"Let Me Show You": An Application of Digital Storytelling for Reflective Assessment in Study Abroad Programs

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Reflection is the process of stepping back from an experience to ponder, carefully and persistently, its meaning to the self through the development of inferences; learning is the creation of meaning from past or current events that serves as a guide for future behaviour. - M. W. Daudelin

Introduction

We are living in a world of chaotic change that is evolving exponentially where we find ourselves literally drowning in a sea of information. There now exists a global environment where citizens are being challenged to think creatively, become cooperative problem solvers, and effective communicators. People need to know how to interact, engage, and collaborate with others from multiple cultures using various types of technology. They also need to be able to match left-brain analytical skills with right-brain creative, innovative skills to be competitive and successful in today's global market (Pink, 2006). Is our educational system preparing our students to become productive well rounded global citizens? And how are our students demonstrating in authentic ways what they are learning in diverse educational environments?

In the United States, we measure educational success based upon assessments where students are asked to recall facts taught to them in classrooms using an industrial-age model of instruction, where students sit in rows, listen to instructors, memorize facts and demonstrate their knowledge based on these high stake testing. As an educational system, we should have advanced past the information-age model, where information is readily available through technology to the conceptual age model of teaching and learning, in which students discover concepts and ideas through exploration, critical thinking and demonstration of knowledge with authentic artifacts that have meaning for students. Today's students are primarily assessed in ways that draw only on the left-brain analytical proficiencies, rather than also tapping into the right-brain creative abilities. Why is there a need for a more engaging and creative type of assessment? The main answer is accountability. Students are working to achieve something, in this case a grade, course credit, or a degree, so there is a need to make sure they have met certain defined standards before the award can be granted. It is usually easy and more convenient to administer a high-stakes objective assessment to a mass audience on left-brain analytic proficiencies. However, it is more difficult to assess students on right-brain creative abilities, as these are more subjective to evaluate.

I argue that narratives expressed through the technological modality of digital storytelling can be a mechanism used to effectively assess not only right-brain creative abilities, but also the left-brain analytical proficiencies. Further, a focus on narratives exposes learning processes often ignored when designing research on a narrow range of cognitive skills (McEwan, 1995). For this article, *digital storytelling* is defined as a modern method for expanding upon traditional

storytelling techniques including narratives through a variety of digital modalities including digital photography and videography. The audience can be engaged in a passive way through just watching a video or in an interactive way through commentary, discussions, or social media after watching the video (Ohler, 2013). Therefore, the research study discussed in this article investigated, the potential use of digital storytelling as an effective assessment method for students to demonstrate both personal and academic learning outcomes. The theoretical framework used for this research was constructivism, how students learn or the way knowledge is assembled in ones' own mind. Through reflection students construct the meaning of their learning and *demonstrate* their outcomes with digital storytelling technological modality and techniques.

The study applied a qualitative approach for researching and collecting data from students participating in summer study abroad programs in Italy, Mexico and Rwanda held over four summers June 2010 to Aug 2014. The instruments used for this study were surveys, field observations, interviews, and the student's final digital stories. The research questions explored the influence of digital storytelling on the learning experience and the impact of demonstrating learning outcomes through digital storytelling. The findings from this study confirmed that reflection on learning and the creation of a digital story to demonstrate what was learned was is an effective method for engaging students and assessing their learning progress. Based upon these findings, digital storytelling can be utilized to engage students in a creative process as well as demonstrate learning outcomes, and support the idea of constructivism.

This article will start with a review of the literature about assessment practices and digital storytelling. The next section examines the research questions and theoretical framework used in the study. It is followed by an outline of the qualitative method utilized for the research. Next the results are discussed, along with a discussion about the study. Finally, implications and recommendations are made based upon the findings of the research study.

Literature Review

Daniel Pink (2006) points out that there is a major shift happening in the world today as we move from the information age to the conceptual age. According to Pink in the conceptual age, it will be vital for students to utilize new ways to "created artistic and emotional beauty, to detect patterns and opportunities, to craft a satisfying narrative, and to combine seemingly unrelated ideas into a novel invention…to empathize, the understand the subtleties of human interaction, to find joy in one's self and elicit it to others" (p. 51). Traditional storytelling, which employs the modalities of oral narration, the written word, or illustrations, is part of the foundations of the new literacies movement (Street, 2003). Digital storytelling expands upon these modalities by adding multimedia techniques, such as voice recording, digital photography, or video production. As educators we need to utilize these types of authentic assessment methods which allow our students to demonstrate their learning in a conceptual age way.

In reviewing assessment practices, there is a need to go back to our ancestral roots and explore ways we first began to learn, retain, and pass on wisdom. Collaborative, interactive narratives have been an entertaining and engaging way for people from cultures all over the world to express their experiences and give meaning to those experiences through telling their stories. From the beginning of time narratives were designed to teach, inspire, bring people together, or to pass along wisdom from one generation to another. Storytelling is a human trait that is universal, present and recognizable across cultures and epochs (Alexander & Levine,

2008). There is power in using narratives or personal storytelling to convey or demonstrate knowledge. Through the process of storytelling, meaning is constructed, knowledge is retained and the ability to pass along wisdom is enabled.

Narratives and Storytelling

Narratives historically have been the way in which humans pass on the knowledge of the world around them and were our first true assessment of learning. Stories in fact, help the people and the culture to survive and thrive in a hostile environment.

Storytelling was the first form of education. In the book, *Wisdom Sits in Places – Landscape and Language Among the Western Apache*, Keith Basso (1996) quotes a bit of wisdom from one of the elders Nick Thompson, "That is what we know about our stories. They go to work on your mind and make you think about your life…" (p. 58). Stories do work on your mind and make you think deeper. Stories help you define yourself, where you come from and what you know.

Gary Witherspoon (1977) in the book, *Language and Art in the Navajo Universe* asserts that when listening to and telling stories, it is important to remember that human beings actually create the world within which they live, think, speak, and act. "And even though they occupy the same globe, they traverse very different worlds" (p. 3). Through the telling of stories and creation of art, humans relate to one another. With language, man has the ability to express himself actively, creatively, and become a powerful part of his universe. "If he is void of language, then he is impotent, ignorant, isolated and static" (p. 62). Our language and our stories become a vital piece of who we are, where we come from and ultimately assist in pointing us to where we are going in this life.

According to McEwan (1995) narratives are a basic fundamental human capacity and the role of narratives in education clearly merits our attention. Narrative is an extended language configured in a way that embodies life. It has a rhythm springing from the patterns of human life and interaction. There is a structural symmetry between the content and human existence. It helps to remember, that knowledge has been gained within the context of someone's life and as a product of that person's inquiry. In focusing on narratives in the framework of education we can explore on how to build it into the curriculum and make it an integral part of the teaching and learning experience.

Bruner (1990) describes two types of narrative structures. The first is a summation of human consciousness, which relates to the growth of knowledge or the discovery of ideas gathered through the deployment of human projects and practices. The other is an individual consciousness, which are stories of an individual's educational growth and development. Throughout our lives we tend to naturally create narratives to give coherence and meaning to the whole lived experience (Bruner, 1990). These narratives of lived experiences represent constructed knowledge, not just the conveyance of information. Narratives allow us to put ideas into our own words, so we can make meaning of them. As we begin to learn, we are forming our own unique narratives. Narratives give us a way of expressing our ways of knowing by helping to organize and communicate our own personal experiences. If we start to understand that the central focus of narrative is to create human meaning making and formation of identity, then we can grasp the significance of narrative in education. With this in mind, narratives can play a vital

role in helping to construct the future of the curriculum, the process of learning and ways to inform the practice of teaching (McEwan, 1995).

In his book, *Narrative schooling: Experiential learning and the transformation of American education*, Hopkins (1994) proposes a narrative schooling grounded in the philosophy of John Dewey. Dewey (1938) stated that education is a continuing restructuring of the learner's experience with the process taking into account personal meaning and social context. Basically, the content being presented needs to connect with the learner's prior experience and the learner must have opportunities to actively engage with the content based on their own personal lived experience (Dewey, 1938). Hopkins advances on Dewey's ideas by adding the narrative process through which the learner demonstrates meaning of their experiences and content. He writes, "Narrative is the indispensable process through which emplotment and meaning attribution flow…" (p. 10).

Narrative as pedagogy

One educational arena that has explored narrative pedagogy is the field of nursing as this discipline relies heavily on case studies to both teach and assess principles of care and medical decision making. Diekelmann (2003) discovered over the course of a 15-year study with teachers, students, and clinicians that how nursing practice is being learned is as important as what is being learned. She found the use of narrative pedagogy, in which teachers and students share and interpret their lived experiences to gather collective wisdom in order to address existing challenges, was an effective practice. Bringing together both teachers and students to learn from each other's perspectives was useful in this educational environment. She found that when multi-perspective thinking is enacted, new possibilities open up for teaching and learning in both the classroom and in clinical situations.

There were two themes that emerged from the Diekelmann study, the first was "Thinking as Questioning: Preserving Perspectival Openness" and, the second was "Practicing Thinking: Preserving Fallibility and Uncertainty." In the first theme, students were not asked to specifically answer questions, but to persistently explore the meaning and significance of the practice. They were to explore and expose the underlying assumptions embedded in the experience. Through this exploration the teachers and students collaborate in new ways that preserve perspectival openness. In the second theme, thinking shifts from being a means to an end into cycles of interpretation. In this situation, uncertainty and fallibility are preserved. Students are not "told", but "guided" into thinking and learning difference content and practices. Through sharing of various viewpoints about how to solve a problem, students think through a situation and go beyond the problem to become deeper thinkers. This helps students learn the importance of generating many perspectives in order to understand a situation and see the complexity and uncertainty of each situation. By using narrative pedagogy to help students think differently, profoundly, and perhaps collaboratively they create a deeper meaning and understanding of the situation. This assists them in being able to tell their story or achieve the learning outcomes of the experience.

Traditional storytelling and narratives have proven to be a fundamental structure of human meaning making. The narrative gives us an epistemological perspective that we can understand and relate to on many levels. As an example, which is easier to remember a list of facts or those facts woven into a story that ties them together for deep meaning? To go even further, which is more intriguing or engaging for the listener or learner, the list or the story?

Then take a deeper step and ponder another level of engaging the listen by adding a new way of delivering the story through the multimodal dimension of digital storytelling.

Digital Storytelling

Digital storytelling revolves around the art of telling a story through the use of digital media (examples are images, audio and video). The story needs to have a theme or topic coming from a particular point of view or perspective and possess meaning within the framework. The stories are usually under five minutes and include a variety of uses including personal experiences, historical events, meaningful content or instructions on a particular subject.

Digital storytelling roots go back to the 1990's when Dana Atchley first coined the term as he was experimenting with the use of multimedia elements in the workshops he offered at the American Film Institute on storytelling performances (Robin, 2006). Dana Atchley, Joe Lambert, and Nina Mullen started the San Francisco Digital Media Center, which evolved into the Center for Digital Storytelling, a non-profit, community art organization in Berkley, California. Joe Lambert (2010) created "The Digital Storytelling Cookbook" from his experience with the Center for Digital Storytelling. This Cookbook constructs seven elements into a rubric, so that students would have guidelines in which to create their stories. The seven elements include: a point of view, a dramatic question, emotional content, visual, sound, economy and pace.

Within the College of Education at the University of Houston there is a group exploring ways in which digital storytelling can be used for educational purposes. The Educational Uses of Digital Storytelling website was created almost ten years ago and has evolved into a resource for educators and students interested in integrating digital storytelling into educational activities. Over the years Bernard Robin, the professor who leads the educational uses of digital storytelling website has researched this area and discovered that it creates a strong foundation for many 21st Century literacies including:

- Digital literacy – the ability to discuss issues, gather information and seek help,
- Global literacy – the ability to create messages from a global perspective,
- Technology literacy – the ability to use computers and other technologies,
- Visual literacy – the ability to communicate through visual images, and
- Information literacy– the ability to find, evaluate and synthesize information (Robin, 2006).

When a student participates in the digital storytelling process the following skills can be developed: research, writing, organization, technology, presentation, interview, interpersonal, problem solving and assessment. However, Robin (2006) also points out challenges with creating digital stories. Some of these challenges include: trouble formulating an educationally sound story, access to technology tools necessary to create a digital story, issues of copyright and intellectual property of others, and time factor to learn all the elements that go into digital storytelling.

Research Question and Theoretical Framework

To address the issue of earning academic credit for knowledge obtained during a learning experience the focus of this research asked the question: "What does digital storytelling offer as

an assessment instrument and model for demonstrating expected learning outcomes for study abroad programs?" This study investigated the use of digital storytelling as a required project in four study abroad programs. The digital storytelling project was designed to form a meaningful assessment practice for student, by allowing them to create and tell a story of their own learning experience. The method was to engage the students during the learning process through the creation of content based upon their unique knowledge acquisition.

Constructivism (McDrury, 2003) is one of the theoretical framework used for this study which views learning as a process, or a way of making sense of knowledge through the addition and synthesizing of new information within an existing knowledge structure. Chaille and Britian (1991) describe constructivism in the following way:

> The learner is actively constructing knowledge rather than passively taking in information. Learners come to the educational setting with many different experiences, ideas and approaches to learning. Learners do not acquire knowledge that is transmitted to them: rather, they construct knowledge through their intellectual activity and make it their own (p. 11).

Reflection and storytelling in concert are ways in which students can construct their knowledge of events or content. They reflect upon their new learning and bring their own unique stories not only from the current information, but merged with knowledge of their past experiences. This idea points to the funds of knowledge theory (Gonzales, Moll, & Amanti, 2005) whereby historical accumulated- and cultural-developed knowledge is essential for individual functioning and well-being. The student's own distinctive background can be as critical or influential to the learning experience as the academic content being acquired.

In socio-cultural constructivism there is more emphasis on the communication processes with the influence of social factors helping to construct the knowledge. Vygotsky (1978) stressed the importance of language and dialogue in the social contexts of learning when constructing knowledge. He recognized the importance of assisted and unassisted learning within the zone of proximal development (ZPD). ZPD is that area of learning where a student can problem solve independently to a certain point, but needs some guidance or collaboration from others to make it to the next level.

Digital storytelling aligns with the Vygotskian perspective, as the learning process is social and collaborative. It also values the prior experience of the student and promotes a reflective dialogue in which meaning is constructed. One aspect of Vygotsky's thinking that relates to the digital story paradigm is the importance of culturally situated learning that stresses educational interactions are influenced by the surrounding culture. Everyone is affected by the interaction of his or her own social, historical, ideological, and cultural contexts. These factors, along with a reflective process, inform and guide how we go about constructing our world.

In framing the digital storytelling process within the socio-cultural aspect of constructivism the idea of *dialogue* is central to the learning process and influenced by the cultural context. This is not just a simple contextual framework, but also one that includes process and the complex issue of surrounding influences including the role of discourse (McDrury, 2003). The learning process for effective digital storytelling includes a meaningful experience, a reflective process, making the experience relevant and a dialogue that promotes deeper thinking.

Noel Entwistle (2001) divides learning into two separate levels. There is surface learning, which is just the reproduction of knowledge to cope with certain requirements verses deep learning, which is transformative learning where students understand ideas for themselves. This becomes a significant theoretical framework for the digital storytelling process as it engages students to dive deeper into the meaning of their experience through the construction of storytelling around their own knowledge.

The other theoretical framework used for this research was supported by Kolb's model of experiential learning. With this model learning is connected to the ways in which a student processes and reflects upon those experiences. The learner gains knowledge in two ways: grasping or perceiving the knowledge, and then by transforming or processing the knowledge (Kolb, 1984). The digital storytelling project gives the learner a mechanism from which to accomplish both of these connections to knowledge. For learners to effectively demonstrate their learning outcomes they must first have a concrete experience, and then reflect upon the experience before conveying that experience to others through the digital story.

Kolb takes a holistic approach by combining both cognitive and behavioral theories together to emphasize how experiences including cognitions, environmental factors and emotions influence the learning process (Kolb, Boyatzis & Mainemelis, 2000). This mode of learning is portrayed as a cycle with the following elements. For grasping the experience there is the *Concrete Experience* and *Abstract Conceptualization*, while transforming the experience has *Reflective Observation* and *Active Experimentation*. Within this cycle, a person has a concrete experience thus providing the information to serve as a basis for reflection. These reflections help the person to form abstract concepts, and then these concepts assist in developing new beliefs or ideas, which the person then actively tests. Through these tests the person gathers information and the process begins all over again.

There are many connections from this theory to the digital storytelling process. Digital stories are the product of experiential learning. The student has a unique experience, for example an event that takes place during their time studying abroad. Through a reflective practice, the student forms a story around the event and in the process forms an abstract concept of what they learned from the event. In this case, the creation and sharing of the digital story moves the student to the active experimentation phase, where the discussion can assist the student in moving deeper into learning from the event. The cycle can continue as the student watches and comment on other student's digital stories who participated on the same study abroad program. Students can relate to the other stories, but expand their thinking about the same experience as it is viewed from a different lens or perspective.

This theory provides a framework for research with digital storytelling as an assessment practice. The process of digital storytelling allows for students to construct and demonstrate their knowledge through their own experience with the use of multiliteracies including writing a script, taking digital photos or videos, and recording their voice. The practice of digital storytelling could help to transform learning and assessment practices in the educational system as it moves more into alignment with the needs of students as they prepare to function in a digital world. James Gee (2013) expresses this view in his book, *The Anti-Education Era*, when he says, "Getting smart is now a 24/7 enterprise because intelligence comes from cultivating our lives and all our experiences in the service of learning and growth. Digital media today can make learning in and out of school engaging, social and life enhancing."(p. 215).

Methods

The choice of conducting a qualitative study for this research was based on the nature of what was being explored. The strength of the qualitative study is providing data that is subjective, descriptive, and gives a snapshot of a particular population. In this instance, the population was relatively small and the outcomes were based upon student and faculty perceptions of a specific intervention, the digital storytelling project in framing the demonstration of learning outcomes. The study was conducted to gain understanding of the students' feelings, impressions and viewpoint of the digital storytelling project as a reflective tool for the demonstration of learning outcomes. The qualitative approach was the most applicable choice for this research as the behavior of students was collected through field observation, interviews, and gathering of artifacts. The faculty members were also interviewed to gain their insight about the effectiveness of the digital storytelling project.

The target populations for this study were college students between the ages of 18 – 25 who were currently attending an institute of higher learning and were taking a faculty-led summer study abroad course for academic credit. However, the study abroad programs were not limited to this population of students. For example, there was one Ph.D. student who participated in the study who was in her 40's and a few other students in their late 20's.

The digital storytelling project was constructed as a reflective assessment assignment to assist students in demonstrating what they had learned during their study abroad experience. This was not a slide show of the trip with a narrative of the events that took place, but rather a deeper reflection about the student's total experience. One way the project was framed for students was to consider this question, "If an employer were to ask you about what you learned on your study abroad experience, what story would you tell?" Table 2.1 shows the program goals, learning objectives and assessment methods used in the four programs.

(Insert Table 2.1)

The requirements of the digital story were given to the students in a rubric format. When constructing the rubric for this study several resources were considered. The Digital Storytelling Cookbook by Joe Lambert (2010), which contains the seven elements of digital storytelling, was the major framework. Other resources taken into consideration were the 21st century literacies taken from the University of Houston College of Education website, The Educational Uses of Digital Storytelling. Finally, Jason Ohler (2013) insights into the use of digital storytelling were helpful in framing the rubric for assessment purposes in this study. The rubric has six elements:

1) The *purpose* of the story is transparent to the viewers and a clear focus is maintained throughout the story,
2) A progressive story flow that starts with a *dramatic question* capturing your audience's attention, has a clear plot and a resolution at the end of the story,
3) The gift of your *voice* achieved by having clear and consistent audible sound attained though good pitch, tone, and timing that connects with the audience,
4) *Emotional* content including a soundtrack if appropriate, that is apparent throughout the narration of your story,
5) A point of view through *content* creation that expresses your opinion, personal reflection, and learning outcomes of your experience,
6) The *economy* of the story in terms of language, pacing and maintaining the attention of

the audience.

This rubric was merged with the specific discipline's learning objectives and used to assess the digital stories. Both the learning objectives and the storytelling rubric were given to the students at the beginning of the study abroad program. The introduction of these two elements were a major factor in the creation of successful digital stories. For when students know what they are to be learning and also know how they will be asked to demonstrate their knowledge there is less stress and more opportunity for successful outcomes. Assessment in this particular educational experience was a reflective exercise allowing student to go deeper into how the learning objectives become a personal journey. Table 2.2 was the rubric used for assessment of the digital stories in this research study.

(Insert Table 2.2)

The data was collected through several mechanisms including: an electronic survey before the study abroad trip, observations by the researcher during the trip, paper surveys, interviews after the trip, and the collection of the digital story artifacts by students participating in the study. The surveys were given to the students before and after the study abroad trip and were compared to determine the differences or similarities in the perception and actual process of the digital storytelling project. The digital stories obtained through the project were reviewed and evaluated based upon the rubric and the learning outcomes of the course. The observations and interviews were converted into a transcript, then coded and analyzed for emerging themes.

Various methods were incorporated to check validity and credibility during the analysis phase of the research. All of the following procedures were utilized throughout the data analysis phase. The first procedure used was prolonged engagement. In this case, the researcher has been involved with the digital storytelling project for the four years. During the fourth summer the researcher was in the field observing the implementation of the digital storytelling project in two of the programs participating in the study. Another procedure was a member check, whereby the researcher shared the data and the interpretation of the data with the participants for verification of accuracy. Triangulation was used, as the researcher gathered data from a variety of sources including: 1) survey tools and interviews, 2) observations, and 3) collection of the digital storytelling artifacts created by the students.

Results

This study set out to determine if the methodology of digital storytelling was an effective assessment tool by answering the question, "What does digital storytelling offer as an assessment instrument and model for demonstrating expected learning outcomes for study abroad programs?" There were several themes that arose during the analysis phase of the research to assist in answering this question. The themes discussed in this section were: 1) reflections, journals and scripts, 2) instructor and peer reviews, 3) role of a rubric, 4) multimodal assessment, and 5) traditional assessment versus digital storytelling assessment.

Reflections, Journals and Scripts

Reflections were one of the key factors in helping students to demonstrate their learning outcomes through the digital storytelling project. The reflection process assisted students to recall not only their personal experiences, but also their learning journey. One student made this statement about the reflection process:

> It (the digital storytelling project) really helped me to reflect on everything we did and [SIC] asked myself, "What was the real intention behind this trip? Why did we go to the museum? Why did we volunteer at Resplandor?" It is more than just busy work, there is a certain meaning behind it, and so that is what the digital storytelling project made me think about. – Monica, 2014

In her digital story, Monica was deeply reflective about her personal learning journey. She talks about the history and culture of Mexico and the indigenous past she saw all around her. She relates what she is learning about Mexico into her own identity. She says that being in Mexico helped to fill a void in her identity. In the closing statement of her story she says, "I found a City so rich in culture whose humbleness has greeted me with open arms." Monica's digital story helped her to demonstrate several of the topics that were outlined in the learning objectives and go even a step further by relating them to her own personal growth and identity.

(Insert Figure 2.1)
Monica's Digital Story
https://www.youtube.com/watch?v=mdQeEwahcxo

Journal writing was another factor that proved to be an effective means for students to reflect upon their learning experiences. Some students were natural journal writers, while others needed prompts and points. Here are two comments from students, the first student did not use prompts for reflection writing, while the second student had prompts provided each day:

> I journal when I travel, because when you get back from a trip you immediately start forgetting everything. So if you don't do things like this you are going to forget all the little things and eventually the big things. It was nice to put pictures to the story, because with the pictures it jogs your memory. You remember exactly what was happening when this photo was taken. – Melissa, 2014

> …the journals were a good way for us to remember things. We were instructed to write down significant things and go back to remember. I did not go back and look at every entry, but I did write every day until the day we got back to the United States. It is a good part of the reflection process to be able to go back and look at a daily journal. I think it is a good match to journal every day and then reflect upon your writing for the digital story...you need to be held accountable for what you are learning every day. Some people tried to go back and remember what had happened in previous days and it was hard for them. – Tiffany, 2014

Keeping a journal about a learning experience can be beneficial to the creation of the digital storytelling project especially if the story is going to be used to demonstrate outcomes of the learning experience.

Another factor that was not as critical, but proved to be helpful in assessment was script writing for the digital storytelling project. The first two summers the digital storytelling was administered, a graduate student who traveled with the students reviewed the scripts. The next two summers the scripts were not reviewed. This was part of lifting the restrictive nature of the project that students complained about early in the research. It was found that most students in all programs studied did write a loose script even when it was not reviewed. Here are some comments from students who did script writing:

> I had so much to say that I had to write out my script and edit it a couple of times and find just the right words. This improved my writing skills. – Monica, 2014

> I actually did write a script. My writing part took less time than the visual compilation. I really wanted to choose the pictures that were my favorite or captured a specific moment or sparked a memory. – Jen, 2013

> The hardest part for me was the script and making it more story like. We have this style of writing that students do, where we write everything in a certain way, so it was hard for me to make this more informal like you are telling someone a story. – Sky, 2014

Next are comments from some students who did not write a script:

> I did not write a script, I just took chunks out of my journal...I am not going to say this or I am going to change this and sort of modifying the script. – Genesis, 2014

> I did not write a script for this project, I was just talking off of my passion. I knew what I wanted to talk about, but I did a lot of takes (on the recordings). – Jimaral, 2014

In reviewing the digital stories, there was no obvious change in the quality of digital storytelling based upon the requirement of script writing, however it was apparent when students did not put time into reflecting about their study abroad experience. The digital storytelling became more of a vacation slide show presentation, instead of a reflective story about what they experienced. Take a look at several digital stories at: http://www.melodybuckner.com/#!digital-stories-03/c1uud to compare. Monica wrote out a script, while Jimaral talked of his passion. While Jimaral's story has a causal familiar feel to the presentation, almost like he is right in the room with you, Monica's story goes much deeper into her transformative experience on the study abroad trip.

Instructor and Peer Reviews

Sharing was perceived as a positive part of the digital storytelling project, however access and usability were major factors in the success of this aspect of the learning experience. The students in this study wanted to share their project, not only with the other students who participated on the study abroad, but with their family, friends, and even potential employers.

> It would have been nice to see what my peers had to say and learning from their own VoiceThread. – Ana, 2011

> I would definitely like to receive comments and if everyone else was doing it and if I thought they would read my comments, then I would definitely comment on things. – Lauren, 2013

> I would be open to anyone's comments because it makes the story more worthwhile and interesting to listen to other people's viewpoints. – Jimaral, 2014

> I would like to hear what others are thinking about and it is interesting to hear from their perspective and voice or read what they wrote because everyone thinks about things differently and has a different take on stuff. – Melissa, 2014

Students were very open to receiving comments on their stories from the instructor and even willing to receive and make comments on their peer's stories. This is an important factor in assessment as research has proven that feedback is perceived as having a powerful influence on learning, if it is used to enhance the learning experience. (Hattie & Timperley, 2007). Here are some comments from students about feedback:

> I think feedback from both Dr. Fletcher and my peers would have been good, but especially feedback from Dr. Fletcher...I think it would have been neat if we could have posted it on a particular place and everybody had posted there and then if we could get feedback from somebody either the instructor or peers. – Sheri, 2014

> I would definitely like to receive comments and if everyone else was doing it and if I thought they would read my comments, then I would definitely comment on things. – Lauren, 2013

> I would be open to anyone's comments because it makes the story more worthwhile and interesting to listen to other people's viewpoints. – Jimaral, 2014

> I would like to hear what others are thinking about and it is interesting to hear from their perspective and voice or read what they wrote because everyone thinks about things differently and has a different take on stuff. – Melissa, 2014

However, there were several reasons peer feedback did not happen with the digital storytelling project. The main reasons dealt with access and usability issues in both the VoiceThread application and the learning management system used in the course. The students created their stories in VoiceThread, a free application available on the Internet. In order for students to share a VoiceThread presentation, a box must be checked to share and allow others to comment, and then they need to generate a link that is shared with others. The students must copy this link and distribute it to anyone they want to view their presentation. This process proved to be confusing and time consuming for students. They got frustrated and just put the link in the learning management dropbox area for the faculty to view and grade. Therefore, it did not get distributed among their peers.

A solution did arise during the summer of 2014 that helped to eliminate the accessibility issue. One study abroad group decided to post their digital story links on the course Facebook page. Here were some of the comments from this innovative solution:

> We all posted to Facebook and were watching each other's digital stories and commenting. – Rebecca, 2014

> It makes more sense to share the VoiceThread on Facebook, where people can find it easily…people are kind of lazy. – Jenna, 2014

> I posted it on Facebook to our little group, because they sort of knew what it was about, but I did not post it to everyone I knew. – Genesis, 2014

Adding the digital story to a social media site that the course was using for communication proved to be an excellent resolution to the accessibility issue. The usability problem with VoiceThread can be addressed with training before the students leave the country or through specific directions on how to share the presentation.

Role of a Rubric

The role of a rubric plays a critical role in the assessment of a project. It also provides transparency to students about the standards from which they will be evaluated. This type of creative project can enhance the learning experience for students, however restrictions can hinder both the creative and learning process. During the first two summers of the digital storytelling project, the focus was more on the rubric and the assessment than it was on the reflection of the authentic learning that was taking place in the study abroad experience. It was a forced effort to make students tell the story of achieved learning outcomes, rather than letting the students weave their own unique learning experience through storytelling. Here is a comment that reflects the feeling of the students from the first two summers:

> …how it (digital storytelling project) was brought up and it was very restricting, like I did not really have a lot of options...it being so restrictive kind of takes a toll on you. I can't be as creative as I want to be. I can't really share the things, because the people are looking for certain, specific things...The focus was on diversity and the things you had

> done or things you were contributing to rather than your overall experience...You don't put limits on them and more restrictions because that is in a way telling them this is how I want you to do it. Grading effected the enjoyment of the assignment. – Ana, 2011

However, when the rubric was administered as a guide, the comments were very different:

> …you are out of your comfort zone and you are learning so much…it is a different type of knowledge. ...it is good to know initially when you go into it that there are expectations about the product you are going to have to produce at the end and be thinking about it. All of us were thinking about it and taking pictures and reflecting on things that were happening in the moment. – Rebecca, 2014

The assessment rubric did not change from the summer of 2011 to 2014, however the perception of how it was being administered shifted from directing students to what they must include in the digital storytelling project to guiding students through the exploration of their own storytelling of their unique study abroad experience.

One comment from a faculty lead supports this idea:

> In regards to the field study, the language and experiences that are shared in the personal narratives show their expertise through the new vocabulary to express their thoughts in this discipline. The vocabulary comes up spontaneously, so I don't use it as a formal assessment, because I don't want to spoil the favor of the assignment by putting this vocabulary as a requirement. It is a bonus for me to see them demonstrate their knowledge without being a formal requirement. – Netzin, 2014

In this instance, the digital storytelling project can assist faculty in assessing what students have learned through an authentic meaning of acquired language and explanation of the experience. For Netzin's program, the students demonstrated many of the learning outcomes through their digital stories. To view the learning outcomes and the stories, go to: http://www.melodybuckner.com/#!digital-stories-04/c1x1a .

Overall the rubric proved to be a helpful guide in assisting students through the various components of the digital storytelling project. It should to be noted that when the rubric was used in a restrictive manner the students were frustrated and felt their creativity was limited. However, when the rubric was used as a guide, then students were aware of what was expected from them and creativity flourished rather than be diminished.

Traditional or Digital Storytelling Assessment

In this study, digital storytelling was not used as a replacement to the traditional assessment rather it was used as an addition. Students were still required to perform either oral presentations or submit written reports depending on the study abroad program. This was a positive factor as the researcher could ask the students to compare the different type of assessments.

Two opinions surfaced when discussing oral presentation versus digital storytelling. The first was that an oral presentation allows the speaker to feed off of or react to the energy of the audience and some people thrive in front of a crowd. Whereas the digital story gives the speaker time to process and redo the presentation to get it "just right" and is much better for those who are not comfortable speaking in front of a group. Here are some comments that speak to this:

> The digital story is not like a PowerPoint standing at the front of the class presenting your stuff. It was cool to kind of make it your own...The digital story gave me more room to think over what I wanted to do and put it all together. Whereas when you give a presentation you are put on the spot and for me that is hard to do. I need time to process things through and put it together, so that is what I liked about storytelling.
> – Kendra, 2014

> The digital storytelling experience is very intimate so doing an oral presentation would not be very appropriate or comfortable. So the digital storytelling process allows for you to be comfortable, as you are by yourself. Other people are going to see it but you get to use your discretion of what you put into it. So I do think it is a very good format.... and an oral report can kind of be boring. A lot of people do not do oral reports well…you are just sitting there watching or you are the person up there wishing that it was over.
> – Rebecca, 2014

> I would prefer giving a live presentation over digital storytelling, because of having the real audience. Speaking in front of people that you know you can have an impact on…that you are having a non-verbal conversation with and they are thinking things over in their minds. And the way you speak to them is so different versus just speaking to yourself. You receive feedback from the audience and adjust your message accordingly versus just creating it yourself and recording it. It is more lively, because there is this real interaction going on. – Summer, 2014

> The digital storytelling project is great for students who work that need the flexibility. Increased distribution is great verses getting it one time in a classroom. So when the class is done it is over and nobody is ever going to look at again. It gets tossed in the trash and I just spend 10 hours putting together this great presentation and it is done forever.
> – Melissa, 2014

The most common opinions on the paper verses the digital story was the longevity and sharing aspect of these modalities. Students talked about how they would share a digital story with others and would even enjoy looking back at it, however they would not do this with a written paper. It also appeared to be a more creative outlet for expression of reflection than a standard written assessment. Here are some of the comments generated around this theme:

> The digital storytelling project is something that I would enjoy coming back to watching. I would be much more likely to look at throughout the years and have it be something

special to me than a paper. I would file a paper away and maybe read it once or twice but it would not be as enjoyable as hearing myself talk about the experience when it is fresh in my mind and having pictures there to guide me through the story. – Lauren, 2013

The digital story forces you to reflect a little bit more and to go a little bit deeper than you would in a paper. And papers tend to be boring and we have all written so many of them. I think you approach the digital story with a little more exuberance and energy because it is something that you have not tackled before. It is a new challenge, where as a paper is something you have done before. There is a certain novelty to it. – Rebecca, 2014

The digital story is like a story…rarely in the academic world do you get the opportunity to say what you really want to say. In most of my classes it is write a paper on this subject and you might not even have an interest in that topic. The digital storytelling really allows you to take ownership of your education. It was like here is an assignment and you make it what you want it to be…there was so much liberty in it and that is what I loved about it. – Monica, 2014

It made me think about telling my own story in my own voice and captivating people that way than just the typical writing. It makes you think about how you are conveying your thoughts more because you are actually speaking it and have the emotion behind it.
– Jenna, 2014

The faculty also had positive comments regarding the written assessment verse the digital storytelling project:

Visual literacy, learning and technology have really taken off and students are more engaged and motivated to be able to tell their story and to share with others. It is a solid reminder that the ability to share with others is easier than sending a paper…it is a short clip that demonstrates what they have learned and experienced more powerfully than they could ever do in a written format.... It creates a sense of perspective that can become very personal that would not normally happen in a paper or presentation.
– Dr. Fletcher, Verano Mexico

The digital storytelling project was fun for the students and they were able to engage other people. They also have something that is a little more permanent or more of a record of what they actually did than showing someone what they wrote. They can show their family. – Dr. Ruiz, Vivir Mexico

These comments aid in demonstrating that the digital storytelling project adds a depth and dimension that traditional assessment lacks. The project engages the students to engage with the assignment, show it outside of the course and come back to re-experience it in the future.

These are not traits that happen with a traditional oral presentation or written report. Through the use of media, the assessment becomes more personal and meaningful to the students and faculty. Dr. Fletcher's comment reaffirms the power of the digital story:

> I think it is the sign of the times. This is one way for students to demonstrate what they have learned during their study abroad experience…. It gives me a snapshot of what they internalized and learned. It is one of the most effective assessment tools I used.

Discussion

Once the students returned from their study abroad learning experience they were asked to take a short survey and talk to the researcher about their experience with the digital storytelling project. Table 2.3 contains the results from the short survey.

(Insert Table 2.3)

Most students had a positive perception of the digital storytelling project. They preferred a creative tool for a reflective project to the traditional assignment, although a few expressed that it was not as academically rigorous as writing a paper. The technology for creating the digital story did not pose a problem for most students, but there were some discussions about being driven to just one application, instead of allowing for choice. Overall, students did find the reflective process that happened due to the nature of the digital storytelling project had a positive impact upon their learning experience.

This suggests that digital storytelling can be a valuable, and perhaps a transformative tool for a broad range of curricula, and discipline based content. Storytelling can be a powerful mechanism for teaching and learning as stories help make meaning out of our experiences (Bruner, 1990). These experiences in turn are the key to transformative learning. Stories can also help students build strong connections to former knowledge and improve memory (Schank, 1990). Parker Palmer states that teaching and learning spaces should honor the "little stories" of students, while telling the "big stories" of the discipline (Palmer, 1998). Digital storytelling provides this learning space by empowering students with the opportunity to express themselves in a variety of media. One great feature of digital storytelling is that with a little bit of guidance and creativity anyone can create their "little story" and make it available for the world to see, hear and learn from.

Implications and Recommendations

The main implications that were drawn from this research include not only assessment practices, but reflection for deeper learning. First and foremost, students need an assessment mechanism to motivate them to reflect fully upon their study abroad experience. Without this mechanism, no matter the modality, students will not take the time and effort to reflect about their experiences and lose the opportunity for learning to take place. This ties into Kolb's (1984) model of experiential learning where students grasp and perceive knowledge through transforming and processing knowledge.

To give an example of this implication of the reflective process affecting a student is the story of Ana. Ana was on the Verano Mexico study abroad program in 2010 and then agreed to be interviewed four years later in 2014 for this research study. As she watched the piece she had produced four summers ago, she said, "I am such a different person than I was back then." She had created an in depth reflective story about her experience in Mexico, but as she watched it four years later, she was able to reflect about who she was, what she learned and how she has developed into the person she is today. It was a powerful moment for her. The digital story had an effect upon Ana more than an oral report or paper would have because of the multimodal elements. Her story complete with photos and voice made a larger impact than just words on a piece of paper or text on a PowerPoint slide.

From an assessment point of view, the implications are that digital story is an effective method for demonstrating not only learning outcomes from a study abroad program, but the personal growth of the students as they travel and experience different people and cultures. The digital storytelling project should not be the only means of assessing students, but it is an assessment that will continue to effect students, as it is an artifact that can be shared it with others and viewed later in life.

The major recommendations for the digital storytelling project to be taken from a pilot research study to a full practice assessment include several ideas. It is important to work with students both before and after the study abroad trip in teaching them to be comfortable with the technology. It is also crucial to teach students the art of storytelling, so that this project does not become a glorified slide show of their study abroad trip. Journaling during the study abroad trip and prompting students with questions to answer every day was an effective method for helping students to form their digital stories.

Two lessons learned that were unexpected during this research was agency and accessibility. Students need to have a sense of agency when it comes to learning. This was evident in giving them a choice about what they used to create the digital stories. The choice or lack of choice got in the way of the creativity. Once students were able to choose their own modality there were less complains and better products. In terms of sharing stories among their peers, it was found that when students were forced to go to a place that is not as accessible or "clunky", they just don't go and share or make comments. However, when students are allowed to share in spaces that are familiar and easy to navigate, comments and conversations grew.

The digital storytelling project was a successful assignment that was used for both assessment and for students to reflect on their personal growth. It is recommended that the digital storytelling project be expanded to other study abroad programs and that more studies be conducted as this research evolves into an effective practice for reflection of learning.

The digital storytelling project also demonstrated that it was an effective reflective media tool that inspires creative students to demonstrate their learning outcomes. It is not a total replacement for other methods of assessment, but it is an additive tool allowing students to create their own stories about their unique learning experiences. The lessons learned around the implementation of the digital storytelling project can be helpful for educators interested in pursuing a similar project.

It is recommended that the digital storytelling project be extended to more study abroad programs and even to other learning environments, including service learning projects or the traditional classroom where constructivism is an integral part of the learning environment. It is also suggested that more research be conducted with digital storytelling and other methods of knowledge acquisition to validate the effectiveness of demonstrating learning outcomes.

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