

Taiwanese Undergraduates' Digital Story Quests for Art Treasures in Second Life

Mary Stokrocki

Arizona State University

Jin-Shiow Chen

National Chiayi University, Taiwan

ABSTRACT

To promote cultural understanding, the authors attempted to discover how Taiwanese students develop digital stories, personal narratives told through words and images in response to quests to find artwork within the virtual world of Second Life [SL]. The undergraduate one-semester course occurred in Chiayi, Taiwan, in “real life,” or life as we usually experience it, face-to-face. Through participant observation, the authors planned, taught, documented, analyzed, and interpreted results of the digital storytelling project. Participant observation in the virtual context included gathering data to identify themes that students used frequently within the stories, interpreting the stories, and determining implications. In the beginning, the undergraduate stories were mostly travelogues and some animal transformations. Frequent themes in Taiwanese undergraduates' digital stories were identified, including such descriptors as “lonely,” “funny,” and “dream.” These psychological transformative themes revealed students' real-life concerns of finding a purpose in life, alleviating loneliness, overcoming fear of the unknown, raising awareness of social enterprises, and struggling to survive in a competitive environment. Implications call for collaboration and social action in negotiating multiple perspectives, respecting and embracing diverse or contrary opinions, creating double entendre examples, and delving deeper into the historical roots of cultural practices.

Description of the Project

Digital Storytelling is a process of constructing a story in a digital experiential space (Sanchez, 2009). In this study, digital stories were constructed in the virtual world of Second Life [SL]. Second Life is one of the most popular 3-D virtual worlds on the Internet in which participants, through their avatars, may globally interact with others, create and build objects, start a business, and attend classes, among other activities. Taking classes in SL is very unusual in Taiwanese education.

Education becomes self-expression and play on Second Life, a virtual world regarded as a giant playground (Steinkuehler, 2008) where participants expand their natural interests. Sanchez (2009) used digital storytelling to engage his students, who reported being immersed in the activity because role-playing enabled them to respond freely as compared to typical physical classroom activities. In his study, we recognized and emphasized this “ennobling” nature of role-play and the humanitarian educational possibilities for a future SL project.

In designing our study, we were guided by this past research in posing our research questions. What character types did students choose to role-play in their stories? What digital story themes/types did they construct? How did their stories develop and end? What artwork did they select for their stories? What evolving hidden significance did the thematic stories reveal? We anticipated that answers to these questions would lead to deeper understandings of cultural concerns. Our goal was to focus on participants' self-reflective inquiry in social situations to improve cross-cultural understanding (Kemmis & McTaggart, 2000, p. 5).¹ In other words, how would students interact with other avatars from the cultural world such as SL? Second Life involves multiple simultaneous ways of communicating, such as text, instant messages, voice, and gestures.

Context

Our undergraduate class occurred at National Chiayi University in Minshiong, Taiwan, a small town about three hours south of Taipei, the capital. Formerly a teaching college, the university merged with an agricultural college and is now famous for its research on orchids and peanuts (National Chiayi University, 2008). Since the first author was a visiting Fulbright scholar from the U.S., students from diverse areas in the University's Art Department also took the course to practice their English. We acknowledged, “Asian students

¹ Stokrocki obtained Institutional Review Board permissions from her university and the National Chiayi University in Taiwan prior to her Fulbright teaching. The Chair of the Art Department at National Chiayi signed the release forms. All participant names are avatar names.

are accustomed to teacher-led, passive and reticent way of learning” (Wang, 2005, 2006). They rarely start discussions, find it difficult to chat online, and do not confront nor question teachers (Jun & Park, 2003). “Their parents expect them to respect elders, study hard, and perform in school. They don’t like to be quoted [give their opinion] for fear of being offensive” (p. 76). While these authors address online learning, the same learning predispositions are brought to the traditional classroom. Therefore, our teaching involved a great deal of real life mentoring in terms of providing models of stories from U.S. students, technical help, and suggestions about some of the most popular art sites in Second Life.

The semester course, called Introduction to Visual Culture and Art Education, met once a week for two hours over the course of an 18-week semester in the computer lab. Our course description and rationale was drawn from several art education scholars addressing the broadening of art education to visual culture through trans-disciplinary study.

Conceptions of art are changing and expanding . . . Recent theoretical and philosophical shifts have emerged in and across various domains of knowledge. Those shifts have been informed by critical theories, such as postmodernism and feminism, and shape analyses of art and culture. New self-conscious trans-disciplinary fields of study have emerged to challenge conceptual dichotomies, such as fine/popular arts. As a result of these changes, it has become necessary to expand the concept and practice of art education to the realm of visual cultureThe use of the term visual culture, in part, reflects the recent global explosion of prolific pervasive visual images and artifacts and their importance to social life. (Boughton et al., 2002, p. 1)

We based the course on these principles of collaboration in social theory. Our activities represented remediation (problem solving) and bricolage (the process of constructing a world from diverse components [Deuze, 2006; Luhmann, 1990]). In so doing, we

promoted students’ freedom to formulate their identity and reform social life politics (Giddens, 1991).

The course provided a set of technological and critical tools for students and instructors to explore art and education in a virtual world. In art education, Chung (2007) introduced digital storytelling using the popular software applications of Microsoft Photo Story 3 and described how to integrate this technology into art education settings by creating life-action stories. Shin (2010) championed using the movie-making software iMovie for its ease in editing SL filmic screen shots in K-12 classrooms. Our technology tools mostly involved Second Life (an online 3-D immersive community environment), as well as Flickr (a public storage and display site for photographs with captions), used to store students’ screen shots, and Photoshop instruments. Critical tools encompassed pre- and post-questionnaires and art criticism investigative strategies of describe, analyze, and interpret. We explored a new cooperative education paradigm, called rhizomatic, in which students’ and instructors’ learning grew together² (Wilson, 2003; Deleuze & Guattari, 1993). Most of this cooperative learning occurred in the virtual world of Second Life.

Assignments

After joining, choosing an avatar, and briefly exploring Orientation Island in Second Life, we gave students two major assignments in the class. The first was to visit the Art Box gallery to view its famous immersive artworks, both historical and modern. Their second project was to search for art treasures of their choice and create stories through writing and screen shots as reactions to these art treasures.

²In our postmodern culture, students can instantly modify and collage images. Similar to a rhizomatic plant or a knotted patch of grass, ideas and images shoot out in multiple directions (Wilson, 2003).

Art Box

Art Box is one of the most popular immersive sites in SL. At this site, students clicked on an artwork of their choice and the program site teleported their avatars into the 3-D scene with props, including clothes, to dress their avatars. The artwork was divided into fore, middle, and backgrounds through which the avatars walked. We expected students to take a screen shot, upload it to Flickr, and add a comment about their character's actions and feelings in this artwork context. Here students could also learn about traditional and contemporary artists through virtual immersion in the scene. They could see and experience the details close-up. We also encouraged students to visit other sites on the Internet to learn about the techniques used in making the artwork they had chosen to study in-depth on Art Box.³ Art Box seemed to be a catalyst for introducing learning about art through SL, and proved to be a further stimulant for our main class project on digital storytelling.

Digital storytelling project

The major class project was to develop a story about art treasures in Second Life and highlight one in a digital story PowerPoint Presentation. We used Sanchez' (2009) SL suggestions, a lesson format wherein information gained comes from other sites on the Internet as well as SL. We provided the following guidelines:

Develop a story to find an unusual artwork. Pose a conflict. Introduce your avatar character and its role (e.g., hero, seeker, detective) in some SL art place.

Focus on one artwork and its form or expressive details. Tell us why you chose it.

Include the name of the artist, artwork, and SL location (i.e., URL), so we can visit it.

Use a screen capture program to capture story scenes, arrange them in a PowerPoint Presentation, and include a creative title.⁴

Include contrasting colors—the background needs to be exciting too!

Add some character gestures (e.g., running, surprise, crying).

Complete pre- and post-questionnaires.

Using art criticism strategies learned in this class (describe, analyze, and interpret), evaluate your digital story⁵.

Methods

Participant Observation. Our major methodology was participant observation [PO], which is a type of qualitative research that exposes the essential qualities of an event (Stokrocki 1997). In this case, the events were educational and cultural. PO methodology involves multiple people, multiple methods, and multiple variables. Research methods unfolded in three stages: data collection, content, and comparative analysis. We concentrated on one class and one project. Four students in the class volunteered to assist in data collection and ongoing analysis by offering additional data and interpreting the situations similar to a focus group (Krueger, 1994). Through these methods, we learned from and with our students rather than merely studying them (Spradley, 1980).

Data collection. Our data included observational field notes, pre-questionnaires (covering first impressions, expectations, and initial problems; see Appendix A) and post-questionnaires (information about digital communication tools, virtual world operations, avatar transformation, preferred art quest site, SL URL address, artwork, selection reasons, information learned, and problems and solution;

⁴ Please refer to examples on the Center for Digital Storytelling website at www.storycenter.org for motivational material given to students in the class.

⁵ Results of student self-evaluations and art criticism answers are not included here because the class was too large, their answers were in broken English, and students never finished the art criticism questions. Ho and Lee (In press) reported difficulty in teaching art criticism to Taiwanese students and needed expanded time, such as a full year, to help students comprehend the processes.

³ See <http://blog.koinup.com/2009/04/art-box-experience-in-second-life.html>.

see Appendix B.) We also collected documents of students' stories, artwork and action screenshots, and follow-up informal interviews conducted by e-mail. We emphasized the context [Second Life] to understand students' participation in the SL community through blogs, events, forums, groups, and SL realms (categorical places, such as art and education), and avatars' performances (Stokrocki, 2004)⁶. These data collection methods also incorporated the authors' and students' practical reflections such as instructional, technical, and navigational problems throughout the study (Bogdan & Biklen, 1992), beginning with the initial project design and continuing throughout the data collection (students' questionnaires and e-mails, PowerPoint presentations, photo elicitation, art criticism self-evaluations) and analysis phases (using a focus group), to final conclusions and becoming active media producers (Kemmis & McTaggart, 2000). These reflective strategies involved individual and team problem solving and focus groups, also known as collaborative inquiry (Sagor, 1992).

Content and comparative analysis . We selected/condensed the major content categories and then made sense of them. First we wrote an initial synopsis of each student's PowerPoint digital story. For example:

In Mung Sian's story of Catherine the Cat, her father tells her about her birth and that she is not a cat. She goes on a voyage of discovery . . . Climbing up temple steps . . . she meets a wise horse at Machu Picchu that tells her to go west. She jumps in a boat, lands on [an] island, and meets a goddess who opens a door. Catherine finds a luxurious place [seen in bird's eye view]. Her tail disappears, she changes color, and her shape changes into a human The final words are, "returned home."

To analyze the content, we used narrative scale categories (Caldwell & Moore, 1991) and searched for frequent words. These included the elements of story type, setting, character traits, and plot development.

We also analyzed the digital photographs of the SL artwork, the title, type, and details. (See Table 1 for an example of our analysis of students' completed digital stories). In this section, frequent words began to emerge.

Finally, we clustered responses and developed tentative conclusions with our Taiwanese focus group, composed of three self-selecting, cooperating students. In this section of our paper, we also compared our insights with similar studies in art and education. We further triangulated our findings (Creswell, 2013) by inviting notable Taiwanese professors at the university to add their interpretations. We thus negotiated and exposed the complexities of the research (Arminio, Jones, & Torres, 2006), which will be elaborated on in the section below on Future Concerns.

Findings

Our two major projects were exploring Second Life's technological tools of Art Box and the capability to construct digital stories. Students enjoyed their initial experience posing in the Art Box artworks and putting their screen captures on the class Flickr site. They were amazed with the 3-D interpretations of famous artworks that they could walk through or parts on which they could sit. One student exclaimed, "I can jump into the picture to become [role-play] *Alice in Wonderland*." Students thus came into contact with artworks on SL for the first time, became acquainted with them, and could explore them further on the Internet.

Individuals struggled, however, with the second assignment to write and portray digital stories. In spite of computer and Internet problems, forty-five out of 50 students persisted and completed their digital story PowerPoint presentations.

Character types. Every student's digital story had a main avatar character. Throughout the class, students tried different avatar types, such as human warriors (e.g. Swordskey the swordsman), heroes, princesses, cowboys, and vampires. Animals were the next

⁶ Retrieved from <http://secondlife.com/community/?lang=en-US>.

most frequent avatar type that students selected to represent them in SL, including four wolves, three cats, two rabbits, two unicorns, two dogs, and a lizard. Only three students attempted to appear as a robot. In summary, most avatars were humanoid. When we asked students why they chose human character avatars, many students stated that they preferred these human types that resembled themselves in physical life. In contrast, students' avatars in Sanchez's study (2009) were more hero-like.

Story themes and types. In most of the stories, the character started in a familiar art place and traveled to different related sites in search of a favorite or unusual artwork. Stories initially had little drama or resolution. Titles were descriptive actions, such as the "Story of riding a dragon" or "Memory of running on a bridge." Many students failed to include the artwork title, artist name, and URL location (so we could visit the site as well). We surmised that a lack of time and unfamiliarity with Second Life were possible reasons for students' initial choice of artwork. Although we gave individuals additional time to redo their stories, some stories did not improve substantially, due to students' lack of attention to the details of the assignment. Later, many of these episodes evolved to more action and scope and sequences that surpassed simply visiting an art gallery and finding a painting.

We then listed the stories and counted the word frequencies used in the students' stories and discovered recurring thematic terms, such as "lonely," "funny," and "dream." We discovered that these frequent words denoted feelings and formed patterns of meaning (Gee, 2005). Early in the project, students complained that they found no one at the SL sites; the dominant word they used was "lonely," appearing in their stories (9 students). For example, one student whose avatar was a wolf found the *Loneliness of Being* [LOB] site on SL⁷. The student reported, "Art can express missing [someone]." Another student exclaimed, "I feel very lonely to play this game" (see Figure 1). Participants' feeling of "loneliness" in Second Life is a quite common phenomenon, especially for those who interact with few other avatars

(Sanchez, 2009). Therefore, students spent additional time searching for artwork and sites that inspired their stories.



Figure 1. A third student exclaimed, "I feel very lonely to play this game, except for [during] class time."

A second frequent word, expressed by 10 students, was "funny." These student creators determined that their own work was amusing. Perhaps the most amusing example was Peacelai's melodrama entitled *Kick You! Bad Guy*, involving a warrior who chose to rescue his "boring city and add art" and his "bad guy" father (see Figure 2).

⁷ See <http://maps.secondlife.com/secondlife/Isles%20Las%20Avies/153/125/368>



Figure 2. Peacelai's comic *Kick You! Bad Guy* also used Photoshop [pink abstract schema of dad].

A third frequent word category was “dream,” appearing in 11 stories. A dream story deals with thoughts and psychological transformations. Some of these story narratives included “earthquake dream,” “hide/dream in the dark,” “fear of the unknown,” “scary scene,” “cat fantasy/dream,” “rainbow art dream,” and “a dreamy stained glass exhibit.” Other examples involved such dream predicaments as living in an overwhelming strange house that was only a dream, and life as a daydream or reality puzzle. A final example was an underwater dream adventure with political overtones, shown in Shan’s story, with one of the cutout figures identified as Barack Obama (see Figure 3). In all of these dream stories, students were choosing a series of potential settings and art installations for their characters’ unknown future.



Figure 3. Shan discovered another special installation with hand-drawn cutout figures. She instructed, “Follow our steps, and get into the unknown mist together.” We interpreted his ghosted figure as a possible pun on the state of politics.

Story development

Several students’ digital stories were drawn from Western classical literature SL sites and did not involve visual art, but literature. These sites could be characterized as fashion stores, storybook castles, gardens, and underwater places into which the students’ avatars traveled. Individuals were overwhelmed with possible storyline choices and finally started to ask for help from other avatar characters on Second Life and not in the class, such as Peter Rabbit and Poe’s Raven. One example resulting from this predicament was that Avatar Swordskey, while visiting Art Box, sought the meaning of life from the wise caterpillar avatar in Lewis Carol’s *Alice in Wonderland* site (see figure 4).



Figure 4. Swordskey wrote in his story that the caterpillar revealed to him, "Thinking is not the whole of life. The most important [thing] is action." From ArtBox <http://maps.secondlife.com/secondlife/Klaw/7/21/46>

Other stories involved avatar change. For example, in "Catherine Cat Story," the cat avatar discovers, "I am not a cat" when her father tells her so. In an attempt to discover her true identity, she travels to a castle, meets a goddess, walks across the pentagram floor, transforms into a human, and discovers her sister, a goddess. In another fantasy, a different cat avatar becomes lost and wanders around until she walks through a strange door and meets a surreal woman's head with a bird beak. Like a witch, the woman whispers to the cat, "This is not what you seek" (see figure 5). At this point, the invented story changes: the avatar discovers that she is not a cat but a centaur. Several student avatars also became transformed beings in their stories.



Figure 5. The cat avatar discovered a surreal place and talked to the witch who redirected her.

Finally, one of the most unusual stories was Angela's *Lonely World*, in which she discovers *Empyrean Dreams*, a 3-D installation of Edgar Allen Poe's poem *The Raven*, used to sell Fashions for Cancer in SL (see figure 6). Here the character reveals a different concern or quest beyond her, a need to abate her loneliness in art for a social cause—raising fashion money for cancer victims. Although students' quests initially seemed simplistic, some of their investigations into humanitarian concerns, such as raising funds to combat cancer, revealed deeper commitments. Angela revealed her need to be a hero and to reach out and help change the world as Sanchez (2009) found among participants in his earlier study.



Figure 6. In her story, *The Lonely World*, Angela discovers *Empyrean Dreams*, a 3D installation of Edgar Allen Poe's poem *The Raven*, with floating words and birds. She realized that the artist used the poem with its floating words to sell Fashions for Cancer⁸.

Artwork search

Another requirement of the digital storytelling project in SL was to seek an artwork, its artist owner, and site. Students discovered ancient, classical, modern, and popular culture sites. Because of their limited European art history background,⁹ at first some students didn't recognize the historical importance of their discovered artwork. Robot Rita, for example, found the French Lascaux cave painting but did not recognize its name or significance (See <http://maps.secondlife.com/secondlife/Kalepa/216/30/21>). An attached notecard sent her to Wikipedia to learn about this Paleolithic site, *The Great Hall of the Bulls*, with its primitive perspective that is understood by art historians as progressive for the time.¹⁰

⁸ See <http://maps.secondlife.com/secondlife/Ctrl%20Shift%20H/28/169/22>

⁹ Key informant Art History Professor Liu from this University commented on our findings and informed us that undergraduate art studio majors have limited art history backgrounds and few required art history courses at this University.

¹⁰ See <http://en.wikipedia.org/wiki/Lascaux?>

Lana's story included a pyramid, Sphinx, and King Tutankhamen's throne.¹¹ Yet again, she did not realize the importance of the historical throne, prompting us to coach students to conduct Internet research to learn about the original artifacts. In doing so, they discovered new technical vocabulary, such as when Lana learned that King Tut's wooden throne backrest was an elaborate "gold embossed bas-relief" and it was an important "symbol of authority and prestige."¹² She added this art definition of bas-relief and the throne's importance to her story. Avatar Lana even sat in the chair, but after she "saw ghost like souls float[ing] in the air, [I] began to feel the horror" [the ghost was probably annoyed that she sat in the King's chair], she fled.

Some students found Asian artworks in SL, such as *The Great Wall of China* and Hokusai's 19th century painting *People Crossing Arched Bridge*. After traveling to several art sites, four students also chose the Terracotta Warriors installation because of its overwhelming size in real life and called it their lost treasure. One student started with scary death scenes and transformed them into a comedy with the famous art installation of terracotta warriors and horses. She wrote:

There are some strange buildings and a red-hot sun. Oh! There [are] a few golden trees, maybe I can go under the tree [to] enjoy the shade! Oh my God! It is the statue of Death! I was scared and run away! I ran [in a] hurry, . . . not paying attention to [my] feet. And then ...I fell into a crater, it is so hot and I could not climb out. Here! [I found] the bronze statue, a huge palace and [a] guard [at] the door. I think Qin Shi Huang¹³ lived here! I once heard my friend said . . . When Qin Shi Huang [died], he

¹¹ See <http://maps.secondlife.com/secondlife/Enchantment%20Island/10/123/447>.

¹² The Golden Throne of Tutankhamen. Retrieved from EGY-KING at <http://egy-king.blogspot.com/2012/05/golden-throne-of-king-tutankhamen.html>

¹³ Qin Shi Huang, the king of the Chinese state of Qin from 246 to 221 BCE, was the first emperor of a unified China and considered pivotal in history because his reign marks the beginning of nearly two millennia of imperial rule in unified China.

[buried his effigy] with a bunch of huge terracotta warriors and horses to attack hell.... [Joking, she concluded], Maybe I can join the emperor's subordinates! Terracotta Warriors of the Rabbit Shape would be cool!

She then took a screen shot of one of the terracotta horses, imported it into Photoshop, and similarly cut out her rabbit avatar image with the lasso tool, creating a transparent image, and overlapping the rabbit onto the original horse [image]. This transformation is both technically advanced and an emotionally sophisticated reversal of status and existential state where the dead "warrior" horse is mounted by the "lowly" living rabbit. She summarized, "I am a handsome Rabbit Terracotta Warrior!" (See Figure 7). Students can thus use other digital programs to physically transform their artwork images, not ethically possible in real life, and change their meanings (social class ridicule) through role reversals and double entendres¹⁴



(Cranton, 1997).

Figure 7. Students were surprised to find a replica of the Terracotta Warriors in SL because of the overwhelming size of the Warriors' installation. The student adjusted the horse's size and her avatar rides it in SL. See <http://maps.secondlife.com/secondlife/Dewey/49/214/49>.

¹⁴ Double entendre examples are figures of speech that have double meanings which here ridicule social practices.

[com/secondlife/Dewey/49/214/49](http://maps.secondlife.com/secondlife/Dewey/49/214/49).

A few students also later found modern artwork examples, such as abstract sculptures. In his *Wandering Life* story, Burning Cheese, for instance, first found 18th century realistic stone lion statues in front of the London Museum on SL and wondered what they were guarding. They were similar to the ones outside the temples in Taipei. Later, he discovered elsewhere on SL a modern guardian lion sculpture to which he added an orange blazing light and an intriguing abstract form that guarded his "lonely heart" (see figure 8). We later realized that sculptural installations dominated undergraduates' digital quests. Several students also seemed to infuse their digital story quests for art sculptures with a life purpose, as in Burning Cheese's



case, for protection or the alleviation of loneliness.

Figure 8. Kamilah Hauptmann's *Viceregal Guardian Lion* (at Lionsgate Palace; <http://slurl.com/secondlife/Caledon%20Lionsgate/60/96/52>).

Pre- and post-questionnaire results

Only 34 out of the 50 students returned required pre-unit questionnaires. We speculated that students' limited English could

have curtailed their responses. To our question asking for their first impressions of SL, they reported mixed reactions, such as “mysterious, peaceful”; “beautiful magic”; “cool, like [a] funny online game”; the “avatar can fly, run fast, swim, [and] show another personality.”

The next question concerned what they anticipated learning. Most respondents anticipated learning about computer software, with some specifying digital art and design or computer games. Several students admitted that they had not thought this question through while a few anticipated learning English. Other answers were diverse: “About different culture thoughts,” for example, and “how to use art education.”

When asked about initial problems, over half of the students’ replies were similar to most newbies’ technical concerns: how to start, the length of time it takes to learn to work with the technology, and difficulties with the computer.

In comparison, post-questionnaires (43/50) revealed more elaborated responses. Students wrote that they learned about more artists and many different kinds of artworks. Almost a third of students preferred the Art Box site as compared to other SL art sites, because they could teleport inside an artwork and role-play for their story. Another third of the students valued the Digital Story Project. They reported, “I can make [a] new story myself,” “learn about what Taiwanese student[s] think,” “tell others what I think,” “you [become] a master of this world,” “it’s fun,” it’s “like a picture book.”

Finally, students summarized their Second Life experiences,¹⁵ noting that visual culture is a broad and diverse course, that the “Virtual world [SL] is a textbook to explore,” and that a SL user can role-play in a painting. Respondents suggested the breadth of what can be considered art, and noted learning about specific artworks and places, creating their own spaces to play out their dreams, and meeting other

people. One student wrote simply, “unlimited possibilities.” These responses indicate that students broadened their understanding of virtual world functions and settings and of different art types, and that their communication skills grew as well.

Deeper Meanings Discussion: Evolving Life Concerns

Because of students’ limited English, mostly the focus group students primarily interacted with Stokrocki with Chen providing translations as needed. Little interaction occurred with SL avatars and only two groups of Taiwan students planned their stories together. Students seemed burdened by life’s unpredictable conditions and needed a place to explore possibilities and exchange solutions. Wang’s (2003) research, for example, points to the expansion of Taiwanese higher education as an avenue of economic success that has brought additional financial worries to parents and the government due to rising costs and unemployment rates, worries similar to those experienced in Western countries. Students’ stories showed that they are pondering their life situations and the members of the focus group added additional reflections. Further analysis with the student focus group also revealed the nature of their life struggles.

The stories that represented or expanded on the theme of loneliness were typical of those who begin Second Life (Sanchez, 2009). Several students complained about being lonely because they couldn’t find avatar players on their chosen art sites, a plight typical of beginners on SL. Alien’s title, *Journey of Soul*, for example, began with a theme of loneliness in the loss of her unfaithful lover, continued with a frustrating search with a friend, followed by a loss of Alien’s own body, and culminated in her transformation into a Buddha statue. Alien interpreted her story, “Go travel [the] world, sometimes take a risk; [you] can get more than you think.” Her story, then, moved from loneliness to illustrate her belief that individuals have the power to change their own destinies. Her quest ended, but her soul continued “wandering,” as her body turned into a Buddha statue. Deschene (2013), in her blog *Tiny Buddha*, uses this same quote about taking

¹⁵ We extracted these short quotes from students’ comments, which were written in poor English.

risks as simple wisdom for complex lives. The comment seems to show how an artistic representation [such as Buddha] can absorb one's loneliness at the end of a long search for life's meaning.

Students like Swordskey indicated that they were "confused by life's uncertainty (in both first and Second Life) and, in their Second Life stories, resorted to dreams." These students approached first life as a dream, a memory, or a reflection of the past. Nothing mattered, they indicated, and life scared them. Swordskey consulted the wise caterpillar in Lewis Carol's *Alice in Wonderland*. His story was accompanied by the statement that one "Need[s] inner peace no matter how old you are . . . Because, [I] encounter . . . world pressure, I am tired and unhappy. I want to relax." They also were looking for answers to their problems and projecting their personal views in the process of personal identity formation. Many students' stories really did not end with a resolution from conflict, but in questions about their life's purpose.

Swordskey's *Alice in Wonderland* dream seemed to be about his real life or future plight. Finally he stated, "[In my] mind quest, there is a heart that must be free to fly." Freedom to choose or travel is part of one's life quest. In a similar way, Swordskey expressed, "My avatar story is like Johnny Cash's song, *Walking the Line*." He explained, "I think everyone has [a] question like me, consider[s things] too much and [is] afraid to do whnt he/she wants... if we can't explain it, we feel disturbed." In other words, he was trying to explain his life in a dream, as a delicate balance with too many uncertain and disturbing avenues.

In a similar way, Angela's reflection on her story about finding a site that raised money to help cancer survivors shows the burden of life's uncertainty on her emotions and the escape that Second Life and art provided her.

In real life, I feel lonely or [bored] and [have] lots of thing[s] to do, [I feel] busy, heavy, and nervous. In Second Life . . . I found its inspiration also came from art [i.e., from Edgar Allen Poe's

poem *The Raven*]. I really feel art is important, when you feel lonely or heavy, you can relax.

We also addressed the theme of minor humor arising in a number of students' digital stories, some of which may have initially seemed silly or insignificant. The theme, however, revealed how students explored emotional meaning in their Second Life, which had at first seemed strange to them. Students explored the condition of human existence and their own life purpose. Instead of anguishing over their lives, some students transformed avatar images and changed their meanings through role reversals and ridicule or double entendre⁶ examples (Cranton, 1997).

Finally, Participant Observation demanded comparative analysis with other studies or interpretive frameworks to make sense of the students' digital stories and their interpretations of discovered artworks' deeper messages. We determined that these young adults were expressing decision-making and life concerns with such words as "lonely," "dream," "free," and "funny." Their stories were, as one of the authors found in an earlier study on Second Life, eclectic, interpretive, cloudy, contradictory, and context-bound (Stokrocki, 2010), which could signify the intensity of cultural life experienced by Taiwanese students in an era of financial stress when there are few jobs and declining government resources. Such identity concerns are rampant in small communities (Abulof, 2009), such as this university town of Minshiong in Chiayi County, Taiwan. Students also confronted new media in a different language (English) that challenged their traditional educational expectations. Grauer, Castro, and Lin (2012) expressed the concern that, "New media is . . . laden with issues of equality, diversity, and community that affect aspects of citizenship, democracy, and social change" (p. 139). When teachers offer students the opportunity to reflect on life (even their Second Life), several hidden dimensions of life's struggles may surface. These "personal mythologies," notes Rolling, "have allowed their inhabitants to narrate a coherent story of origin that validates their

presence and trajectory in the current existential cosmology” or state of affairs (2012, p. 114).

We understand students’ life concerns with all their current political and economic stresses. Such myths “encode and encrypt in story form the norms, values, and ideologies of the social order” (Friedman, 1998, pp. 8-9). In interpreting the students’ stories, we “bring to light an underlying coherence or sense” of life or existence expressed in the students’ work (Taylor, 1976, p. 153). This becomes a way of transforming the quest for art and life’s meaning. We summarize the students’ Second Life quests as a form of freedom that enables them to go beyond avatar limits to change their form and re-imagine their future.

Conclusion and Implications

Using participant observation, we re-examined our digital storytelling project to find art treasures on SL. In the beginning, undergraduate story types were mostly about lonely human avatars and some animal transformations. We had to constantly remind students that a quest is a search for something in particular. We asked them to focus on one artwork and explain why it impressed them. Students later tended to base their digital stories on sculptural installations, like the Terracotta Warriors, and literature installations such as Peter Rabbit or Poe’s “Raven.” Students later recognized the importance of these Second Life art forms, not as mere entertainment or decoration, but for life purposes, such as guarding a treasure or raising money for cancer. Deeper investigation of lonely, funny, and dream themes exposed life concerns, such as finding a life purpose, overcoming fear of the unknown, alleviating boredom, raising social enterprise awareness, and struggling to survive in a competitive environment.

Our course was not meant to train future artists, but to liberate students’ thinking about themselves, each other, and the purposes of digital storytelling and art. Based on what we learned from the students and the student focus group, we will, in the future, encourage collaborative problem solving by having participants

author digital stories in teams to produce new knowledge. This could take place through digital stories as practice for first life solutions. Future research for us will shift from a focus on forms of individual art expression to community art involvement. Undergraduates need to become political “transformants” in the areas of social life that affect and concern them, notably education (Jenkins, 2009). Even when learning in virtual worlds, students need to become critically reflective thinkers and adopt skills in negotiating multiple perspectives, respecting and even embracing diverse or contrary opinions, and digging deeper into historical roots of cultural practices (Taylor, 1976). They need to transform their roles as passive media consumers toward becoming active media producers (Kemmis & McTaggart, 2000). Transformative learning is cognitive, emotional, and at times irrational, a matter of emphasis. No single model of transformative learning occurs in practice, as in this study, when the high literally become low or the [virtual] living reverse the dead as in the case of the Rabbit Terracotta Warrior (Cranton, 1997). In today’s anxious and tumultuous world, students can become a force for change through exploring life concerns and problems via digital storytelling in virtual spaces.

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Appendix A

Prequestionnaire

What is your real name?

What is your avatar name?

What avatar did you choose and why? How did you transform your avatar?

What Freebie attachments did you add? You can find them by searching for them in newbie places.

What experiences on virtual worlds have you had? What worlds?

What were your first impressions of Second Life?

What problems did you have initially?

How did you solve them?

Please give me permission to quote you and use your snapshots.

Name _____, Date_____

Appendix B

Post questionnaire

How did you transform your avatar?

What Art Quest Site did you find rewarding and why? Give me the Island and SL URL.

How has Second Life helped you? (Information, entertainment, networking, etc.)

What have you learned? Information---- Technique-----

What did you specifically learn at one of the art or design museums or art galleries?

What problems did you have and how did you solve them?