within an interprofessional leadership programme accessed by health and social care professionals. The module focuses on acquiring skills and knowledge in quality enhancement, quality improvement and service user and patient involvement essential to shaping and transforming services. Emphasis is on the co-production of service improvement and particularly on enhancing skills in using information technology and different media supported by a virtual and blended learning environment. This *Ideas in Action* describes a case study where digital storytelling provided a virtual learning activity supported by a combination of multimedia, discussion boards, group work and structured activities to engage students in peer support. We illustrate how aspects of the digital storytelling process provide a useful distance learning tool for engaging different professionals in identifying common issues in improving services. We provide a reflective account of the process by drawing on both tutor and students own commentary on the potential of digital storytelling. Learning digital storytelling within a collaborative virtual learning environment gave rise to three key observable outcomes: a levelling effect in interprofessional collaboration; enhancing curiosity as a vehicle for enriching interprofessional exchange and; emphasising service users and patient perspective in service improvements.

Key words: Digital storytelling; Collaborative learning; service improvement; leveller; service user outcomes, Virtual Learning Environment.

Introduction

Digital storytelling is rooted in community theatre with a strong emphasis on developing the first-person narrative. The use of multimedia such as photographs, video, animation, sound, music or text commonly used in digital storytelling are shown to be effective in health and social care education with potential to capture and communicate an issue or topic in a more powerful way (Gubrium, 2009; Leonard, Hafford-Letchfield & Couchman, 2016; Sandars & Murray, 2009). Within pedagogy, digital storytelling lies at the crossroads between the creative and analytical (Leonard et al., 2016). According to Benmayor (2008) both the process and the effect of reaching the end product facilitates a meeting of creative and critical theorising that can be complex, rich and holistic. Given political and policy emphasis on integrated delivery of care and co-production (Hafford-Letchfield, 2016), achieving these outcomes through interprofessional communication and collaboration presents a key challenge. There are few examples of synchronised online interprofessional education particularly because of the lack of heterogeneity of learning interventions that exist across different disciplines.

The potential for digital storytelling to enable and foster collaborative learning is also being documented (Robin, 2008; Vecchi, Kenny & Dixon-Smith, 2016). Just as intellectual theorising requires situating the individual in a collective referent, we share our own experience of using digital storytelling within an interprofessional 'quality improvement' module which suggests that paying attention to the process of creating a digital story was instrumental in creating a 'community' in important ways. This is ideal when generating learning opportunities to bring colleagues from different professions together in a virtual learning environment to examine and own common issues and problems faced within the provision of health and social care towards holistic approaches to service development. This '*Ideas in Action*' case study describes how discussion boards, group work and structured

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activities using multimedia within a virtual learning environment were used to engage students in peer support around thinking through and planning quality improvements in their own contexts. We reflect on the implications for the challenges in social work education to offer more diverse learning opportunities which complement instrumental learning experiences (Wahler, 2012) and contribute to activist pedagogies (Preston & Aslett, 2014).

Background

 'Service Development and Quality Improvement' is an accredited module within an interprofessional leadership programme called 'Leading Public and Community Services' and taught in a UK university. The module serves a range of professionals from health and social care services for continuous professional development wishing to gain a qualification in leadership. It attracts frontline managers as well as experienced practitioners aspiring to develop their leadership potential. Its popularity reflects increasing emphasis within policy on the role of distributed and participatory leadership to encourage people at all levels to adapt, learn, innovate and constantly improve performance (Hafford-Letchfield, Lambley, Spolander & Cocker, 2014). The curriculum and content encourages application of theories about quality issues by teaching skills and knowledge in quality enhancement, quality improvement and user/patient involvement essential to shaping and changing services. Emphasis is on the co-productive nature of service improvement (Hafford-Letchfield et, 2014) and particularly on enhancing skills in using information technology and different media to promote and improve the quality of information and resources about service developments (PricewaterhouseCoopers, 2013).

Students identify and critically analyse a single issue in their workplace by drawing on the theories and models taught. Learning outcomes are assessed by the student developing an action plan to address their issue and putting forward a written plan for improvement. An

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element of this improvement plan is further illustrated by the development of a 3-5 minute

digital story. Assessment gives 50% weighting to the digital story and 50% to the written

part.   Using freely available software such as Windows Moviemaker or Apple i-movie, their

digital storytelling may result in a short information or training resource for patients, service

users or colleagues and encourages students to draw on a new mode of communication

substantially different to how they would normally provide information. Combining

multimedia artefacts alongside written assignments are thought to provide a more dynamic

record of how the students have responded to the quality issue in a creative way (Knight,

2009). The rapid adoption of technology presents practitioners with many challenges but also

rich opportunities for enhancing their practice differently. Knight (2009) suggests that the art

of the practitioner as instigator, designer and animateur within the art of digital storytelling

remains central to the process of learning.

One of the key concerns frequently expressed by students is that there is little they can do

from their perceived 'lowly' position.   Managers often send staff on development

programmes when things go wrong without analysis of the systems and processes within an

organisation contributing to professionals being able to do their job to the best of their ability

(Hafford-Letchfield et al, 2014). Embedding processes within the module that supports

guided critical reflection through the process of storytelling can be useful to challenge

underlying assumptions about issues and problems in the practitioners setting.   Creative

aspects can help bridge these expectations by developing new perspectives that include the

contribution of others.

Sandars and Murray (2009) refer to the essential steps in critical reflection within education

and draw on Mezirow (1991) concepts of 'noticing', 'generating awareness' and 'building

therapeutic relationships' between students, these involve recognition and understanding of

the personal belief and value systems of the involved individuals, expressed within the

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context of their particular professional role. The use of storytelling where students unpack the quality issue (the critical incident) and present it (the therapeutic aspect) in a group situation is an important process which allows the learner to release emotion, an essential part of the reflective process as the drama of their issue unfolds.

Digital storytelling process

The design and structure of our digital storytelling pedagogy comprises a series of online activities which run parallel to half-day workshops taught face-to-face and opportunities for critical review and reflection on learning materials regarding quality and equality; workforce development; resource management; user involvement; measuring and evaluating service performance. This blended learning approach can add value to learning by enabling connectivity of students to their peers outside of the formal learning environment, particularly when they come from diverse backgrounds. It also permitted knowledge-sharing and co-authoring across a broader range of locations in health and social care and more active learning and participation in communities of knowledge around the topics being explored (Knight, 2009).

An evidence scan by The Health Foundation (2012) examining methods of training in quality improvement, found insufficient evidence to conclude which method is the most effective. However, active learning strategies, where participants put quality improvements into practice, are thought to be more effective than didactic classroom styles alone. Murray Douglas, Girdley & Jarzemsky (2010) suggested that experiential learning combines classroom learning with practical projects such as those embedded in our approach to producing digital storytelling that support the implementation of a service improvement plan.

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From the outset, students are expected to undertake weekly online activities moderated by the

module tutor via the virtual learning environment. An outline of the process is illustrated in

Table 1.

Insert Table 1 about here

Incrementally, these activities require a range of skills from conceptualising and visualising

an idea towards integrating, performing and signifying their proposed service improvement.

The role of the tutor is to encourage and moderate by going on to the discussion board

regularly to make comments, ask provoking questions and to provide stimulation where any

reticence is noted. Reassurance and guidance on the technical side is given by access to an e-

learning technologist who supports the tutor in this respect. Figure 1 also provides an

example of a storyboard and topic that a student might develop using a proforma and share

online. This example incorporates imagery on the types of leadership styles that can be used

to foster more collaboration and co-productive relationships. The student has provided three

images that represent these changing relationships alongside a spoken commentary.

Insert Figure 1 about here - Example section of a storyboard

Reflection of the process of online digital storytelling in enhancing collaborative

practice

We now discuss some of our observations based on an end of module evaluation of two

cohorts following the module, (n=62). These cohorts included 16 social workers; 18

midwives; 7 community nurses; 5 occupational therapists; 2 dieticians; 9 general nurses and 4

mental health nurses. We draw on both student self-reported qualitative comments end of

module evaluations alongside content analysis of 334 individual postings, ranging from brief

single entries and longer more reflective commentaries on the peer discussion boards referred

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to in Table 1. Ethical approval was provided for the evaluation from the University Ethics Committee (Ref: MHEC 674). Participating students gave informed voluntary written consent to the tutors' evaluation and use of entries to their discussion boards following a guarantee of anonymity and agreement that this would not take place until after the formal assessment of the module was completed. The qualitative data from these two sources was read several times and then coded for any insights into identifying student experience of both the process and outcomes of digital storytelling. Three loose themes emerged which are discussed under their headings below.

Creating a level playing field

It was observed that learning a new skill such as digital storytelling created a level playing field by provoking the anxiety associated with a new experience in a pre-meditated and safe teaching and learning environment and supported by the structured framework outlined in Table 1. This reflected some of the complexities of uncertainty faced by professionals in the everyday 'swampy lowlands' of practice (Schon, 1991, p. 42). Active exploration and commentary on digital storytelling via resources on the virtual learning environment provided common parlance for students to consider how this particular mode of communication related to their own role and practice areas. Digital storytelling also stimulated counter narratives on the way other professionals communicated about their organisations particularly in relation to the assumed priorities of uni-professionals within that context. Both the excitement and fear of learning a new skill for some students involving technology quickly brought emotions about learning to the surface as most students were not very proficient at his form of communication. For those students who were more familiar with digital technology, they actively coached others who were less confident. Whilst experimenting with the software, the discussion boards contained a higher number of emotionally-led communications expressing vulnerability, suspicion, dependency, and then growing confidence as they became more

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familiar with the task and associated technology. This appeared to stimulate increased

expressions of peer support through mutual exchange of reassurance, encouragement earlier

on that one might expect.

I am thinking of telling the story of ambulance turnaround times challenging both the A&E

staff and the ambulance crew. New ways of working have been put to the test, to meet this

quality indicator but we haven't got it right. I want to tell the story of why and what it means

to the patient, as I think staff have not brought this into this indicator and perhaps talk

through a new way of working. I've noticed that a member of our group is at the (name of

hospital) A&E and would like to ask how they are meeting the challenge?" (discussion board

entry in week 3).

Curiosity and enriched exchange

Froggett (2006) identified features of the changing nature of the power dynamics and

emotional relationships when using art-based pedagogies. She observed participants

experiencing shifts in the depth of learning when facing uncertainty and having to work

through a process of resolution. We found that using online methods that encourage active,

collaborative and engagement (see Table 1), facilitated problem solving from peer support

rather than relying on direct transmission of knowledge from tutors. By emphasising imagery

and sound, digital storytelling facilitated the value of listening, as a critical starting point

from which relationship building around a common interest in care services was fostered,

irrespective of discipline. As one midwife put it:

"I found it so insightful to read what we all do for a living. This is a great method for

summarising what we all do, and it amazes me how much experience we have together"

(discussion board).

Students responded well to the iterative process of identifying an issue, preparing the

storyboard, selecting and editing images, and receiving feedback on other's reactions. For

example, by the middle of the module, a typical discussion board would attract approximately

20 postings and by week 8 as many as 71. Once students actively experimented with creating

their digital storytelling, dialogue was less centred around the tutors input and more centred

on the use of images and ethical issues in relation to points being put across by groups and

individuals. These exchanges triggered more lively discussion as deeper questions were

posed about the aims of an individual's service improvement plan. For example, students

shared concerns about systemic issues in their practice contexts commonly hindering their

desired improvement. Examples included overly bureaucratic processes for people accessing

a service which were unpicked and the chain of actions reviewed. Active positioning on these

debates drew people in, fostered peer alliances and gained commitment in some situations.

"I hope our discussion in the workshop the other day helped to process some of your

frustration. We have to keep trying; there is a view out there that we involve service users

when there is clearly a long way to go, inch by inch! Keep up the challenge and we need to

be passionate about it" (social worker, discussion board, week 6).

Similarly, students expressed open curiosity about each other's professional boundaries and

day-to-day experiences through this medium. Overseas students utilised the software in the

experimental stage to portray their experiences of living in the UK or their work contexts

through images and voiceovers. This sharing of backgrounds appeared to forge greater

empathy and friendship in some cases which in turn facilitated informal learning and support

outside of the classroom.

Focussing on service users' outcomes

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A key outcome of the module was the production of the digital stories with content focused

on communicating service user/patient needs and highlighting possible injustice or imbalance

of power as perceived in the students own practice area. As illustrated in the above comment,

there are ongoing challenges in how different organisations and groups of professionals

embed user and carer participation both formally and informally into service delivery. This

was a highlight of discussion on the virtual learning environment and expressed through the

students digital storytelling. Given that students were not permitted, for ethical reasons to

film or engage with patients or service users, helping each other out and engaging their work-

based colleagues in acting staged scenarios that could be photographed and used in their

digital stories facilitated perspective taking and an opportunity to get into the shoes of

different actors within the quality issues being addressed. Some examples of digital stories

involved; service users perspectives on promoting good diet when living with mental ill

health and on low incomes; relationship building with older people in care environments; the

promotion of good aftercare such as breastfeeding; going into hospital from patients own

perspectives and engaging young people in managing their own sexual health. Whilst it

wasn't possible to assess the impact of the service improvements put forward, the students

used digital storytelling as a trigger to start conversations in practice area that may have felt

otherwise difficult. They "reintroduced" the perspectives of service users and patients by

sharing their digital storytelling with managers and staff and provoking further reflection and

debates in their workplace. Showing something visual rather than communicating the issue

verbally or in writing enabled students to raise issues they might otherwise have experienced

discomfort in doing so.

Conclusion

Kip, Pimlott & Satzinger (2007) highlighted the importance of practice and learning in

continuous improvement as part of the daily work of delivery of care and professional

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education.   Our example of using digital storytelling for enhancing improvement planning

demonstrates the benefits of developing further shared curricula by using the virtual learning

environment based pedagogies which encourage co-construction of shared solutions across

different disciplines. Leadership for curriculum integration can begin at the university level

but the mode of delivery can also support the provision of teamwork experiences that deal

with intersections of care for service users and patients at level of continuing professional

education (Barr & Ross, 2006). The relational nature of digital storytelling and the way in

which the process incorporates elements of reciprocity enhanced opportunities for students'

building authentic relationships beyond their professional domain. Nearly all students

created innovative and informative digital stories with genuine practical utility within their

work environments. These ranged from information for patients about routine care for pre-

and post-intervention care such as hip replacement or an introduction to staff induction and

embedding links to organisational induction resources into a more visually engaging and

accessible format. Students also learned process skills and about the importance of sharing

accountabilities for service user/patient outcomes.

"Now that the course has come to an end, I personally feel that in an age of multi-media, it

was resourceful and a good means to make a different to the service and quality along with

my colleagues" (District nurse – evaluation).

This case study primarily focused on the process of using digital storytelling as a method to

encourage collaboration around identifying and developing students own plans for service

improvements rather than on how effective the learning objects produced were in achieving

improvements. This reflects current critique within public services about paying attention to

the human side of change when effecting service improvements as opposed to focusing on the

all-important outcome of change itself (Hafford-Letchfield et al, 2014).

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There are limitations and risks involved in teaching digital storytelling as tutors need to be confident with technology, have sufficient time to help resolve technological issues, and be proactive as moderators by supported students through ethical issues. Most can be overcome by good planning and setting clear ground rules at the beginning and through active moderation and facilitation of debates within the discussion boards. We put a lot of effort into frontloading the virtual learning environment but have since been encouraged to generate student directed learning materials and become more confidence as tutors to experiment with a co-produced resource with fewer didactic elements. Finally, we recommend developing the extraprofessional education environment further by bringing service users/patients as facilitators of learning into the discussion boards and into the assessment process which requires training and support and additional resources.

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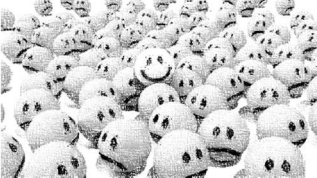**Table 1: Programme of virtual learning activities**

Week 1	Introduction to discussion boards, finding and downloading the digital story software
Week 2	Students conduct online searches about digital storytelling (some links are provided) following which they post an example they found most interesting with a narrative commenting on their reason for selection, photos, narration used, and particularly how they were affected including a direct web link.
Week 3	Students view instruction videos on creating digital stories and introduced to the story board template. Using a template, in small groups they create a storyboard around a common theme and view students past examples. They are given resource links to copyright free images and music/sounds* (see links below).
Week 4	A designate member of the group uploads their storyboard to the discussion area. Each individual views storyboards produced by 2 other groups and provides critical feedback to help them to improve their stories.
Week 5	Hands-on session in the computer lab takes students through the process of producing digital stories and using personal photos or copyright free images from which they make their own sample and upload it for review by their peers.
Week 6	Students who are now working on their service improvement plan begin to develop their individual story boards around their service improvement theme and again upload these for peer review.
Week 7	Hands-on session in the lab, enable students to translate storyboards to digital stories with support. These are uploaded for peer review. Students view each other's digital stories and provide critical feedback on their peers draft digital stories.
Week 8 - 10	Students work with peer and student feedback and upload up to three further drafts. They are given a format for structured evaluation based on the summative assessment criteria and each student is given three named peers to evaluate their digital story as it develops.
Week 11	Opportunity to record their final story in supported lab session

*Music : Bensound: https://www.bensound.com/royalty-free-music/cinematic Sound Cloud Royality Free Music: https://soundcloud.com/royalty-free-audio-loops Mobygratis: http://www.mobygratis.com/

Images: PEXELS: https://www.pexels.com/royalty-free-images/ PIXABAY: https://pixabay.com/ Flickr: https://www.flickr.com/creativecommons

Sketch Images Leadership styles Managerialism / Paternalis Voluntarism / Co Production 	Theme: Our Challenges and opportunities – Leadership.	Scene number: 9
	Narration:	List of Audio/video/visual/textual components:
	Well we could begin by redefining the relationships within our service so that everyone within it, users and staff, are actively encouraged to participate it's development.	
	That means shifting from leadership as this….	
	Or this	
	To something more like this….in which staff and service users alike actively contribute toward the service delivering quality in the eyes of those using it and those funding its existence.	

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Example section of a storyboard