They just don't get it: Using digital stories to promote meaningful undergraduate reflection?

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Abstract

The skill of reflection is essential for all doctors but can be a difficult concept for students to understand. We established a Special Study Module (SSC) in the final year working with the Patient-Voices project to enable students to reflect on their clinical experiences by producing a digital story. Using prospective qualitative methods, we tracked the progress of the students during this SSC. Post-course students took part in a focus group and completed an evaluation questionnaire.

Five students took part and produced seven digital stories currently available on the patient-voices website (http://www.patientvoices.org.uk/lssc.htm) . The creation of a short digital story enabled these students to distil their clinical experiences to the core. Using story development methods, linked with specialist IT knowledge, was a challenging process for the students. Students stated that making digital stories was a powerful process. It had helped them to reflect, fully describe and analyse critical events and demonstrate professionalism within their portfolios'. They all grappled with the emotional aspects of the process. They highly recommended all students to have the opportunity to learn to reflect by making digital stories. The stories provide insights for medical educators and can be used as teaching tools.

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Introduction

Today's medical students are expected to '*continually and systematically reflect on practice and whenever necessary, translate that reflection into action…*'. (GMC, 2009). Over the last decade reflection has become an accepted essential doctrine within health and social care education (Dalley, 2009, p18; Sandars, 2010). There is a great deal of agreement that reflection should be taught so that students become motivated self-directed adult learners, able to develop personal insights and appraise their performance as doctors (GMC, 2009).

Reflection is a metacognitive process achieved through the analysis of social situations (Sandars, 2010).   Doctors are required to develop and assimilate these skills so that they can continually reflect on their practice (Schön, 1983). Reflection for learning is complex and many learning theorists have articulated the concept (Dewey, 1938; Vygotsky, 1997; Moon, 2004; Kolb, 1984). For educators, designing and assessing reflective learning remains challenging (Sandars, 2010; Bulpitt and Deane, 2009). This is confounded by a plethora of different approaches used in teaching reflection, including reflective essays, diaries, case studies and portfolios. As a result students are confused and educators frequently lament that students just '*don't get it'*. Recent guidance has added some clarity and suggests three approaches:

- Establishing experiential learning to provide pivotal moments for student reflection

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- Enabling students through reflection to maintain and develop therapeutic relationships with patients

- Enabling students to reflect on the complexity of clinical decision making (Sandars, 2010).

Perhaps one of the simplest ways to help students understand reflection is through patient stories and narrative. In our experience the Kolb learning cycle has provided a sound educational approach for students to examine the lived life experiences of patients (Kolb, 1984; Anderson and Lennox, 2009; Smith and Anderson, 2007; Kinnair, Anderson and Thorpe, 2012). These patient encounters add the important dimension of emotion to enhance learning (Illeris, 2002). Understanding peoples' lives has enabled doctors to practice medicine with empathy, reflection, professionalism and trust (Charon, 2001). It is even more powerful to allow students to re-tell and further process the content of these situations through storytelling (Bruner, 1990; Gersie, 1997; McDrury and Alterio, 2003). It is widely accepted that narrative medicine can make a significant contribution to understanding the patient's condition (Greenhalgh and Hurwitz, 1999).

Digital storytelling offers a powerful means of reflection on experience. The creation of a short two-three minute film, results in the distillation of experience to its very essence. A partnership with Pilgrim Projects who established, developed and evaluated the Patient Voices Programme, led to an opportunity to assess the impact of creating a digital story on student's reflective learning abilities (Hardy, 2007; Sumner, 2009).

The Background and aim

Adapted from the Patient Voices digital storytelling workshop this learning was set up as a Special Study Module (SSC). The content and details of the SSC can be found in Table I. The learning was supported by expert facilitation from the Patient Voices Programme (PH and TS) and two university academics familiar with the process. Assessment depended upon completion of a digital story and presentation to senior members of the medical school. The SSC was intended to offer students the opportunity to:

- Reflect on prior clinical placement learning

- Develop reflective skills using storytelling and IT techniques

- Produce a digital story.

Students consented to place the stories on the Patient Voices website and ethical principles were followed throughout the SSC.

Method

We applied a prospective evaluation using qualitative methods.

- Students recorded their activities, key learning and personal reflections daily in a **reflective diary**.

- Students completed a pre and post-course standard **questionnaire** on learning. Each learning outcome was scored on a 5-point Likert scale, where 1 indicated little learning and 5 a great deal.

- Post-course, students participated in a **focus group** led by the researcher (LT) and completed free text comments in a questionnaire.

Sample

Medical students who selected this SSC were half-way through their clinical rotations. Entering their final year they were well placed to draw upon a wealth of clinical experiences.

Results

The five male students produced seven digital stories (two students producing two stories each) (Table 2). These stories may be seen at: http://www.patientvoices.org.uk/lssc.htm. The stories contain the themes of death and dying; professional choice; professionalism; patient choice; complexity of emotions within clinical uncertainty; and insights into the pressures on front-line staff in modern healthcare.

Prospective Themes

Reflective diaries

Pre-course three students were concerned they did not have the skills to complete the task in the time allotted. Everyone wanted the event to be enjoyable and fun. Two were uncertain what to expect (Table 3).

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During the course all students felt there was little time to complete the work and some had concerns about mastering the technical aspects and producing a coherent story. All found the process mentally exhausting but rewarding. The energy was often related to the process of reflection; '*really pleased to be able to reflect on my experiences in a meaningful and constructive way'* student 1, (Table 3).

Post-course all students viewed the experience positively, stating it had helped them to reflect, listen and value the power of stories in healthcare. All students emphasised the value of in-depth reflection on their clinical experiences; '*nice to be able to reflect on something of my choosing and not something the medical school told us to reflect on'* student 2, (Table 3).

Questionnaires

The students had wanted the course to be enjoyable and; *'To learn more about producing a digital story and to develop IT skills relevant for all the tasks involved. I hope to improve my creativity and writing and reflection skills',* student 5.

Pre-course, three were concerned that they had problems with reflective writing, one was anxious about time constraints and another about what story he could tell. They expected to improve their ability to reflect and be able to produce the story at the end of the course.

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Post-course they all found the experience to be powerful. Producing the stories had made them think more deeply about their clinical learning, about stereotyping in medicine, and; *'about the small details in everyday practice that could improve aspects of clinical care'*, student 5.

They all felt they had improved their skills in:

- Reflection

- Preparing a coherent narrative

- Computing and information technologies

- Organisation and self-management

- Listening.

All considered there to be future uses for digital stories including:

- A process to consider critical incidents in clinical care and their impacts

- The use of visual material for learning

- A process to help them fully listen to patient experiences

- A tool for reflection on learning

- A tool for presenting their reflections-on-actions taken in clinical work.

All had enjoyed the course;

> *'I enjoyed the course. I produced a digital story that I am pleased with. I have improved my reflective abilities and I found that I had many stories I could have used from clinical practice',* student 3.

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'I expect my video to be used - this is particularly pleasing as I feel others will strongly benefit from my experiences,' student 4.

'I produced two powerful stories that can benefit other people-patients and healthcare professionals. Two important reminders… to say have patience with patients all the time - the main theme of my stories is also an important aspect of being a [professional] *doctor',* student 5.

Focus group

Post-course, all the students felt they had benefitted from attending and felt they had gained so much more than they expected. They agreed that this was a more powerful method of reflection than any other that they had been offered at medical school as they would clearly remember these experiences and learn from them. One student stated:

'those medical students that do not want to do this should be made to do it as it is probably these to whom it would have the greatest effect - it has on us.'

They all agreed that the course should have small numbers for the support required.

Pre- and Post Learning Outcomes

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Pre- and Post quantitative data shows all students perceived they had increased their learning (Table 4).

Discussion

This SSC was highly successful and the stories continue to have an impact today. The outcomes, shared at national and international conferences elicit a positive response, demonstrating the Effective, Affective and Reflective potential for digital storytelling in healthcare education (BMJ, 2010).

The small evaluation is clearly a limitation of this study. Small numbers were a part of a design structure which required emotional and technical support. Many SSC's do attract small numbers but hold key messages about teaching and learning that often fail to become assimilated within core curriculum.

Digital storytelling is confirmed by all the students as a tool for in-depth reflection-on-action. Nowhere is reflection more important than amongst medical professionals who have to deal with the most profound issues of life, death and illness. While great emphasis is placed on the intellectual knowledge required of skilled professionals, it is not uncommon to overlook the emotional intelligence that is of equal importance in the practice of medicine and the maintenance of good health for the practitioner as well as for the patients (Goleman, 1998). Digital storytelling enabled student reflection that maintained intellectual and emotional awareness and gave clarity to their moments of

being with patients and other professionals. Vital to these students was the opportunity to reflect on a key clinical experience of their choosing, seen as an essential ingredient for in-depth reflection (Sandars, 2010). The creation of the stories enabled the student to reflect by looking back at their chosen moments through different lenses. They considered what they had done, what other professionals were doing, the impact on the patient and their families. Both the story circle and the discussion helped the students think more deeply about the moment (Gersie, 1997). The ability to talk through experiences and use digital techniques in reflection are both reported to be high quality approaches to reflection (Sandars, 2010). Familiarity with this reflective technique was also seen as a modern and meaningful way to present their future reflections within e-Portfolio's for continual professional development which has been endorsed (Sandars, Murray and Pellow, 2008).

Digital storytelling proved to be a powerful reflective technique. The outcomes for the students appear to be a set of skills for in-depth future reflection and techniques for presenting self-analysis for appraisal and re-validation. In addition they offer the opportunity to see clinical moments through the lens of others (Wakerhausen, 2009). Medical schools gain insights into the hidden curriculum of student experiences in clinical placements and we continue to use these stories in preparing students for clinical learning.

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Table 1*: Stages of Digital Storytelling Workshop*

Stages of the Patient Voices workshop	SSC stage	The stages of the student voices SSC
1. Introductions – who are we and why are we here? 2. Seven elements – what makes a good story? 3. Story circle – sharing our stories 4. Script development – reflecting on, and finding meaning in, our own stories	Week one	Introduction to digital storytelling and consideration of what makes a good story (one-day session) Analysis of existing digital stories and literature review Planning and development of the story on paper Finding and taking photographs to tell part of the story
5. Photo editing – working with images 6. Voiceover – hearing our own voice 7. Storyboarding – bringing words and images together	Week two	Story circle Refining and distilling the story Learning new technologies (image and video editing) Compiling the digital story
8. Video editing – bringing together the photographs, film, music, voiceover 9. Premiere of stories – sharing with others in the group to refine prior to final editing 10. Debrief/reflection – reflecting on the entire process	Week three	Time for further reading and exploration Showcasing of stories at a celebratory premiere Time for reflection on the process and design of their stories

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Table 2*: Digital stories and summaries*

Digital story	Summary
Heart of stone	This medical student is shocked and angered when an emergency operation doesn't go according to plan. But he comes to realise that things are not always what they may seem, and even consultants have feelings.
Be patient with us	This medical student became acutely aware of the tensions between caring for the patient and caring for the family – and pleads for tolerance while he learns to find the right balance.
Are you happy in your profession?	This student had a successful career as an accountant in London before deciding to go to medical school. Despite the ups and downs, his chosen path seems to be the right one.
Yeah, I'll go	This student is a keen and enthusiastic to successfully perform a 'by-the-book' catheterisation, but the discovery that there is more to his vocation than technical know-how leads him to reflect on the true nature of caring for patients.
Can I have a hand please?	Patients in the last days and hours of life can sometimes be challenging and even unreasonable. As the only male professional on the ward this student was at first frustrated, but then patiently responds to the final requests of a dying man.
Your Type	When this student chooses a placement at a hospice, in order to learn some of the 'softer' skills that he thinks will help him in the practice of emergency medicine, a casual remark causes him to reflect on what 'type' he needs to be to care for people facing death.
Care of the dying	There are many preconceptions and stereotypes surrounding hospice care. When this student chooses Hospice for his clinical placement, he is pleasantly surprised to find that care of the dying is not at all what he had anticipated.

Table 3: Prospective diary course reflections

Time Frame	Students				
	1	2	3	4	5
Pre-course	'I hope this is going to be an enjoyable and worthwhile experience'.	'Intrigued, what is this SSC, not quite sure what to expect'.	'Open minded was my 7th choice so not entirely sure what to expect'.	'A bit worried that I might not have the skills required to produce a good end-product'.	'Happy to learn about digital storytelling and how it can improve healthcare'.
Week 1 (end)	'Pleased with my story and surprised at what I could come up with from my clinical practice. Looking forward to next week. I have enjoyed the process far more than I anticipated'.	'A lot of reading! Videos not quite what I expected'.	'Anticipating work ahead, nice week though. Some reading material has been really enjoyable as has watching patient voices'.	'Spent a few days reflecting back on my clinical experience. Had a few stories in mind…it was quite difficult to recall the actual event but the message of the story is clear'	'Assured there will be enough time.. surprised how effective the digital stories are'.
Week 2 (start)	'A bit nervous. I have used Photoshop a lot but I am struggling to think of pictures and music to go with my story. Looking forward to the three days. Looking forward to hearing others stories hope they won't be critical of mine'.	'More comfortable about the stories.. I have two ideas. Looking forward to working on the computer'.	'Having taken a break form the workbook and digital stories I am hoping to make some progress. I believe finalising my script will be difficult'.	'Anticipating new things to be learnt in the three days. It seems too short to learn an enormous amount of stuff…story drafts were difficult in making it concise'.	'I am hoping to finish a story and produce a script.. start looking for pictures and photographs'.
Week 2 (end)	'Quite tired! Really pleased with the finished story. I didn't think it would work as well as it did… really pleased to be able to reflect on my experiences in a meaningful and constructive way'	'Glad it's over. Very long tiring week. A productive week pleased with the end result'.	'What a week-exhausted. Enjoyable-especially watching everyone's story. Overall good experience. Not entirely sure of purpose but hope the videos will be used. Not sure what to expect over the next week'.	'Glad to put everything together...Enjoyable playing around with functions of the programme to make my story more interesting.. A very fruitful and challenging week'	'Very pleased with my story. Hoping that the images available are good images for me to use'
Week 3 (end)	'Realised usefulness of reflection and the power of the stories when they were show cased'	'Happy and pleased how well the showing went'	'Enjoyed the past three weeks-keen to promote our group videos to medical students	'Satisfied with both my stories. Realise now that digital story telling in a powerful reflective tool... creates awareness and insights to certain issues. Considered many possibilities about this new skill I have learnt'	'Very pleased with story'
Key learning	'Realised during the course the usefulness of reflection. Improved my IT skills and knowledge of related software'	'Nice to be able to reflect on something of my choosing and not something the medical school told us to reflect on."	'Consider the experiences to date… this was particularly memorable. I am now able to tell a story and ensure personal nature'	'Active thinking of personal experience. Reflective skills and presentation skills. Expressing emotional content properly and effectively'	'The importance of stories in healthcare. The importance of listening. I have learnt that I have had good experiences at medical school in the last five years'

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