



# Digital Stories as Data

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## Abstract

Technology is an integral part of daily life for many young people; much of their communication is mediated by digital and social media. Youth connect with each other through social networking platforms that allow for short, snappy messages, such as Snapchat with images that disappear after a few seconds. Furthermore, YouTube has been steadily growing in popularity as technology changes have made video-making accessible. Anthropological methods suggest that to fully understand your participants, you have to meet them where they are. But perhaps, in addition to that, we also have to adapt our data collection methods to incorporate their means of communication. This chapter describes how digital storytelling can be used as a method for data collection. The author's dissertation study is used to demonstrate the practical application of this method.

## Keywords

Digital storytelling · Ethics · Youth studies · Technology

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## Introduction

Technology is ubiquitous in modern life and usage continues to grow in Canada and around the world. In the USA and Europe, the majority of teens own cell phones and use them (and other devices) to participate in social networking sites (Ranieri and Bruni 2013). In Canada, young people are increasingly accessing the Internet using cell phones and other portable devices such as laptops, tablets, and iPods, giving them almost constant access to the Internet (Steeves 2014). Youth in Canada live a significant part of their lives in online spaces; much of their communication is mediated by digital and social media. In the fast-paced world of digital technology, social networks gain and lose popularity on a regular basis. While this change is undoubtedly influenced by a variety of factors, the increasing use of video can account for the growth of networks such as YouTube and Snapchat. A recent Social Media Lab report (Gruzd et al. 2018) provided new information on the social media used most frequently by Canadians. Youth aged 18–24 are most engaged with Facebook (88%) and YouTube (88%), followed by Instagram (65%), Snapchat (62%), and Twitter (47%). Indeed, screen media has become the “preferred means of communication” (Davis and Weinschenker 2012) for today’s youth. It follows that scholars in the field of youth studies want to engage with young people in the spaces they inhabit (Hallett and Barber 2014) and through methods that reflect their ways of communicating. This chapter uses the author’s dissertation experience (the Project) with using participant-created digital stories as part of the study data to illustrate the incorporation digital storytelling into research design. Despite the relatively wide body of literature about digital storytelling, it is not well documented as a research technique (Walsh et al. 2010, p. 193). The focus is often on the process itself, or the value of engaging participants, or the use of digital storytelling in dissemination of research data. This chapter will begin to fill that gap in knowledge.

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## Digital Storytelling

The concept of digital storytelling is not new, having been developed in the 1980s by Joe Lambert, cofounder of *The Center for Digital Storytelling* (CDS) in California (now *StoryCenter* <https://www.storycenter.org>) (Meadows 2003; Robin 2006). Ferrari et al. (2015) describe digital stories as “three- to five-minute videos produced with a mix of voiceover, music, and images to convey first-person narratives” (p. 556). In the StoryCenter context, digital stories are personal expressions about an important person, event, or place in our lives; about what we do; or about a personal journey of love, discovery, or recovery (Lambert 2010). According to Lambert (2010), “we are made of stories” (p. v), and the purpose of the StoryCenter workshops is to “help storytellers find the story they want or need to tell” (p. 8). Thus, digital storytelling, in this context, is intensely personal.

Prior to the introduction of the StoryCenter, digital storytelling existed as the purview of experts in media production who had ultimate control over the completed video (Hartley and McWilliam 2009; Hopkins and Ryan 2014). StoryCenter

provided a space and the technology to create exportable videos which enabled “ordinary” people to participate in the practice (Edmonds et al. 2016; Hartley and McWilliam 2009). Today’s technology, in particular Web 2.0, has made it possible for practically anyone with access to a computer, or even a smartphone, to create a video (Edmonds et al. 2015; Hopkins and Ryan 2014; Page and Thomas 2011; Ranieri and Bruni 2013). This has opened more avenues for digital storytelling, which is “practiced around the world in increasingly diverse contexts” (Hartley and McWilliam 2009, p. 4). In the StoryCenter model, the emphasis is not on the technology but on the story and the telling of the story (Hartley and McWilliam 2009). As it becomes used in different places and contexts, the way in which digital storytelling is presented varies. However, Hartley and McWilliam (2009) argued that despite this variation, “the practice can usually be directly linked to the CDS” (p. 8).

What makes digital storytelling different from other methods of telling stories? Qiongli (2009, pp. 230–231) listed several characteristics that distinguish digital storytelling:

- Story-oriented: with a focus on the story not the technology
- Disciplined: with a practical framework developed by StoryCenter
- Authentic: storytellers narrate their own personal stories
- Multimedia: weaving together narratives, images, voices, music, and video
- Simple technology: can be done with a computer, microphone, and easy to use software
- Found materials: utilizes preexisting material such as family photo albums
- Collaborative creativity: StoryCenter training workshop model

Authenticity and found materials are key attributes of digital storytelling. Producers narrate their own stories, “prioritizing personal experience and allowing a ‘direct voice’” (Hopkins and Ryan 2014, p. 32). The materials they use are also their own, whether preexisting or found/created for the Project, and reflect their connection to the story. Those who engage in the process create, and tell, their own stories and have full editing power. Meadows (2003) lauded this as one of the most exciting aspects of digital storytelling as “no longer must the public tolerate being ‘done’ by media – that is, no longer must we tolerate media being done *to* [emphasis in original] us” (p. 192). Digital storytelling provides an opportunity to tell your own story and have your voice heard in *your* way (Hopkins and Ryan 2014).

As a pedagogical tool, digital storytelling can be used by educators to deliver content or to engage students in participatory educational practices (Buturian 2017; Clarke and Adam 2012; Robin 2006, 2008). Lowenthal (2009) listed five benefits of using digital storytelling in the classroom: increase student engagement, give access to a global audience, amplify students’ voice, leverage multiple literacies, and increase student’s emotion (pp. 253–254). While the possibilities and promises of digital storytelling in the pedagogical sense are intriguing, this chapter focuses on digital storytelling as means of sharing personal experiences in a specific research context.

## Creating Digital Stories

The creation of a digital story can be seen as a journey (Lambert 2010), often through personal, sometimes emotional, territory. Thus, every story represents a unique experience. However, over time, StoryCenter has developed a seven-step process to guide storytellers in the creation of a digital story. Those steps, as outlined by Lambert (2010), are (Table 1):

The steps outlined above provide a very linear method for the creation of a digital story. In application, the process is much more circular. Each step builds on the one(s) before it, but often the storyteller will revisit a step based on practical considerations as well as insights gained throughout the journey. For example, a storyteller might have an idea of a moment and emotion but, when reviewing images, realize that the emotion generated by the visuals is not what was intended. The choice is then to focus on a different emotional direction or search for new images. Or, once the images and words are put together, there is a discordance – it simply does not work – so, again, new images or new words. And this continues, back and forth between steps, until a story is created. Thus, as in any creative endeavor, the finished product may be considerably different from what was conceived. For example, in the Project, participants were asked to create a story about the ethics of online life. Barry (a pseudonym), in the process of preparing his story, was reminded of a bicycle trip he had taken after high school. Although not related to online activity, it recalled an important event and became the story he shared.

**Table 1** 7 steps of digital storytelling

Step 1: Owning your insight	Understanding the story behind the story; exploring your motivation for telling this particular story at this particular time
Step 2: Owning your emotions	Be aware of the emotions generated within yourself by the story and be honest in conveying that emotion; consider your intended audience when determining how to demonstrate your emotional honesty
Step 3: Finding the moment	In the process of developing the story, look for a “moment of change” that will best represent the insight you want to share with your audience
Step 4: Seeing your story	Look for the images that come to your mind when thinking about your story. Think about which images best represent the meaning you are trying to convey and then find or create those images for use in the story
Step 5: Hearing your story	Think about the script you want to add to your story. Then think about how you want to perform that script. Focus on natural speaking patterns rather than reading. Consider whether your story will be enhanced by the addition of background sounds such as music
Step 6: Assembling your story	Now is the time to put it all together – to create a storyboard. In this step, you consider your story as a whole, how you want it to look and sound
Step 7: Sharing your story	Consider both the audience you wish to share your story with and the method

Adapted from Lambert (2010, pp. 9–24)

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## Digital Storytelling and Youth

As a means of creative expression, digital stories are opportunities to create visual representations of and give meaning to experiences (Ferrari et al. 2015, p. 556). Davis and Weinshenker (2012) suggested digital storytelling as a method to tap into youth engagement with screen as a “preferred means of communication” (p. 49); taking charge of creating their own messages increases youth agency and empowerment (Clarke and Adam 2012; Davis and Weinshenker 2012; Gubrium et al. 2014; Taub-Pervizpour 2009).

In research with youth, digital storytelling can appear to be a “natural fit” based on young people’s engagement with technology. However, we must always beware of making a broad assumption that youths’ ubiquitous use of and engagement with digital media translates to skill or interest in all technologies (boyd 2014). The Project incorporated digital storytelling to provide youth participants with the opportunity to engage in a way that resonated with their current practice. Time and resources did not allow the presentation of a three-day digital storytelling workshop. Instead, the concept was discussed in focus groups and ideas brought forward. Youth participants were presented with some information on digital storytelling, including a short presentation on the seven steps outlined above. They were then asked to create a story based on their experiences with ethical issues in digital media. The format and content of the digital story remained the sole responsibility of the participant. There was no training on any specific technology as there are so many different ways to create video, and it was felt that participants would have their own ideas about how to proceed. This proved to be a false assumption demonstrated by Adrienne (a pseudonym) who wanted to tell a story about an experience with a fake Facebook account. However, the video software was unfamiliar to her, and she found it very difficult to understand. She was very confident with the technology she used on a regular basis, but those skills did not translate to this new platform; that became her story.

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## Ethics of Digital Storytelling in Research

A key element of ethical conduct of research is the informed consent process. Within this process, participants are generally guaranteed that their privacy will be protected, and they will remain anonymous in any publication of study results. The ethical implications of visual methods have been described as “muddy” (Gubrium et al. 2014, p. 1608), particularly if the intention is to share images in dissemination of results. It is important that the participant understands fully how the images will be used and how anonymity and confidentiality will be limited. Consent should be ongoing, with secondary consent for dissemination (Cox et al. 2014; Gubrium et al. 2014). The Project offered participants several options, formally and informally, regarding dissemination of their digital stories. Formally, they were asked to sign a licensing agreement outlining two options (Fig. 1). This form also allowed the participants to request notification prior to any presentation of their video.

Choose <b>ONE</b> of the following options:	
I agree, or give consent, to provide a limited license to [Author] to use my digital story (as described above) for academic purposes only (including public presentations), at no charge.	<input type="checkbox"/>
I agree, or give consent, to provide a limited license to [Author] to use my digital story (as described above) as data for her dissertation only (with no public presentations), at no charge.	<input type="checkbox"/>
If you wish to be notified any time your story will be presented, please provide contact information: _____	

**Fig. 1** Video dissemination options

If the content is produced by the participant, consent of nonparticipants who may appear in the images then becomes an issue (Clark 2012; Cox et al. 2014). Indeed “it is often impossible, impractical, or even illogical to maintain the anonymity and confidentiality of individuals in artwork, photographs and film” (Clark 2012, p. 21). Clark further stated that while it may be possible to have the participant make contact with other people who appear in the image(s), it could be time-consuming and difficult to manage. Additionally, “ethical issues may arise when a storyteller publicly identifies people, experiences, or events that others would prefer remain private” (Gubrium et al. 2014, p. 1610). Notwithstanding the ethical challenges mentioned above, participant-created digital stories provide an opportunity to show respect for research participants, a core principle of research ethics (Canadian Institutes of Health Research et al. 2014), by providing them with a forum to present their story, in their words, using methods familiar to them.

Anonymity, another key element of research ethics, is difficult to maintain when using visual methods (Anderson and Muoz Proto 2016). Dissemination of those stories may, and often will, compromise anonymity; however, while that is a key element of research ethics, is it equally important for youth? Cox et al. (2014) argued that anonymity may even be contrary to the intention of participants who create visual data, and Anderson and Muoz Proto (2016) cautioned against paternalism in ethical decision making. The Project storytellers did not attempt to conceal their identity in their videos, and all but one agreed to allow the researcher to use the video in dissemination activities. This suggests that anonymity is not a requirement for youth participation. Indeed, in discussions about research ethics, youth participants were more concerned with transparency; they wanted to know how and why their data would be used.

Despite the participants’ willingness to have their videos shared, some of the stories contained images of people other than the storyteller. These stories were received at the end of the Project, after the analysis workshops had been completed. Inclusion of third-party images had not been discussed in the focus groups, and participants had not been asked to ensure images of others were blurred or to garner consent. Consideration was given to have the researcher modify the stories herself and make third-party images blurry, but this created a new ethical dilemma: does the researcher have the right to alter participant-created data? Would the participant be

asked to provide consent for this alteration? When presenting direct quotes from participants, researchers will often remove any potentially identifying information – would blurring images in a video be any different? These questions are part of the muddiness (Gubrium et al. 2014) of working with visual data. Kim (2015) discussed “narrative smoothing” as a method used to make a “participant’s story coherent, engaging, and interesting to the reader” (p. 192). Although she suggested that this is a method used by many researchers, she also described it as problematic ethically in that it might change the participant’s intended meaning and thus not be a faithful account. Kim’s concern with this method in narrative inquiry can be considered in the situation above: would blurring the images change the story?

In one example from the Project, a participant submitted a story showcasing the positive side of her social networking sites. This was an important story as much of the discussion in the workshops had been about the negative aspects of social media. However, most of the images in the story included people other than the participant. Although she had given permission to use the digital story in presentations, the only way to do so would be if the researcher modified the video to hide all third-party images. After careful consideration of the ethics of this approach, it was decided to leave the video as submitted and refrain from using it in presentations, although the content would be analyzed as project data.

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## Analysis of Digital Stories

Analysis of digital stories is complex. The literature on digital storytelling focuses on process or the experiences of participants. There is little discussion on analysis of the stories themselves. Each digital story received in the Project was transcribed verbatim by the researcher and the transcripts read as text, focusing on the content. Reading the stories on paper provides an opportunity to focus on the story without any distraction. However, the text alone offers a limited understanding without the context of the images, voice, and, perhaps, music. Images can be powerful on their own and may illustrate a particular phenomenon in a way which is difficult to explain, however, without the context of the words, may be interpreted in a way contrary to the storyteller’s intent. Thus, when digital stories are used as data, both visual and narrative modes of analysis are necessary.

Narrative analysis requires “looking for underlying patterns of meaning” (Shopes 2011, p. 459) within the text. Kim (2015, p. 188) identified the elements of qualitative analysis as codes (identifying concepts), categories (linking codes), patterns (repeated units in categories), and themes (representations of similar patterns). In the narrative context, we are applying these elements to a story, attempting to understand the meanings the participant has given to their experiences (Kim 2015, p. 189). Narratives can be interpreted by focusing on meanings “What does this mean? What does this tell me about the nature of the phenomenon of interest?” (Patton 2002, p. 477). It is necessary to read the words carefully, with a focus on how the words are put together (Daiute 2013) and looking for clues such as a play on words or contradictions in the text (Kim 2015). In other words, if “narrating is a

sense-making process” (Daiute 2013, p. 15), analysis of narrative is a process of unpacking how that process unfolded.

Visual research provides a new set of cues for analysis. Visual analysis is similar to narrative in that it is a process of sense-making, developing an understanding of the perception and meanings that can be attributed to a photo or video (Prosser 2011). Whether researcher or participant produced, videos or photos allow the analyst to evaluate more than the words used, for example, the setting, tone of voice (in videos), body language, and other nonverbal behaviors that are captured within an image – “it would take a lot of words to convey the information in the photographs” (Harper 2000, p. 721). However, without the context of the story, there is no framework of analysis for interpretation of the images. Visuals in research can corroborate data, thus improving the trustworthiness of the analysis (Prosser 2011).

Many of the challenges of narrative inquiry (e.g., researcher interpretation of meaning) can be ameliorated by the addition of visual content, “the potential of using visuals in narrative inquiry is enormous” (Kim 2015, p. 149). Kim (2015) provides ten ways in which visuals can enhance narrative inquiry, including the ability of images to express what is difficult to put into words (p. 150). Thus, the digital story provides the best of both worlds; the text explains the images and vice versa. However, that does not mean that there is no space for researcher analysis and interpretation. Key questions to ask include: Why this story at this time? Why those images? Does the connection between the words and images seem authentic? Is there a story behind or beneath the story? Every image in a digital story is the result of a decision-making process by the participant, and analysis of the story includes interpretation of that process.

In addition to narrative and images, digital storytellers often incorporate music into their videos. Music can set the tone for the story, even if only softly playing in the background. Music invokes emotion; it can be romantic, dramatic, invigorating, relaxing, and so much more. While the addition of music adds to the complexity of the analysis, it also can be a cue to aid in interpretation.

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## Challenges of Digital Storytelling in Research

The common approach to digital storytelling is through a workshop process in which the elements of storytelling and available technology are presented and participants have time/space to develop and create their stories. This process requires time and resources not always available to a researcher. It is also a big ask of participants. Meadows (2003, p. 190) stated that everyone has a story to tell; however, Gubrium and Holstein (2010, p. 256) noted that storytelling takes work “people seldom just ‘burst out’ in stories.” In order to truly understand what is being asked of participants, a researcher should really go through the process first (Buturian 2017). Only then can one fully appreciate the challenge and rewards of creating a digital story.



While it can be argued that the benefits of producing a digital story are many (Hopkins and Ryan 2014), for example, development or enhancement of digital literacy skills, opportunity to explore your own interests and make meaning out of life experiences, ownership of the final product, and so on, do those benefits outweigh the time and effort? How can participants be persuaded to engage in this process? These are important considerations when electing to add digital storytelling to a research project.

Research generally has a specific focus. When incorporating digital storytelling, participants are then asked to tell a particular story – one that meets the requirements of the Project. This is contrary to the agency and voice digital storytelling is meant to provide. The researcher must be careful to ensure that participants understand the nature of the Project well enough to create relevant stories while avoiding being overly directive and imposing their own voice.

Participants will not always produce a story that is in line with the research questions. Our focus as “professional researchers” may not align with the stories participants value (Manning 2010, p. 166), and we have to be prepared to learn from that. Perhaps we are asking the wrong questions? Or have chosen the wrong participants? In the Project, two participants created stories that were not at all about their online lives or experiences with social media. They had other stories to tell. This does not mean that their stories cannot be used. In fact, it is ethically unacceptable to disrespect the data provided by participants in such a way. Even if the content of the story does not align with the research question, the ways in which the stories were told, and even the fact that they chose to tell stories that were off-topic, are worthy of analysis.

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## Conclusion

Digital storytelling as data is not well researched. The bulk of the literature focuses on the process and the benefits to the participants. Digital storytelling can provide a rich body of data in a research project. It privileges participant voice and can elicit deeper engagement with the research topic. However, as a research tool, digital storytelling requires time, technology, and participant engagement. The use of digital storytelling in youth research is a wonderful opportunity to ask young people to participate in a process congruent with their everyday practices and gives them the agency to tell the stories they want to tell. In selecting this method, researchers must think ethically about the benefits to the participant and consider whether those benefits outweigh the level of involvement required. As research data, digital stories provide a deeper insight than a filmed interview; participants take time to reflect and select the visuals, words, music, and any other elements they incorporate to provide *their* story, in *their* way. And while that story may not always align with the researcher’s plan, the process of soliciting and then analyzing digital stories will prove invaluable to a research project.

Digital Storytelling isn’t just a tool; it’s a revolution. (Meadows 2003, p. 192)

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