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Multimodal literacies and critical reflexivity: Digital storytelling as a 21st century tool for Learning Developers

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Multimodal literacies and critical reflexivity: Digital storytelling as a 21st century tool for Learning Developers

Abstract

Digital storytelling (DS) is a multimedia storytelling technique that has become an efficacious educational tool in tertiary environments. Individual students, supported by other students in a facilitated "Story Circle", create short videos using digital devices, still images, and a cloud-based video editor in response to a targeted story prompt. The DS process aligns closely with an emerging trend in universities to instil in their students both critical reflection skills and strong digital, media, and visual literacies to enable them to thrive in their professional and personal lives. This paper proposes the adoption of DS as an additional and innovative pedagogical strategy by Learning Developers (LDs) within discipline-specific embedded teaching. Embedded teaching is a well-established method of developing student literacies, and LDs already employ this approach to support academics across disciplines. The integration of DS into this practice would further strengthen the capacity of LDs to enhance students' capabilities as they move into post-Covid, 21st-century 'graduateness'.

Practitioner Notes

1. Student creation of short digital videos through digital storytelling model
2. Use of scriptwriting and multimedia tools to enhance critical reflection skills
3. Development of multimodal literacies, including digital, media, visual, and copyright
4. Adoption of Story Circle/group learning as a means of promoting collaboration
5. Utilisation of Learning Developers/Advisors within embedded teaching to implement this strategy and make it sustainable

Keywords

critical reflection, academic literacies, digital literacies, learning developers, learning advisors

Introduction

[Students] have come to see posting a quick video in social media as a publication—but it's not a considered publication. It is not a considered text. Digital storytelling is about a considered document, one where the process of selection drives you into deeper reflection (An interview with Brooke Hessler in Lambert, 2020, p. 233)

The creation of short videos by everyday users of digital devices has now become commonplace, especially since the global roll-out of TikTok in 2017-2018 (Fannin, 2019). With its omnipresent and often hilarious reels, interminable utterances of "OMG!!!", and genuinely moving crowdsourced sea shanties, TikTok became one of the fastest growing brands of 2020 (Morning Consult, n.d.) and now dominates the arena of user-created video content as entertainment. To its credit, TikTok's version of participatory media has enabled meaningful social and cultural connections between users and served as a vehicle for them to develop and refine their digital and creative skills as they seek shareability and "viral" status. More broadly speaking, social media platforms enable users to develop what Caverly et al. (2019) refer to as their "social literacies". Other forms of participatory media, however, have the potential to achieve much more, particularly in the context of education, and for the purposes of this paper, tertiary education[1]. The implementation of more nuanced, targeted and intentional digital technologies and models aligns well with multiple educational goals that could make an important contribution to 21st-century "graduateness" for students.

This article therefore proposes the adoption of one significant deployment of participatory media, digital storytelling (DS), as a new pedagogical strategy for Learning Developers (LDs)[2] in tertiary institutions within discipline-specific embedded teaching that focuses on developing academic literacies (Lea & Street, 2006). Research has demonstrated the effectiveness of embedded teaching (Thies, 2012; Wingate, 2006; Wingate et al., 2011), and LDs already employ this approach to support academics in the development of student literacies across disciplines (McWilliams & Allan, 2014). The integration of DS into this practice would further strengthen the capacity of LDs to broaden students' capabilities, an essential move if tertiary education is to "keep pace with the multimodal conventions and practices of communities, professions, and society" (Mills & Unsworth, 2017, p. 2).

The discussion begins with an account of the proposed digital storytelling model developed by the StoryCenter (Lambert, 2010, 2020), and then presents a variety of previously published DS case studies to demonstrate the breadth and efficacy of its possible applications. This will be followed by comments on my own initial experience of deploying DS as an LD. In addition, it will provide an overview of how DS enhances both critical reflexivity and the development of multimodal literacies such as digital, visual, media and copyright literacies, thereby expanding the scope of literacy development by LDs beyond their well-established focus on academic writing. These capabilities align closely with what McVitty (2020) identifies as an emerging trend by universities to instil in their students "sufficient critical reflexivity to match their aspirations" (para. 3) and provides them with the capacity to become purposeful digital producers rather than simply consumers. It will conclude with a précis of the case for the implementation of DS by LDs in tertiary institutions, including a consideration of possible next steps.

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[1] The term "tertiary" is equivalent to "college" or "university".

[2] Also known as "Academic Language and Learning Developers" or "Learning Advisors".

Digital storytelling in practice

The StoryCenter model of DS (Lambert, 2010, 2020) has been selected because of its well-documented history as an efficacious tool in tertiary environments across a wide range of topics (Brigido-Corachan & Gregori-Signes, 2014; Jamissen et al., 2017), ranging from clinical reflections by junior doctors (Anderson & Kinnair, 2018) to the empowerment of humanities students (Benmayor, 2008) to "a novel mode of science diplomacy and democratization of science" by Chilean students studying Antarctica (Salazar & Barticevic, 2015, p. 576). These examples begin to demonstrate the adaptability of DS to different pedagogical requirements, but videos could also comprise a story of personal significance, summarise and reflect on the essential elements of an essay, provide a vehicle for a creative assignment, or afford an immersive platform for reflection on a work placement or the process of thesis writing.

This DS framework involves individual students, supported by other students in a collaborative process called a "Story Circle", creating 1–5-minute videos in response to a targeted story prompt. This process requires use of digital devices such as desktop computers, laptops or mobile phones, still images and/or short video clips, soundtracks, and a cloud-based video editor (Lambert, 2020). In the broadest sense, the production of a story involves 1) identifying a story idea and possibly writing a script; 2) seeking feedback from the Story Circle[3]; 3) further writing and/or editing of the script; 4) creating a storyboard that includes media content such as still images, video clips, sound effects and music; and 5) rendering each of these elements into a video using a digital video editor. Within this model, creating a digital story is not intended as an exercise in filmmaking that aims for high production value. The focus is instead on the process of creating a meaningful story within a collaborative process and collecting and applying appropriate visual and audio digital artefacts that enhance that story.

This protocol is significant for pedagogical reasons since the focus of DS assignments is primarily on in-depth engagement with course materials or experiences rather than technical skills. The StoryCenter model also addresses most of the equity issues that are often referred to as the "digital divide". Access to a computer has become a pre-requisite for tertiary study in recent years, especially with the increasing adoption of e-learning management systems such as Moodle, but mobile phones can also be used to create videos and have become ubiquitous even in most developing countries (Adam & Alhassan, 2021). In addition, the StoryCenter DS process is not based on live filming, but relies primarily on still images instead (Lambert, 2020, p. 40). This removes the requirement for expensive cameras or other film equipment, and while still images must be clear enough to enable interpretation by viewers, the criteria for inclusion depend more on the meaning, relevance, and tone of the photo rather than on photographic quality. Family photos are often used in DS stories, as are amateur photos that record events of significance to the storyteller. In cases where such photos are not available, free and legal images in the public domain are widely available for download on websites such as Pixabay (n.d.), Unsplash (n.d.), and on Creative Commons (n.d.) sites such as Openverse (n.d.). Mobile phones also function as a readily available audio recording device, and storytellers who seek a more refined voiceover have access to free mobile apps such as Dolby On (n.d.) and Easy Voice Recorder (n.d.) that deploy noise reduction and adjust volume levels to improve sound quality.

The StoryCenter DS model currently uses the cloud-based video editor WeVideo (n.d.), which is also significant in addressing equity. WeVideo positions itself as an important tool for the education sector, both at tertiary and school level, and access is gained through subscription to a specified number of licenses at an institutional level, rather than as a cost to individual students (WeVideo,

[3] This step is voluntary for the video creator.

n.d.). From an institutional perspective, the subscriptions can be tailored according to the number of licenses and duration, and, as with all cloud-based platforms, students are able to access the video editor from any computer, tablet, or mobile phone using either the web-based video editor or one of the WeVideo mobile apps. One significant equity issue remains, however, with the use of all cloud-based tools: reliable access to high-speed internet. This problem took on heightened global visibility and significance due to the COVID-19 pandemic, during which the United Nations (2020) estimates that 1.6 billion students were affected by school closures and lockdowns. Much of the world responded with online emergency remote education, during which uneven and inequitable access to suitable devices and internet connectivity was brought into stark relief. This shortfall can be attributed to multiple factors (Mathrani et al., 2022; Diaz, 2021), but for the purposes of this paper, one lesson from the pandemic is clear. Redressing the inequities of the digital divide has taken on heightened significance, not just for digitally enabled learning such as DS, but for education as a whole and for all learners. As such, it must be addressed for all online and cloud-based learning.

DS has been implemented widely in recent decades across a variety of disciplines. One significant area comprises its use as a valuable reflective activity in fields that require professional practice or placements as part of their training. Social work (Anderson, 2017), midwifery (Hunter & Hunter, 2010), medical education (Anderson & Kinnair, 2018; Hardy, 2017; Laranjeira & Carvalho, 2021), and teacher education (Dreyer, 2017; Kim et al., 2021) provide several examples of the successful use of DS to strengthen reflective skills that are difficult to teach, but nonetheless required in each of these professions. The reflection embedded within the DS process provides these students with the time and space to process the inevitable challenges and adversity faced by the novice, as well as the opportunity to think critically about how to improve their practice in the future. The Story Circle, if implemented, can further enhance this process of reflection through its focus on peer collaboration in the context of a facilitated environment that ensures mutual respect and constructive feedback.

Other uses of DS are wide-ranging and less readily categorised. Some are directed towards preparation for employment, such as its application to a timber module assessment within a South African industrial design class (Gachago et al., 2015). Rather than assigning a traditional essay, the aim was to provide students with a "hands-on" experience of problem-solving by providing them with the digital literacies and technologies required to create an "object", namely the digital story. Similarly, Slayton and Benner (2020) have used DS to help students create "spatial stories" in the interests of improving spatial literacy and deepening students' understanding of geographic information systems (GIS), and Lin and Chang (2021) deployed DS within a computer science class to improve both motivation and computational thinking in business students attending the course. It has also been used at the graduate level[4] by Schrum & Bogdewiecz (2021) to improve research and digital skills and by Singh (2014) as part of a decade-long project within a course entitled "Technology, Culture, and Development" that "allows the student to understand how hard it is to represent people's lives and the complex circumstances in which they are embedded" (p. 244).

These are just a few examples of how DS can be deployed across disciplines and at all stages of study to facilitate reflexive thinking and increase multiple literacies. Yet despite these benefits and DS's inherent adaptability to diverse pedagogical purposes, in practice it can be difficult to sustain within institutions. At present it largely relies on the interest and commitment of individual academics rather than being embedded within tertiary institutions as a key element of 21st century teaching and learning, and significant dedication to the value of DS is required. A solid understanding of the DS process and competency in multimodal literacies are a prerequisite to providing students with an intellectually robust and personally rewarding DS experience, and ideally teaching staff will have produced at least one video of their own before setting DS as assessment.

[4] Also referred to as "postgraduate" in some contexts

This involves dedicating significant time towards something that many academics may view as being outside of their core responsibilities and is unlikely to be adequate experience for many of them to feel confident to move forward. In addition, as Gregory & Lodge (2015) discuss in their investigation into the barriers to technology-enhanced learning (TEL), this time investment is unlikely to be accounted for in workload allocations, which Kenny (2018) argues are already dominated by "a drive for efficiency and productivity in teaching and research" (p. 365).

Jamissen and Haug's (2014) attempt to move towards the "digital storytelling university" provides a cautionary tale about attempts to introduce institutional change when academics and institutions must work within this environment of pressure and constraint. In 2010, they began a 3-year action research project in their professional education programme, and while both students and staff who participated considered the first year an overall success, year two was cancelled altogether. In year three, teachers who were encountering DS for the first time became "passive bystanders" (p. 103) who chose to exit the process, and less than half of students who participated were satisfied with the experience. These issues arose from staff turnover in key non-academic positions, disagreements over responsibilities, and a lack of understanding and buy-in by faculty teachers. In the aftermath of this fraught experience, Jamissen and Haug conclude that the ongoing viability of DS requires sustained institutional commitment, parallel to what has been recognised within Writing Across the Curriculum (WAC) programmes in North America (Boyle et al., 2019), and a functional "community of practice" (Jamissen & Haug, 2014, p. 105). Both of these factors were lacking in this case, a situation which demonstrates how a lack of educational infrastructure and support creates significant barriers to DS thriving and becoming an accepted pedagogy within universities.

LDs are well-positioned to respond to these structural barriers in developing and sustaining DS within tertiary institutions. They are a pre-existing and continuous workforce in many universities that could form part of the type of ongoing community of practice referred to by Jamissen and Haug (2014), thereby alleviating the existing reliance on either individual or small groups of academics to sustain DS. LDs have extensive experience and pedagogical awareness of guiding students through literacy development, and many have longstanding relationships with academic staff. It could even be argued that academic staff already rely on LDs for the bulk of literacy development as tertiary education proceeds down the path of massification. While LDs as a cohort do not currently have the specific knowledge of the digital and media literacies that would enable them to undertake this work, targeted upskilling would allow them to integrate these specific skills into a pre-existing framework of literacy development. Moreover, LDs are already engaged in the move towards the "digital university" in a general sense by virtue of their role within the broad grouping sometimes referred to as "educational developers", which typically comprises academic developers, LDs, and educational technologists (Aitchison et al., 2020).

Reflections on initial forays into DS

These reflections contain a brief story of my experiences in disseminating DS as an accompaniment to the more formal discussion that surrounds them. At the time of writing, I am partway through my second venture (as an LD) into DS at my university. I have not yet conducted a formal case study and consider these trials in 2022 to be pilot projects that will inform the design of future rollouts of DS. Subsequent implementations are likely to become the focus of formal research. These initial observations provide no firm conclusions, but my hope is that they will be of use to LDs interested in implementing DS themselves.

Firstly, the implementation of DS as embedded teaching within credit-bearing courses will, for the time being, feature a distinctly different sequence of events than that of the status quo. In my experience, the latter typically involves academics requesting LDs to deliver instruction into their courses on topics such as note-taking, essay writing, or preparation for exams. The expectation is

that these workshops will be tailored to the discipline and class and are sometimes linked to specific pieces of assessment. While there is often discussion and negotiation on how the session might run, the nature of assessment is determined prior to contact with LDs, and often replicates years-long practice for any given class.

The situation is markedly different when an LD proactively recommends and offers assistance with a new model of assessment such as DS. Once DS and other participatory media projects become commonplace as assessment, academics are likely request assistance as they do now for other topics, but so far the process has involved me selecting courses where I thought DS might be of value, and approaching the course coordinator. This has involved introducing a novel piece of assessment, for most of them, and explaining its pedagogical value. In some cases I knew the academic involved, but in others my approach was based solely on what I saw as the potential contribution that DS could make towards achieving stated course objectives.

I began to contact academics in early 2020 and the results so far have been mixed. Some were interested in principle but unwilling to replace existing assessment with DS, and one appeared to be very interested but failed to follow through, potentially due to increased workload due to the pandemic. Two invited me to speak about how to structure a compelling story and then tasked students with creating a video on their own rather than including the full DS process. Only a few expressed scepticism about DS, in what appeared to be a rejection of "storytelling" in universities rather than the DS model in particular.

Two course coordinators, however, have now chosen to implement DS as part of their course assessment, and a third rollout is scheduled for the summer of 2022-2023. It is noteworthy that this has occurred two years after I began speaking to academics. This delay is not surprising, given the long lead times involved in course planning, but it may also be an effect of what I would cautiously refer to as the "culture change" that DS represents, both in terms of its focus on story, but also its use of the digital tools and multimedia artefacts that are more commonly associated with social media. This long unfolding has demonstrated that patience is a prerequisite for LDs interested in following this path.

The first rollout tentatively suggests that this patience will reap rewards. At first it seemed to fall flat, with low initial engagement from students. There were very few questions posted on the class forum, and attendance at the Story Circles and a hands-on tutorial on using WeVideo was extremely low. In response to the latter, I created a video demonstrating the relevant functionality of WeVideo, but very few students accessed the video, and most watched for only a few minutes. It also appeared that many students were not working on their videos, since their presence on the assigned WeVideo video editor represented only about half of the class. This absence was in alignment with anecdotal reports of very low student engagement overall in 2022 from academics, but concerning nonetheless. Despite these concerns, the students were indeed working, with many of them using an alternative video editor rather than WeVideo. Videos were duly submitted, and the course coordinator informed me that that the overall student response to this assessment was very positive, with roughly the usual range of marks.

Two important insights can be taken from this experience. The first is that in an era in which the pandemic has accelerated the normalisation of remote content delivery as "education", apparent non-engagement by students is more difficult to interpret than ever, and observing them choosing a video editor for themselves, and working their way through the technology largely on their own perhaps should have been anticipated. Secondly, if their presence is expected or required, for example in Story Circles, this needs to be signalled strongly, perhaps through sign-up sheets for specific sessions, or the allocation of points for attendance.

Many questions remain. For example, will different cohorts respond differently to the technological challenges? Will some groups be more engaged in Story Circles than others? How will different story prompts trigger different levels of engagement with the topic of their story and the richness of the storytelling? How might relationships with academics be affected by working collaboratively on DS projects, and how might different student cohorts view the ongoing engagement of LDs in DS assessment?

Space and time to think: DS as a tool for critical reflection

In treating 'self' as a subject of critical study in relation to others and the contextual conditions of study or work, 'lifelong learning' can be fostered. (Ryan, 2013, p. 145)

In the context of ever-accelerating technological change, multiple seemingly insurmountable problems such as climate change, and the ongoing Covid-19 pandemic, the ability and inclination to think critically and deeply about complex issues has become an essential tool in navigating an increasingly challenging world. With its provision of "time to think" in the company of subject experts and fellow students, tertiary education has long been considered the natural home of critical reflection. As McVitty and Andrews (2021) remark, "an essential strength of higher education is the development of critical citizens equipped with the ability to question, learn, and innovate . . . to bring creative approaches to solving complex problems" (para 4).

Critical reflection was explicitly applied to education by John Dewey (1998 [1933]) in the early 20th century, and since the 1980s it has been implemented widely in tertiary education as a means of developing precisely these reflective capabilities (Chan & Lee, 2021; Rogers, 2001). One model of reflective thinking posits "the four 'R's'" to describe the process involved: 1) reporting and responding, 2) relating, 3) reasoning, and 4) reconstructing (Ryan, 2013). These steps involve choosing a specific focus of reflection and communicating its relevance; relating that focus to one's own experience; analysing this experience and linking it to course materials; and envisioning viable alternative future outcomes or behaviours (adapted from Bain et al., 2002, as cited in Ryan, 2013, p. 146). Universities have developed numerous vehicles for nurturing this type of critical reflection, including the use of reflective journals, blogs, learning portfolios or essays focussed on course content; experiential learning such as internships, school placements, or medical training (Chan & Lee, 2021); interactive group learning (Grundy, 1982 as cited in Boud et al., 1985); and the debriefing of learning activities (Boud et al., 1985). These types of assignments "[help] the learner to make autobiographical connections with . . . content" (Rossiter & Garcia, 2010, p. 38) and bring coherence and sense to their learning (Clark, 2010). If they embrace each of Ryan's four R's (2013), they also provide effective strategies for developing the skills of critical thinking, questioning, and innovating referred to by McVitty and Andrews (2021).

DS provides another approach to the enhancement of critical reflexivity that is arguably even more powerful by virtue of its deliberate use of story. Producing a digital story in an academic context not only prompts students to develop personalized understandings of course content or learning experiences, it also encourages them to deliberate on how to make their new understanding or insight function well as a story. The DS model deployed by the StoryCenter (Lambert, 2010, 2020), which draws heavily on the community arts background of its founders, is particularly well-suited to the task of reflective thinking in an academic context. Creating an effective story comprises seven elements[5], three of which are highly useful prompts for reflective tasks: exploring an insight, a moment, and the emotions attached to that moment. In other words, an effective story involves creating and enacting a specific *scene*. Numerous layers of reflection, in the form of repeated

[5] The steps are owning your insights, owning your emotions, finding the moment, seeing your story, hearing your story, assembling your story, and sharing your story (Lambert, 2010, pp. 9-22).

iterations of distillation, focus, and recalibration, are required to create an effective and concise scene. This process involves identifying the key insight from an experience, a process that typically involves several attempts; pinpointing the specific moment that best communicates that insight through words, images, and sound/music; ascertaining the various elements of the story that will be used and how they are related; and storyboarding these elements to elicit the strongest possible engagement with the audience. Deriving insight and constructing a coherent story from an experience, whether intellectual or literal, is difficult enough. Identifying and expressing the emotion attached to that moment and insight adds an additional layer of complexity, particularly in an academic context.

Emotions are an inherent part of this storytelling process (Nordkvelle, 2017), throughout the creative process and also in the sharing of stories with others. They often fit awkwardly, however, within Western tertiary institutions that still claim to be bastions of rationality and objectivity. A “naïve” empiricism that takes these two terms for granted has been challenged in recent decades by critical and anti-racist pedagogy (Freire, 1970; hooks, 1994), both indigenous (Denzin et al., 2008; Smith, 2021) and feminist (Code, 2014; Lennon & Whitford, 1994) methodologies and epistemologies, and what has been referred to as the “narrative turn” (de Fina & Johnstone, 2015; Riessman, 2008). Nonetheless, universities continue to casually refer to “contributions to knowledge”, for example, within the PhD regulations of my own university, as if what is presumed to be objective knowledge remains a simple and uncontested entity. This usage suggests that self-evident information is owned by subject experts and deposited into students who are conceived of as passive vessels (Richards & Richards, 2013). In this model, students lack agency and are required to reproduce what they have received from the teacher on command, such as in the context of examinations. Emotions are not welcome in this model because their introduction of “subjectivity” poses a risk to the transfer of accurate information from teacher to student.

Yet to the degree that a contemporary tertiary education involves reflective assessments, emotions are already part of many students’ experience, since they are acknowledged to be an intrinsic part of reflection (Boud et al., 1985; Chan & Lee, 2021; Rogers, 2001). The explicit management of emotion in an academic environment can be aided through the adoption of the StoryCenter model of DS as a tool for conducting reflective tasks. One of its strengths is the clear and consistent pathway it provides for producing a digital story. It also provides the means to reduce the feelings of discomfort and vulnerability expressed by both students and staff due to its ongoing refinement over many years. DS first appeared in 1994 when the Center for Digital Storytelling (now StoryCenter) was founded and has been modified in the decades since, not only to accommodate new technologies but also to fine-tune the processes that protect and empower storytellers (Lambert, 2020). In the most direct sense, protection is provided in the DS model by their adherence to a formal guide to ethical practice that emphasises storyteller wellbeing, an ongoing alertness to consent (as opposed to a one-off signature on a consent form), the placement of knowledge production and ownership with the storyteller, local and culturally appropriate support by facilitators, ongoing ethical engagement throughout the process, and a commitment to distribution being guided by the needs of storytellers and their local communities (StoryCenter, n.d.). When storytellers are respected, provided with ongoing opportunities to be active agents in all aspects of the process, and grounded in their own cultures and communities, they are empowered in a process that is "broadly democratic and inclusive” and in which “every story matters” (Lambert, 2020, p. 235).

There is another aspect of the StoryCenter DS model which is also relevant to empowering students in particular: the Story Circle. This process creates a collaborative environment in which teachers are repositioned as facilitators, and students are enabled to listen, learn, create, and reflect in concert with their peers. Richards and Richards (2013) make clear why this is important by outlining three specific and recognizable ways in which students are conditioned into passivity and

disempowerment when asked to engage in open-ended reflective discussions in the context of classrooms led by teachers who are structurally empowered as judges/assessors of their work. Students do not want to be "put on the spot" by being directly questioned (p. 777), regard class discussion as lacking in structure, and are convinced that their "opinions do not count" (p. 780). The latter point makes sense in an environment primarily structured by the need to provide "evidence" for any statements students wish to make, for example, within undergraduate essays. Richards and Richards (2013) also argue that these views are the logical outcome of a political and economic environment in which students are positioned as consumers, and meeting assessment-based targets is prioritized over teaching and learning. Both teaching and learning "to the test" create an environment where reflection has no obvious value and is often viewed as an interruption or obstacle to obtaining the information needed to score well.

The Story Circle cannot eliminate the structural effects of this political and economic environment, but it does carve out a well-structured and relatively safe space outside of the typical teacher-student relationship in which students can practice working collaboratively with their peers and supporting each other in specific, task-oriented ways. No space will ever be completely safe, however, and the self-disclosure involved in DS may create feelings of discomfort or vulnerability that are not evenly shared across any given classroom. In a world structured by social, economic, gender, and cultural inequality, some students will inevitably have a stronger protective level of privilege and familiarity with tertiary environments than others. Writing from the context of post-apartheid South Africa, where these discrepancies are particularly stark and experiences of trauma are ubiquitous, Gachago and Sykes (2017) note that, "the digital storytelling workshop is not equally uncomfortable for every student" (p. 95). Peer work is likely to mitigate the inequities of the teacher-student relationship, but the potential power imbalance between members of the Story Circle is one of the key reasons that StoryCenter places such a strong emphasis on respect and consent throughout the story creation process.

This discussion of reflection becomes relevant to LDs when they are positioned within higher education as specialists in the development of student academic literacies rather than filling deficits in generic skills (Hill et al., 2010; Lea & Street, 2006; Thies, 2012; Wingate, 2006; Wingate et al., 2011). McWilliams and Allan (2014) refer to multiple literacies beyond academic writing that students must develop to succeed at university, including database searching, referencing, and the appropriate use of formal register. Yet if academic literacies are conceived of even more broadly, reflection as a meaning-making, meta-cognitive, and epistemological literacy (Bruner, 2006; Richards & Richards, 2013) fits within the broad literacy-oriented pedagogical approach taken by LDs, particularly within embedded teaching. When students not only learn the "facts" of their subject matter, but also are asked to reflect on that learning, they are transforming their understanding of the nature of knowledge. By engaging in the DS process, students develop the capacity to engage in the construction of knowledge with others in which "truths are the product of evidence, argument, and construction rather than of [the teacher's] authority" (Bruner, 2006, p. 167).

Going multimodal

The word is not enough. (Richards & Pilcher, 2018, p. 164)

Even before the global Covid-19 pandemic firmly bound much of the world to their devices, the necessity of improving digital literacy for students, workers and citizens had become widely accepted (La Rose & Detlor, 2021; Spante et al., 2018; Sunderland et al., 2020; The New London Group, 1996; Trilling & Fadel, 2009). According to Richards and Pilcher (2018), however, the implementation of the academic literacies approach, including by LDs, has remained focussed on academic texts at the expense of the broader range of literacies required by students. They argue that while literacies development may venture far enough afield to investigate practices such as the

production of texts, or the relationship of written to oral texts, the focus remains on "helping students understand and produce written text" (p. 163). Based on their own experience as LDs, they provide examples of emotional literacy and the development of compassion in nursing, and visual literacy in the field of design as part of a broader call for a more holistic and "permeable" approach to literacy development. Aitchison et al. (2020) posit a possible reason for the lack of digital literacy in particular in both students and staff, arguing that it arises from an institutional environment in which "top down digital strategies are unduly focused on delivering educational products" (p. 183) in order to meet the demand for online and flexible learning in a competitive global market. In other words, the focus is on product rather than people. As long as this situation persists, students are at risk of graduating with tertiary degrees without proficiency in the additional literacies needed to succeed both personally and professionally in an increasingly digital world.

The DS model, in contrast to the "educational product" model, is focussed on the people who tell the stories and create the videos. It places students firmly within the role of digital *producer,* a role viewed as increasingly important in the era of Web 2.0 (Alexander, 2008), rather than as the passive recipient of digitally-delivered course content, and invites them to develop multiple literacies that go well beyond the traditional focus on academic texts. There is an element of functional literacy at play here, as students learn or refine the technical skills of operating a digital video editor, explore the more nuanced potential of their phone's camera and microphone, learn about mobile apps for media production, and discover where to find appropriate digital artefacts to populate their video editor as they create their story (Spalter & van Dam, 2008). DS requires far more than these functional skills, however. It also develops students' facility with both visual and audio creation, curation, and recording in an iterative process which involves "questions of agency, authority, and knowledge production" (Goldfarb, 2002, as cited in Fletcher & Cambre, 2009, p. 112). This occurs through choices made about which images, music, and words will best convey their key message, and how and when to best deploy each of these elements (Gachago et al., 2015). Thus, the development of the meta-cognitive and epistemological literacies required by reflective tasks are not confined solely to the creation of a DS script, but rather are embedded in the numerous choices made through the creation of a complex and multi-layered digital artefact.

The scriptwriting component of DS also warrants attention. It supports written literacy (Tanrikulu, 2020), albeit in a less formal and more conversational mode than traditional academic writing. Yet "crowd-constructed" Web 2.0 websites, blogs, social media, social news aggregators, and gaming are also firmly and appropriately grounded in an informal register and are now increasingly important channels for information dissemination, entertainment, and commerce. There is also a strong expectation for professionals to construct and actively promote an effective online persona. Thus, the development of effective informal writing through DS is one way that students can begin to develop the meta-cognitive capacity to move deliberately and effectively between different writing genres and styles, including formal academic style (Bloome & Enciso, 2006; Miller, 2015; Street, 2013).

DS also provides students with direct experience of negotiating the complexities of intellectual property, and thus the opportunity to develop copyright literacy. This area is typically under the purview of librarians within higher education (Benson, 2019; Rodriguez et al., 2014; Secker et al., 2019), and fits logically within their broader brief of information literacy. Gaining an understanding of the concept of intellectual property and respecting copyright is an essential skill for graduates who take up professional positions, particularly since many will have come of age in an environment in which illegal streaming, jumping onto memes, and remixing copyrighted music without permission have become normalised. The StoryCenter's DS process emphasises integrity and legality and encourages students to either create their own digital artefacts or access resources that are in the public domain or available through the Creative Commons licensing regime (n.d.). This

process gives them direct experience of how to 1) create or search for, 2) curate, and 3) deploy legal images, music, and sound effects in a context in which they are personally invested and therefore are likely to be strongly motivated, all of which are conducive to a highly effective learning environment.

Conclusion

The implementation of the StoryCenter model of DS can provide significant benefits to 21st-century tertiary students. As a highly refined form of participatory media, it enhances reflective skills and multimodal literacies as demonstrated through its successful implementation in wide-ranging educational contexts. DS has been used to enhance, for example, reflection on medical and education placements, spatial literacy, and student understanding of the complexities of representing others. It achieves this through highly structured iterative and creative processes which enable students to become reflexive and agile digital producers.

In order to be sustainable, however, DS is dependent on established communities of practice and institutional support (Jamissen & Haug, 2014), something that has not been achieved to date. DS has relied on deployments by individual or small groups of academic staff, leaving it vulnerable to staff turnover, shifting research and teaching interests, and fluctuating institutional priorities. Therefore, this article has argued for the adoption of DS as a new pedagogical strategy for LDs. Locating DS within administrative units already staffed by these dedicated literacy specialists would provide improved institutional visibility and continuity of offerings, and increased awareness of DS campus-wide would help to normalise it as a relevant and easily accessed type of literacy development for all academics to consider. Making DS part of the existing institutional infrastructure that supports academic literacies would also have a mitigating effect on the transiency of DS offerings, as the expertise would reside within a dedicated central location rather than solely with individuals. LDs would require significant professional development to develop this expertise, but multimodality will only become more pervasive as this century proceeds, a reality that tertiary institutions must acknowledge and respond to in order to remain relevant.

In practical terms, LDs can provide this support to students most effectively by assisting teaching staff in the context of embedded teaching. DS that involves individual students creating digital stories by themselves represents a comparable contribution within courses to current practices of academic writing development. The facilitation of Story Circles requires more intensive input, but for courses in which teaching staff consider it worthwhile, LDs can lead the facilitation of student groups with the assistance of course coordinators, peer mentors or tutors. It is also significant that DS can be effectively implemented solely by targeting compulsory classes within specific programmes. The opportunity to create just one or two videos in a student's course of study can deliver the significant benefits discussed above.

With the exception of my initial brief reflections included earlier, this argument remains theoretical, however. Next steps must include detailed case studies of LDs assisting academics with the implementation of DS through embedded teaching, something which I plan to pursue in 2023 and beyond. Any claims to validity must also depend on a wide range of applications across disciplines and at all levels by LDs in numerous institutions. Yet while noting the challenges of embedding a new pedagogical model into complex tertiary institutions, there are significant opportunities for LDs to provide ongoing expert support for the development of expanded and relevant literacies for our 21st-century tertiary graduates.

References

Adam, I. O., & Alhassan, M. D. (2021). The effect of mobile phone penetration on the quality of life. *Telecommunications Policy*, *45*(4), 1-10. https://doi.org/10.1016/j.telpol.2021.102109

Aitchison, C., Harper, R., Mirriahi, N., & Guerin, C. (2020). Tensions for educational developers in the digital university: Developing the person, developing the product. *Higher Education Research Development 39*(2), 171-184. https://doi.org/10.1080/07294360.2019.1663155

Alexander, B. (2008). Web 2.0 and emergent multiliteracies. *Theory into practice, 47*(2), 150-160. https://doi.org/10.1080/00405840801992371

Anderson, K. (2017). Let's get personal: Digital stories for transformational learning in social work students. In G. Jamissen, P. Hardy, Y. Nordkvelle, & H. M. Pleasants (Eds.), *Digital storytelling in higher education: International perspectives* (pp. 73-89). Palgrave MacMillan.

Anderson, L., & Kinnair, D. (2018). Reflection: They just don't get it! Digital stories from junior doctors. In P. Hardy & T. Sumner (Eds.), *Cultivating compassion: How digital storytelling is transforming healthcare* (2nd ed., pp. 155-168). Palgrave MacMillan.

Benmayor, R. (2008). Digital storytelling as a pedagogy for the new humanities. *Arts and Humanities in Higher Education, 7*(2), 188-204. https://doi.org/10.1177/1474022208088648

Benson, S. (2019). Copyright conversations: Rights literacy in a digital world. *Journal of Web Librarianship*, *15*(1), 49. https://doi.org/10.1080/19322909.2021.1891636

Bloome, D., & Enciso, P. (2006). Looking out across Columbus: What we mean by "multiple literacies". *Theory into Practice, 45*(4), 296-303. https://doi.org/10.1207/s15430421tip4504_2

Boud, D. J., Keogh, R., & Walker, D. (1985). *Reflection: Turning experience into learning*. Kogan Page.

Boyle, J., Ramsay, S., & Struan, A. (2019). The academic writing skills programme: A model for technology enhanced, blended delivery of an academic writing programme. *Journal of University Teaching and Learning Practice, 16*(4), 1-12. https://ro.uow.edu.au/jutlp/vol16/iss4/4

Brigido-Corachan, A. M., & Gregori-Signes, C. (2014). Digital storytelling and its expansion across educational contexts. In C. Gregori-Signes, & A. M. Brigido-Corachan (Eds.), *Appraising digital storytelling across educational contexts,* pp. 13-29. Universitat de Valencia.

Bruner, J. K. (2006). *In search of pedagogy: the selected works of Jerome Bruner, 1957-1978.* Routledge.

Caverley, D. C., Payne, E. M., Castillo, A. M., Sarker, A., Threadgill, E., & West, D. (2019). Identifying digital literacies to build academic literacies. *Journal of College Reading and Learning, 49*(3), 170-205. https://doi.org/10.1080/10790195.2019.1638218

Chan, C. K. Y., & Lee, K. (2021). Reflection literacy: A multilevel perspective on the challenges of using reflections in higher education through a comprehensive literature review. *Educational Research Review, 32,* 1-18. https://doi.org/10.1016/j.edurev.2020.100376

Clark, M. C. (2010). Narrative learning: Its contours and its possibilities. *New directions for adult and continuing education, 2010*(126), 3-11. https://doi.org/10.1002/ace.367

Code, L. (2014). Ignorance, injustice and the politics of knowledge: Feminist epistemology now. *Australian Feminist Studies, 29*(80), 148-160. https://doi.org/10.1080/08164649.2014.928186

Creative Commons (n.d.). *What we do.* https://creativecommons.org/about/

De Fina, A., & Johnstone, B. (2015). Discourse Analysis and Narrative. In D. Tannen, H. E. Hamilton, & D. Schiffrin (Eds.), *The Handbook of Discourse Analysis* (pp. 152-167). John Wiley & Sons, Inc.

Denzin, N. K., Lincoln Y. S., & Smith, L. T. (Eds.). (2008). *Handbook of Critical and Indigenous Methodologies.* Sage.

Dewey, J. (1998 [1933]). *How we think: a restatement of the relation of reflective thinking to the educative process.* Houghton Mifflin.

Díaz, M. J. S. (2021). Emergency remote education, family support and the digital divide in the context of the covid-19 lockdown. *International Journal of Environmental Research and Public Health, 18*(15), 7956. https://doi.org/10.3390/ijerph18157956

Dolby On. (n.d.). https://www.dolby.com/apps/dolby-on/

Dreyer, L. M. (2017). Digital storytelling to engage postgraduates in reflective practice in an emerging economy. *South African Journal of Education, 37*(4), 1-11. https://doi.org/10.15700/saje.v37n4a1475

Easy Voice Recorder. (n.d.). https://play.google.com/store/apps/details?id=com.coffeebeanventures.easyvoicerecorder&gl=US

Fannin, R. (2019, September 13). The strategy behind TikTok's global rise. *Harvard Business Review.* https://hbr.org/2019/09/the-strategy-behind-tiktoks-global-rise

Fletcher, C., & Cambre, C. (2009). Digital storytelling and implicated scholarship in the classroom. *Journal of Canadian Studies, 43*(1), 109-130. https://doi.org/10.3138/jcs.43.1.109

Freire, P. (1970). *Pedagogy of the Oppressed.* Herder and Herder.

Gachago, D., Barnes, V., & Ivala, E. (2015). Case study 13.6. From consumption to production of knowledge: Using digital storytelling to enhance authenticity of industrial design students' learning. In V. Bozalek, D. Ng'ambi, D. Wood, J. Herrington, J. Hardman, & A. Amory (Eds.), *Activity theory, authentic learning and emerging technologies: Towards a transformative higher education pedagogy* (pp. 181-191). Routledge.

Gachago, D., & Sykes, P. (2017). Navigating Ethical Boundaries When Adopting Digital Storytelling in Higher Education. In G. Jamissen, P. Hardy, Y. Nordkvelle, & H. M. Pleasants (Eds.), *Digital storytelling in higher education: International perspectives* (pp. 91-106). Palgrave MacMillan.

Gregory, M. & Lodge, J. (2015). Academic workload: the silent barrier to the implementation of technology-enhanced learning strategies in higher education. *Distance Education 36*(2), 210-230. https://doi.org/10.1080/01587919.2015.1055056

Hardy P. (2017) Physician, know thyself: Using digital storytelling to promote reflection in medical education. In G. Jamissen, P. Hardy, Y. Nordkvelle, H. Pleasants (Eds.), *Digital Storytelling in Higher Education* (pp. 37-54). Palgrave Macmillan.

Hill, P., Tinker, A., & Catterall, S. (2010). From deficiency to development: The evolution of academic skills provision at one UK university. *Journal of Learning Development in Higher Education,* (2), 1-19. https://journal.aldinhe.ac.uk/index.php/jldhe/article/view/54/38

hooks, b. (1994). *Teaching to transgress: Education as the practice of freedom.* Routledge.

Hunter, L. P., & Hunter, L. A. (2010). Storytelling as an educational strategy for midwifery students. *Journal of Midwifery & Women's Health, 51*(4), 273-278. https://doi.org/10.1016/j.jmwh.2005.12.004

Jamissen, G., Hardy, P., Nordkvelle, Y., & Pleasants, H. M. (Eds.). (2017). *Digital storytelling in higher education: International perspectives.* Palgrave MacMillan.

Jamissen, G., & Haug, K. (2014). Towards the digital storytelling university. In C. Gregori-Signes & A. Brigido-Corachan (Eds.), *Appraising digital storytelling across educational contexts (*pp. 93-113). Universitat de Valencia.

Kenny, J. (2018). Re-empowering academics in a corporate culture: an exploration of workload and performativity in a university. *Higher Education, 75*(2), 365-380. https://doi.org/10.1007/s10734-017-0143-z

Kim, D., Long, Y., Zhao, Y., Zhou, S., & Alexander, J. (2021). Teacher professional identity development through digital stories. *Computers and Education, 162,* 1-14. https://doi.org/10.1016/j.compedu.2020.104040

La Rose, T., & Detlor, B. (2021). Social work digital storytelling project: Digital literacy, digital storytelling, and the makerspace. *Research on Social Work Practice. XX*(XX), 1-11. https://doi.org/10.1177/1049731521992427

Lambert, J. (2010). *Digital Storytelling Cookbook.* Digital Diner Press.

Lambert, J. (with Hessler, B.). (2020). *Digital storytelling: Story work for urgent times* (6th ed.). Digital Diner Press.

Laranjeira, C., Carvalho, P., & Querido, A. (2021). Digital storytelling: Art-based pedagogy to improve professional development for nurses. *The Journal of Continuing Education in Nursing, 52*(10), 454-456. https://doi.org/10.3928/00220124-20210913-04

Lea, M. R., & Street, B. V. (2006). The "Academic Literacies" model: Theory and applications. *Theory into Practice, 45*(4), 368-377. https://www.jstor.org/stable/40071622

Lennon, K., & Whitford, M. (1994). *Knowing the difference: Feminist perspectives in epistemology.* Taylor & Francis Group.

Lin, C., & Chang, Y. (2021). A progressive digital narrative teaching method to improve learning motivation as a lifelong learning skill. *Sustainability (Basel, Switzerland), 13*(23), 12991. https://doi.org/10.3390/su132312991

Mathrani, A., Sarvesh, T., & Umer, R. (2022). Digital divide framework: Online learning in developing countries during the COVID-19 lockdown. *Globalisation, Societies and Education, 20*(5), 625-640. https://doi.org/10.1080/14767724.2021.1981253

McVitty, D. (2020, November 30). *From work-ready to world-ready—Why breaking down knowledge silos is the new frontier in student development.* WonkHE. https://wonkhe.com/blogs/from-work-ready-to-world-ready-why-breaking-down-knowledge-silos-is-the-next-frontier-in-student-development/

McVitty, D., & Andrews, M. (2021). *Skills to thrive--academics' perceptions of student skills development.* WonkHE. https://wonkhe.com/blogs/skills-to-thrive-academics-perceptions-of-student-skills-development/

McWilliams, R., & Allan, Q. (2014). Embedding academic literacy skills: Towards a best practice model. *Journal of University Learning & Teaching Practice, 11*(3), 1-20. http://ro.uow.edu.au/jutlp/vol11/iss3/8

Miller, A. (2015). On paper, in person, and online: A multi-literacies framework for university teaching. *Journal of Academic Language and Learning, 9*(2), A19-A31. https://journal.aall.org.au/index.php/jall/article/view/359

Mills, K., & Unsworth, L. (2017). Multimodal Literacy. *Oxford Research Encyclopaedia of Education*. Retrieved 23 October 2022 from https://oxfordre.com/education/view/10.1093/acrefore/9780190264093.001.0001/acrefore-9780190264093-e-232

Morning Consult (n.d.). *The fastest growing brands of 2020.* https://morningconsult.com/fastest-growing-brands-2020/

Nordkvelle, Y. (2017). The Long March: The Origins of Voice, Emotion and Image in Higher Education. In G. Jamissen, P. Hardy, Y. Nordkvelle, & H. M. Pleasants (Eds.), *Digital storytelling in higher education: International perspectives* (pp. 1-10). Palgrave MacMillan.

Openverse. (n.d.). https://search.openverse.engineering/

Pixabay. (n.d.). https://pixabay.com

Richards, K. & Pilcher, N. (2018). Academic literacies: The word is not enough. *Teaching in higher education, 2*(3), 162-177. https://doi.org/10.1080/13562517.2017.1360270

Richards, R. W., & Richards, L. M. (2013). Sponges do not make their own water: student engagement through dialogue and the development of reflective consciousness. *Reflective Practice, 14*(6), 774-786. https://doi.org/10.1080/14623943.2013.836083

Riessman, C. K. (2008). *Narrative methods for the human sciences.* Sage.

Rodriguez, J., Greer, K., & Shipman, B. (2014). Copyright and you: Copyright instruction for college students in the digital age. *Journal of Academic Librarianship, 40*(5), 486-491. https://doi.org/10.1016/j.acalib.2014.06.001

Rogers, R. R. (2001). Reflection in higher education: A concept analysis. *Innovative Higher Education, 26*(1), 37-57. https://doi.org/10.1023/A:1010986404527

Rossiter, M., & Garcia, P. (2010). Digital storytelling: A new player on the narrative field. *New Directions for Adult and Continuing Education,* (126), 37-48. https://onlinelibrary.wiley.com/doi/10.1002/ace.370

Ryan, M. (2013). The pedagogical balancing act: Teaching reflection in higher education. *Teaching in Higher Education, 18*(2), 144-155. https://doi.org/10.1080/13562517.2012.694104

Salazar, J. F. & Barticevic, E. (2015). Digital storytelling Antarctica. *Critical Arts, 29*(5), 576-590. https://doi.org/10.1080/02560046.2015.1125087

Schrum, K., & Bogdewiecz, S. (2021). Cultivating research skills through scholarly digital storytelling. *Higher Education Research and Development* (ahead-of-print), 1-13. https://doi.org/10.1080/07294360.2021.2010667

Secker, J., Morrison, C.M., & Nilsson, I. (2019). Copyright literacy and the role of librarians as educators and advocates. *Journal of Copyright in Education & Librarianship*, *3*(2), 1-19. https://doi.org/10.17161/jcel.v3i2.6927

Singh, J. P. (2014). Development remix: Representing poverty, culture, and agency in the developing world. *International Studies Perspectives, 15*(3), 243-256. https://doi.org/10.1111/insp.12023

Slayton, E., & Benner, J. G. (2020). Using spatial storytelling as an approach to Teaching GIS and spatial literacy skills. *Journal of Map & Geography Libraries, 16*(3), 300-316. https://doi.org/10.1080/15420353.2021.1964673

Smith, L. T. (2021). *Decolonizing methodologies: Research and indigenous peoples* (3rd edition). Zed Books.

Spalter, A., & van Dam, A. (2008). Digital visual literacy. *Theory into Practice, 47*(2), 93-101. https://doi.org/10.1080/00405840801992256

Spante, M., Hashemi, S. S., Lundin, M., & Algers, A. (2018). Digital competence and digital literacy in higher education research: Systematic review of concept use. *Cogent Education, 5*(1), 1-21. https://doi.org/10.1080/2331186X.2018.1519143

Storycenter (n.d.). *Ethical practice*. https://static1.squarespace.com/static/55368c08e4b0d419e1c011f7/t/579134a05016e13dde264720/1469133984611/Ethics.pdf

Street, B. (2013). Literacy in theory and practice: Challenges and debates over 50 years. *Theory into Practice, 52(*sup1), 52-62. https://doi.org/10.1080/00405841.2013.795442

Sunderland, N., Robinson, K., & Burgess, A. (2020). Overcoming future professionals' fear of digital storytelling. *Australian Social Work, 74*(1), 13-28. https://doi.org/ https://doi.org/10.1080/0312407X.2020.1762098

Tanrikulu, F. (2020). Students' perceptions about the effects of collaborative digital storytelling on writing skills. *Computer assisted language learning.* https://doi.org/10.1080/09588221.2020.1774611

The New London Group (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review 66*(1), 60-92. https://doi-org.ezproxy.canterbury.ac.nz/10.17763/haer.66.1.17370n67v22j160u

Thies, L. C. (2012). Increasing student participation and success: Collaborating to embed academic literacies into the curriculum. *Journal of Academic Language & Learning, 6*(1), A15-A31. https://journal.aall.org.au/index.php/jall/article/view/127/126

Trilling, B. & Fadel, C. (2009). *21st century skills: Learning for life in our times.* John Wiley & Sons, Inc.

United Nations. (2020). *Policy Brief: Education during COVID-19 and beyond*. https://unsdg.un.org/resources/policy-brief-education-during-covid-19-and-beyond

Unsplash. (n.d.). https://unsplash.com/images

WeVideo. (n.d.). *Video projects to master new media literacies*. https://www.wevideo.com/highered

Wingate, U. (2006). Doing away with 'study skills'. *Teaching in higher education, 11*(4), 457-469. https://doi.org/10.1080/13562510600874268

Wingate, U., Andon, N., & Cogo, A. (2011). Embedding academic writing instruction into subject teaching: A case study. *Active Learning in Higher Education, 12*(1), 69-81. https://doi.org/10.1177/1469787410387814