Using Digital Storytelling as a Methodology for the Introduction of Socially Responsible Graphic Design in a University Bachelor of Computer Graphic Design Programme

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Abstract This paper case studies the pedagogical methodology for a digital storytelling project involving final semester Bachelor of Computer Graphic Design students and students from a community based charitable arts trust. A young artist is paired with a senior tertiary graphic design student to create digital narratives that attempt to remain within the spirit of the original goals of the Digital Storytelling Movement. The project aims to introduce socially responsible graphic design to tertiary computer graphic design students and foundation arts students. Discussion of the learning outcomes of this project, including analysis of the results of the personal breakthroughs made by students as seen in their written accounts in project completion surveys are detailed.

Introduction

Ohler (2007) points out that little formal research is available to support the effectiveness of Digital Storytelling in the classroom. On the contrary there is much research supporting storytelling and technology use in the classroom.

It is argued that constructivist pedagogies that promote reflective practice and pursue student centred learning opportunities involving technology are transforming the potential learning experiences of students while enhancing teaching and learning in this new technology saturated educational environment. Digital storytelling, which introduces students to personal creative and reflective narrative creation using small motion graphics, is one such medium that is often cited as a powerful device for achieving this enhanced form of education at all levels. (Fehér, 2008; Warren, Creamer, Czapracki, Scott, & Woodward, 2008)

Motion graphics is a medium that graphic design students at the University of Waikato, in Hamilton, New Zealand find themselves confident in. For this reason digital storytelling as a pedagogical approach can be considered differently to that commonly prescribed in studies such as Waren et al (2008). It was thus considered that digital storytelling could prove a useful tool in introducing social graphics and socially responsible graphic design to Bachelor of Computer Graphic Design (*BCGD*) students. This was conceptualized such that, instead of producing personal digital stories for themselves, the BCGD students would work alongside a storyteller to help create this storytellers' story.

In 2006 a digital storytelling project began in Hamilton, New Zealand, between the Waikato University, Computer Graphic Design Programme and the Hamilton, Artmakers Community Artists Trust. This student project has introduced digital storytelling to final semester Bachelor of Computer Graphic Design students from the university as well as students undertaking the foundation Youth Arts Programme at the community based Artmakers Trust. This investigation is a part of the on-going *Glass Hedgehog Project*, a digital storytelling initiative of Artmakers Trust. For the purposes of this paper, the joint-institute student project will be referred to as the *Glass Hedgehog Collaboration*.

Background

What is Digital Storytelling?

"Digital storytelling as a 'movement' is explicitly designed to amplify the ordinary voice. It aims not only to remediate vernacular creativity but also to legitimate it as a relatively autonomous and worthwhile contribution to public culture. This marks it as an important departure from even the most empathetic 'social documentary' traditions." (Burgess, 2006a, p. 207)

Digital storytelling is a collaborative and powerful multimodal, multimedia vehicle for exploring the creation of personal narratives in the form of a small motion graphic. Since the early 1990s, this art form has been championed by Joe Lambert, co-founder of the Center for Digital Storytelling in Berkeley, California.

The term digital storytelling has been used by many individuals, organisations and communities to describe a myriad of media creations. These have ranged from hypertext poetry, to narration in film and video game (Burgess, 2006b). Digital story's are often described as a short personal narrative, delivered in the first person by the storyteller, culminating in a short motion graphic. (Davis, 2004)

As David Thornburg (in Ohler, 2007, p. viii) points out digital storytelling is "first, storytelling, and second, digital". Technology, production quality, and expertise are not central focuses of digital storytelling projects. The narrative voice is always given precedence and fundamental authority within a story. Emphasis is on personal voice to affix authenticity and ownership to the story. This is eloquently described by Burgess (2006a, p. 207) who states "the personal narrative, told in the storyteller's unique voice, is central to the process of creating a story and is given priority in the arrangement of symbolic elements."

Why Digital Storytelling in Computer Graphic Design Education?

Computer Graphic Design Education

A consideration for graphic design educators is the often posited debate and rationale for teaching practical usable technical skills for the real world as opposed to the theoretical, historical or contextual underpinnings to the practice. McCoy discusses this stating, "skills are what professionals want to hire, but it is the responsibility of education to consider the students long-term needs and educate the entire person." (1990, p. 21)

Social Responsibility in Computer Graphic Design

Social responsibility and a social conscience have long been a central concern of many of the art and design movements of the twentieth century. The Russian Constructivists, for example, saw social activity as a significant tenet. Although politically motivated, idealistically the artists of this movement believed graphic design played an integral part in 'constructing' a new society. Core artists such as El Lissitsky and Alexander Rodchenko in 1921 extolled the need for visual communication, graphic design, industrial design and art to foremost serve and support the community of the aspiring communist society they found themselves within (Meggs & Purvis, 2006).

This call to action has arisen with increasing frequency throughout the twentieth century. In the preface to the first edition of his book, *Design for the Real World*, (as reprinted in 2nd edition,1985) Victor Papanek calls for morally and socially involved designers and advertisers. At this time Ken Garland also wrote the 1963 *First Things First Manifesto*. Both Papanek and Garland accuse designers and advertisers of using their skills, capabilities and resources for the promotion of less than worthy pursuits, products and services. Both called for these industries to use visual communication for socially responsible and societally conscientious purposes.

Social responsibility in design is discussed within ethical design education the world over, with Frances C. Butler (1989) calling for the designer and design student to more fully understand the "detail of human life" (p. 170) by looking for inspiration, work, and communication opportunities in avenues other than the commercial and profit based world.

Combining Social Responsibility with Practical Skills for the Professional World

In attempting to consider the social as well as commercial roles of graphic design, and design for social improvement in the twenty first century, Waikato University BCGD lecturers were looking for student design projects beyond pro-bono & issue-based social graphics. Digital storytelling was identified as a unique avenue to advocate an authentic form of social graphics design for BCGD students.

It was considered that learning opportunities in communication, collaboration and deep understanding of a narrative would also become apparent in the introduction of a design partner who is not a graphic design student.

It was also clear that digital storytelling would provide an excellent opportunity for participants in the Artmakers Trust Youth Arts Programme to experience a unique form of personal art-making and creative exploration. Not only would these students gain unprecedented access to the university and its facilities, but they had the potential to create what Nilsson (2008) describes as a good digital story; that which "is or has been a tool for its creator in his or her personal development." (p. 141)

The Graphic Design Student

Waikato University BCGD is a three year undergraduate programme with a focus on media technology. Students study both graphic design and computer science and are expected to develop a comprehension of the computer, beyond just the use of relevant software and hardware. Thus, encompassing a greater degree of understanding of the creation and manipulation of software applications and related digital media to develop and produce visual communication. The teaching methodology at all levels of this programme follows *Studio-Based* or *Problem-* or *Project-Based Learning* pedagogies (Raein, 2004). As such, students experience a myriad of team based tasks and collaborative learning opportunities, however, previous to this assignment these collaborations are solely within the students own cohort.

The Storyteller

The storytellers are the students enrolled in the Youth Arts Programme run by Artmakers Trust. The programme is a government funded and accredited course through which students undertake art exploration and education including print making, painting, jewellery design and sculpture. The emphasis of this course is on collaborative process based exploration through art. This program enrols students aged 16 to 24. The duration of this enrolment is flexible, generally ranging 20 to 40 weeks. These young students have a wide range of life skills and experiences. Some are academically capable, while some have learning or emotional challenges. Many graduates of this programme carry on to both careers and higher education in the arts and community programmes.

Our Digital Storytelling Methodology

"There are many kinds of stories, and many ways to find your creative voice as a storyteller, but it is almost impossible to imagine the number of ways a single story can be structured. And, when you factor in the choices of the filmmaker; in design of visual elements and audio, in thinking about how the story is performed and paced, and what is possible in the world of computer-generated effects, we are talking about an infinite variety of expression." (Lambert, 2006, p. 45)

The stories which result from our methodology, like those from the Center for Digital Storytelling methodology, are many and varied, but all are visual and audio creations which share personal journeys, memories, ideas and histories. However, the lecturers and tutors involved in the Glass Hedgehog Collaboration also believe the visual results are proving to be unique amongst digital stories of this kind (Vanderschantz, in press). This is due, not only to the reasons mentioned by Lambert above, but perhaps more importantly due to the creative qualities of the collaborators. The storytellers are themselves accomplished artists and their partners are third year graphic design students, with maturing technical and aesthetic skills. These partnerships are a significant point of difference for the Glass Hedgehog Collaboration, which brings together two creatives to tell a single story, all of which have resulted in personal digital narratives.

The Groundwork

Before the storytellers are introduced to the university environment and their BCGD partners, the skilled leaders of the Youth Arts Programme at Artmakers Trust begin the digital storytelling facilitation process with the storytellers. This is completed in the Artmakers Trust art studios using the first three steps of the traditional *seven elements of story structure and design in digital stories* (Lambert, 2003, 2006); covering story development exercises, initial idea generation and story writing finalisation.

At this time the graphic design students work with their lecturer in the Waikato University Computer Graphic Design studios and are introduced to digital storytelling, social graphics and socially responsible graphic design, through a series of lecturers, tutorials and readings. An integral part of this introduction of social graphics to the BCGD students is the active inclusion of the teaching staff from Artmakers Trust. The teaching staff of Artmakers Trust have backgrounds in arts based community development projects and community activism which brings an authentic and experience based external perspective to the project for the graphic design students.

The First Meeting

Having completed the written stories in the familiar surroundings of their own course environment, the storytellers move to the Waikato University Computer Graphic Design studios to begin working with their graphic design partners. This step is often discussed by the storytellers as an incredibly "daunting" part of the Glass Hedgehog Collaboration.

The storyteller and the BCGD partner work to develop a rapport which results in a creative and trust based working relationship. From this first meeting, the digital storytelling teams begin the collaborative task of getting to know each other and understanding the story that they will be conceptualising and developing.

Due to the intellectual and emotional strain that this process can entail for the storyteller, staff from the university and staff from Artmakers Trust, work closely and carefully to select and partner storyteller and graphic design student prior to this meeting. The aim is to form respectful and cohesive partnerships which take into consideration the personalities, skill sets, social and personal backgrounds of both sides of the partnership as well as the content of the story and the ability for the graphic design partner to sensitively manage a project with such themes. This task requires perceptive and close knowledge of both the graphic design student and the Artmakers Trust foundation arts student. Due to the range of sensitive subjects covered in these stories, we feel this is an important part of the preparation for this project in order to protect both the storyteller and the graphic design partner as much as possible.

The Working Process

Over a four week period consisting of six 2-hour studio-based working sessions, each pair works to develop storyboards, create artefacts and animate the storyteller's story. The partners collaborate through the traditional design process (Arntson, 2007; Fletcher, 2001; Hembree, 2008; Meggs, 1992) and the digital storytelling framework (Lambert, 2006) to create appropriate visual representations of the original narrative.

The story is openly discussed within each small team from the initial meeting. Ideas are shared and a working storyboard is developed by the pair. Both members of the team are actively encouraged to offer insight and inspiration and partake in creative brainstorming throughout the design process to find unique visual communication methods for delivering the storyteller's vision. It is during these sessions that the storyteller and the graphic design student gain direct experience of the collaborative communication skills required to develop a project with more than one stakeholder.

The Voice

As stated above, to fully capture the storyteller as the author of these stories, it is important that they tell the story in their own voice. The narrative is recorded in the university sound studio with a qualified audio engineer. Although this is a luxury not afforded many conventional digital stories, it has proved to be an excellent learning opportunity

for both the BCGD and Youth Arts students to work with a sound engineer in a commercial studio and has ensured a sharp, high-quality soundtrack for the story.

Learning Outcomes and Student Responses

As has been discussed, a central aim of this digital storytelling project is to introduce an authentic form of noncommercial and socially responsible graphic design to final semester graphic design students. These students have primarily been exposed to commercial graphic design briefs and as such often struggle to fully engage with the premise of this project at the outset. With concerns of economic pressures once these students graduate many of the students do not understand or foresee the potential of this project or the way in which they might be able to compliment their working lives with such pursuits. Many echo the following students reflection that "originally it was hard to understand the purpose of this assignment, but this has been a great experience – it reminded me that there are many aspects of design".

At the end of each round of stories the graphic design students and their storytelling partners are each asked to complete a very short project completion survey. Following is an analysis of the feedback received through these surveys.

Project Completion Surveys – University Computer Graphic Design Students

Insight Into the Social Nature of Graphic Design

A consensus seems evident from the written feedback that the BCGD students appreciate the opportunity to work with an authentic client driven project. Students gain unique insight from this experience because they are working on a brief where the final product has a distinctively personal outcome. This was summed up well by a recent BCGD student who stated, "what I found the most rewarding is the storyteller's satisfaction, as it is far greater than that of industrial/commercial design projects. They [the storytellers] have a lot more appreciation towards the final outcome."

When asked to describe the most rewarding part of the project, one graphic design student remarked, "working with different people from different backgrounds", while another student stated "just the feeling that the final outcome is for someone [else] feels like I'm creating a little gift for them (the storyteller)". These remarks seem to indicate that learning opportunities involving not-for-profit projects, client interaction and collaboration can be created in an authentic manner within an institutional Computer Graphic Design degree.

Communication and Interpersonal Skills

Students discussed the challenges that they encountered throughout the project by acknowledging that "incorporating another persons ideas/creations into my own design concepts and keeping both people happy" was difficult at times. Students also discussed the challenges of completely comprehending the story in enough detail to respect and visualise some of the hidden meanings as well as the literal or verbalised ideas.

Another constructive learning outcome for these students has been an increased appreciation of the skills required in communicating within a partnership and with a client who is also a lead-design-partner. One student acknowledged this by stating that she developed a greater "understanding [that] non-design people think differently".

Students often acknowledged a need to openly and more fully discuss details that they often took for granted in their own workflow. These include time management decisions, aesthetic and stylistic considerations and aspects of the design process. Students from both the BCGD and the Youth Arts Programme acknowledged learning in overcoming communication obstacles. Students described the need to ensure both partners listened and discussed ideas and ensured that each understood the other's point of view or their points of contention. This needed honesty and the development of trust.

Personal and Design Growth

BCGD students were also able to discuss some of the differences when working with not-for-profit clients in collaborative roles as compared to commercial projects they had been exposed to previously. "Working with a 'client' that is 'not-for-profit' has been an interesting experience because it takes patience to do a motion graphic how they [the storyteller] have interpreted it." This same student evaluated their personal learning by stating "compromise and more importantly, just listening to their opinion is valuable, and also just being quietly aware of the emotions attached, I learnt to ease quietly into finding out the required info (*sic*)."

As was previously stated in this paper, a central goal for this project was to introduce third year graphic design students to the potentials of not-for-profit, socially responsible graphic design. This was acknowledged by the BCGD students. One student eloquently stated, "[I] learnt the impact that this work can actually have, which was humbling" while another student went on to say "it has really opened my eyes and made me realise how someone – a graphic designer like me – can work on something to help other people".

Project Completion Surveys – Artmakers Trust Youth Arts Programme Storytellers

The benefits and experiences described by the storytellers are quite different to the learning described by the computer graphic design students. In their survey responses, the students from the Artmakers Trust Youth Arts Programme describe the inspiration, insight and skill they gained from these collaborations with admiration, respect and gratitude. These students describe new thinking about ways to express their art and how time based motion design differs from the still or static art that they have previously been exposed to as well as personal learning regarding communication and collaborative creative processes.

Communication and Interpersonal Skills

Learning about communication and teamwork, including collaborative practices and pressures are also acknowledged by the storytellers. These students gained new language with which to communicate with graphic designers in the future, as well as improved understanding of collaboration and communication within the graphic design process.

As detailed above, both Youth Arts Programme students and BCGD students acknowledged learning in overcoming communication obstacles. Storytellers often stated that they felt they needed to find the confidence to vocalise their thoughts about visual direction and progress so as to retain ownership of the process and the product. Similarly, the BCGD students often discussed the need to sensitively encourage detailed feedback from their partners to ensure the retention of the storytellers' ownership.

One student summed up what he gained from the partnership in the following way "he [my BCGD partner] inspired me to think outside the square, he made me realise that with his skills and the programs uni (*sic*) has, there is a lot more possible than what I thought before".

Personal and Artistic Growth

The Youth Arts Programme students discuss aspects of learning relating to the new technologies they have interacted with as well as a new comprehension of the processes and practices of time based art. Students list improvements to their artistic toolkit, including use of the computer as a creation tool such as application specific capabilities in Adobe Photoshop, Adobe Illustrator and Adobe AfterEffects as well as hardware competencies in scanning, photographing and video recording.

When asked to describe the most positive aspects of the digital storytelling experience one of the storytellers from our very first digital storytelling collaboration commented that the best aspect was "the opportunity to participate in this fabulous, holistic, creative process. It was fun, rewarding and it offered a way to translate challenging life experiences into a meaningful and positive art piece." Another student from this first project commented that she most enjoyed "meeting new people, [and] getting more partnership skills".

Conclusions

As was concluded in this authors correlating paper (Vanderschantz, in press) digital storytelling as a framework has proved to be a rewarding learning tool within the final semester paper of the BCGD at Waikato University. Students and storytellers alike have gained new and authentic insights into the potentials of graphic design for socially responsible visual communication. Both have gained a new perspective on the skills required for artists and designers in collaborative creative visual communication projects.

Graphic design students have been able to appreciate how social graphics and socially responsible graphic design can play a part in their futures as professional graphic designers. The students have learnt how valuable their own skill sets are in visualising narratives for purposes other than advertising, selling, promoting or branding. Graphic design students have come to understand how non-designers can appreciate their skill sets and can benefit from the shared exploration of these skills in a project that benefits multiple stakeholders. Importantly, the graphic design students have been exposed to ways in which they might use their skills in a socially minded manner alongside the formal aspects of their future careers.

Students from both organisations gained insights into their own strengths and weaknesses in group projects including time management, communication and group dynamics.

BCGD students and students from the Artmakers Trust Youth Arts Programme gained improved appreciation for the skills required to effectively communicate in a collaborative creative project. Computer graphic design students found new ways to communicate without jargon and learnt to distil working methodologies to ensure the full participation of their team. The storytellers also acquired new knowledge in the areas of working with graphic designers who have specific skill sets and jargon based languages.

Both computer graphic design students and storytellers have gained appreciation for each others skill sets and working environments. After graduation a number of computer graphic design students have gone on to take an interest in Artmakers itself with more than one student showing an interest in becoming involved in tutoring roles should they arise. Although, by no means solely a result of this collaboration, students having graduated from the Artmakers Trust Youth Arts Programme have also gone on to enrol in the Waikato University Bachelor of Computer Graphic Design programme, while others have enrolled in fine art and graphic design education at other universities and polytechnics around New Zealand.

This project will continue to provide a rewarding, authentic learning experience and vital aspect of the education for both students completing a Bachelor of Computer Graphic Design at Waikato University and for students completing the Artmakers Trust Youth Arts Programme.

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