

## Client's digital stories: Using the lived experience to personalise online learning

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Clients' stories of their lived experience of disease and illness are an important part of the nursing curriculum that fosters the development of a client-centered approach to healthcare. While opportunities for these types of learning experiences have historically been possible via placements or simulations, opportunities for such personalised interactions in the online context is more difficult. Digital stories offer a way to bring the lived experience to online learning. Digital stories are short multi-media clips that bring a character's experiences to life, yet research into the impact of these stories on student learning is sparse. This paper presents a work in progress and preliminary findings from 20 students' responses to client's digital stories in a fully online course using the construct of empathy to identify themes in the students' comments. Themes indicated that the digital stories helped student learning, assisted with the development of empathy, and stimulated engagement by tapping into the emotional dimension of learning. The study suggests that learning design incorporating client digital stories assists with the development of empathy, aids in understanding and stimulates engagement by inspiring students through personal connections with clients.

Keywords: Digital stories, Nurse education, Student engagement, Empathy, Learning design

### Background

The opportunity to study online rather than needing to come on campus to study has enabled many students to participate in higher education who would otherwise be unable to due to geographical, work or family commitments (see eg. Stone & O'Shea, 2019; Muir et al. 2019). Online students tend to be older, first in family, come from low SES backgrounds and regional areas, and be juggling work and family commitments alongside studying (Muir et al., 2019; Stone & O'Shea, 2019). In addition, online learners have higher attrition rates than on-campus students (Muir et al., 2019), and face a number of challenges that are unique to the online study experience. For example, they report feeling isolated and disconnected, without a sense of belonging to their institution (Burton, et al. 2016), that is, there's a sense that their learning experience isn't personal.

Findings such as these suggest that it is not just interest in the content that keeps online students engaged in their studies, but that there are relational components to their engagement. Moore (Moore, 1989) describes some of these relations in his model of online interaction by conceptualising online interaction as consisting of three elements; student-content interactions, student-student interactions and student-educator interactions. Moore (1989) explains student-content interactions as the defining characteristic of education, as it is through these interactions that students come to understand new concepts, take on new perspectives or alter the cognitive structures of their mind. Student-student interactions are also seen as important, as peers act as valuable, if not essential learning resources (Moore, 1989). And finally, student-educator interactions are also essential, especially in motivating and maintaining students' interest, and as a source of feedback to students (Moore, 1989).

Although Moore's model was conceived of some time ago, his advice of the need to specifically design for all three types of online interactions and to use multiple mediums to facilitate each interaction is very much relevant today (eg. Bates, 2015). In addition, his model highlights the idea that not only is cognitive engagement with content important (ie. student-content interactions), but that social interactions between others, ie the relationships, are also an important part of the learning process.

The importance of social relationships is also central to experience based learning pedagogy, which, apart from assuming that experience is the foundation and stimulus for learning, also has as its central tenants that 'learning is socially and culturally constructed', that 'learning is influenced by the socio-emotional context in which it occurs', and that it is a 'holistic' process involving feelings and senses as well as the intellect of the learner (Andresen, Boud, & Cohen, 2000), ch. 14). Once again highlighting that learning involves more than just intellectual engagement, but that emotional connections with others, and the content and context are important. One way that we can foster both intellectual and emotional connection with content with the aim to ignite the 'spark' for learning in the online environment is through the use of digital stories.

## Client stories in nursing education

Client stories are not new in nursing education, indeed they are a fundamental part of the curriculum bringing the lived experience of disease and illness to the student learning experience. Importantly, this lived experience enables students to develop empathy and take a client-centred approach, but they can also reduce preconceptions and challenge stereotypes, and develop students' confidence in future clinical encounters (Codd, Burford, Petruso, Davidson, & Vance, 2018). Further, as such stories are grounded in reality, they are recognisable to students, provoking reflection on a variety of viewpoints and can also assist with sense making (Waugh & Donaldson, 2016). Traditionally these client stories have been told during student placement experiences or patient simulations –however these experiences are difficult to transfer to the online learning environment where physical contact with clients is not possible.

We used digital stories to bring clients' stories to life in an fully online Graduate Certificate in Diabetes Education (GCDE) course as a proxy for face-to-face client stories that have traditionally formed a fundamental part of the on-campus learning experience, but to also personalise the online learning experience and foster emotional connections with the content. Digital stories are short multi-media clips created by weaving together images, music, story and voice (Haigh & Hardy, 2011). Haig and Hardy (2011, p. 410) describe the power of digital stories resulting from the "tapestry bring[ing] depth and colour to everyday characters, situations, experiences and insights. They not only touch hearts and therefore influence minds, but they provide opportunities for reflection". However a recent systematic review found that client's digital stories alone had minimal impact on understanding or knowledge of a topic, and concluded that more research was needed on the impact of digital stories on health professional's behaviour (Moreau, Eady, Sikora, & Horsley, 2018). This study sought to contribute to our understanding of the impact of clients' digital stories on post-graduate students by investigating students' responses to digital stories in a fully online course.

## Curriculum context

The GCDE is a fully online degree offered by the School of Nursing and Midwifery a large Australian regional university. The GCDE aims to prepare graduates to practice effectively as diabetes educators in a range of healthcare settings, and is the first step towards professional recognition with the Australian Diabetes Educators Association. The majority of students are registered nurses, although demand has increased over the past several years from other allied health areas.

The degree consists of four units, each offered in 5 x 2 week 'courses' broken down into a series of 'steps' (ie. individual html pages) on the FutureLearn platform. Each step ended with a 'Your Task', which represented a call to action for students to do some form of learning activity, or to respond to a discussion prompt by 'commenting' in the peer discussion space which was located within the step. Digital storytelling formed the backbone of the curriculum design due to the importance of a patient-centred approach in the discipline, but to also provide context and a framework for students to link together new concepts (Moon & Fowler, 2008). We used a variety of practitioner interviews and client digital stories throughout the degree, with clients re-appearing throughout the unit in order to tell different aspects of their story as it aligned to the content.

## Digital stories: Production considerations

In developing the digital stories, the digital production team worked collaboratively with academic staff to ensure that the content of the videos aligned to the unit and course learning outcomes. Further, the production team approached each client's story as though it were a miniature movie –this included selecting clients who were comfortable telling their stories on camera and developing backstories for clients so that the audience got to know them as a person. In addition, they spent time working with clients to do practice shoots, build rapport and develop relationships –again contributing to the client's comfort in telling their story to camera.

Rather than having clients come into the studio, filming occurred on-location in client's homes and included them undertaking daily activities (eg. driving, running, preparing meals). There were also different characters in the stories, those who were important in the lives of the clients (eg. family members, pets). Post-production focused on shaping the footage into a story, complete with image overlays that produced a 'photo-album' look and feel, and the images and music overlays were contextualised to the character to once again promote a personal connection to the client.

## Method

### Aim

The aim of this study was to explore the impact of client's digital stories on post-graduate students by analysing students' comments in response to digital stories.

### Conceptual framework

This study used the construct of empathy as a framework for understanding the impact client's digital stories had on students. Empathy is considered a basic component of therapeutic relationships, it is critical in patient perceptions of quality care, and has a positive influence on patient health outcomes (Levett-Jones, Cant, & Lapkin, 2019). As empathy is an essential component of the healthcare curriculum (Levett-Jones et al., 2019), it is important to understand factors that can influence the development of empathy in the online context when physical contact with patients is not possible. The study used a generally accepted definition of empathy, defined as "the cognitive ability to comprehend what another person is feeling, an emotional resonance with those feelings, and the willingness to respond appropriately to the person's needs" (Levett-Jones et al., 2019, p. 80) as a lens through which to analyse students' comments in response to client stories. In addition, consistent with learning involving the whole person as per experience based learning, the analysis also focused on the impact these stories had on students' feelings in relation to the content.

### Participants

Following ethics approval (HEA-H 139\_2017) from the relevant university body, all students enrolled in the GCDE were invited to participate in the study via a hyperlink to the Plain Language Statement and Consent Form in the last step of their unit. Twenty-three students volunteered to participate, three of these students did not post any comments and were therefore excluded from the study leaving a total of 20 participants. All participants were female, ages ranged from under 25 (n=1) to 40+ (n=10). Participants came from a range of professional backgrounds, including registered nurses, pharmacists and dietitians.

### Comment analysis

At the end of the study period, participants' comments from steps that included a client digital story or a step that included a 'Your Task' that related to the client story were downloaded from the FutureLearn platform and de-identified (See Table 1). Once de-identified, a deductive thematic analyse was conducted using empathy as a conceptual framework. The data presented in this paper only includes data collected in the first two units of the GCDE, and is part of a larger data set of comments collected across the course as a whole.

**Table 1: 'Step' information and comments analysed**

Unit (course)	Step number	Step title, type and length of video	Number of participants who commented	Number of comments
Unit 1 (1)	1.9	Being diagnosed with diabetes: Video of Kirsty; 4:59mins	8	8
	2.9	Practical strategies for living with diabetes: Video of Kirsty; 2:27mins	7	7
	2.10	Reflect on Kirsty's experience: Article (Reflective task)	6	7
Unit 1 (2)	1.14	Quality of life and self-care: Article (Application task)	7	8
	2.4	Joan and Colin's Story: Video of Joan and Colin; 9:00mins	9	10
	2.9	Colin putting it all together: Video of Colin; 2:15mins	6	6

Unit 1 (3)	1.5	Kirsty's experience of life transitions: Video of Kirsty; 5:14mins	8	8
	1.7	Sense of Coherence and chronic illness: Article (Application task)	8	8
Unit 1 (4)	1.7	Joan's experience accessing diabetes information: Video of Joan; 2:40mins	10	11
	2.8	Interprofessional practice in diabetes care: Article (Application task)	9	9
Unit 1 (5)	1.7	Nola's story: Podcast of Nola; 5:15mins (audio and images only)	10	13
Unit 2 (1)	1.10	Living with diabetes: Video of Beth; 3:40mins	7	14
	1.11	Beth's story, your story: Article (Reflective task)	9	14
	2.4	Diabetes: a personal perspective: Video of Beth; 2:53mins	5	6
Unit 2 (2)	2.2	Being diagnosed with type 1 diabetes: Video of Kirsty; 3.03mins	8	10
Unit 2 (3)	Clients' digital stories not used in this course			
Unit 2 (4)	Clients' digital stories not used in this course			
Unit 2 (5)	Clients' digital stories not used in this course			
<b>Total comments analysed = 139</b>				

## Preliminary findings and discussion

Preliminary analyses of students' comments in response to digital stories suggested that the stories impacted the development of empathy. The definition of empathy used as a conceptual framework in this study can be thought of as consisting of three dimensions; a) the ability to comprehend another's feelings, b) having an emotional resonance with another's feelings, and c) a willingness to respond to that person's needs. Table 2 illustrates how each one of these dimensions was illustrated in the students' comments. In relation to comprehending another's feelings, you can see that students indicated that they could relate to the clients in the stories, they could imagine what it might be like to walk in their shoes. Regarding an emotional resonance with another, the students used emotive language (eg. 'I like', 'I love', 'I'm glad') in their responses, indicating that they had an emotional connection with the client. And finally, students comments demonstrated a willingness to respond, these comments also demonstrated that students thought about how they would respond as their future professional self (eg. 'As a diabetes educator', '...for us as educators'). These findings suggest that the client stories had an impact on students' attitudes toward empathy, although we are unable to tell from these results whether this would translate to a change in behavior or transfer to clinical practice.

Levett-Jones et al. (2019) claim that immersive and experiential interventions are most effective at fostering the development of empathy as they enable students to see the world through the eyes of another, in addition they point out that these interventions are most effective when coupled with guided reflection and opportunities for debriefing. The findings of this study support this view, as not only did client stories enable students to comprehend another's feelings (ie. see the world through another's eyes), but as the stories were integrated into the curriculum alongside learning activities prompting students to reflect, apply and discuss with their peers (ei. enabling opportunities to de-brief), this made the learning experience all the more powerful.

**Table 2: Students' comments illustrating empathy**

Dimension of empathy	Example comments
Comprehending another's feelings	Is understandable...I can definitely relate...I also share Kirsty's flux and flow (P01) Kirsty's story completely resonates with me...Believe me, for a runner (P09) When my husband was diagnosed (P14)

	I can't begin to imagine how overwhelmed I would feel. Imagine you are young and ... (P12)
Emotional resonance with another's feelings	I like the way she has found...I like the way she finished...very inspiring (P11) It was good that she was able to...I'm glad that she is able...I like how she (P13) I love how Kirsty...This lady does not cease to amaze me...I sensed that her relationship (P09) I admire the way she...I definitely take my hat off to Kirsty and will remember when I see my patients (P12) I loved how empowered Beth was...I was pleasantly surprised that she looked so well (P01) I love Beth's principal of 'getting on with her life' (P14)
Willingness to respond to need	As a diabetes educator, our role is to ... (P04) It is important for us as educators to realise... (P12) I think this [being diagnosed] is a very overwhelming experience...so anything we can do to ease this would be beneficial (P20) I think the person giving the diagnosis will need to use active listening skills (P14)

Students comments also suggested that the client stories assisted with student-content interactions (Moore, 1989) by sparking students to further inquire into client's lives, "I wonder if ...It would be interesting to see how she..." (P19), "I love Beth's attitude...I envisage she has good family support (P09)", "It is interesting to consider other's diagnosed at a similar time and maybe compare their outcomes...I had a quick look at the most recent list of medal recipients and there are not many" (P15); and by stimulating imagination related to the client's stories, "I imagine that initially she would have started...also I imagine" (P05), "And I wonder if in the early years...It is possible too that the school helped..."(P14), but also at times this imagination related to their future professional selves "Unfortunately not all sufferers understand...so that is why I plan to specialise. I want to guide/educate..."(P16).

Comments also suggested that students' felt inspired by the stories, "Nola is truly inspiring" (P07), "Nola is a very impressive lady and her passion for people is evident" (P04), "Beth's story of her journey with diabetes is quite inspirational" (P15), demonstrating that not only were student's intellectually engaged, but that the stories tapped into students feelings for learning, as per experience based learning (Andersen, et al. 2000).

Finally, in addition to the comments in the steps related to the client stories, some participants also made comments about the client stories in 'wrap-up' steps throughout the units. The analysis of these comments is currently underway, however some of these are included here to illustrate how the stories impacted students' overall learning experience, and made their interactions with content more personalised because of the connections they felt with the clients, "Having the personal stories of people living with diabetes has really helped to consider the impact of diabetes and its complications on the individual rather than it just being something you read about in a text book (P20)", "I particularly liked Kirsty's video and her reflection of diagnosis and adjustment to type 1 diabetes...I have found the personal stories invaluable (P07)", "This is the stuff I love about working with people with diabetes. The individual, their personal story, their challenges and their successes (P12)"; by also assisting students to connect new information together and see the relevance of the content, "The case stories gave real life experiences and made concepts easier to understand; and the expertise gave me the confidence that what I was learning would be useful (P04)".

## Conclusion

The preliminary findings of this study suggest that client digital stories have an impact on empathy and enhance the overall learning experience of post-graduate students in a fully online course. It is suggested that in order for client stories to be most effective in fostering empathy, they be complemented by learning activities which include opportunities for application, reflection and discussion. Client stories offer a way in which we can foster a more personalised online learning experience by enabling students to make connections with clients, which in turn increases student-content interactions. Client stories also appear to tap into students feelings as well as their intellect, making for a more holistic learning experience.

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