

Digital Storytelling: A Multimodal Wonderland

by

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## Abstract

In the 21<sup>st</sup> century, what it means to be literate is evolving. This project examines digital storytelling as one way to incorporate multiliteracies into the traditional literacy skills of writing stories. Included in the project is a guide designed to support students' learning as they create digital stories. The guide provides instructors with the information needed to work one on one with students aged 11-18 to generate digital stories.

A digital story uses digital technology to tell a story with words, images and sounds, producing a multimodal text. Professional literature reviewed for this project revealed that authoring and viewing digital stories provide a link between traditional and new literacies. Further dimensions researched were the elements of linguistic design, auditory design and visual design suggested by the New London Group's *A Pedagogy of Multiliteracies* (1996). Thus digital storytelling can be a valuable tool to bridge the old with the new.

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## **Chapter 1 Rationale/Introduction**

*Once upon a time, there was a young girl who loved stories. She loved to listen to the ones her parents told her and eventually, as she grew older, she began to tell her own stories. Sometimes they were make-believe, but more often they were about things that had happened in her life. The girl liked watching the faces of her listeners and would often change the way she told the stories, depending on who her audience was. Once she started school, the girl learned to read and found even more stories to enjoy. Eventually she started writing her own stories and loved sharing them with others. As she grew older, she noticed that not all her friends liked to read or write stories; in fact, some of these friends found it so difficult, they gave up trying. This made the girl very sad. She knew how wonderful sharing stories could be and she wished she could find a way for everyone to discover their own wonderland, just as a young girl named Alice had in another story.*

I never lost the desire to help people experience the sense of accomplishment reading and writing could bring. As a teacher, I am always on the lookout for ways to make the process of acquiring and practicing reading and/or writing skills more interesting and motivating for my students, especially those who struggle with these literacy skills. Students with limited reading and writing skills often lack a voice to share their stories with others, yet these students have amazing stories to tell. My hope is that the handbook included in this project as Chapter 3 which is designed for instructors (tutors, teachers, and volunteers) to work one on one with students to create digital stories, will provide a way for students, aged 11-18, to make their voices heard through the writing and sharing of stories.

The years between 11-18 can often be turbulent ones. Students who struggle with the academic tasks of reading and writing often lose faith in their ability to ever become capable learners (Gabriel & Gabriel, 2010; O'Brien, 2003) and this is particularly true in the adolescent years. Such students become disengaged from the learning process and lack motivation and self-direction which are key factors in learning (Biancarosa & Snow, 2006; Cordova & Lepper, 1996). Motivation is particularly important in the middle years, as adolescents' beliefs, perceptions and thoughts change both substantially and significantly (Anderman & Maehr, 1994; Biancarosa & Snow, 2006; Wigfield, Lutz, & Wagner, 2005). During their adolescent years, students begin to consciously choose what and how they want to learn. They need to experience the positive reinforcement, both intrinsic and extrinsic, which comes as their learning is successful. As students experience success, often they will then practice the skills they have learned. If the statement, "People learn to write by writing" (NCTE, 2008, p. 4) is true, then ways need to be found to motivate and support students to compose in a way that provides positive reinforcement and practice that is "compelling to learners on their own terms" (Gee, 2003, p. 208). I hoped to develop a tool that would help students create a multimodal form of writing that would involve choice, be personally relevant to their lifeworlds, and that, ultimately, would help them find value in the *process* not just the product (Murray, 1972).

Writing and representing have prescribed learning outcomes (PLOs) in the Language Arts Integrated Resource Packages or IRPs (British Columbia Ministry of Education, 2006 & 2007, see appendix A for PLOs relevant to digital storytelling), so students are expected to write and represent. The digital storytelling handbook (see



Chapter 3) is intended to provide a supporting resource to the IRP, using technology to help motivate students to write and represent, both things many students find difficult. This resource, however, could be used outside of school time by instructors, who would act as facilitators, mentors and co-learners as they helped students work through the process of generating multimodal, digital stories.

As we are now immersed in a digital world, recapturing the wonder of storytelling through a digital medium makes sense. Not only will many students be familiar with some of the technology needed to create digital stories, the cachet of working with Web 2.0 technologies to generate a product (or story) that could be shared with others might appeal to those students struggling to acquire basic reading and writing skills (Gabriel & Gabriel, 2010; O'Brien, 2003; Stornaiuolo, Hall, & Nelson, 2009). In fact, incorporating new or 21<sup>st</sup> century literacies can be viewed as “transitional”. As we move to include these literacies, “we must find ways to ground our understanding of new literacies in assumptions related to print” (O'Brien, 2003, p. 2). New or 21<sup>st</sup> century literacies include the skills needed to:

Develop proficiency with the tools of technology, [b]uild relationships with others to pose and solve problems collaboratively and cross-culturally, [d]esign and share information for global communities to meet a variety of purposes, [m]anage, analyze and synthesize multiple streams of simultaneous information, [c]reate, critique, analyze, and evaluate multi-media texts, [and] [a]ttend to the ethical responsibilities required by these complex environments (NCTE, 2007, p. 1).

By “grounding” or linking the expectations of 21<sup>st</sup> century literacies with the expectations we have for the more traditional print-based literacies, we can provide a more intentional transition between the two. Many of the writing conventions used in academic settings will still need to be learned as students apply these in a digital medium. Producing digital

stories is one way of blending the old and the new to create something relevant to our 21<sup>st</sup> century students while meeting curricula expectations.

While the technology to produce digital stories will morph and change at a rapid rate (Watts Taffe & Gwinn, 2007), the elements of story are likely to remain the same. Many of the fictional elements of early science fiction novels have now become fact, yet science fiction novels continue to be written. The authors of this genre take current scientific knowledge, expand upon it and imagine wild and wonderful things that might happen in the future. At the heart of these futuristic visions, however, is the story. A good story, however, is enhanced with technology, not created by it (Miller, 2010; Stornaiuolo, Hall, & Nelson, 2009). My hope is that the handbook will provide instructors with the information they need to help students generate a story that will include words, images and sound. Providing students with the opportunity and skills needed to discern the “clearest” words, the “best” visual and the “right” audio can be just as important as helping them learn to utilize the current technology. In the future, probably sooner rather than later, these stories may be part of virtual worlds (Porter, 2010) and use programs only the very computer savvy currently can utilize; nevertheless, finding the words, visuals and audio to best communicate the story will still be important.

Technology will change, so the technological aspect of the handbook may become dated over time. However, while changes happen quickly, the challenge of providing students with access to the hardware and software of technology remains constant. For the purposes of this project links to three current (2011) multimedia programs, PowerPoint©, Windows Moviemaker© and Microsoft Digital Story©, will be included. These are the programs students seem to have access to through school, at home through

commercially available word processing programs, and sometimes as free download from the Internet. The handbook is geared for instructors to help students produce digital stories, but my hope is that the process the handbook guides the instructor and student through will be as important to the participants as the story produced and that the process will stand the test of time.

## Chapter 2 Digital Storytelling

As we enter the second decade of the 21<sup>st</sup> century, our concept of literacy continues to evolve. As educators, we struggle to define these new literacies and to find a place to incorporate them into our curricula. The ever-increasing presence of Web 2.0 applications (Sylvester & Greenidge, 2009), embraced whole-heartedly by the digital natives (Prensky, 2005) inhabiting our middle schools, makes it even more crucial for educators to find some way of bridging the traditional literacies with the new literacies and linking in-school and out-of-school literacies as well (Faulkner, 2005; Kajder, 2004; O'Brien & Scharber, 2008; Robin, 2005; Sadik, 2008). One way of blending the old and the new is to incorporate digital storytelling into the curriculum.

### A Brief History of Digital Storytelling

*“What good is a book without pictures or conversation?”*

Alice from Lewis Carroll's *Alice in Wonderland*. (1960, p. 1).

Digital storytelling has its roots in the late 1980s and early 1990s (DeGennaro, 2008; Fletcher, & Cambre, 2009; Gregory, Steelman, & Caverly, 2009; Poletti, 2011; Robin, 2008). A group of individuals with backgrounds in media design, art and production met to discuss how the new age of digital technology could be grounded by the more traditional storytelling and personal narrative practices. Out of these discussions, Dana Atchley and Joe Lambert co-founded the Center for Digital Storytelling and then later, with Nina Mullen, developed the Standard Digital Storytelling Workshop. While the Center initially focused on supporting people, through workshops, to complete projects which focused “on personal voice and the development of identity, esteem and resilience in the individual” (Center for Digital Storytelling, 2011, History

section, para. 3), they soon found that people also wanted to develop digital stories which “specifically addressed social conflicts and broader political issues” (para. 3). The Center’s logo, a large tree with a huge root system bracketed by the words: *listen deeply, tell stories*, reflects the Center’s focus not only on telling a life story or issue, but emphasizes the importance of listening/viewing others’ stories as well.

While some scholars working in the field of digital storytelling suggest broader applications of the genre, which will be discussed later in this review, most agree that the core definition of digital storytelling involves telling a story using a combination of digital tools to add words, images and sound (Center for Digital Storytelling, 2010; Dupagne, 2010; Gregory, Steelman, & Caverly, 2009; Robin & Pierson, 2005). Garcia-Lorenzo (2010) wrote that rather than making stories obsolete, the “new technologies of virtualized and digitalized imaging...may actually open up novel modes of storytelling quite inconceivable in our former cultures” (p. 347). The digital story combines the literacy elements of linguistic, visual and auditory design (New London Group, 1996), yet at the heart of this multimodal creation is the story.

### **The Importance of Story**

As we continue our journey into the 21<sup>st</sup> Century, we may ask ourselves what place the story has in this digital world? While examining the literature for this review, it was apparent that the story has a central role in digital storytelling (Benmayor, 2008; DeGennaro, 2008; Grishman & Wolsey, 2006; Heo, 2009; Hull & Katz, 2006; Kaare, 2008; Kajder, 2004; Ohler, 2006; Robin, 2005, 2008; Sadik, 2008). As Ohler (2006) states, “Part of my task as a digital storyteller is to teach students how to be storytellers” (p. 45). Thus we could restate Alice’s observation, “What good is a book without pictures

or conversation?” in Lewis Carroll’s *Alice in Wonderland*, (1960, p. 1) by saying, “What good are pictures and conversation if there is no story?”

Throughout history, stories have been an important part of our lives. Through stories we connect to the past, and then gain a sense of what is important to move us toward our future (Sax, 2006b). We have used storytelling to share knowledge with the next generation (Kajder, 2004) and these shared stories not only link us to our past, but to our communities’ past and present as well (Benmayor, 2008; DeGennaro, 2008; Hull & Katz, 2006). We are connected to many communities, via our families, our ethnicity, our work or our play. The sharing of stories strengthens connections between members within a community and between different communities (DeBruin-Parecki & Klein, 2003; Hull & Katz, 2006).

Stories help us make sense of our world (McLellan, 2006; Sadik, 2008; Sax, 2006a) and can lead us on a journey to find where we fit in. This can be particularly true for students in the middle years, as adolescents face a time of many changes and transitions (Wigfield, Lutz, & Wagner, 2005). Young people may well feel like Alice entering Wonderland when she said: “I wonder if I’ve been changed in the night? .... But if I’m not the same, the next question is ‘Who in the world am I?’ Ah, that’s the great puzzle!” (p. 8). The literature suggested that these puzzling times for middle years students reflect the need for educators to lend their support to students as they craft agentive selves (Hull & Katz, 2006; Perry, 2006). Articulating their stories can help students discover their place in the world as they connect to events in their past (Hull & Katz, 2006; Sax, 2006b). Linking the present to the past was one major reason Kirby and Kirby (2010) gave for helping their teen-aged students write what the authors called

“contemporary memoirs” (p. 23). They used digital storytelling techniques to help students create 21<sup>st</sup> century memoirs or life stories. Kirby and Kirby proposed that memoirs have always had an important place in the literary landscape, and that creating multimodal memoirs using current technologies has “transformed [the autobiography] into a dynamic and highly readable genre” (p. 23). As well as link us to our past and help us with our present, the story can also help us learn (Kajder, 2004; Robin, 2005; Sadik, 2008).

Learning through stories is perhaps the oldest teaching instruction strategy. In the time before books, many important lessons were delivered in the guise of a story or parable (Michaels & Sohmer, 2000; Sax, 2006b; Short & Ketchen, 2005). Oral storytelling, perhaps the original performance-based art (Lwin, 2010), was used to tell the stories that helped people make sense of their world, particularly in times of transition when the amount of new information to be processed seemed overwhelming (Sax, 2006b). The invention of the printing press and the “rise of the technologies of inscription” (Michaels & Sohmer, 2000, p. 268) such as those in printed texts (words, symbols, diagrams, etc.) did not eliminate stories, but created new ways of sharing them. The manner of delivery changed, but the story endured.

Educators have often used the power of stories to teach concepts to students in mathematics and to provide background or context for history lessons (Heo, 2009; Sadik, 2008). Using stories, teachers can connect to the students’ existing schema, either by using a particular story to illustrate a concept, such as when Alice’s encounter with the Red Queen in Lewis Carroll’s *Through the Looking Glass* was used to describe the competitiveness of the modern consumer landscape, or the very concept of story itself

(Short & Ketchen, 2005). Linking new knowledge to existing or prior knowledge is a well-established teaching principle (Vygotsky, 1978; Wilhelm, 2001). Sadik (2008) found that integrating story into the curriculum helped students gain a better understanding of complex issues and improved their communication skills. Sadik also suggested that before and during the process of communicating their stories, “the students were encouraged to think more deeply about the meaning of the topic or story, personalize their experience, [and] clarify what they knew about the topic” (p. 502).

Creating stories can help students understand authorial stance or voice, important not only in storytelling, but in the development of critical literacy (Hull & Katz, 2006). In their article regarding two case studies of students in the Digital Underground Storytelling for Youth (DUSTY) program, Hull and Katz (2006) reported that working on authoring their stories gave both Randy, a young adult, and Dara, an adolescent, an opportunity to “author” themselves. They discovered their voice as they chose the literacies to best tell their stories.

Storytelling can be an uncomplicated, yet powerful teaching strategy, but the literature confirmed that stories can also provide a way to help students sort through their experiences by taking the complicated pieces of their life to generate a storyline or path that creates an order out of chaos (Hull & Katz, 2006; Sadik, 2008; Sylvester & Greenidge, 2009). We each have a story to tell, perhaps about who or what we have experienced in the past or what we hope for in our future (Hull & Katz, 2006). Oral storytelling can help students discover their voice (Ohler, 2006), and oral stories can provide a way to scaffold students into writing (Kajder, 2004; Sylvester & Greenidge, 2009). We can re-author ourselves through story (Hull & Katz, 2006) and as we share



that story with an audience, or become an audience for others' stories, our perception of what we see, hear or imagine shapes how we view the world (Ohler, 2006). We also build a sense of community as we share our stories and experience the stories of others and through these shared experiences we can build meaning as we learn about the past and the present and consider the future.

### **Combining the Story with Technology: The Multimodal Digital Story**

The story is a powerful teaching and learning strategy. Students are already immersed in a world of stories, whether they view them as music videos, play them in virtual reality games, or tell them as status notes on Facebook. Using technology as a white rabbit to entice students down the rabbit hole to a new identity as writers of digital multimodal stories is a way to blend the old and the new (Faulkner, 2005).

The relatively new concept of digital storytelling has varying definitions in the literature, but most agree that digital storytelling integrates a story with digital technology, or digital multimedia, to produce a multi-modal text. Thus, digital storytelling takes a story and adds other dimensions to it, compounding its meaning (Benmayor, 2008). Some of the dimensions researched for the purposes of this review were the elements of linguistic design, auditory design and visual design suggested by the New London Group's 1996 seminal work, *A Pedagogy of Multiliteracies*.

### **More to the Story: Linguistic, Visual and Auditory Design**

In 1994, a group of educators came together in New London, New Hampshire, to discuss how curriculum could be developed that attempted "to come to grips with our changing educational environment" (New London Group, 1996, p. 63). The term multiliteracies was coined as a result of these discussions. The New London Group

(1996) suggested that by addressing the future of communication, “literacy educators and students must see themselves as active participants of social change” (p. 64). Schools, the New London Group argued, were the place to begin to affect this change. Incorporating different design elements into the curriculum would help students see “the increasing complexity and inter-relationship of different modes of meaning” (New London Group, 1996, p. 78). Learning to accept other modes of meaning as valuable opens a path for students to gain “access to the evolving language of work, power, and community” (New London Group, 1996, p. 60), while also encouraging an appreciation of the diversity of communication throughout the world. Three modes of meaning, or design elements, incorporated in digital storytelling, come together to form a fourth design element, multimodal design.

### **Linguistic Design**

*“I think I should understand that better, if I had it written down: but I can’t quite follow it as you say it.”*

Alice from Lewis Carroll’s *Alice in Wonderland*. (1960, p. 81).

Perhaps the most familiar design element used in digital storytelling, and therefore the first one to be examined, is linguistic design. According to the New London Group (1996) the “[d]esign notion emphasizes the productive and innovative potential of language as a meaning making system” (p. 79), and indeed, language is a powerful tool to communicate meaning. Both oral and written language have long been central in the communication systems of western cultures. Most adults who have successfully completed secondary education in a particular “language community” (Bearne, 2009, p. 157) have some understanding of the linguistic mode or the written word as it was taught

in the school system they attended (Mills, 2010a; Atabekova, 2002). Their knowledge might include such elements as manner of delivery (voice, narrative style), vocabulary choice (metaphor, positioning for audience), modality (oral, written), and structure (syntax, grammar) (New London Group, 1996; Mills, 2010a).

What digital storytelling hopes to accomplish is to take the elements of linguistic design which are “culturally developed, mediated and maintained” (Bearne, 2009, p.157) and allow the storyteller to creatively transform those elements, reshaping them into a dynamic new design. This design maintains the purpose of communicating to others, yet works in combination with other modes, such as the visual and auditory, to communicate with greater clarity.

Communication has been considered a social practice and while different modes of meaning such as visual and oral may be taking the centre stage currently (Kress, 2000) as adolescents and others communicate digitally, the written word still has a place in the curriculum. As Mills (2010a) stresses “competency with written words is still vital, but is no longer all that is needed to participate meaningfully in the many spheres of life” (p. 36). Mills (2010a) cautioned educators to remember that not all youth are digital natives and that neither the “school-sanctioned literacies” nor “the popular literacy practices of youth” (p. 38) should be sacrificed as we help students become better communicators. She suggested that scaffolded multimodal practice within schools is an area that requires further consideration, so that the traditional literacies, like reading and writing, are enriched by and incorporated into multiliteracy or multimodal designs rather than replaced by them. Educators need to take a broader view of literacy and move past the concept of it being merely the “coding of oral language to written language” (Kalantzis,

Cope, & Harvey, 2003, p. 18) to the concept of multiliteracies (New London Group, 1996). As our world becomes geared to multimodal communication, the literature suggests that we need to be careful that the school does not become the only place where we don't use multimodal forms of communication (Felton, 2008; Klerfelt, 2006; New London Group, 1996).

Perhaps the blending of traditional literacies and new or multiliteracies is easier to understand if one thinks of text books. For example, the words may be the same in a science textbook and in a mathematics text book, yet they may mean very different things. In science, the word formula implies a pattern with chemicals and reactions, while in mathematics, the same word describes a proof involving numbers and variables. By adding visuals, such as pictures, graphs and diagrams to the text book, the reader can often make more sense of what is going on. The visuals have enhanced the written words to help the reader make meaning. Kress (2000) invited us to consider that "all texts are multimodal – although one modality can dominate" (p. 187). What the multiliteracies movement hopes, is that by teaching students more about the different design elements of the different modalities, these students will become better versed in the "new basics" (Kalantzis, Cope, & Harvey, 2003, p.15) and will be "broadly knowledgeable, and in particular able to engage with the different interpretive frameworks and contexts of specific information" (p. 17). These skills will help them communicate as they use the different design elements to fully comprehend the diverse social and cultural contexts in which communication can occur.

Linguistic design, then, forms an integral part of digital storytelling, as vocabulary, syntax and narrative style can all play a part in communicating a story.

However, a story can be told with more than words. Like Alice, some people need to not only *hear* the words, but *see* the text of a story to understand it better.

### **Visual Design**

*“Well, I’ve often seen a cat without a grin, but a grin without a cat! It’s the most curious thing I ever saw in my life!”*

Alice to the Cheshire cat in Lewis Carroll’s *Alice in Wonderland*.

The second element of design to be considered is visual design. When beginning a literature review surrounding the concept of visual design, often referred to as visual literacy, two things became apparent. First, there is not one widely accepted definition of visual literacy. However, the majority of educators do agree that visual literacy involves the ability to interpret, or “read”, the messages visual images convey (Jones-Kavalier & Flannigan, 2006; McPherson, 2004; Pettersson, 2009; Seglem & Witte, 2009; Zambo, 2009). Second, as images and visual design become increasingly important in the communication landscape, there is a general consensus that the ability to develop and utilize visual literacy is an important skill in the 21<sup>st</sup> century (Begoray, 2001; Burmark, 2002; Dowhower, 1999; Farmer, 2007; Gee, 2008; Hobbs, 2001; Hoffmann, 2000; Jones-Kavalier & Flannigan, 2006; New London Group, 1996; Walsh, 2009; Wilhelm, 2001; Zambo, 2009). Seglem and Witte (2009) further state that “[i]ncorporating visual literacy in the curriculum is vital for student success” (p. 217). The success the authors refer to is not only students’ performance on school-based tasks, but also in their work after completing school. From designing buildings to stocking shelves, the jobs our students will have when they leave school will likely require them “to process both words *and* pictures [and]...to move gracefully and fluently between text and images, between literal

and figurative worlds” (Burmark, 2002, p. 1) and to be able to do this within a global community.

While images have been used by people to communicate for over 30 000 years (Pettersson, 2009), the saturation of images in our technological world emphasizes the importance of developing visual literacy skills. Visual messages bombard us daily as we watch television, use multimedia devices and read texts laden with graphics and visual structures; therefore, knowing how to analyze, appreciate and evaluate these messages has become increasingly important (Begoray, 2001).

Young people in North American society have never known a world without these images. For many, gathering information from visual images is easier and more efficient than reading texts, particularly for students who struggle with print literacy (Hobbs, 2001). Recent studies in brain research have shown that exposure to verbal information (written and/or oral) engage two regions in the brain’s left hemisphere, but when this information was accompanied by images, the brain’s right hemisphere was also engaged (Burmark, 2002). The combination of using visuals with text was shown to increase the understanding of the information being presented. Begoray (2001) found in her two year project that using visual representations seemed to be particularly successful with middle-years students as they “are still moving from concrete to abstract thinking” (p. 210). Seglem and Witte (2009) added that educators need to help students “understand the diversity of print and non-print texts as well as the connections between them” (p. 217) to link concrete and abstract thinking. As society “shifts to a more postmodern literacy that includes print, oral and visual texts” (Begoray, 2001, p. 213), educators need to incorporate these multiple modes of literacy into the classroom.

Hobbs (2001) suggests that educators need to change their attitudes about media and technology as they pertain to multimodal texts. Rather than seeing these new forms of communication as the enemy, teachers can view visual and electronic messages found in media and technology as “other forms of ‘texts’ that communicate and carry meaning to ‘readers’” (p. 45). As Felton (2008) observed, “technology has not so much made a radical change as re-introduced us to, through a different medium, the importance of visual images” (p. 63).

Many educators agreed that for learning to be relevant, it must be situated in the context of students’ lifeworlds (Gee, 2008; Hobbs, 2001; Klerfelt, 2006; Walsh, 2009, Wilhelm, 2001). The lifeworlds of many of today’s youth revolve around visual and electronic messages, both sent and received. Most adolescents are therefore familiar with the patterns or designs of these messages, like the happy face icon or the Facebook logo. By using these and other familiar designs, educators can show students how to first “read” visual messages with greater intentionality, and then how to redesign these messages to communicate new meanings (New London Group, 1996; Seglem & Witte, 2009).

To become more visually literate, students need the skills to view images “from the sensory level, to the labelling level, to the descriptive level, and then to the inferential level” (Hoffmann, 2000, p. 222). Teaching students strategies to critically consider the messages images can convey, improves their understanding of the world around them (Walsh, 2009; Wilhelm, 2001; Zambo, 2009).

Introducing students to the elements of visual design such as vector, colour, perspective, mood and lighting gives them a language to express what they are seeing

(Farmer, 2007; Kress & Van Leeuwen, 1996 & 2002; Walsh, 2009). This language can link the visual and linguistic modes (New London Group, 1996), taking the visual aspects and attaching words to them. As students process and understand images at the labelling and descriptive levels, they can move more purposefully to the inferential level. Moving through these levels helps students understand how the authors of visual messages use visual design techniques to express their point of view, and to elicit an emotional response from the “reader” or viewer (Hoffmann, 2000). In the world of visual design, even the placement of a dot can change the focus of a message (Farmer, 2007). For example if the dot was placed in the upper right hand corner it becomes a more important focal point than if it was placed in the lower left corner. However, students also need to be aware that other cultures may have different visual coding or design systems, in the same way that words may have other meanings when used in varying Discourses (Gee, 2008; Farmer, 2007). One example is the colour white which in Western culture symbolizes purity, yet is the colour of mourning in many Asian cultures. Once students explore how images can be designed to communicate messages, they not only become better able to read these messages, they can apply this knowledge to become more informed creators of their own visual messages in their digital stories.

Zambo (2009) stressed the importance of making adolescents aware that even ways of thinking can be influenced by the social and cultural messages that images can convey. As creators of digital stories, students need to consider what messages they wish to convey with their visual images and choose those images in an informed way.

Hoffmann (2000) pointed out how photos and videos can be manipulated to present a certain worldview or make the viewer believe the reality the images represent. He



suggested that the same critical questions and “understanding of the abstracting [manipulating] process” (p. 222) used to “read” visual messages can also be used when reading written messages, showing another link between linguistic and visual design.

As students learn to find or create the “right” visual to tell their story, they can also transfer those visual literacy skills to print-based texts as they can then imagine what visual images might go with the text. Learning how to build visual images while reading can help students who struggle with understanding or remembering what they have read. Students who can bring texts “alive in their ‘mind’s eye’ through mental pictures” (McPherson, 2004, p. 58) become more engaged with reading. Using the elements of visual design, such as those described in Kress and Van Leeuwen’s *Reading Images: The Grammar of Visual Design* (1996), as a way to develop visualization skills can create a bridge to reading comprehension (Dowhower, 1999; Hobbs, 2001; Wilhelm, 2001). Many students already have knowledge of visual images or, as Hobbs (2001) observes, “[a] wealth of experiences from the thousands of hours of stories they have viewed on multiple screens in their homes” (p. 49). Hobbs suggested techniques that build on those hours of exposure to visual images can be employed to develop better visualization skills. Educators must be aware however, that “special care should be taken to situate [any] strategy in the bigger picture” (Dowhower, 1999, p. 674), and the strategies and techniques should be purposefully “woven into the curriculum” (Seglem & Witte, 2009, p. 217), a link digital storytelling can provide.

Building on students’ previous knowledge is one important teaching strategy. Wilhelm (2001) writes that research shows that “kids can only read and learn about what they already know something about” (p. 30). Most children are familiar with images and

the media technologies that produce them. If educators use this knowledge as a base, scaffolding their digital storytelling instruction to build upon it, they can help make the acquisition of enhanced visual literacy skills “personally purposeful and socially significant” (Wilhelm, 2001, p. 28).

While many educators may be leery of working with the technology that produces media images, they may take comfort in the fact that many of the skills students need to become visually literate are similar to those used to “to teach students to discuss the significance and quality of literary works” (Begoray, 2001, p. 215), such as author/designer’s purpose and intended audience. The teacher and student can become partners in learning, as students share their knowledge of technology and the teachers share their knowledge of visual literacy. Elements of visual design new to some teachers can be learned and shared with students simultaneously as these teachers model the process of “reading” images. When educators consider that the role of teachers is “about teaching processes with which to make meaning with the world’s texts” (Wilhelm, 2001, p. 29), and that the world’s texts now include much more than print-based texts, then teaching visual literacy skills through a digital medium like digital storytelling does indeed seem “vital to student success” (Seglem & Witte, 2009, p. 217).

Linguistic design combined with visual design can create a multimodal story layered with meaning. Just as Alice had never seen a grin without a cat, digital storytellers can appease their readers’ curiosity with images chosen to communicate their story. As students develop their skills to produce images to go with the story, they become better skilled at visualizing images when reading stories without images. There is one more design element used in digital storytelling, however, that can be investigated.

Sound can also communicate even more meaning to the reader, adding a third layer to the story.

### **Auditory Design**

*“Take care of the sense, and the sounds will take care of themselves.”*

The Duchess in Lewis Carroll’s *Alice in Wonderland*. (1960, p. 60).

Kress (2000) stated that “humans use many means available in their cultures for representation precisely because these offer differing potentials, both for representation and for communication” (p. 194). Auditory design is another means of communicating and can be an integral part of digital storytelling. There is less literature that looks at auditory design as it pertains to digital storytelling when compared with both linguistic and visual design. There is a general consensus, however that the subcategories of auditory design include music, sound effects and narration or vocal expression (Leon, 2008; Lwin, 2010; New London Group, 1996; O’Brien & Scharber, 2008; Poletti, 2011).

Music’s ability to communicate meaning and tell a story is reflected in the soundtracks of movies and the popularity of instrumental music throughout the ages. Kress (2000) wrote that music is another form of communication, but one we have become less familiar with, or “ill-equipped to ‘read’” (p. 182) as music is one of the fine arts that is often cut from school curricula (Szot, 2003). Yet, incorporating music into literacy instruction has been a successful strategy frequently used in the early grades as music “can provide a creative and efficient means for stimulating an additional sensory path to engage the brain in learning” (Kimball & O’Connor, 2009, p. 316). As Kimball and O’Connor (2009) also note, “children of all cultural backgrounds engage in spontaneous singing” (p. 317), thus using music to help tell a digital story can be an

effective cross-cultural instructional design. Both Kress (2000) and Gee (2003) agreed that being literate in today's society involves being able to gather meaning from more than one modality and music is another aspect of auditory design that helps convey meaning.

There was very little in the literature involving sound effects. Most of the information reflected the concern that any auditory design feature should enhance the message or story, rather than detract from it (Kimball & O'Connor, 2009; Leon, 2008; Porter, 2004; Robin & Pierson, 2008). In a study by Halio (1996), she described university students who used background sound effects to "move beyond generalities into specifics" (p. 345). The sound effects the students used usually consisted of muted voices, such as those of pro-life activists shouting and screaming while the protagonist, a young girl entering an abortion clinic, narrated the story. One example of how sound effects that are not of a linguistic design can convey meaning can be found in the movie *Star Wars: Episode IV - A New Hope*, originally released in 1977 as *Star Wars* (Lucas, 1977), when the robot R2D2 "speaks" only in sound effects. Although the character uses no words, it is able to convey a message to the viewer. Other examples of the power of sound to send messages are how the sound of a gently babbling brook can convey peacefulness, or the creaking of hinges can convey fear.

Narration, or vocal expression, is linked with linguistic design as words form an integral part of the narration (Lwin, 2010). However, there is consensus on the aspects of the vocal features or "the manipulations of voice by a storyteller during the storytelling process" (Lwin, 2010, p. 361) that can have an effect on meaning. These aspects include pitch, pace, volume, pause, inflection, tone and emphatic stress. Using these vocal

features can help the storyteller add elements to the story that connect the listener to the story or message on a more emotional or empathetic level (Lwin, 2010; Miller, 2010; Mills, 2010a; Poletti, 2011; Porter, 2004; Robin & Pierson, 2008) and add to the story's authenticity (Kress, 2000). Miller (2010) wrote that often students can learn to use vocal features more successfully once they have heard the playback of their narration. One caution Kress (2000) stated was that in digital or computer mediated communication there is the concern that the personal, one-to-one aspect of speech has moved to a "one-to-many and impersonal interaction" (p. 187). Therefore, the digital storyteller cannot always gauge what impact the vocal expression may have on the audience and needs to take that into consideration when narrating the story. As the Duchess pointed out in *Alice in Wonderland*, if one chooses the sounds carefully (and uses auditory design strategically to add to the meaning of the message), the sense is better able to take care of itself.

### **Multimodal Design**

*"Curiouser and curiouser."*

Alice from Lewis Carroll's *Alice in Wonderland*. (1960, p. 2).

Intertwining linguistic design, visual design and auditory design into a digital story may provide more meaning for the viewer and represents the multimodal design element as described by the New London Group (1996), where the other three design elements relate in dynamic new ways. The combination of modes is, as Kress (2000) states, a reflection of the way human biology and physiology are designed to perceive the world. We use all our senses to make meaning of the world around us, barring any impairment, and are now rediscovering the importance of understanding how meaning is

communicated through different modes. The multimodal digital story is one way to re-examine some of the meaning-making modes we have not previously emphasized in school; as Kress (2000) argues, “if mode affects what can be said and how, media affects who can be and is addressed and how” (p. 187).

The different modes or design elements are communicated with the tools of digital media (Gee, 2003; Kress, 2000; Thompson, 2008) and that the process of redesigning the message, or story, through the combination of various design elements can result in transformation, both of the product (story) and the author (Hull & Katz, 2006; Leon, 2008; Lewis, Pea, & Rosen, 2010). Digital storytelling is one form of media with which to tell such stories and perhaps awaken the curiosity of our students to use other modes of meaning.

### **Beyond the Story: Broader Applications of Digital Storytelling**

While many people consider that digital storytelling is designed only to recount personal stories, some educators see other possibilities for the genre. Robin (2008) contends that digital storytelling has a “variety of uses, including the telling of personal tales, the recounting of historical events, or as a means to inform or instruct on a particular topic” (pp. 224-225). In her article focusing on digital storytelling for adults, McLellan (2006) wrote that digital storytelling could be a valuable tool in all subject areas. She referred to the *Capture Wales* project, where archival digital stories were recorded in both English and Welsh to promote and capture the culture of Wales. Some of the other applications mentioned in McLellan’s article included memorial stories, avocational stories and medicine and health stories. She also included computer mediated communications, like blogs and web pages, in her definition of digital storytelling.

Skouge and Rao (2009) wrote about an endeavour similar to the *Capture Wales* project called *The Pacific Voices Project*. In their study, Skouge and Rao worked with teachers at sixteen different schools spread out among the Pacific islands of Hawaii, America Samoa and Micronesia. The students created “video letters” which they shared with other students in the project. The collaborative nature of this project and the use of technology helped the participants gain “an authentic experience about life in different communities in the Pacific” (p. 55). The students shared their everyday lives with students in other cultures.

Poletti (2011) contends that the process of creating a digital story can “articulate the relationships between personal experiences of structural social and political inequalities” (p. 73), thus sharing life views as well as a story. Occasionally the process of creating a digital story can lead the authors to more deeply understand the social and political landscapes that shape their lives (Hull & Katz, 2006; Leon, 2008; Robin & Pierson, 2005).

Couldry (2008) expressed a concern that digital storytelling and other new forms of digital communication may “change the social and cultural environments that support them” (p. 380). This echoes Vygotsky’s argument that we change our learning environment as we develop and use new tools with which to learn (Vygotsky, 1978) and suggests that incorporating computer mediated communication may have profound effects on education that may not be what we expect.

Couldry further cautioned that if digital stories were posted online, there was the possibility that an author’s narrative “may have unintended and undesired audiences” (p. 382). This concern is one of particular importance to educators dealing with adolescents,

as much of their lives are already on display on various Web 2.0 applications, such as FaceBook and Twitter. Ohler (2009) observed that students need their teachers' support "navigating the new-media craze" (p. 1) as they consider issues like privacy and the quality of their communications. Ohler further added that being able to communicate well using 21<sup>st</sup> century literacy skills is "essential for those who want to be seen as educated and functional in the world of work and personal expression" (p. 2).

### **Digital Storytelling as a 21<sup>st</sup> Century Skill**

Incorporating digital technology with an already widely used teaching strategy such as storytelling is one way that teachers can bridge the gap, sometimes referred to as the digital divide (Mullen & Wedwick, 2008), that exists between students' use of technology at home and at school, and the technological skills of students and their teachers. Allowing some aspects of the students' out-of-school literacies into the classroom affords the teacher the opportunity to provide some guidance in how to use those literacies with caution and intentionality (Mills, 2010b; Ohler, 2009).

In a study by Spires, Lee, Turner, and Johnson (2008), the researchers asked middle school students what they wanted to learn from school in terms of technology. Through surveys and focus groups the researchers discovered that students felt many of their out-of-school uses of technology were better preparing them for life in the 21<sup>st</sup> century than what they learned in school. The students expressed a desire to have "more technologies in school for learning purposes" (p. 506). They wanted the schools to teach them how to use and apply what they termed "21<sup>st</sup> century skills".

While not all educators agree that it is the school's role to teach "21<sup>st</sup> century skills", few dispute that young people will need to acquire these skills before they enter



the world outside of school. According to Ohler (2006) and Robin (2005, 2008), digital storytelling is a multi-faceted instructional tool that can be successfully integrated into the classroom. Robin (2008) wrote that digital storytelling had the potential to promote 21<sup>st</sup> century skills, encompass multiple literacy skills and engage students and teachers. Sylvester and Greenidge (2009) listed some of the skills they associate with 21<sup>st</sup> century learning:

technological literacy, visual literacy (the ability to understand icons, navigate the Web and use images in multimedia), media or digital literacy (being able to access, evaluate and create messages in many media, select media for enhancement and recognize society's use of media), and informational literacy (finding, evaluating, analyzing and synthesizing information) (p. 284).

Sylvester and Greenidge (2009) wrote, "Creating digital stories invites students to employ old and new literacies" (p. 284) which describes the concept of students taking traditional literacy skills, such as reading and writing, and redesigning them as multimodal communications. Robin (2008) add that in creating digital stories, students have the opportunity to use 21<sup>st</sup> century technologies such as digital media software, computers, image capture devices, e.g. digital cameras and cell phones, and audio capture devices, e.g. digital recorders and high tech cell phones. Teaching students how to tell their stories digitally provided some of the skills they might use outside of school, such as knowledge of technology, working with visual images to convey meaning, creating and evaluating the message they wish to convey, and finding information to add to their stories. As students share stories with each other, they can begin to appreciate the different cultures represented in their learning community. An example of this appreciation can be found DeBruin-Parecki and Klein study (2003) where school-aged new immigrants shared the stories of their families' decisions to come to the United

States. As the students learned more about each other, they recognized similarities within their differences and became a more cohesive group.

### **Learning and Literacy through Digital Storytelling**

Gregory et al. (2009) believe that “digital storytelling is a promising instructional technology that engages developmental students in powerful ways and builds learner confidence” (p. 43). According to Gregory et al. (2009) a developmental student is a student experiencing learning difficulties and is not yet working at his/her expected grade level. Some of these “powerful ways” found in the literature included descriptions of transformation, motivation, empowerment and community building. While some researchers and authors cautioned that more assessment and documentation of the benefits of digital storytelling needed to be carried out, the literature supports digital storytelling as a form of communication which could provide an opportunity for students to author multimodal stories.

**Transformation and motivation.** Recent studies have shown that the process of creating digital stories has the power to change or transform people’s views.

Transformation was a theme that occurred repeatedly in these studies as participants created digital stories. Sadik (2008) related how the experience of creating digital stories made pre-service Egyptian teachers willing to think about transforming their teaching practice to include digital storytelling. Heo’s (2009) quantitative study with pre-service teachers in the United States supported Sadik’s findings, as did Fletcher and Cambre’s (2009) study with Canadian university students. The pre-service teachers in Heo’s study showed a greater “disposition to openness” (p. 421) about using technology in their teaching. Heo found that pre-service teachers with improved technology efficacy had a

better chance of becoming advocates for change and integrating technology into the curriculum.

Benmayor (2008) and Hull and Katz (2006) also found that the participants in their case studies were transformed by the experience of creating digital stories. Benmayor states that the “process of creating and theorizing a digital story empowers and transforms students intellectually” (p. 190). Lilly, a participant in Benmayor’s study, struggled to find her identity as she felt caught between the world outside and within her ethnic community. As Lilly’s digital story developed, she examined this dichotomy and ultimately found a “way to draw strength from her heritage” (p. 191). Benmayor included the text of Lilly’s story along with descriptions of the music and images she chose to use to enhance her story. Also included are excerpts from Lilly’s journal as she describes the transformation she has made. DeGennaro (2008) referred to this process of transformation as well when she described how students’ “identities relate to a set of organized actions that form and re-form over lifetimes, and through collective histories” (p. 441). As they reformed their identity, each participant learned something new and became further engaged in the process.

If the literature indicates that using technology motivates students, then using technology to tell stories can motivate students to engage in creating stories. Many of the studies in this review refer to constructivism (Benmayor, 2008; DeGennaro, 2008; Grisham & Wolsey, 2006; Heo, 2009; Hull & Katz, 2006; Kajder, 2004; Rance-Roney, 2010; Spires et al., 2008) and that students can construct meaning through “customizing” their learning, something the digital story allows. In her study of high school students in Norway, Kaare (2008) wrote that the students were impressed with the digital stories they

had created and were motivated to continue to write because they said they could express what they wanted to say more easily in the digital format.

Sylvester and Greenidge (2009) wrote that in their case studies of three struggling grade 4 writers, they found that digital storytelling had “the capacity to not only motivate struggling writers”, but that the young writers also were able to “reposition themselves from struggling writers to competent writers” (p. 290). Spires et al. (2008) included a quote from one of their middle school participants that helps illustrate this engagement: “When we get to use technology, learning is more fun” (p. 511).

**Empowerment and community.** As the participants in each study developed their digital story, some gained a sense of empowerment as they became creators; others felt a greater sense of community as they shared one another’s stories. Authorship brings a sense of agency as the two participants in Hull and Katz’s (2006) study show when “they borrowed and then repurposed texts, images, photographs, and music in their multimodal compositions.” (p. 52). Randy, the young adult in the above study, used digital technology to layer his writing with images, music and narration. He used images found on the Internet to represent important themes in his life. Thus a picture of Malcolm X connected Randy to his desire to make a difference in the world. Randy shared with the researchers that he felt a sense of community as his work was viewed and praised by others. He felt the experience he had creating his digital story was life-altering. Just as Hull and Katz found that their participants gained a sense of empowerment and self agency, Read (2006) found that as young adolescents told their stories through the digital medium of the blog, they felt empowered and part of a community.

Sylvester and Greenidge (2009) reported that as students gained expertise in creating digital stories, they moved from being the creator to also being the expert. Having knowledge that others desire and which they could share, empowered students. Middle school students want to interact in positive ways with their peers and sharing knowledge can provide this (Wigfield, Lutz, & Wagner, 2005). When students feel responsibility for their peers, as Grisham and Wolsey (2006) found in their study of threaded discussions, they begin working together. A digital story can involve collaboration as students interact with each other and the teacher to generate their stories. As students and teachers become co-learners in the creative process, relationships build and learning can be enhanced (Flynt & Brozo, 2010). Students may also run ideas past their friends, or ask for feedback on their work. This collaboration builds a sense of community as well.

In Benmayor's (2008) case study of a college student, the author stated that "both product and process in digital storytelling empower students to find their voice and to speak out" (p.188). Benmayor wrote that by integrating digital storytelling into her classes, she constructed an "empowering space for cross-cultural collaboration and learning" (p. 199). The process of digital storytelling created community as writers shared their stories and listeners felt they could relate not only to the story being told, but also to the person telling the story. Students can share their cultural knowledge through digital storytelling, inviting others into many different communities.

**Communication.** We want our students to be literate to empower them to communicate with greater ease and fluency, both within their local community and the global community. In some traditional school literacies, the teacher's voice often drowns

out the students' voices. When the teachers in Rance-Roney's (2010) study created digital stories to help provide context for their English Language Learners (ELLs), the process led to teachers thinking more about voice. As they worked on capturing the right "voice" for their "digital jumpstart", (Rance-Roney's term for digital stories used to develop schema for ELL students), the teachers gave more thought to what the needs of the learners might be, and altered their teaching voice. Grisham and Wolsey (2006) wrote that digital technologies allowed students more opportunities to use their own voice. Learning to speak and write with their own voice can help students develop better communication skills. Knowing how to listen to the stories of others is another important facet of communication.

Mullen and Wedwick (2008) describe some of the newer communication skills our students may need when they write, "The literate of the 21<sup>st</sup> century must be able to download, upload, rip, burn, chat, save, blog, Skype, IM, and share" (p. 66). Prensky (2009) would go even further as he stated "the distinction between digital natives and digital immigrants will become less relevant" (p. 1) as we continue into the 21<sup>st</sup> century. Prensky wrote that what may be needed now is "digital wisdom". Digital wisdom, according to Prensky, is the wisdom that arises through "the interaction of the human mind and technology" (p.7). Digital storytelling might not be what Prensky had in mind as a strategy for learning digital wisdom, but the literature confirms that it has the right combination of pieces to provide for the interaction he described.

### **Concerns for Educators and Gaps in the Literature**

In all the literature reviewed, the authors stressed the need for educators to embrace incorporating 21<sup>st</sup> century skills into the curriculum. Heo (2009) writes that the

earlier a student begins to use these skills, the more adept they will become. While he was speaking about pre-service teachers, the suggestion is a good one. The earlier technology is integrated into our classrooms, the sooner we can begin teaching our students how to use it effectively.

Throughout the literature reviewed, several other concerns are expressed. One concern addressed the notion of the digital divide. Mills (2010b) observes that a study by Knobel, Stone, and Warschauer in 2002 considered the digital divide to really be a “complex set of divides ... [that overlapped factors] such as gender, geographical location, socioeconomic background and ethnicity” (Mills, 2010b, p. 262). This more complex consideration of the digital divide appears valid. Other concerns included the issue of safety arising from using the Internet and other Web 2.0 applications, the lack of professional development for teachers, the need for more ways, both well-thought out and authentic, to integrate 21<sup>st</sup> century literacies into the curriculum and more time to work on integration strategies like digital storytelling.

Gaps in the literature included research and assessment that investigate and measure the impact digital storytelling has on Canadian middle school students. This information might include quantitative data that indicates if learning how to create digital stories affects the traditional literacy skills of students measured by current standardized testing, or qualitative data to ascertain if the students have felt transformed and empowered by learning how to create digital stories. While more recent articles are beginning to address the need to create assessments that measure multiliteracy skills, like those found in digital storytelling, there remains a need to develop these assessments. Mills (2010b) observed that conventional measures of literacy need to be reformed “by

generating, implementing, refining, and disseminating innovative models of digital and multimodal literacy assessments for the new times” (p. 262).

Although there was information about linguistic and visual design elements, finding articles that discussed auditory design, particularly the use of sound effects as a means of communication, was more difficult. Kress (2002) pointed out that visual design, or visual literacy, had, at one time, remained something taught predominantly in the fine arts curriculum. However, with the emergence of visually dominated media, such as the Internet, visual literacy has become a concern for all educators. Thus while auditory design is “undertheorized” (Bearne, 2009, p. 160), there is the potential for more studies to investigate this modality in the future.

The current literature has not addressed the possible “oversaturation of the online information environment” (Couldry, 2008). And while there have been theoretical articles about how the new age of digital, global communication may impact the world both socially and culturally, particularly as new tools for communicating replace existing ones, there appears to be a lack of research to illustrate just what those impacts may be for educators and how we might prepare for them.

## **Conclusion**

Digital storytelling integrates the story, a powerful learning tool, with the multiliteracy design elements of linguistic, visual and auditory design by using technology to create a multimodal text. Traditional literacies, such as reading and writing, are enhanced by the multiliteracy design elements to create a new design, the digital story, that is an engaging blend of old and new and that reflects the “mediasphere in which children and youth live” (Flynt & Brozo, 2010, p. 528). The literature suggests that



digital storytelling can transform and motivate students as they communicate their stories, and that it can empower students while building a sense of community. With overt instruction and situated practice provided by teachers who are aware of the importance of incorporating multiliteracies, such as linguistic, visual and auditory design, into the classroom, digital storytelling can be a multimodal wonderland for students as they learn to create digital stories to share with others.

## **Chapter 3**

Digital Storytelling: A Multimodal Wonderland

Instructor's Guide

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## **Introduction: Rationale for Design Decisions of the Instructor's Guide**

The Instructor's Guide for digital storytelling is a crucial step in beginning to develop a program similar to the Digital Underground Storytelling for Youth (DUSTY) program. In the DUSTY program adolescents work after school with instructors, who are also co-learners, to create digital stories. Incorporating some of the design elements of multiliteracies was also important as a way to introduce the participants to some of the literacy skills needed to fully participate in today's society.

Digital storytelling lends itself to working with youth who may face learning challenges with reading and writing skills. The short length of the digital presentation (three to five minutes) and the images used to support the abbreviated written text make this genre an excellent one to provide success for those students who may not have experienced success with other writing assignments. Students who view themselves as successful authors are often eager to write more. Having others read and praise their work motivates students to further develop their identities as authors.

The Instructor's Guide was written to be used by volunteer instructors who may come from many backgrounds. Thus the guide does not include a lot of references in brackets after Section II, as these can make the reading more difficult for instructors unfamiliar with research-style writing. All the references are listed at the end of the guide, however.

In the interest of covering as much as possible, some areas of digital storytelling were only briefly described. The Guidebook provides the basics for the student and instructor (the writing team) to get started on a digital story. Initially the digital stories could be as uncomplicated as writing about the colours of summer, or about a day in the

life of the author. Once comfortable with the format of the chosen program, the subsequent stories can become more complex. As the team explores the possibilities, they may decide to follow some of the links provided to learn more about adding other elements to their digital stories.

In the process of preparing the Guidebook, several people, both teachers and non-teachers, were asked to assess the guide for clarity and ease of use. They were asked if they felt the guide provided them with the information needed to start a digital story. Their responses were positive and some even expressed a desire to start a digital story of their own.

The guide is now ready to be put to use. The wonderful thing about this digital age is that making modifications to a document saved in a word processing program is an easy task. Therefore, once the guide has been used for a time, it can be modified based on the suggestions of the instructors and students. *The Instructor's Guide for Digital Storytelling* can become its own digital story!

## Section I - What is Digital Storytelling?

*“What good is a book without pictures or conversation?”*

Alice from Lewis Carroll’s *Alice in Wonderland*. (1960, p. 1).

The concept of digital storytelling is relatively new. Digital storytelling has its roots in the late 1980s and early 1990s when a group of individuals with backgrounds in media design, art and production met to discuss how the new age of digital technology could be grounded by the more traditional storytelling and personal narrative practices. Out of these discussions, Dana Atchley and Joe Lambert co-founded the Center for Digital Storytelling. The Center presents workshops for people interested in learning about digital storytelling. More recently other organizations and educational institutions have developed similar programs. Web addresses (URLs) for some of these sites are listed in the “Using the Technology: Fear Not!” section of the handbook.

When a story is combined with digital technology, or digital multimedia, to produce a multi-modal text, the result is a digital story. Through the use of computer-based tools, other dimensions such as images and sound are added to a story, enhancing its meaning (Benmayor, 2008). Most digital stories focus on a specific topic and represent a particular point of view.

### **A Means to Support Students’ Learning: Purpose of Digital Storytelling Handbook**

Literacy and our concept of what it encompasses are continually evolving. Educators are now working to incorporate these broadened conceptions or new literacies into the schools. The ever-increasing presence of Web 2.0 applications (Sylvester & Greenidge, 2009), embraced whole-heartedly by today’s youth, sometimes referred to as *digital natives* (Prensky, 2005), makes it even more crucial to find some way of bridging

the traditional literacies of reading and writing with these new literacies (Kajder, 2004; O'Brien & Scharber, 2008; Robin, 2005; Sadik, 2008). New literacies can include multiliteracies which recognize the importance of other modalities of learning and communicating such as words, gestures, images, sounds and spatial elements. One way of blending the old and the new might be to provide the opportunity for children and youth to create digital stories, which are multimodal texts.

Writing and representing are both subjects students are expected to learn through the Language Arts curriculum (examples of Prescribed Learning Outcomes, PLOs, can be found in the Resources section). This digital storytelling handbook, or guide, is intended to be a supporting resource to the curriculum, using technology and the traditional method of storytelling to motivate students to write and represent, both activities that many students find difficult. This resource is intended to be used outside of school time by tutors, teachers, or volunteers, who act as facilitators, mentors and co-learners as they help students work through the process of generating multimodal, digital stories.

### **Summary of Research Findings**

The literature in the past decade supports the view that digital storytelling integrates the story, a powerful learning tool, with the multiliteracy design elements of linguistic, visual and auditory design by using technology to create a multimodal text. Traditional literacies, such as reading and writing, are enhanced and redesigned by adding other modes of meaning through technology to generate the digital story, which is an engaging blend of old and new and reflects the “mediasphere in which children and youth live” (Flynt & Brozo, 2010, p. 528). Research also suggests that digital storytelling can motivate and transform students as they communicate their stories, and that it can

empower students as they develop as authors. As students and instructors share their stories and experience the stories of others, they can build a sense of community. The participants become co-learners in the creative process, building relationships (Flynt & Brozo, 2010). Students may also run ideas past their friends, or ask for feedback on their work. This collaboration builds a sense of community as well.

Thus the research confirms that producing digital stories provides students with extra writing practice and “an authentic opportunity to craft identities as successful authors and successful readers that are part of a community where literacy and written communication is [sic] both important and relevant” (Gabriel & Gabriel, 2010, p. 682).



## **Section II - Preparing the Instructor**

### **The Instructor's Role**

*“Read the directions carefully and you will be directed in the right direction.”*

The Doorknob, from Walt Disney's (1951) adaptation of Lewis Carroll's *Alice in Wonderland*.

The instructor plays a crucial role in helping students create digital stories. While using the technology required is a part of the process, students will probably need more support developing their capacity to attend to the traditional elements of stories, i.e. audience, plot and structure. One on one instruction allows the opportunity for students and instructors to develop relationships that facilitate and encourage learning.

In the 21<sup>st</sup> century, students need to be able to read, write and understand a variety of text genres (Callow, 2008). Callow suggests that a “key aspect to the implementation [of this] is providing students with the concepts and language to be able to discuss what they see and view” (p. 616). Working with students to create digital stories is one way for students to learn some of the skills they will need, both for their in-school and out-of-school lives.

Students thrive on immediate feedback and instruction that is specifically geared to them and this is something that can be accomplished in the one on one setting. Once a positive working relationship has been established, the instructor's role can be to challenge the students to stretch their abilities. Students are engaged and motivated when the learning is authentic and they are “purposefully involved” (Flynt & Brozo, 2010, p. 528). The instructor's task is to help the student create authentic stories while introducing multiliteracy concepts and vocabulary that can help build communication skills.

Multiliteracies involve literacies beyond those associated with print (or traditional) literacies such as visual, gestural and auditory literacy. The theory behind multiliteracies is the understanding that literacies are a reflection of social and cultural practices and that all literacies have value and can be used to communicate messages (New London Group, 1996). Some definitions of multiliteracies also include the involvement of some form of technology such as multimedia (Cervetti, Damico, & Pearson, 2006).

### **Using the Technology: Fear not!**

Often one of the biggest fears for people who did not grow up with computer technology in their daily lives, sometimes referred to as *digital immigrants*, is working with the technology needed to help children and youth create digital stories. Ohler (2009) wrote that instructors do not necessarily need “sophisticated” training, but rather their role is that of a guide. Halio (1996) commented that the instructor can “write and explore along with the students” (p. 344), modeling the process as a co-learner.

Technology changes too quickly for any one handbook or guide to have all the answers. Watts Taft and Gwinn (2007) suggest that once the instructor finds out what programs are available to work with, he or she can check the user manuals, on-line or in hard copy, and the program publisher’s website for tips or to seek help. While many students may seem to be miles ahead in terms of their skill with technology, they need guidance to use technology to create cohesive, dynamic stories that use words, images and sound in a digital format.

### **Digital Storytelling Websites**

<http://www.storycenter.org/standard.html>

<http://digitalstorytelling.coe.uh.edu/>

<http://digitales.us>

<http://www.umass.edu/wmwp/DigitalStorytelling/Examples%20of%20Digital%20Storytelling.htm>

**Software Publishers' Websites and Tutorials: Options for Presentation**

[http://www.microsoft.com/education/teachers/guides/digital\\_storytelling.aspx](http://www.microsoft.com/education/teachers/guides/digital_storytelling.aspx)

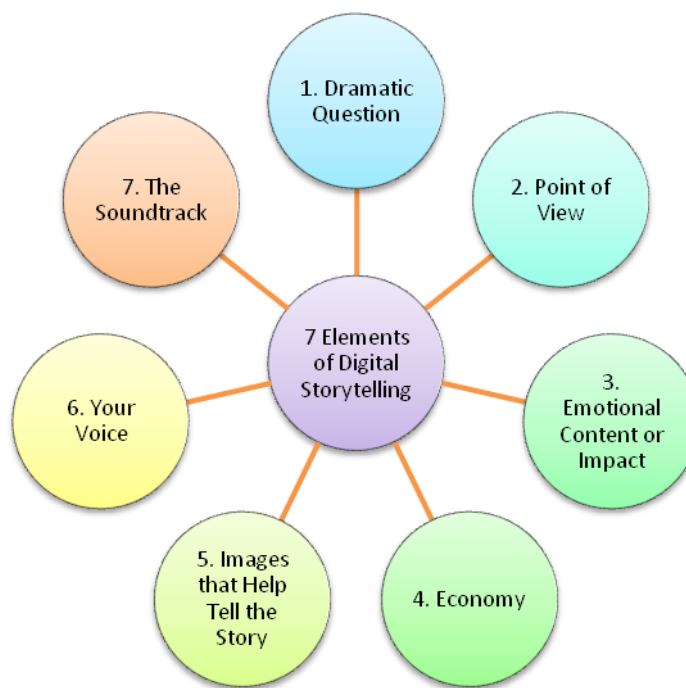
<http://office.microsoft.com/en-us/powerpoint/> & <http://www.microsoft.com/photostory>

### Section III - Gathering the pieces

*“Begin at the beginning and go on until you come to the end: then stop.”*

The Red King in Lewis Carroll’s *Alice in Wonderland*. (1960, p. 81).

### The Big Picture: The 7 Elements of Digital Storytelling



**Figure 1 (adapted from Center for Digital Storytelling, 2010 and Miller, 2010)**

In the following section, the seven elements of digital storytelling are divided to follow the process of creating the digital story while incorporating the elements of linguistic, visual and auditory design. The first four elements (dramatic question, point of view, emotional content or impact and economy) are included under the heading: Writing the Story. The fifth element (images that help tell the story) is included in the section: Choosing the Images. The last two elements (your voice and the soundtrack) can be found under the heading: Selecting the Sounds. While these elements intersect and interact, they are described here separately in the interests of clarity.

## Writing the Story

Start the writing process by developing story ideas with students. Choosing to write about an event from their life is a good starting point, as they will have the background knowledge to begin to develop the idea. If students wish to write about something they do not know a lot about, some preliminary research and extra time spent organizing information may be necessary. Depending on the age and skill of the student, varying degrees of the instructor's support throughout this step will be needed as researching for writing adds another layer of complexity to the process. Further suggestions for researching before writing can be found in the Extensions and Adaptations section.

After a topic has been chosen, brainstorming to write down all the thoughts about the topic is the next step. This preliminary information can then be reorganized in an order to help communicate the stories students wish to tell. Some examples of free graphic organizers designed to help students organize their thoughts can be found on these websites <http://olc.spsd.sk.ca/de/pd/instr/strats/graphicorganizers/index.html> <http://www.superteacherworksheets.com/graphic-organizers.html>

At this point, the instructor can begin to introduce some of the elements of digital storytelling.

**The dramatic question.** After the story idea has been chosen, students must decide what question their story will answer. Discuss with the students some ways that an author can keep the audience interested in the story. If the question posed is intriguing, the readers will want to read the entire story to find the answer. For example in a life story, the question could be as simple as, "How did my mother choose my name?" or

“What was in the mysterious birthday package?” Asking a dramatic question provides structure to the unfolding story in order to answer the question.

**Point of view and emotional content or impact.** Deciding on the point of view to take as authors can also affect the impact of the story. If students would like their story to be amusing, perhaps they might tell the story from the point of view of the baby they once were, or the mysterious package that arrives. The instructor can help the students consider how different points of view and manner of delivery (first person, second person, and third person) can alter the impact of their story, affecting its emotional content. Choosing a clear point of view helps the audience “get” the message the writer is trying to communicate. Knowing the audience that the writer wishes to reach helps the author decide on the point of view. Experimenting with different points of view can provide one way for students to try on different identities as well. For example, writing from the point of view of the baby may encourage students to think about how different people of different ages view the world.

Once student writers have decided on a story, a question, a point of view and the emotional content (funny, sad, mysterious, etc.), the time has come to write. A digital story is relatively short and will have the added elements of images and a soundtrack to help tell the story. The writers should, however, keep in mind that they want the audience to be able to read/view/hear the story. Thus, paying attention to the linguistic elements of vocabulary and grammar is important. The instructor can help students by providing editing support and explanations.

Now that the first draft of story has been written, the next step is to create a storyboard, a slightly different form of graphic organizer. As a digital story is a

multimedia production, having a storyboard keeps the writer organized and on track once other design elements are added into the story.

**Economy.** A digital story is usually short, often between 3-5 minutes long. There is not a lot of room on each frame for written text, so students need to practice economy with their words and sentences. The images and soundtrack support and add to the story. Creating a storyboard helps keep students focused on what must be shown, told or written in each frame of the digital story in order to convey the message to the reader/viewer. A sample blank storyboard frame and an example of a completed one are included in Section IV – Resources, and other examples can be found on some of the digital storytelling websites (listed in Section II).

One page of a storyboard is completed for each frame of the digital story. If students wish to use video clips once they have become proficient with adding still images, another column can be added to the storyboard template. Frame one should be the title frame and it might help to have the dramatic question and point of view included in the storyboard title on this page. Creating an overview that shows all the frames in the correct viewing order is also a good idea, so the flow and continuity are maintained. A sample of an overview can be found in Section IV – Resources.

Bringing some examples of graphic novels or comic books may help the student get a better idea of what the storyboard frame (and the multimodal) story might look like. Some web sites for finding graphic novels are listed here:

<http://www.education.wisc.edu/ccbc/books/graphicnovels.asp>

[http://www.orcabook.com/client/client\\_pages/Graphic\\_Novels\\_Info.cfm](http://www.orcabook.com/client/client_pages/Graphic_Novels_Info.cfm)

## **Choosing the Images**

The study of visual literacy or visual design as a mode of communication has gained importance in educational research and literature during the last 10-15 years. Educators are concerned that students need to be better equipped to critically evaluate not just the words, but also the images and the visual design of text. To help students develop and understand the language or vocabulary used to discuss visual design elements, the instructor can introduce five to seven of the concepts. The elements the students may be most familiar with are colour, shape, proportion, balance, pattern, contrast and direction. These categories pertain not only the images the students choose to include in their digital story, but also to the visual design of each frame of the story, such as fonts, backgrounds and design scheme.

**Colour.** Colour plays an important role in the world. What colour means to a person can vary depending on their culture. In China, white carnations are a funeral flower, while in North America white is associated with purity and innocence. Colour will create a reaction from the viewer, regardless of one's cultural background. Imagine trying to eat a green egg with your ham!

Kress and Van Leeuwen (2002) wrote an entire article on the meanings of different aspects of colour, such as brightness, shading and hue. Discussing colour choices in the presentation, including the colour of the fonts, backgrounds, etc., with students may help them be more aware of the meaning colour can convey.

**Shape.** Choosing different shapes to put in a presentation also conveys meaning. According to Farmer (2007) "squares are stable, triangles are active, circles are organic, and spirals are cyclical" (p. 30). So deciding to put a photo in a circular frame, may give



it a slightly different meaning than putting it in a square frame. The shape of the font in a presentation also sends a message. While the standard convention is to have only two different fonts in a presentation, choosing the right one for the job takes a bit of time. If the student is telling an amusing story, using a font like **Jokerman** might add to the fun. If the story is more thoughtful and serious, Palantino Linotype might suffice. Students must remember that their audience has to be able to read the font they choose, so while **ALGERIAN** looks really good, reading it in extended text might be difficult for some people.

**Proportion.** If one object or image is out of proportion with another, the effect can be jarring (which may be what the student writer desires). Discussing proportion and its effect on the reader/viewer is important, so that the elements in the story work together to create the desired effect. In Figure 2, the figures under the tent in the background can be compared to the figures in the foreground to give the viewer a sense of how large the reception tent is.



Figure 2. The reception of the " Ah-Haussoo-Noh-Beh," or " Queens' Mouths." (1851) [Digital ID: 1167946](#)

**Balance:** If one object is meant to be more important than another, choosing to put that object closer to the viewer or changing its size can communicate that. The author also wants to make sure that the written text and images are in the proportionate

relationship that conveys the intended or desired meaning. For example, in some frames the image will dominate and the text will be deliberately minimized and vice versa.

In Figure 3, for example, the girl is facing the reader as she is the subject of the song being advertised, yet her partner's face remains a mystery.



Figure 3. She is my picnic girl / words and music by Harry Connor. [Digital ID: 1157576](#)

**Pattern.** Repeating a pattern, either the background of each frame, or the placement of images within the frame conveys a message to the audience. While the writer does not want the digital story to become boring, having some sense of pattern helps the audience to follow the story. However, a pattern can be deliberately “broken” to emphasize a break in the story. For example, a background format might change to show the passage of time. Pattern can also be applied to the structure of the written text in a digital story with font type, size and colour.

**Contrast.** Choosing to contrast one thing to another creates an effect and can convey different meanings. The writer may want to put a picture of a dove beside a crow, symbolizing opposites or a dove beside an olive branch to symbolize peace or a safe harbour. Contrast can provide a dramatic element in a digital story, particularly when the narration or music contrasts with the words or pictures.

**Direction.** Sometimes writers want the reader to follow a particular direction, such as time order or position. Often this can indicate different relationships between the elements of a digital story. Comic book graphics often use direction to convey movement

or sequence of events. For example, arrows can lead the reader/viewer to follow each of two story lines that may overlap in time and on the same page.

**Images that help to tell the story.** The visual aspect of the digital story is more than just the drawings, pictures or photographs that are added to each frame. However, these images are crucial aspects of digital storytelling. The most important thing to remember is that the images and words need to complement each other in a digital story. Depending on the author's purpose the words can reflect the image or contradict it, but the decision to do either must be a conscious one. Always keep the audience in mind when considering visual elements and choose elements that enhance the story, not detract from it. Finding just the right picture that can help tell the story can be difficult. Many pictures are available through the Internet; however, the students may need help learning how to "read" the images to make the best choice for their story and how to avoid plagiarism. For more information about copyright laws and fair use guidelines, Linda Miller (2010, pp. 28-29) suggests checking out the Consortium of College and University Media Centers website.

<http://www.ccumc.org/mc/page.do?sitePageId=116006&orgId=ccumc>

An equivalent website that deals with Canadian fair use guidelines can be found at:

<http://www.ic.gc.ca/eic/site/crp-prda.nsf/eng/rp01119.html>

Students can bring picture files to the session from digital cameras, memory sticks (flash drives) or photo CDs and these can be loaded into most of the existing digital storytelling programs. Students' drawings or photos can be scanned and then loaded into the programs or students can get pictures from educational websites. Some sites that allow students to use the images are: <http://classroomclipart.com>

<http://digitalgallery.nypl.org/nypldigital/index.cfm>

<http://pics4learning.com>

### **Selecting the Sounds**

The sounds in a digital story can include voice-over narration, music and sound effects. The study of auditory design as a mode of communication in relation to digital storytelling is not as well documented as other modes. However, the study of the power of the voice in oral storytelling and the importance of sound effects and music in media entertainment is something most people are aware of. The voice-over or narration and sound track in a digital story can add depth and emotion to the presentation. The instructor can guide students to choose the best vocal features, music and sound effects to help tell their story.

**Your voice.** Having an impact on the audience is part of the role sound plays in digital stories. As Miller (2010) stated, “[r]eading their own stories empowers students” (p. 21). Most people like to have stories read to them and having the author read his own story can have a profound effect on the audience. While the voice-over, or narration, is linked to the words, altering the pitch, pace, volume, pause, inflection, tone and emphatic stress of a voice can add meaning and impact that words alone cannot. Consider the phrase, “Come here,” delivered in a slightly menacing tone from the high school principal, or the same phrase said with joy by a grandmother watching her grandchild taking a first step. How you say something can really change its meaning!

**Pitch.** Pitch generally refers to the high or low note of the voice. For example, if the narrator wants to convey a feeling of fear, he or she might raise the pitch of their voice.

**Pace.** How fast or slow you speak is considered the pace of narration. Usually a storyteller will speed up the pace of the narration to convey intensity, or slow down the pace to convey moderation. In other words, as the storyteller builds to a climax, the speed of the narrator may pick up. Conversely the storyteller may choose to slow the pace of the narration to indicate the story is wrapping up.

**Volume.** Most students will be familiar with the concept of loudness or softness. This knowledge can be a good starting point to discuss what volume they want to use to best tell their story. Does the student want to begin to speak softly, gradually becoming louder to convey mounting excitement? Perhaps the student wishes to speak in hushed tones to share a secret with the reader/viewer/listener.

**Pause.** A well-timed pause, or silence, can speak louder than words. Research has shown that waiting for five to seven seconds before beginning the narration for a frame can increase the viewer's attention.

**Inflection.** The sliding or gliding of the voice up or down is often used to indicate sarcasm or disbelief. Inflection is used as we slide our voice up slightly to indicate a question mark at the end of spoken question and down to indicate periods at the end of sentences.

**Tone.** Most students will be familiar with this term as tone is often referred to. Tone is related to the emotional connotation the speaker wishes to convey.

**Emphatic stress.** Sometimes a word or even a syllable is given more emphasis to change the meaning. In written work, this would be the word that is underlined, italicized, bolded or written in capitals to let the reader know how to "read" the meaning of the words.

Remember that not all vocal features mean the same thing in each culture, so be open to discussing the differences if they arise!

**The soundtrack.** Choosing the right music to go with a digital story can be a matter of taste. Many of the vocal features mentioned earlier can also apply to music, such as pitch, pace, volume and tone. Music and sounds evoke amazing responses in people, so while the burble of a babbling brook might convey a soothing, peaceful mood, and the clashing and clanging of metal might bring to mind a battlefield of medieval knights, remember that the music and any other sound effects should add to the story, not overwhelm it.

Some programs have limited sound effects available to add to digital stories and some of the digital storytelling websites have links to other soundtrack sites. Some sites for free music downloads or sound effects are:

<http://freeplaymusic.com/>

<http://www.findsounds.com/>

<http://audacity.sourceforge.net/>

### **Combining it All**

Using the storyboard to make notes about which visuals and sounds to use will help speed up the process of putting all the pieces together. Most images not already found on the computer will need to be added to the document or picture files. Usually adding images is relatively user friendly and the computer will guide you through the process with prompts. Often students will know how to do this. Depending on the technology available, scanning pictures to a file is also a possibility. Music and sound effects can be loaded into files from the Internet or other devices using digital music files.

Once the images and sound bites have been loaded onto the computer, you are ready to start creating a digital story. Most programs available to students through the school have word processing programs that are used to insert text into the presentation. Often pictures can be added by choosing the “insert” option on the menu bar. Some programs have existing sound effects which can be added easily with the “insert” option. Adding narration is relatively easy and is explained very clearly in the digital tutorials listed on page 48. Adding music to a digital story can be the most technologically challenging step in the digital storytelling process and one that may take some practice. Often soundtracks can be inserted into the digital story directly from sound files loaded into the computer. Compact discs can also be used. Experimenting with the programs before working with the students is a good idea.

## **Section IV – Resources**

*“The time has come, my little friends, to talk of many things / Of shoes and ships and sealing wax, of cabbages and kings / And why the sea is boiling hot, and whether pigs have wigs...”*

The Walrus from Walt Disney’s (1951) adaptation of Lewis Carroll’s *Alice in Wonderland*.

### **Assessing and Evaluating the Process and Product**

The school, community group or afterschool program may ask you to fill out some kind of progress chart or evaluation before, during and after completing a project with the student. Usually these are in the form of checklists or rubrics. A sample rubric can be found in this section. If evaluations are to be completed, a teacher, community worker or counsellor will explain the process to the instructor. While sometimes the instructor and student complete separate evaluations, they can also be completed as a joint activity.

### **Suggestions for Extensions and Adaptations**

When digital storytelling was first conceived, it was described as a way to share life stories using digital technologies to combine words, images and sounds. Since that time many other adaptations for digital story telling have been employed.

One such adaptation involves redesigning the traditional written research report as a digital presentation. If a student wishes to create a digital story that does involve research, more support from the instructor may be required. One resource that could help keep the research focused is a K-W-L chart. This helps students clarify what they already know about a subject, what they want to find out and then finally, what they have



learned. The information in the chart can then be used to develop an outline or plan for the digital presentation. An example of a K-W-L chart can be found later in this section.

If student writers wish to write or narrate their story in two languages, a valuable exercise for differentiating the process for English language learners (ELLs), a parent or language teacher can help with the editing process. Different cultures may also have different story structures and these differences can be discussed by the student and the instructor and incorporated into the digital story.

In another adaptation of digital storytelling, Gabriel and Gabriel (2010) describe how the students from one school first took digital pictures of their school and community and then created a photo library. The photographs were then used by the students as they produced narrative and informational digital texts about their school and their community.

Educators and researchers listed other adaptations and extensions for digital storytelling. Robin (2008) suggested that digital presentations could be created that describe historical events or that provide information about a topic or instructions on how to do something. McLellan (2006) wrote about the *Capture Wales* project, where archival digital stories were recorded in both English and Welsh to promote and capture the culture of Wales. McLellan also suggested that digital stories could be produced that memorialize others, tell about occupations, or describe health-related topics. Poletti (2011) wrote that as people authored life stories, they also examined their life views which led them to take a more political view about issues that have shaped their lives. Porter (2010), the author of the *Digitales* website related how technological changes have

made it possible to create interactive digital stories as students create their stories within virtual, computer-generated worlds.

### **Writing Conventions**

Writing conventions can include form (e.g., paragraph, essay), sentence structure (syntax), word choice (diction), usage, spelling, punctuation and capitalization and appearance (e.g., spacing, indentation, page numbers). If you are unsure of what the right “rule” is, check with on-line resources or books about writing conventions.

One such website is [http://www.grammarbook.com/english\\_rules.asp](http://www.grammarbook.com/english_rules.asp)

### **Trouble Shooting**

When in doubt, ask an expert. If there is a teacher or older student who has some expertise in the programs being used, the instructor could ask for help. Help is also available on-line. If nothing seems to be working, save what was done up until that point and then seek further assistance.

### **Sharing Your Work**

Once the digital story is complete, sharing it with an audience is the next step. While digital stories are best viewed on a computer itself, or projected on a screen, some programs will allow you to print the presentation as a book. The audio portion of the presentation is lost; however, the text and images are there for others to share.

**Storyboard Example (Blank)**

Name: \_\_\_\_\_

Working Title for Story: \_\_\_\_\_

Frame Number: \_\_\_\_\_

Written text	Font and Background	Image/ Graphic	Narration and Soundtrack

**Extra Notes:**

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**Storyboard Example (Completed)**

Name: \_\_\_\_\_

Working Title for Story: A Learning Journey

Frame Number: 2

Written text	Font and Background	Image/ Graphic	Narration and Soundtrack
<p>What did Linda need to learn?</p> <p>How could Janie teach that?</p>	<p>Font: Calibri Varying sizes</p> <p>Background: PowerPoint Design – Flow Colour – Module</p>	<p>Search clip art for something that expresses information being delivered</p> <p>Trying to match colour scheme as well (These descriptions might take the form of an actual drawing or sketch)</p>	<p>Shared reading of written text Possibly adding PowerPoint sound effects</p>

**Extra Notes:**


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## Overview of Digital Story Example

Name: \_\_\_\_\_

Working Title: A Learning Journey

<b>Frame 1</b> Title	<b>Frame 7</b> An example of a class
<b>Frame 2</b> Ask the questions	<b>Frame 8</b> The improvement that was noticed: spelling
<b>Frame 3</b> What we decided the answers were	<b>Frame 9</b> A short sample of the writing
<b>Frame 4</b> How we carried out the plan (1)	<b>Frame 10</b> Going on to other courses (job related)
<b>Frame 5</b> How we carried out the plan (2)	<b>Frame 11</b> Where you can take your learning and make a better future
<b>Frame 6</b> How we carried out the plan (3)	<b>Frame 12</b> Credits

## Digital Storytelling Rubric Sample

Name: \_\_\_\_\_

Category	Criteria for 16-20 marks	Criteria for 11-15 marks	Criteria for 6-10 marks	Criteria for 0-5 marks	Subtotal
Story elements	Asks a dramatic question and resolves it, has a consistent point of view, uses descriptive language	Asks a dramatic question and shows an effort to resolve it, sometimes loses focus, uses some descriptive language	Asks a dramatic question, but does not resolve it, the point of view is inconsistent, uses little descriptive language	Does not ask a dramatic question, has an inconsistent point of view, uses no descriptive language	
Images	Images match the story and complement it, images convey meaning to the viewer	Images match the story, and some attempt is made to convey meaning to the reader	Images were included, but did not add meaning to the story	Few images were included and did not always relate to the story	
Soundtrack	Successfully used vocal features, music and sound effects (if appropriate) to enhance the story	Used vocal features, music and sound effects (if appropriate) to enhance the story	Attempted to use vocal features, music and sound effects (if appropriate)	Little or no attempt to create a soundtrack	
Economy	Story has right amount of detail and is neither too short or too long	Story has detail, but moves at an uneven pace	Story has detail, but is too long or too short	Story has little detail and needs extensive editing	
Writing Conventions	All elements of writing conventions included in story were correct	Most elements of writing conventions included in story were correct	Some elements of writing conventions included in story were correct	Few of the elements of writing conventions included in story were correct	

### K-W-L Chart

Name:	Topic:	
K – What I already know about my topic or technical process	W – What I want to find out	L – What I learned about my topic or technical process

## **Examples of Prescribed Learning Outcomes (Language Arts Grades 8) Addressed By Digital Storytelling**

### **Oral Language:**

A2 express ideas and information in a variety of situations and forms to

- explore and respond
- recall and describe
- narrate and explain
- persuade and support
- engage and entertain

A5 select and use a range of strategies to prepare oral communications, including

- interpreting a task and setting a purpose
- considering audience
- generating ideas
- making connections among relevant knowledge and experiences
- planning and rehearsing presentations

A6 select and use a range of strategies to express ideas and information in oral communications, including

- vocal techniques
- style and tone

A12 recognize and apply the structures and features of oral language to convey and derive meaning, including

- context
- text structures
- syntax
- diction
- usage conventions
- vocal techniques

### **Reading and viewing:**

B3 view, both collaboratively and independently, to comprehend a variety of visual texts, such as

- photographs
- art
- visual components of print media
- student-generated material

B12 recognize and explain how structures and features of text shape readers' and viewers' construction of meaning, including

- form and genre
- functions of text
- literary elements
- literary devices

- use of language
- non-fiction elements
- visual/artistic devices

#### Writing and Representing:

C1 write meaningful personal texts that explore ideas and information to

- experiment
- express self
- make connections
- reflect and respond
- remember and recall

C5 select and use a range of strategies to generate, develop, and organize ideas for writing and representing, including

- making connections
- setting a purpose and considering audience
- gathering and summarizing ideas from personal interest, knowledge, and inquiry

C10 write and represent to synthesize and extend thinking, by

- personalizing ideas and information
- explaining relationships among ideas and information
- applying new ideas and information
- transforming existing ideas and information

C12 use and experiment with elements of style in writing and representing, appropriate to purpose and audience, to enhance meaning and artistry, including

- syntax and sentence fluency
- diction
- point of view
- literary devices
- visual/artistic devices

C13 use and experiment with elements of form in writing and representing, appropriate to purpose and audience, to enhance meaning and artistry, including

- organization of ideas and information
- text features and visual/ artistic devices

C14 use conventions in writing and representing, appropriate to purpose and audience, to enhance meaning and artistry, including

- grammar and usage
- punctuation, capitalization, and Canadian spelling
- copyright and citation of references
- presentation/layout



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## Chapter 4 Reflection

*“Oh my ears and whiskers, how late it’s getting!”*

The White Rabbit from Lewis Carroll’s *Alice in Wonderland*. (1960, p. 1).

Although we live in a world of computer mediated communication, not all of us, even today’s youth, fully utilize the possibilities of 21<sup>st</sup> century technologies (Flynt & Brozo, 2010). There is a general consensus among educators, however, that individuals will need to be multiliterate; that is, have the ability and skills to read, view, hear and understand many kinds of texts, especially texts found in the digital world of laptops, iPods and cell phones that access the Internet, to succeed in the workplace (Callow, 2008; Gee, 2000; Mills, 2010b). The New London Group (1996) suggest the place to start teaching multiliteracies is in school, but, as the White Rabbit laments, there never seems to be enough time in the day to get everything done.

### **Multiliteracies and Digital Storytelling**

An important goal of teaching multiliteracies is to “provid[e] students with the concepts and language to be able to discuss what they see and view” (Callow, 2008, p. 616). Although students live in a world saturated with images and technology, they need guidance to fully participate in that world. Educators need to “plan for meaningful learning experiences to support [the students’] development as viewers, markers and critics of visual and multimodal texts” (Callow, 2008, p. 619). Students need the opportunity to have overt instruction and situated practice developing multiliteracy skills, while at the same time being purposefully involved in authentic learning. In theory, digital storytelling has the potential to provide that meaningful learning experience. However, sometimes students need more time to practice digital storytelling than the

classroom can provide, possibly because not all students are as familiar with technology as others and may have varying degrees of writing skills.

Barone and Wright (2008) report that while computers with Internet access were available for most students in the schools they studied, there was simply not enough time in the school day for students to use “this technology to develop new literacies” (p. 292). Teachers do not always have the training to use the technology, nor the support to integrate new literacies and technologies into the existing curriculum. Given that digital storytelling can be such a valuable tool with which to “join the symbols of the traditional story and the symbols used in mass media” (Klerfelt, 2006, p. 177), I decided to investigate the possibility of setting up a program that uses volunteer instructors to work with students to create digital stories. My thought was that this program would be modeled after the DUSTY program in Berkley, California, but would focus on middle and high school aged students.

At this after-school or out-of-school program, as at DUSTY, students would be given the opportunity to work one on one with volunteer instructors to learn about computers, communication and multimedia; knowledge that could be translated to both their in-school and out-of-school worlds. In the process of creating digital stories, students could learn about how texts were constructed as they designed their own multimodal presentations (Callow, 2008; Gabriel & Gabriel, 2010).

### **The Value of a Learning/Writing Team**

Of course, students can access digital storytelling websites that take them through the process of generating a digital story, but they must be able work independently, without the support of a live facilitator. For students who do not see themselves as

capable learners, trying to work without the help of a supportive guide may cause them to give up on the process before they complete the product. I had also hoped that with an instructor who can act as a facilitator, students could explore the concepts of multiliteracies more deeply, while receiving individualized instruction and support.

In the one on one setting, the instructor and the student can focus on the process of creation, working with each other to create a risk free environment where there would be time for the instructor to talk with the student and “consistently interact with children on the edge of their abilities” (Compton-Lilly, 2007, p. 720). The instructors could provide students with assistance right away when the students needed it, keeping them actively involved in the process and in the Zone of Proximal Development proposed by Vygotsky (1978). The students would have time to practice taking elements from both traditional and new literacies, combining and redesigning them with the instructor as a facilitator and co-learner (Klerflet, 2007).

Compton-Lilly (2010) states that “literacy learning and literacy practices are not separate from people’s identities” (p. 719). Some students who do not consider themselves to be writers may require more support and reassurance than those students who are more confident in their writing abilities. Gee (2003) suggests that if a child believes that he or she cannot learn, “then this identity needs to be repaired before any active, critical learning can occur” (as cited in Compton-Lilly, 2010, p.721). The one on one teaching situation can lend itself to providing students with the extra attention and care that is not possible due to time constraints and number of students in the regular classroom and can therefore help build students’ confidence as learners.

Directly supporting writers who struggle can lead to increased performance which leads to success and success leads to motivation (Biancarosa & Snow, 2006, Gabriel & Gabriel, 2010). Compton-Lilly (2010) notes that when students were interested in what they were doing, they became completely engaged and did not notice the passing of time. Digital story telling provides an opportunity for students to write about “people and things that really matter to them” (Gabriel & Gabriel, 2010, p. 680). The finished product can be printed or shared as an electronic document, giving the students “an authentic opportunity to craft identities as successful authors” (p. 680).

One of the first steps in setting up a program like the one I have described is to ground the ideas with theory and assess the need for the program. My journey over the last three years has provided me with the skills to do that. While teaching in a one on one situation, I saw first-hand how authoring stories can change the perception students have of their own abilities. I was fascinated by the “possibilities software affords” (Flynt & Brozo, 2010, p. 526) in this digital age, so I knew my students would be as well. Once I began linking the foundational theories I learned in my first summer of the program to the coursework in the subsequent years, I saw that my idea of using digital storytelling to help my students tell their stories had merit. I knew that the prospect of having their work published and shared with real readers would further motivate students to develop their identities as authors, such as the students in Gabriel and Gabriel’s (2010) study. I hoped that my students would also feel that they were “part of a community where literacy and written communication is both important and relevant” (p. 680).

## **Creating the Instructor's Guide**

Having been involved in establishing other after-school programs, I wanted to use this knowledge I have gained over the past three years to securely base my ideas in theory and then employ that theory to develop a guide book to train the volunteer instructors to deliver the program.

One of the difficulties I encountered while preparing the original handbook was trying to find a balance between making the document scholarly enough to reflect the theory behind my work, and yet user friendly for instructors not well-versed in educational language or pedagogy. I had to make several choices to reach a compromise. One choice was that after the first two sections of the guide, I opted not to include the citations in brackets so that the instructions and information would flow more smoothly. I also decided to keep the design elements within each subcategory to a minimum, so that they would not become overwhelming for the volunteer instructors.

As the computer programs are perhaps the most complicated part of digital storytelling, I wanted the guidebook to include pictures and instructions of how to use three of the least expensive and most accessible programs available to students. Unfortunately, I had not taken into consideration the time involved in obtaining copyright permission, a far more complicated process than acknowledging or referencing a source. As I considered how to deal with this issue, and after discussing my dilemma with both my supervisor and committee member, I realized that if the Instructor's Guide focused on the technology, it would become quickly dated and of little use. This realization drove me to re-design my original handbook to become more of a guidebook. I focused instead on the actual design aspect of the digital story. By concentrating on the different modalities



used in digital storytelling and relating them to the seven elements of digital storytelling, I believe the Instructor's Guide has become a more useful document and one that will not become quickly dated.

In addition, by more closely examining the "multiplicity of communication channels" (New London Group, 1996, p. 60), such as the linguistic, visual and auditory, the Instructor's Guide can help instructors introduce students to a "broader view of literacy than portrayed by traditional approaches" (p. 60). My hope was that in constructing the guide to include multiliteracies under the digital storytelling umbrella, both the instructors and students would learn how to communicate using varying modalities and literacies. This would then help open the door for them to begin to understand the importance of recognizing "the multiple linguistic and cultural differences in our society" (p. 60).

### **Questions Still to Answer**

While I have used the Instructor's Guide with students to produce digital stories, I still have questions to answer and issues to resolve. I see the guide as a work in progress; complete to this point until more information is gathered to suggest improvements.

Some of the issues and questions I hope to address over the coming months include: Will other instructors with different backgrounds find it as useful as I did? Are the Uniform (or Universal) Resource Locators (URLs) sufficient for helping the instructors navigate the software programs? Would more examples of the visual design elements be helpful? In the future, I would like to continue to work on this project, not only to find solutions to these questions and concerns, but to create and add intermediate and advanced level sections to the guide.

## The Wrap Up

As I worked on completing the Master's program in Middle Years Language and Literacy, I discovered so much I had not known that I re-crafted my own identity as a learner and educator. I became fascinated with visual literacy, a topic I had always avoided because my previous identity kit did not have a costume for being a visually literate person. I created digital stories using my own photographs and poems. I used the digital storytelling format to create a presentation for my father's memorial service and discovered how creating a multimodal text transformed my perception of his identity.

In my journey to find ways to help my students learn, I entered into the cycle of learning outlined by Gee, "probing the world (doing something); reflecting in and on this action and, on this basis, forming a hypothesis; reprobating the world to test this hypothesis; then accepting or rethinking the hypothesis" (as cited in Compton-Lilly, 2007, p. 720). I began to see the possibilities an out-of-school time program afforded to researchers and how the digital storytelling process could be differentiated for students from different cultures and backgrounds. I realized that in hoping to lead my students to a wonderland, I had fallen down the rabbit hole too.

*And as the girl considered all she had learned about creating and sharing stories, she realized she had discovered a way to help others. Digital storytelling was a unique and rewarding path people could take to become authors and, like Alice, enter their own wonderland of discovery.*

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## **Appendix A**

### **Examples of Prescribed Learning Outcomes (Language Arts Grades 8) Addressed**

#### **By Digital Storytelling**

##### Oral Language:

A2 express ideas and information in a variety of situations and forms to

- explore and respond
- recall and describe
- narrate and explain
- persuade and support
- engage and entertain

A5 select and use a range of strategies to prepare oral communications, including

- interpreting a task and setting a purpose
- considering audience
- generating ideas
- making connections among relevant knowledge and experiences
- planning and rehearsing presentations

A6 select and use a range of strategies to express ideas and information in oral communications, including

- vocal techniques
- style and tone

A12 recognize and apply the structures and features of oral language to convey and derive meaning, including

- context
- text structures
- syntax
- diction
- usage conventions
- vocal techniques

##### Reading and viewing:

B3 view, both collaboratively and independently, to comprehend a variety of visual texts, such as

- photographs
- art
- visual components of print media
- student-generated material

B12 recognize and explain how structures and features of text shape readers' and viewers' construction of meaning, including

- form and genre
- functions of text

- literary elements
- literary devices
- use of language
- non-fiction elements
- visual/artistic devices

Writing and Representing:

C1 write meaningful personal texts that explore ideas and information to

- experiment
- express self
- make connections
- reflect and respond
- remember and recall

C5 select and use a range of strategies to generate, develop, and organize ideas for writing and representing, including

- making connections
- setting a purpose and considering audience
- gathering and summarizing ideas from personal interest, knowledge, and inquiry

C10 write and represent to synthesize and extend thinking, by

- personalizing ideas and information
- explaining relationships among ideas and information
- applying new ideas and information
- transforming existing ideas and information

C12 use and experiment with elements of style in writing and representing, appropriate to purpose and audience, to enhance meaning and artistry, including

- syntax and sentence fluency
- diction
- point of view
- literary devices
- visual/artistic devices

C13 use and experiment with elements of form in writing and representing, appropriate to purpose and audience, to enhance meaning and artistry, including

- organization of ideas and information
- text features and visual/ artistic devices

C14 use conventions in writing and representing, appropriate to purpose and audience, to enhance meaning and artistry, including

- grammar and usage
- punctuation, capitalization, and Canadian spelling
- copyright and citation of references
- presentation/layout