ABSTRACT

Title of Dissertation: EDUTAINMENT AND CONVERGENCE: UTILIZATION IN HIGHER EDUCATION FROM THE PERSPECTIVE OF ENTERTAINMENT PROFESSIONALS


Dissertation chaired by: Rosemary Gillett-Karam, Ph.D. Department of Advanced Studies, Leadership and Policy

This qualitative study examined edutainment and convergence from the perspective of entertainment professionals, who were interested in revealing their background and opinions as they would relate to academia. The professionals told their own stories explaining how edutainment and convergence should be used in the modern classroom, according to their own experiences. The study was conducted utilizing convergence technology such as the Internet, electronic mail, weblogs, video sharing sites, social bookmarking sites, photo sites, social networking sites, iPods, smart phones and video cameras to collect data from the participants. Designed to be open-sourced and collaborative in nature, a case study design became a phenomenological inquiry. The participants found that
edutainment and convergence can be utilized in higher education to create a learner-centered environment. They also found that several interactive entertainment techniques and convergence technologies were transferable to higher education. The participants were aware of government organizations like the Pentagon who have spent billions of dollars to develop and employ edutainment and convergence techniques and technologies such as video games, the Internet, and handhelds for more than forty years for educational, training, simulation, and preparedness. An additional result of this collaborative research between the participants and the researcher was the creation of several interactive online sites that applied and reported the findings of the research on the Internet with the approval and guidance of the participants.
EDUTAINMENT AND CONVERGENCE: UTILIZATION IN HIGHER EDUCATION FROM THE PERSPECTIVE OF ENTERTAINMENT PROFESSIONALS

by

Chris A. Heidelberg III

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy

MORGAN STATE UNIVERSITY

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EDUTAINMENT AND CONVERGENCE:
UTILIZATION IN HIGHER EDUCATION FROM THE PERSPECTIVE OF
ENTERTAINMENT PROFESSIONALS

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February 27, 2008

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CHAPTER I

INTRODUCTION

The twenty-first century ushered in a new era where entertainment, information, education, and technology are seen as merging into a single medium through the use of the wide screen television, the computer screen, and the handheld media screen for educational and research purposes (Apple Computer, 2006; AT&T, 2006; Blackboard, 2006; Comcast, 2006; Gates, 1998, 1995; Gee, 2003; Jenkins, 2006; Microsoft, 2006; Nintendo, 2006; Nokia, 2007; Prensky, 2006; Sony, 2006; Verizon, 2006). This use of media and technology for instructional and entertainment purposes has received much attention in both academic and popular literature where terms such as edutainment and convergence have been introduced and have become popular (Bergen, 2000; Farkas, 2006, 2007; Gee, 2004, 2005; Halter, 2006; Parker, 1990; Prensky, 2006).

The concept of edutainment can trace its roots to the beginning of civilization and the fields of politics, communications, religion, and higher education in Egypt, Mesopotamia, Greece, Alexandria and Rome (Boot, 2006; Freeman, 2006; Halter, 2006; Lindberg, 1992; Martin, 1996; Pollard & Reid, 2006). The Academy of Athens, the Alexandria Library and Museum, and the Vatican Library and Museum were renowned for advancing and preserving education, scholarly research, military, and artistic advances since each of these
institutions were founded for religious and political purposes (Boot, 2006; Freeman, 2006; Lindberg, 1992; Martin, 1996; Pollard & Reid, 2006).

Convergence, also has its historical roots, but lately has been defined as the merger of old media such as television, telephone, and radio with new media and technology such as the Internet, handheld devices, gaming systems, wireless technology, storage devices, robotics and personal computers (Baldwin, McVoy & Steinfield, 1996; Gee, 2003; Jenkins, 2006; Tapscott & Williams, 2006). Most of the technology associated with convergence was created on university campuses through various partnerships of academia with the federal government, private industry, and innovative students seeking to create solutions for defense research, general scientific research, and personal communications (Abbate, 2000; Aronowitz, 2000; Bonk & Dennen, 2005; Bonk & Wisher, 2000; Boot, 2006; Carroll, 2006; Jenkins, 2006; Leslie, 1993; Lessig, 2001; 2004; Vise & Malseed, 2005; Robert Wisher, personal communications, August 20, 2007). In summary, convergence was developed as part of this nation’s commitment to national defense, and the academic and business communities have developed scientific research, education, technology, and commerce around this commitment (Aronowitz, 2000; Bonk & Dennen, 2005; Bonk & Wisher, 2000; Boot, 2006; Carroll, 2006; Leslie, 1993; Tapscott & Williams, 2006; Vise & Malseed, 2005).

The term edutainment has been credited to Robert Heyman in 1973 who coined the term when he produced multi-media educational materials for the National Geographic Society (Google, 2007; Center for Continuing Education,
Heyman has continued to work as media producer and entertainment attorney, and holds a Masters in Education from Harvard in media based learning (Center for Continuing Education, 2008; Google, 2007). Heyman was the former provost at New Canoe University One, an alternative to online education, and is currently the chief search officer for MediaSmith.com according to Robert Moselle, the executive director of the Center for Continuing Education an online legal edutainment firm that has ties to Heyman (Google, 2007, Center for Continuing Education, 2008; Robert Moselle, personal communication, March 19, 2008). One of the first public figures to popularize the term edutainment was rapper Kris Parker, more commonly known as KRS 1, who introduced a socially conscious rap album titled *Edutainment* in 1990 (Apple Computer, 2006; Parker, 1990). The album earned Parker (1990) the title of “the teacher of hip hop” for his emphasis on education and social issues. Parker’s focus on education contrasted the mainstream hip-hop of the late 1990’s that emphasized street culture, materialism, and violence that became known as gangster rap (Apple Computer, 2006).

have consistently maintained that the United States military services, intelligence agencies, and NASA have utilized, embraced and mastered the use of media, gaming, and technology (Beal & Christ, 2004; Belanich, Sibley & Orvis, 2004; Bonk & Dennen, 2005; Bonk & Wisher, 2000; Halter, 2006; Leslie, 1993) for more than 60 years that began during World War II, and continues to the present as the United States Air Force markets air, space, and cyberspace as its core operating mission (United States Air Force, 2008).

The result has been the creation of a military-industrial-academic complex according to Leslie (1993) in his book *The Cold War and American Science: The Military-Industrial-Academic-Complex at MIT and Stanford*. Carroll (2006) and others (Abbate, 2000; Boot, 2006; Etzkowitz & Loet, 1997; Halter, 2006; Leslie, 1993; Lost Worlds, 2006b, 2006c) supported this notion and took it further by maintaining that the Pentagon was one of the driving forces behind the American economy and that research universities and contractors have often acted as both well-meaning and mercenary surrogates to make sure that this continues through a public education campaign that mandates that globalism, free trade, and national defense spending has been good for America (Bagdikian, 2005; Dobbs, 2004, 2006; Dorgan, 2006; Fenton, 2006; Friedman, 2004; Iacocca, 2007; O’Harrow, 2005; Risen, 2006; Snow, 2003; Tapscott & Williams, 2006; Willinsky, 2006).

The considerable government investment and academic research on gaming, computer, audio, and video technologies set the stage for modern
convergence and edutainment (Abbate, 2000; Boot, 2006; Carroll, 2006; Halter, 2006; O'Harrow, 2006). The Department of the Defense's Advanced Distributed Learning Co-Lab has performed much of the pioneering and cutting edge research on the effective use of gaming, online, and other convergence technologies in concert with scholars and institutions of higher learning (Bonk & Dennen, 2005; Bonk & Wisher, 2000; Sitzmann et al., 2006; Robert Wisher, personal communications, August 20, 2007). In fact, some ADL research has indicated that convergence based technologies such as gaming and online education have been more effective than classroom instruction for teaching facts and was equal to classroom instruction when measured quantitatively (Bonk & Dennen, 2005; Bonk & Wisher, 2000; Boot, 2006; Sitzmann et al., 2006; Robert Wisher, personal communications, August 20, 2007).

The study turns now to the statement of problem, purpose of the study, objectives to be investigated, the rationale and theoretical framework, qualitative emphases and the significance of the study.

**Background to the Statement of the Problem**

This research sought to examine how entertainment techniques can be utilized in higher education from the perspective of entertainment professionals. Both edutainment and convergence have developed as fields that have been driven by entertainment techniques, communications methods, gaming, handheld multi-media devices, the Internet, new media and computer software. In fact,
Gates (1995, 1998) predicted in the 1990s that edutainment would emerge when convergence technology was sufficiently developed and available to the masses.

In a recent national podcast interview on iTunes (Apple, 2007), Microsoft chairman Bill Gates and Apple chairman Steve Jobs both emphasized that technology can finally provide fulfill its promise to education by providing students with the software, hardware, Internet based, and handheld solutions to academic problems with tools such as: iTunesU, PowerPoint, Microsoft Word, Excel, the Xbox gaming platform, the Zune media player, the Surface touch based software, the Windows Explorer Internet browser, the Vista operating system, the Leopard operating system, the iPod, the iPhone, AppleTv, and the Safari Internet browser. True convergence, in its infancy now, as handheld technologies exist in the form of form of digital smart phones, gaming platforms, and multi-media and educational software companies such as industry leader Blackboard (2007). Early assessment entrants, Nuventive and WEAVEonline have begun creating educational assessment software designed to comply with the Spellings Commission’s attempt to get to the heart of learning outcomes (Jaschik, 2007).

This study, therefore, was proposed to discover information about state-of-the-art convergence and edutainment ideas directly from people in the entertainment field, rather than educators and researchers who, according to the researchers, seem to be embedded in their academic cultures where books and paper are their reason for existence (Apple, 2007; Allendar, 1981; Bok, 2003; Calder, 1977; Cornwell & Cornwell, 2006; Dempsey et al., 1994, 1996, 2002;
This researcher takes note of the exacerbation of this issue by demonstrating that educators are often divided along disciplinary lines—almost nowhere does the research demonstrate that entertainment professionals have consistently worked together with academics to create a body of research pertaining to the concepts of convergence and edutainment in a learner centered environment (Cornwell & Cornwell, 2006; Gee, 2003a, 2003b, 2004; Jenkins, 2006; Rhodes, 2001; Sitzmann et al., 2006; Sperling, 2000; Tapscott & Williams, 2006; Vise & Malseed, 2005). Indeed, while there are volumes of research on instructional techniques and philosophies on learning and thinking (Bandler & Grinder, 1975, 1979; Hatch, 1997; McCombs & Whisler, 1997; Knowles & Associates, 1984; Lenz, 1982; Stark & Lattuca, 1997), there are virtually no studies in which instructional and entertainment techniques and convergence technology have been concurrently “fitted” for classroom use in higher education. This research proposes to provide new focus on this area from the viewpoint of the entertainment professional, thereby providing a new perspective and set of viewpoints from field experts. It is expected that their dialogues and stories will set into motion a new set of instructional techniques and technologies to be used in the classroom, unbound by spatial architecture, for convergence and
edutainment integration and collaboration that crosses disciplines and the academic, technology, business, and entertainment fields (Cornwell & Cornwell, 2006; Gates, 1999; Gee, 2004, 2005; McCombs & Whisler, 1997; Sitzmann et al., 2006; Tapscott & Williams, 2006; Robert Wisher, personal communication, August 20, 2007).

Problem Statement

Generally, a problem statement is examines an issue in a discipline, which is worthy of solution. In this case the problem under scrutiny can be framed by a question: How do experts in the technology and entertainment fields reveal their use of convergence and edutainment as appropriate for academia? Moreover, a sub-question for the study, asks how can convergence and edutainment techniques suggested for classroom use improve teaching and learning? Skeptics of learning theory will want to examine carefully the affects and effects of these terms and their tools on learning since it is known that new techniques for classroom use are slow to be accepted and even slower to be adopted even when evidence indicates that these new techniques have merit and have been adopted by academic, governmental, non-governmental organizations, military and corporate institutions with critical missions. It is also well known that “tools” other than books and paper seem to be suspect to the traditional professor. The professor will demand proof that new tools are better than the old ones (Bok, 2003; Cornwell & Cornwell, 2006; Cornwell, personal communication, August 21,

Finally, many researchers including philosophers like Kellner (1990) and Postman (1993) have an antipathy toward technological change (Gates, 1999; Heller, 2001, Rhodes, 2001; Sperling, 2000). These two authors have been warning us for years about the devious attempt by the technocrats to take over the world (Gates, 1999; Gee, 2004, 2005; Heller, 2001; Jenkins, 2006; Kellner 1990; Postman, 1993; Rhodes, 2001; Sperling, 2000). However, researchers and leaders such as Gates (1999), Gee (2004, 2005), Heller (2001), Jenkins (2006), Rhodes (2001), Sperling (2000) and Wisher (2007) have contended that anti-technocrats like Kellner and Postman represent what is wrong with higher education today.

A recent study by Kavik and Caruso (2005) for the Educause Center for Applied Research found that convergence technology added convenience, connection, and control for students in higher education and promoted a learner centered environment—more than 90% owned computers, more than 90% owned cell phones, 80% had wired broadband access, more than 60% played video games, and nearly half of college freshman owned multi-media players such as iPods. Studies by Bonk and Wisher (2000) and Bonk and Dennen (2005) for the Department of Defense have consistently indicated that video gaming and online multi-player video games have demonstrated levels of effectiveness in the
readiness that can be readily viewed in the transformation of the armed services into a digitally based fighting force with uniformed personnel who were not always Ivy League educated, military academy educated or even local college educated (Wisher, personal communications, August 20, 2007).

Finally, an even more recent study by Sitzmann et al. (2006) found that a learner centered approach that enabled learners engaged in e-learning to have more control over the content, sequence, or pace of learning resulted was more effective than classroom instruction and equal to traditional classroom instruction in other areas with no loss in learner satisfaction. The fact that higher education has not adapted and transformed its educational content or adopted edutainment and convergence methods en masse when the military, federal civilian governments, commercial entities, foreign governments and foreign educational institutions of higher education have spent billions of dollars in research and have successfully adopted and implemented digital based learning and technologies has raised questions with this researcher and others (Bok, 2003; Bonk & Dennen, 2005; Bonk & Wisher, 2000; Heller, 2001; Rhodes, 2001; Sitzmann et al., 2006; Wisher, personal communications, August 20, 2007).

Indeed, the fact that nearly all of the Ivy League and several elite and flagship colleges and universities have adopted online courses or have begun to distribute their content directly or through commercial vehicles such as podcasts and webcasts raised even more questions as to when traditional education will go beyond basic distance learning and begin to fully inject entertainment, gaming,
blogs and other convergence and edutainment tools into the classroom and
distance learning classes (Apple, 2007; Bok, 2003; Duke University, 2007;

This research also sought to explore edutainment and convergence from a
Merriam, 1988; Merton & Kendall, 1956; Nielsen, 2004) and framed its grand tour
question in terms of the stories entertainment folks revealed about their
processes: How do entertainment creative professionals utilize entertainment
techniques to create interest; to create a repeat desire to view or listen to
entertainment programming; and to suggest entertainment techniques can be
transferred to education (Duke University, 2006; Farkas, 2006, 2007; Gee, 2004,
Rhodes, 2001; Sperling, 2000; Wimmer & Dominick, 2000; Woods, 2000)?

Purpose of the Study

The purpose of this study was to give voice to a divergent group from the
traditional academia, professionals from the entertainment field, who may have a
voice and role in creating learner-centered classrooms or in expanding
curriculum development from the viewpoint of edutainment and convergence
(Allendar, 1980; Bergen, 2000; Creswell, 2003; Creswell, 1998; Cornwell &
Cornwell, 2006; Farkas, 2006, 2007; Gee, 2004, 2005; McCombs & Whisler,
1997; Severin & Tankard, 2001; Stark & Lattuca, 1997). Moreover, this research builds on some of the ideas and techniques advocated by McLuhan (McLuhan & Fiore, 1967, 1968) in the 1960s and advocated and applied by Heyman in the 1970s that have continued to develop until the present day (Center for Continuing Education, 2008; Google, 2007; Hawkey, 2005; Robert Moselle, personal communication, March 19, 2008). Further, this study used the voices of these entertainment professionals interviewed for this study to discover how entertainment techniques may assist educators in higher education in attracting, teaching, and retaining students.

Questions for the Study

Grand Tour Question: How can entertainment techniques and technology be utilized in higher education?

There were other questions for the research, typical for a qualitative study, that emerged as the participants in the study and the researcher developed a camaraderie and association based on discovery of the participants’ storytelling. Chapter IV captures this association and the emerging questions suggested by the participants.

Assumptions of the Study

This research endeavored to explore whether McLuhan’s (1967) assertion that the media was the message—not the content—has become a view shared
by many media practitioners (Bagdikian, 2005). This directly spoke to actual techniques utilized by media professionals on television, film, video and the Internet. McLuhan asserted that there (1968) were two different manners or styles of thinking pre-dated much of the work on the two brain hemispheres. McLuhan (1978) later credited his own work directly to the research done on brain hemispheres.

Entertainment, like edutainment and education, has also appealed to both sides of the brain, and researching how entertainment professionals appeal to both sides simultaneously could prove useful in the field of higher education (Bandler & Grinder, 1979; McLuhan, 1978; Robbins, 1986, 1989, 1997, 2005; Severin & Tankard, 2001; Singhal & Rogers, 1999). The field of edutainment is relatively new, and there is limited research in this new field that directly questions entertainment professionals on how they could utilize edutainment, convergence and entertainment techniques to educate, entertain and students in higher education (Bergen, 2000; Fisher, 2004; Gates, 1995; Gee, 2003; Griffiths, 2002a, 2002b; Lessig, 2004, 2001, 1999; Saunders & Smalley, 2000; Savill-Smith & Kent, 2003; Squire et al., 2003; Stone, 2005a, 2005b, 2006). Further, there is a gap in the research on this subject because much of the research that exists is based on children in a field that is relatively new for adults (Funk, 1992, 1993a, 1993b, 1996; Gill, 1998; Kafai, 1998; Kelly & O'Kelly, 1994; McKenzie, 2000; Pope & Bogart, 1996; Saunders & Smalley, 2000) and most of the
convergence technology discussed in this literature did not exist commercially in its present state.

This research sought to go directly to entertainment professionals and to interview them (Bogdan & Biklen, 1992; Creswell, 2003; Creswell, 1998; Marshall & Rossman, 1995; McLuhan & Fiore, 1968, 1967; Merriam, 1998), learn which techniques they employed, and why they used them. Moreover, this research will also look at the specific entertainment techniques from the perspective of the entertainment experts who regularly have to keep audiences engaged and informed to earn a living (Reid Cornwell, personal communication, August 21, 2007; Creswell, 2003; Eric Dodson, personal communication, August 30, 2007; McLuhan & Fiore, 1967).

This study did not focus specifically on distance learning; but rather it focused on various entertainment techniques from the perspective of a media practitioner (Apple, 2007; Dizard, 2000; Cornwell & Cornwell, 2006; Reid Cornwell, personal communication, August 21, 2007; Gates, 1999; McLuhan & Fiore, 1967; Sperling, 2000) and how these techniques may impact the delivery of distance learning (Heller, 2000; Rhodes, 2001; Sperling, 2000). Clearly, distance learning received minimal attention in this study that focused on the utilization of entertainment techniques, new media and user-generated technology (Dizard, 2000; Gee, 2005; Jenkins, 2006; Tapscott & Williams, 2006). Edutainment and convergence has been utilized in a traditional classroom setting, a non-traditional classroom setting or in a media technology environment;
however, edutainment can be employed without the use of technology (Dizard, 2000; Heller, 2001; Rhodes, 2001; Sperling, 2000). In summary, this study specifically investigated how edutainment and convergence can be employed in a media technology environment, in a traditional classroom setting from the perspective of entertainment professionals (Dizard, 2000; Heller, 2001; Rhodes; Sperling, 2000).

Rationale and Theoretical Framework

Several communications theories were examined for this study. The primary theories that were utilized are the following: the theory of powerful media effects, the communications expert theory, sense making theory, the community empowerment theory, media agenda setting theory and the technology adoption model (Atkin & Rice, 2001; Davis, 1989; Lenz, 1982; McLuhan & Fiore, 1967; Severin & Tankard, 2001; Venkatesh & Davis, 2000; Wimmer & Dominick, 2000). The community empowerment theory was utilized in this study because the community that provided its voice was media professionals. The media agenda setting was utilized in this study; since, the media professionals set the agenda for the study when they provided their thoughts (Atkin & Rice, 2001; Severin & Tankard, 2001; Wimmer & Dominick, 2000). The technology adoption model and adult learning theory were utilized because these theories mandated how people utilized edutainment and
convergence, and why these technologies were adopted by users (Davis, 1989; Venkatesh & Davis, 2000).

Moseley and Dessinger (2007) have examined non-traditional and traditional learners and discussed Brookfield (1991), Cevero and Wilson (1994), Cross (1981), Knox (1981), and Merriam (2001) as some of the leading researchers in the evolving field of adult learning theory that began developing in the 1960s in terms of formal, informal and training settings. They cited the work of Merriam (2001) since her research has been inclusive and flexible enough to incorporate the work of other research on adult learners. In short, Mosely and Dessinger (2007) have maintained that adult learning theory is far too complex a phenomenon to explain with one single theory. McCombs (1997, 2003, 2005) and Wisher (2000) and Stark and Lattuca (1997) have also examined learner centered curriculum and adult learning theory with both traditional and non-traditional methods. Edutainment and convergence has utilized foundational theories of adult learning theories such as andragogy, self-directed learning, informal and incidental learning and transformational learning in the production, pre-production and post-production processes (McCombs, 2003, 2005; Merriam, 2001; Mosely & Dessinger, 2007).

Qualitative Emphasis

This study was qualitative in nature because it was investigative and exploratory in nature (Creswell, 2003). Qualitative research traced its roots to
cultural anthropology and American sociology (Creswell, 2003; Kirk & Miller, 1986) only recently has qualitative research been incorporated into educational research (Creswell, 2003). Locke, Spirduso, and Silverman (1987) and Creswell (2003) have contended that the intent of qualitative research is to understand a specific event, group, role, interaction or social situation. Qualitative research is truly an investigative and exploratory process that permitted the researcher to gradually make sense of a social phenomenon by contrasting, comparing, replicating, cataloguing and classifying the object of the study (Creswell, 2003; Miles & Huberman, 1984). It was through short-term immersion in the daily lives of informants and through ongoing interaction in the informants' world that a researcher began to elicit the perspectives and meaning of the informants when engaged in qualitative research (Creswell, 2003; Marshall & Rossman, 1989).

According to Creswell (2003, 2005) and others (Lincoln & Guba, 1985; Marshall & Rossman, 1980; Merriam, 1988) the essential characteristics of qualitative research include the following: (a) occurs in natural settings where human behavior occurred; (b) asks about sense making; (c) the researcher is the primary instrument utilized in data collection; (d) is seen as descriptive and based on the informants’ perceptions and experiences and how they made sense of their lives; (e) is focused on the process and events, as well as the product or outcome of the study; (f) is seen as paying attention to the smallest of details; (g) is an emergent design in its negotiated outcomes; (h) is relied on the utilization of intuitive and feel of knowledge because the subtle nuances of multiple realities
can be appreciated and discovered; and finally (i) sees objectivity, trustworthiness, and truthfulness as crucial.

Entertainment (Gill, 1998) has been referred to as an art that has been affected by everything from politics, economics, race, class, education, environment, customs, history, relationships and the life histories of the creative professionals who work in the field of entertainment. There was no one prescription that could be measured quantitatively and employed by this researcher (Creswell, 2003, 1998). This research employed a qualitative research strategy that was a hybrid design of that recommended by Creswell (2003, 1998, 1994) and Marshall and Rossman (1995) that utilized taped in-depth interviews and a participant observer when possible to collect data, whenever possible, to obtain feedback from the informants.

This study utilized the interview format, similar questions, and informal entertaining style of Inside the Actor's Studio cable television program on the Bravo cable network (Bravo, 2006; Pace University, 2008). The rationale for this approach was that this television program utilized many of the entertainment techniques that this study examined; and the television show was and continued to be an actual college course for those studying acting, directing and playwriting at both the undergraduate and graduate levels in the entertainment field at Pace University (2008) in New York City.
Significance of the Study

This research attempted to add to the body of knowledge in a new field and spur further research of the twin fields of edutainment and convergence on teaching and learning (Bergen, 1996; Farkas, 2006, 2007; Gee, 2003, 2005; Heller, 2001; Jenkins, 2006; Lessig, 2004; McCombs, 2005; Olesen, 1996; Prensky, 2006). This study can be used to help point the way for educators, entertainment professionals, and academics to work together to create innovative and different ways to educate students in higher education that are perceived as stimulating, entertaining, fun, and meaningful to the learning process of adult learners.

Future researchers may be able to gain a greater understanding of the field of entertainment, various entertainment techniques and the messages employed in the media by creative professionals. Moreover, this research may suggest to future researchers that they learn techniques transferable to education, pass those techniques on to their colleagues, and examine the effect of these techniques on the enhancement of teaching and learning (Gee, 2004, 2005; Halter, 2006; Jenkins, 2006). Finally, the research endeavored to be one of the first dissertation research projects that utilized multiple new media platforms to disseminate open-sourced, low-cost, and free research to the public utilizing edutainment and convergence technologies to limit publishing costs; this process could begin a new trend of collaborative and open-sourced publishing for future scholars, even those denied the opportunity to publish in the current era of
media consolidation and peer review publishing which are less democratic and open to new ideas and methods (Bagdikian, 2005; Bush, 1945; Farkas, 2006, 2007; Gee, 2003a, 2003b, 2004; Kvavik & Caruso, 2005; McChesney, 2004; Tapscott & Williams, 2006; Willinsky, 2006).

Definition of Terms

Convergence, for the purposes of this study, was defined as the transforming of many mediums into a single media through technological advances that enable communications products and data to be portable, transferable, have multiple simultaneous uses, have the ability to store electronically or on paper, and is interactive and convenient in nature, so that it is timeless (Baldwin, McVoy, & Steinfield, 1996; Dizard, 2000; Gershon, 2001; Jenkins, 2006; Pavlik, 1998).

Entertainment techniques, for the purposes of this study was defined as artistic, creative, educational and technological devices utilized by entertainment professionals that attracted audiences, maintained audiences and secured repeat audiences (Baldwin, McVoy, & Steinfield, 1996; Gershon, 2001; Jenkins, 2006).

Edutainment for the purposes of this study was defined as utilizing storytelling, entertainment techniques, educational techniques, play techniques, interactive media or computer games and software to promote learning
that was fun and convenient for the user (Bergen, 2000; Gee, 2005; Olesen, 1996; Parker, 1990).

Blogs for the purposes of this study refers to electronic websites on the Internet that are characterized by high levels of interactivity, the ability to transfer and post media and print content on the Internet, the ability for non-professionals and professionals to utilize blogs because of their high levels of ease of use, and the fact that blogs are generally free or low cost versions of websites that offer free sites in exchange for advertising (Castro, 2005; Farkas, 2006, 2007; Tapscott & Williams, 2006). The term blogging will be used to describe the physical act of contributing to a blog through the use of print, audio, visual, or video means (Castro, 2005; Farkas, 2006, 2007).

Multi-media devices and handheld devices for the purposes of this study refers to devices such as iPods, mp3 players, portable gaming devices, pocket computers, cell phones, and smart phones like the Blackberry, Treo, and the iPhone that enable users to view video content, listen to audio content, create notes, conduct conversations, record sounds, and record and photograph images that are generally transferable to the Internet and computers (Apple, 2007; Farkas, 2006, 2007; Gee, 2005; Sony, 2007; Tapscott & Williams, 2006).

Open source or open sourced for the purposes of this study refers to technology, research, devices, and methodologies that embraces the sharing of
technologies, research, methodologies, and ideas (Apple, 2007; Jenkins, 2006; Lessig, 2001, 2002, 2004; Tapscott & Williams, 2006; Willinsky, 2006). Open source also refers to technologies that embrace the concept of interoperability that enables devices and software to perform on multiple convergence platforms without electronic or digital protections (Apple, 2007; Jenkins, 2006; Lessig, 2001, 2002, 2004; Tapscott & Williams, 2006; Willinsky, 2006).

Podcasts for the purpose of this study refers to audio and video recordings of events, plays, television shows, lectures, radio programs and consumer-generated media that are distributed as electronic files via the Internet through websites, social networking sites, blogs, and video sites like iTunes, Amazon.com, and YouTube (Amazon, 2007, Apple, 2007; Castro, 2005; Farkas, 2006, 2007; Google, 2007; YouTube, 2007). Vlogs and vodcasts are other name that refers to blogs and podcasts that exclusively or primarily use video (Amazon, 2007; Apple, 2007; Castro, 2005; Farkas, 2006, 2007; Google, 2007; Jenkins, 2006; YouTube, 2007).

A smartphone for the purposes of this study refers to wireless devices that simultaneously act as telephones, cameras, gaming devices, video cameras, tape recorders, computers, media players, Internet devices, storage devices, radio communicators, and televisions. A smartphone is also considered a convergence device for the purposes of this study because of its ability to seamlessly merge these multiple media tasks
simultaneously for the user (Apple, 2007; AT&T, 2007; Farkas, 2006, 2007; Jenkins, 2007; Microsoft, 2007; Nokia, 2007; Sony, 2007; Sprint, 2007; Tapscott & Williams, 2007; Verizon, 2007). Smartphones are different from cellular phones because they tend to be physically larger than cellular phones, possess greater computing power, have larger memories, are more expensive, and emphasize multi-media and Internet functions (Apple, 2007; Googin, 2006; Microsoft, 2007; Motorola, 2007; Nokia, 2007; Research In Motion, 2007; Sony, 2007).

Social networking sites for the purposes of this study refers to Internet sites that enable individuals and organizations to socialize, share media, content, games, and share information through Internet sites on portals such as Facebook, LinkedIn, MySpace, Orkut, and Slashdot (Facebook, 2007; Farkas, 2007; Google, 2007; Holtz, 2005a; MySpace, 2007; Prensky, 2001, 2006; Tapscott & Williams, 2007).

Social bookmarking sites for the purposes of this study refers to Internet sites that permit individuals and organizations to rate, research, categorize, store, share, and transfer articles and media content via the Internet, blogs, social networks, and media sites (Delicious, 2007; Digg, 2007; Farkas, 2007; Jenkins, 2006; Tapscott & Williams, 2006).

Social media tools for the purposes of this study refers to blogs, podcasts, social networking groups, video sharing sites, gaming sites, media sharing media sites, and Internet software that enables individuals to
communicate, collaborate, socialize, research, store, and share the following: content, information, and data (Delicious, 2007; Digg, 2007; Facebook, 2007; Farkas, 2006, 2007; Holtz, 2005a; Jenkins, 2006; MySpace, 2007; Tapscott & Williams, 2006).

Video games for the purpose of this study are portable and stand alone computer devices that enable users to compete, explore, interact, learn, make rapid decisions, simulate live events, enable the user to practice performance in intense environments, collaborate with others in person or via the Internet, and to assess individual performances and learning (Bonk & Wisher, 2000; Bonk & Dennen, 2005; Gee, 2003a, 2003b, 2004, 2005; Halter, 2006; Jenkins, 2006; Microsoft, 2007; Nintendo, 2007; Prensky, 2001, 2006; Sony, 2007).

Scope and Limitations of the Study

This study had several limitations (Creswell, 2003). First, expenses associated with this study prevented the researcher from continuous interviewing of subjects as I had to travel to Los Angeles, California; San Antonio, Texas; Palm Beach, Florida; and Washington, DC; New York, New York, and other locations for three to six months to speak with subjects more than three times. Second, this study was limited by scheduling, since many of the subjects had busy schedules, travel frequently and had limited availability for interviews. Third, this study was limited because of the length of the interviews and due to the
demands of time on entertainment professionals. Fourth, the study was limited by the fact that the researcher was employed and was registered for other graduate courses that placed constraints on the researcher’s time.

Fifth, the study was limited by the fact that the researcher focused primarily on one question: which entertainment techniques are transferable to higher education and how should these techniques be utilized. Sixth, the study was focused on entertainment techniques that can attract and maintain audiences, and not focused primarily on distance learning. Distance learning will be discussed in the final chapter when a multiple platform digital edutainment construct was created based on the data obtained from the participants, and placed online for viewers. The final limitation of the study was created by edutainment and convergence: the accuracy of citations for scholarly works that utilize content in new media forms. This limitation was the most challenging because many commercial and academic web sites and blogs frequently change, delete, and move the location of content based on usability and proprietary market research obtained from users (American Broadcasting Company, 2007; Amazon, 2007; Apple, 2007; Google, 2007; Nielsen, 2000).

New media sites such as Amazon, Apple, and Google often changed or eliminated content so frequently that it became nearly impossible for one to pinpoint a location to locate specific content unless one utilized the sites navigation and search tools. Therefore, this study resolved this problem by citing the location of the content at the time or the general website of the address of the
source for documentation purposes. This is an issue that I became familiar with in my capacity as a member of the Association of Internet Researchers because the general citation methods have been difficult to utilize with many new media forms. As of this writing, there has been no conclusive way to capture this information except through electronic means. I created several online media sites so that information and source video could be located to buttress my sources (Edutainment and Convergence, 2007; Edutainment Today, 2007; Edutainment Today On YouTube, 2008).

Summary

In summary, this research was a case study with micro-ethnographic elements (Creswell, 2003, 2005; Wimmer & Dominick, 2001) that looked primarily for the answer to one question: How can entertainment techniques and technology be utilized in higher education? This research endeavored to look at how higher education can enhance its product by utilizing and shaping the educational process through the use of interactive technologies, entertainment techniques, and created an edutainment prototype and products based on data obtained by entertainment experts who attract audiences as a way of life. In the next chapter, a detailed review of the literature will include the following: a brief discussion of some of the ten events that have changed the landscape of communications worldwide, fostered convergence and edutainment, and
impacted higher education in technological, legal, financial and pedagogical
terms.

The literature review, which follows as Chapter II, will specifically discuss
convergence and communications in terms of the following: its legal impact, the
psychological impact, its on labor, its impact on national security, its impact on
entertainment and its impact on higher education. Convergence has made
distance learning on massive level possible; however, this study endeavored to
obtain data from entertainment professionals on how to utilize entertainment
techniques in higher education and not necessarily concentrate this study solely
on distance learning (Apple, 2007; Farkas, 2006, 2007; Gee, 2003a, 2003b,
CHAPTER II
LITERATURE REVIEW

Introduction


This literature review examined how edutainment and convergence can be utilized in higher education from the perspective of professional users. Also, it examined and discussed the following: a brief history of the origins of edutainment and convergence; the contributions of researchers and practitioners to this body of knowledge; a detailed examination and discussion of the influence of multi-national media and technology conglomerates on the development and delivery of this new field of edutainment, and the ramifications of this new convergence of learning and technology in higher education; and finally an examination of the current debate between the technocrats and the anti-technocrats in this learning revolution.

The Military, Political, Academic, and Entertainment Origins of Convergence

The digital twin of edutainment has been referred to as convergence (Baldwin, McVoy & Steinfelder, 1996; Pavlik, 1998; Young & Simon, 2005). Convergence is the merging of old media such as print, telephony, radio, film and television with new media such as the Internet, cellular telephony, digital video, Internet protocol television, voice over Internet protocol, satellite technologies, wireless technologies, personal computers, gaming platforms, digital storage devices, and handheld digital multi-media devices (Abbate, 2000; Baldwin, McVoy, & Steinfelder, 1996; Dizard, 2000; Boot, 2006; Pavlik, 1998; Poole, 2000; Severin and Tankard, 2001; Sperling, 2000; Young & Simon, 2005). Friedman (2005) and others (Jenkins, 2006; Marcus, 2004; O’Harrow, 2005; Sperling, 2000;
Toffler & Toffler, 2006) have contended that convergence has been the driving force behind the global economy, politics, warfare, entertainment, and even higher education.

The birth of convergence has been directly traced to Albert Einstein’s letter to Franklin Roosevelt that urged Roosevelt, written at the behest of several prominent scientists, to work with academia to develop the power of the atom before Germany could do so during World War II (Aronowitz, 2000; Boot, 2006; Carroll, 2006; Cohen, 1998; Leslie, 1993; Lost Words (2006b). Roosevelt had reason to be concerned because the Nazis had used radio and newly invented color films and edutainment in the form of large flag waving military parades with goose stepping troops, patriotic civilian parades, nationalistic artwork and signage; inspirational speeches often broadcasted on radio, marching youth organizations, funerals, and even athletic events like the 1936 Olympics to engender loyalty from the German masses (Lost Worlds, 2006c; Severin & Tankard, 2001). Moreover, the Olympic torch bearing procession from Olympia, Greece, to the Olympic Games stadium site actually was done for the first time in the modern era at the 1936 Olympic Games at Berlin as a Nazi propaganda tool that was an edutainment event and a film that was used to reinforce the message to Germans and the rest of the world (Lost Worlds, 2006c; Severin & Tankard, 2001).
Edutainment and Convergence as Political Spin Agents

This method of persuasion or propaganda, depending on one’s frame of reference, has proven to so successful over time that it has been adopted and duplicated by the governments, their surrogates in the media and their opponents in the following countries: Russia, Cuba, China, Iraq, Iran, Pakistan, Afghanistan, Vietnam, England, Panama, Venezuela and the United States during World War II, Cold War, Desert Storm, and the current wars in Iraq, Israel and Afghanistan (Apple Computer, 2006; Bagdikian, 2005; Carroll, 2006; Countdown with Keith Olbermann, 2006; Engineering An Empire, 2006e;; Engineering An Empire, 2006f; Lou Dobbs Tonight, 2006; Severn & Tankard, 2001; Snow, 2003; The O’Reilly Factor, 2006; The Rush Limbaugh Show, 2006; The Sean Hannity Show, 2006; The White House, 2006; YouTube, 2006) as the convergence tools of the Internet, satellite, radio, media devices, and cellular phones with cameras have intensified the effect of these tools and swayed public opinion and elections worldwide.

This form of edutainment coupled with old media, film and radio, was so effective that Roosevelt actually formed a group of government and academic experts to investigate whether a charismatic leader could utilize such techniques in America (Severin & Tankard, 2001). The group eventually created a report that studied and described the various types of propaganda techniques and identified an extremely provocative radio host with a nationally distributed newsletter, Father Coughlin, who successfully used these techniques with one of
the largest radio audiences at the time (Severin & Tankard, 2001). Coughlin, a Roman Catholic priest, was later forced off the air by the Catholic Church and the Federal Communications Commission because the FCC was a very strict regulatory agency at the time (Severin & Tankard, 2001).

Convergence: A Political, Military, Academic & Industrial Partnership

Shortly after Enrico Fermi demonstrated a nuclear chain reaction at the University of Chicago that proved that the atom had defense capabilities, Roosevelt took action that brought the research universities under the watchful eyes of the Pentagon with the dual enticements of government funding and patriotism through research (Bird & Sherwin, 2000; Boot, 2006; Carroll, 2006; Cohen, 1998; Geiger, 2004). Roosevelt worked with the Congress for funding and then utilized the military to create the Manhattan Project that successfully developed the atomic bomb and created a partnership with research universities, the military, and corporations that has continued to this day (Abbate, 2000; Aronowitz, 2000; Baran, 1964; Bird & Sherwin, 2005; Boot, 2006; Carroll, 2006; Cohen, 1998; Geiger, 2004; Leslie, 1993).

Immediately after World War II the federal government determined that national defense, scientific research, higher education, and job creation for the returning veterans from World War II were crucial to America’s future (Carroll, 2006; Cohen, 1998; Leslie, 1993; Rhodes, 2001). The GI Bill and other veteran’s benefits were created to educate and train the veterans for employment in the
growing American economy (Cohen, 1998; Leslie, 2000; Rhodes, 2001). Other veterans’ benefits were used to house the veterans and their families, and to create a middle class of college educated and vocationally trained veterans who benefited directly from the GI Bill and higher education (Cohen, 1998; Leslie, 1993; Rhodes, 2001). The research universities benefited from the influx of enrollment, and from the federal research dollars from the Defense Department (Abbate, 2000; Carroll, 2006; Cohen, 1998; Geiger, 2004; Leslie, 1993; Rhodes, 2001).

The scientific research and development from World War II through the Cold War years helped to develop computer technology, the Internet, satellite technology, wireless technology, gaming and simulation technology, and digital audio and video technology (Abbate, 2000; Aronowitz, 2000; Baran, 1964; Bird & Sherwin, 2005; Boot, 2006; Carroll, 2006; Googin, 2006; Leslie, 1993; O’Harrow, 2005; Robbins, 1986, 1989, 1997, 2005). While universities were compelled to lessen their dependence on federal and state government funding during the 1990s after the end of the Cold War and Desert Storm, there has still been a close political, military, academic and industrial relationship in America that has grown stronger since the 9/11 terrorism attacks and the wars in Afghanistan and Iraq (Bianco, 2006; Boot, 2006; Carroll, 2006; Friedman, 2005; O’Harrow, 2005 Rhodes, 2001; Robbins, 1986, 1989, 1997, 2005).

In fact, the Defense Advanced Research Projects Agency, DARPA, hired Lockheed Martin, the largest defense contractor, CACI Dynamics Systems, and
more than twenty-four research universities including Cornell, Columbia, and the University of California at Berkeley to work on research for the Total Information Awareness program that focused on developing collaborative technologies that analyzed and monitored everything from data to live surveillance of people through pattern recognition machines, and cameras and sensors augmented with biometric identifiers (Boot, 2006; O’Harrow, 2006; Risen, 2006). While the Total Information Awareness program was later ended due to major concerns about privacy and civil liberties, the defense dollars kept flowing to research universities and defense contractors for other related projects (Abbate, 2000; Boot, 2006; Carroll, 2006; Cohen, 1998; O’Harrow, 2005; Risen, 2006). The relationship between DARPA, military contractors, and research universities produced the packet-switching technology that was created as a nuclear bomb-proof data network for national defense helped to make the Internet possible (Abbate, 2000; Baran, 1964; Boot; 2006; O’Harrow, 2005); the B-2 Stealth bomber, the F-117 Stealth fighter, wearable computers; facial recognition software, and space-based surveillance (Boot, 2006; O’Harrow, 2005). Technology firms such as Cisco Systems, IBM, and Sun Microsystems have built fortunes and their reputations from DARPA-funded discoveries that they leveraged into commercial products and services such as Cisco’s packet-switching, TelePresence video conferencing, and web filters like the one used in China by the government to maintain control of the Internet (Abbate, 2000; Baran, 1964; Boot, 2006; Cisco, 2006; Friedman, 2005; O’Harrow, 2005).
Near Absolute Power Can Corrupt Absolutely, Too: Conglomerates

The fact that ten, or twenty, global conglomerates control most of what everyone sees, hears, reads, types, dials or clicks has been considered extremely alarming and mandated immediate changes according to Bagdikian (2005), Lessig (2004) and McChesney (2004). Lessig, a Stanford University attorney and scholar, Bagdikian, (2005), Fenton (2005) and others (O'Harrow, 2005; Risen, 2006; Thomas, 2006) have argued it is just plain dangerous for these same companies to possess the ability to record individuals electronically through digital footprints both online and offline such as: the recording of search results online, the recording of key strokes, text messages and instant messages, credit and debit transactions, discount shopping cards which create profiles and through the ability to sell these lists to marketers, collection agencies, private detectives, police forces, and the biggest customer of all: the United States Government and its many law enforcement, intelligence and data collections agencies (Bagdikian, 2001, 2005; Fisher, 2004; Lessig, 2001; O'Harrow, 2005; Risen, 2006). Recently, the two largest American telecommunications firms, AT&T and Verizon, and the White House admitted that the telecommunications firms engaged in warrant-less wiretapping of phone calls with the National Security Agency for national security reasons (AT&T, 2006, 2007; Google, 2007; Iacocca, 2007; Risen, 2006; Yahoo, 2007; YouTube, 2007). The telecommunications firms contended that they were compelled to participate in
the warrant-less eavesdropping program by a national security letter, and the Bush White House contended that the exigent circumstances of the war on terror made the program a necessary evil (Google, 2007; The White House, 2006, 2007; Yahoo, 2007; YouTube, 2007). Civil libertarian groups filed charges against the program and at least one federal judge rejected the government’s claims of national security, and the case has continued in the court of public opinion, law schools, the Congress and federal court as of this writing (American Civil Liberties Union, 2006, 2007; Google, 2007; Iacocca, 2007; Risen, 2006; Yahoo, 2007; YouTube, 2007).

This section of the literature reviewed focused on the political commitment to national defense employed by the United States that created the intimate funding relationship that exists between the United States Defense Department, military contractors, research universities and commercial companies (Abbate, 2000; Boot, 2006; Carroll, 2006; Halter, 2006; Leslie, 1993; O’Harrow, 2006; Risen, 2006). The research from this defense funding resulted in scientific, communications, and military technology that would create a technological advantage for America in wars in Iraq and Afghanistan, and literally create shock and awe, as well as fear and resentment throughout the world from both allies and foes (Abbate, 2000; Boot, 2006; Carroll, 2006; Halter, 2006; Leslie, 1993; O’Harrow, 2006; Risen, 2006; Snow, 2003). This section also focused on how convergence has lead to abuses by government officials acting in concert with business and academic institutions that have negatively impacted free speech
Bagdikian, 2005; Boot, 2006; Fenton, 2005; O’Harrow, 2005; Risen, 2006; Snow, 2003). In closing, civilian research and the commercialization of defense-based technologies have exploited these technologies that created convergence and later merged with edutainment.

 Contributions of Researchers and Practitioners to the Fields

Much of the civilian research in the field of edutainment has focused on children and not adults, the primary consumers of higher education (Bergen, 1998; Bergen, 2000; Olesen, 1996; Vander Werff, 1999). In fact, Vander Werff (1999) has insisted if one associates Sesame Street with teaching one’s child to read, then one understands the concept of edutainment. Canadian researcher, McLuhan (1967) contended that the media is the message, and that it gradually effects individual perceptions and thoughts, especially television, because television is multi-sensory based. He predicted that television would re-tribalize society and transform it into a global village (Dobbs, 2004; Lessig, 2004; McLuhan & Fiore, 1968; O’Harrow, 2005; Robbins, 1986, 1989, 1997, 2005).

McLuhan’s belief in the powerful effects of media has been elusive to research because those effects ostensibly would take years to occur, and yet, he had actually predicted the instantaneous, socializing, democratizing, informative, economical, globalizing, and educative impact of the Internet (Champy & Hammer, 1993; Dobbs, 2004; Fenton, 2005; Lessig, 2004; McLuhan & Fiore, 1967, 1968; O’Harrow, 2005; Robbins, 1986, 1997, 2005) according to Severin
and Tankard (2001). In fact, McLuhan (1967, 1968) predicted that electronic communications would be an actual physical extension of the human body and human mind through the combination of the human mind’s innate ability to create reason and the ability of convergence technology to transform thoughts into reality remotely with just a click of a mouse, the press of a key, the click of an iPod wheel, the touch of a hand, a voice command, or just the flip of a mobile phone. McLuhan’s theory has become fact; technology developed by companies such as Emotiv Systems and NeuroSky enable individuals to utilize their electronic brain waves through a brain-computer wireless interface that detects thoughts electronically through sensors in a helmet and translates them it into actions on a screen, and this interface can also detect facial expressions like a smile or a grimace and translate them too (Takahashi, 2007). Emotiv Systems and Neurosky have maintained that brain power will become the joysticks of the future (Takashi, 2007).

The Industrial Film Origins of Edutainment

According to Janice Long Coe, a former executive producer with the United States Commerce Department’s National Telecommunications Information Service in the Washington area, edutainment can trace much of its modern roots to the television production and education techniques developed by Jim Henson and The Children’s Television Workshop that produced Sesame Street for the Public Broadcasting System in the 1960’s to the present (Janice
Long Coe, personal communication, November 20, 2003; Gladwell, 2005). Additionally, Long Coe maintained that edutainment is technically not a new field (Janice Long Coe, personal communication, November, 20, 2003). She contended that producers and directors of industrial films and academic researchers have been actively working in the field of edutainment since the World War II era (Janice Long Coe, personal communication, November 20, 2003).

Long Coe suggested that these producers of training, informational, and educational films that the United States government used to encourage everything from rubber and metal recycling to safe sex are the forerunners to Sesame Street because they have both educated and entertained their audiences (Janice Long Coe, personal communication, November 20, 2003) to aid in the war effort, public health and general education. Finally, Coe explained that modern producers of industrial films and edutainment based films are continuing the legacy of award winning filmmakers like Fritz Roland, who was a former Hollywood producer and director who migrated to the Washington area to produce numerous industrial films through several Presidential administrations.

Edutainment, Convergence and the Stickiness Factor

One aspect of edutainment that Gladwell (2002) emphasized was the stickiness factor. The stickiness factor has been described as when a show registered with members of the audience and how these audience members
recall learning information during research (Gladwell, 2002). What made *Sesame Street* unique was that it began with education, learning and academic research in mind from the beginning of the concept of the show (Gladwell, 2002). The program was driven by the mixed methods research data obtained from test audience members (Gladwell, 2002). In fact, the psychologists were just as important a part of the production team as was the creative staff, generally a normal thing in the creation of television and films—especially because of its highly interactive collaborative process (Gladwell, 2002; Levy, 1994; Tapscott & Williams, 2006; Zettl, 2003). It often required multiple takes because of errors (Gee, 2005; Gladwell, 2002; Levy, 1994; Zettl, 2003) whereas education is typically one teacher providing information to a student or a group of students with minimal interactivity. Gladwell (2002) illustrated how research was the driving force behind another children’s show, *Blues Clues* which was considerably lower tech and very repetitive, and consistently scored higher than *Sesame Street* with its audience research because it kept the show simple, repeated concepts consistently, and moved slowly.

Rhodes (2001) has contended that higher education courses can develop stickiness for adults if there is an emphasis on short-term access to knowledge in modules, workshops, and interactive electronic programs. Moreover, Rhodes (2001) has contended that universities employ talented and creative producers and directors to work with professors to create collaborative interactive educational programming that is student-centered and true to the curricula. Dr.
Michael Barrett of Temple University has taken Rhodes contention to reality when he created digital mp3 sound recordings of approximately 400 heart beats that ranged in sound from healthy hearts to unhealthy hearts, and has successfully taught his medical students and even a marketing student to recognize healthy and unhealthy hearts by listening to the sound recordings on their iPods while commuting, studying or while resting (Carmichael, 2007). According to Barrett (Carmichael, 2007) the iPod enabled his students to obtain the repetition necessary to learn the subtle nuances of sound that it virtually impossible to obtain from live subjects whom he claims could not sit still long enough for students to obtain accurate data (Carmichael, 2007).

Moreover, Barrett reported that a marketing student was utilized to demonstrate that individuals without medical backgrounds could be taught to recognize healthy and unhealthy heartbeats with the assistance of edutainment and convergence (Carmichael, 2007). In fact, Barrett reported that the marketing student that he secretly planted in the class was able to score equally to any medical student by the end of the class even though the medical student could not spell the medical terminology he was taught to recognize heartbeats by utilizing a convergence device and edutainment (Carmichael, 2007). Barrett has maintained that medicine, especially cardiology, has lagged behind in utilizing edutainment and convergence to instruct students on how to recognize medical problems like heart sounds because medical students and many doctors do not get enough practice with live subjects because of the amount of time that is
required to practice listening to heartbeats to know the difference between healthy and unhealthy heartbeats (Carmichael, 2007). The University of Minnesota has also been successfully using iPods for its medical students in a similar manner according to Kvavik and Caruso (2005).

Eric Dodson, a communications professor formerly at Delaware State University, and now the director of new media with Morgan State University, and the former national field producer of the Public Broadcasting System show, To the Contrary, asserted that what has made modern day edutainment different was the development of convergence technology that has enabled viewers and listeners to be virtually entertained and educated simultaneously (Eric Dodson, personal communication, October 27, 2003). Dodson (2003) has explained that the convergence of television, computers and telecommunications technology has enhanced the interactive experience for learners. Charles Roggero, a former college professor, a four time Emmy Award winning producer and a former Hollywood editor for films such as Polyester, suggested that the entire business of entertainment has changed because of the development of interactive digital technology (Charles Roggero, personal communication, November 20, 2003). In fact, Roggero, Dodson and this author concurred in 2003 when the initial research began for this study that most people would be able to legally download movies and television programs to portable devices like cell phones and iPods in two or three years (Eric Dodson, personal communication, October, 27, 2003; Charles Roggero, personal communication, November 20, 2003) because of the

This section of the literature review briefly discussed the contributions of early adopters, academic researchers, hybrid academic and corporate users and professional users in the entertainment field who utilized edutainment with early convergence for children for television programming and adults for instructional government films and videos. Now, we return again to the political, military and corporate entities and their contributions because these entities have created and demonstrated convergence occurring in living room, while walking, on computers, handheld multi-media devices and cell phones. These devices can instantly retrieve data, pictures, video, audio, music, global position, the weather, entertainment, search results, and the morning paper (AT&T, 2006, 2007; Apple, 2007; Apple Computer, 2006; Boot, 2006; Comcast, 2006; Farkas, 2006, 2007; Gates, 1995, 1998; Gee, 2003a, 2003b, 2005; Googin, 2006; Google, 2006, 2007; Jenkins, 2006; Kirriemuir, 2000a, 200b; Microsoft, 2007; Motorola, 2006; Nokia, 2006; Prensky, 2006; SprintNextel, 2006, 2007; Time Warner, 2006, 2007; Verizon, 2006, 2007; Yahoo, 2007; YouTube, 2007). An examination of the contributions of commercial entities which utilized edutainment with convergence technology and gaming in the entertainment world will follow and explain how these commercial interests have been able to transfer convergence to higher education through the creation of multi-media devices, online services, online
college courses for download, software, and telephony to leverage the power of
the Internet and interactivity (AT&T, 2006, 2007; Apple, 2007; Apple Computer,
2006; Farkas, 2006, 2007; Googin, 2006; Google, 2007; Jenkins, 2006; Microsoft,
2007; Motorola, 2007; Nokia, 2007; Sony, 2007; SprintNextel, 2006, 2007; Time

Contributions of Commercial Products in Global Convergence

This transformation of many media into one media (Dizard, 2000; Jenkins,
2006; Pavlik, 2000; Tapscott & Williams, 2006) has had profound effects, while
still in its infancy on the civilian and commercial front. High quality digital, easily
accessible, inexpensive, and free video content was introduced and adopted by
consumers on a global scale in the fall of 2005 (Apple, 2007). Apple, as a
commercial entity, has benefited greatly from convergence and has arguably
developed three of the most disruptive stars of convergence: the iTunes store,
the iPod, and the iPhone (Apple Computer, 2006, 2007; Jenkins, 2006; Young &
Simon, 2005). The iTunes store and the iPod provided an outlet and an
aesthetically attractive device for quality legal, inexpensive and music and video
downloads when the music and movie content industries were actively suing its
customer base often on college campuses because of the high speed networks
and abundance of technologically advanced students (Apple, 2007; Jenkins,
2006; Lessig, 2001, 2004; Linzmayer, 2004; Young & Simon, 2005). In fact,
Apple (2007) has developed and featured programming from each of the
broadcast networks, nearly all of the cable entertainment, sports, music, educational and news channels on its iTunes store which has received more than 1 billion downloads of music and video since its introduction in 2001.

Apple has managed to control 70% of the multi-media player market and 80% of the digital download market in America according to chairman of Apple Steve Jobs (Apple, 2007; Farkas, 2006; Young & Simon; 2005). However, the music industry led by Universal and more recently the television industry led by NBC have decided to revolt against Apple’s policy of low pricing: .99 cents per song with copy protections; $1.29 per song without copy protections, and $1.99 for copy protected television shows at this writing. Apple (2007) has contended it was the first company to create a profitable online media business that was consumer-friendly in terms of price and ease of use. Furthermore, Jobs (Apple, 2007) has maintained that its low pricing scheme was developed to discourage and prevent the piracy of copyrighted materials and lawsuits against consumers by the music and movie industries who mandated copy protections on their media content when sold online by Apple and others despite the unpopularity of copy protection software with consumers, academia, and online retailers who point out that compact discs are not copy protected when sold at retail outlets like WalMart. The music and film industries, however, point out that Apple is more interested in selling iPods and iPhones with large profit margins that might have pirated content than making sure that content providers can sell popular media content at market rates rather than fixed rates (Apple, 2007; Levy, 2005, 2006;
In fact, Edgar Bronfman Jr., the chairman of the Warner Music Group, has insisted that Apple share some of its iPod profits with the music industry since music industry content has driven iPod sales and some research has suggested that many iPods store pirated music (Apple, 2007; Levy, 2005, 2006). Jobs has pointed out that online music and movie stores owned by the music, television, and movie industries were not massively embraced by consumer, and that the online media download business was not profitable until Apple introduced the iTunes store and the iPod (Apple, 2007; Edutainment & Convergence Today, 2007; Levy, 2005, 2006).

In fact, Jobs called the music industry greedy, and suggested that consumers would begin pirating heavily if Apple did not keep prices low (Apple, 2007). NBC (2007) has begun streaming its television shows online for free to respond to Apple taking NBC’s programs off of the iTunes store after a contract dispute over market based pricing on iTunes (Apple, 2007; General Electric, 2007). While Disney owned ABC was the first network to stream its programs online for free, Fox, CBS, MTV Networks, and some Time Warner cable outlets have all begun streaming their programs online with advertisements to compete with Apple’s dominance (Newscorp, 2007; Time Warner, 2007; Viacom, 2007; Walt Disney, 2007). Apple (2007) has answered this challenge by introducing the iPhone which plays streamed content from the Internet, AppleTv which can record and replay television programming, and the iPodTouch which has Wi-Fi Internet connectivity like the iPhone and has the capability to access streamed
content via W-iFi if Apple when Apple decides to unlock it. This fight between the technology companies of Northern California and Washington and the Southern California and New York-based entertainment companies has impacted higher education because of the risk of copyright infringement lawsuits when professors use copyrighted media content in the classroom (Bagdikian, 2005; Lessig, 2001, 2004; McChesney, 2004). Bagdikian (2005), Lessig (2001, 2004), and McChesney (2004) have suggested that the impact of the copyright wars due to the passage of industry supported laws such as the Digital Millennium Copyright Act of 1998 and the Telecommunications Act of 1996 have created a chilling effect on academic freedom and fair use. Apple (2007) took a different path with educational institutions when it introduced educational podcasts on iTunes.

The educational podcasts downloads have generally been free from iTunes unless purchased from the History Channel, Discovery Networks or any commercial channel. Most educational podcasts were products of universities, professors and students; the educational podcasts and video podcast were so well received that Apple created iTunesU, so that universities can create and distribute their own virtual distance learning classes through iTunesU for free (Apple, 2007; Apple Computer, 2006; Farkas, 2006, 2007; Stanford University, 2006). Apple has developed Macintosh laptops and desktop computers that have utilized Intel processors and can run the Microsoft operating systems, XP and Vista, the Mac operating system OSX Leopard, and the Linux operating
systems which are open-sourced software (Apple, 2007; Apple Computer, 2006; Farkas, 2006, 2007; Kelby, 2006).

Apple changed the entertainment landscape when it introduced the iPod which began as a music player in 2001, but has since transformed the iPod, the iPhone, and now the iPod Touch, into three of the most coveted embodiments of convergence with the following features: a video player; a music player; a digital audio recorder, a gaming device, a digital storage drive, a digital transfer tool, a digital photo album, a stop watch, an alarm clock, a phone book, a personal organizer, a calendar and an educational tool (Apple Computer, 2006; Farkas, 2006; Kelby, 2006; Kirriemuir, 2002a, 2002b; King, 2003). Apple introduced the iPhone and Apple TV in 2007 at its Macworld Convention and made full entry into convergence; since, the iPhone allows tactile interaction with the screen to make phone calls, download content, and view images in various sizes and formats concurrently (Apple, 2007). Further, the iPhone has enabled viewers and callers the ability to make phone calls without phone key buttons (Apple, 2007). The iPhone sold more than 1 million units in approximately three months at the prices of $499 and $599 (Apple, 2007). Apple (2007, 2008) has now transformed the iPhone into a business smart phone through frequent software updates that work with Microsoft software through the contributions of developers who can now register to develop licensed iPhone software for a small fee. At this writing Apple (2008) is introducing the second generation of the iPhone that will work with the high speed, also known as 3G, phone and high definition networks. Apple (2008)
through convergence has transformed the cellular phone into a portable media
device, computer device, store and downloading device, recording device, and
camera that will permit consumers to eventually utilize its iChat software which
permits individuals to have live video conversations with the iPhone as Apple’s
computer customers have been able to do for more than five years.

Microsoft’s contribution to higher education are as follows: the omni-
present Microsoft Word software program that most students and scholars have
used to create written papers; the PowerPoint presentation program which has
been the standard software for making public, business, and academic
presentations (Gates, 1995; Microsoft, 2006, 2007; Slater, 2004); the Internet
Explorer browser which allows navigation of the Internet (Gates, 1995; Microsoft,
2007; Slater, 2004); and the Excel spreadsheet program which has the
mathematical, accounting, business, and scientific computation program of
choice in academia (Microsoft, 2006, 2007; Slater, 2004).

Recently, Microsoft (2007) introduced the Zune media player and the
Surface platform that utilized touch-based technology to do everything from
commercial art, school projects, business collaboration, and business
transactions. Moreover, Microsoft created the Xbox gaming system that has been
utilized for fun and serious purposes by the military, academic institutions, and
non-government organizations (Reid Cornwell, personal communication, August
Prensky, 2006; Robert Wisher, personal communication, August 20, 2007). In
fact, Microsoft co-founder and chairman Bill Gates has consistently advocated for the collaboration of convergence technology and innovative educational methods for much of the last two decades, and has been using his fortune, strategic business alliances, and the Bill and Melinda Gates Foundation to fund schools and universities that employ technology–based learning (Dell & Fredman, 2000; Gates, 1995, 1999; Microsoft, 2006, 2007; Slater, 2006). In the next section this review of literature will succinctly chronicle the development of online search and pay technology, and then briefly discuss how these services are impacting higher education. Critical to this discussion will be a brief discussion of free Internet search, electronic search, electronic mail, online storage, instant messaging, online news, really simple syndication, and the transformation of advertising because of convergence (Anderson, 2006; Battelle, 2005; Castro, 2005; Farkas, 2006, 2007; Slater, 2004; Vise & Malseed, 2005).

Another company surviving the dot-com bust of the 1990s and has continued to thrive today is Amazon (Amazon, 2006, 2007; Anderson, 2006). Amazon created an entire online business model of creating an entire catalog of relatively low sellers to create profits based on volume (Anderson, 2006). When Jeff Bezos of Amazon created this model in 1994, it ran counter to traditional business retailing which relied on large inventories and low prices to make profits (Amazon, 2006; Anderson, 2006; Bianco, 2006; Fishman, 2006) just as Wal-Mart had done to become the largest retailer in the world (Bianco, 2006; Fishman, 2006; Friedman, 2004; Marcus, 2004). Amazon became one of the largest online
retailers of books, digital video discs, compact discs, online media, cameras, digital music, toys and many other products through its unique strategy of using entire inventories of content and products rather than just hot sellers (Anderson, 2006). Anderson (2006) has referred to this as the long tail and he has pointed out that one of the primary reasons for the long tail has been convergence technology which eliminated the necessity of keeping large inventories of content or products that can be shipped directly or downloaded immediately through the Internet or even through RSS feeds for pre-orders of digital content (Amazon, 2007; Apple, 2007; Friedman, 2004; Marcus, 2004). Amazon (2007) has entered the video, handheld device; movie and music download business utilizing Microsoft software to compete against Apple, WalMart, and Best Buy. Amazon’s introduction of its Kindle electronic book reader and multi-media device and its introduction of its online book service that enables purchasers with Amazon accounts to read books that they have purchased online on Amazon’s site from any location with any device that is online (Amazon, 2007). The Kindle device has the opportunity to transform the printed book into portable electronic content that will enable universities, students, and scholars to collaborate, publish, study, research, and write publications online via wikis, blogs, podcasts, website and electronic books directly from the universities and researchers instead of media conglomerates (Amazon, 2007; Anderson, 2006; Apple, 2007; Bagdikian, 2005; Friedman, 2004; Jenkins, 2006; Lessig, 2001, 2002, 2004). Researchers and writers from multiple disciplines and perspectives have suggested that
companies like Amazon that promote digital publishing can do everything from spread scholarly knowledge in a more democratic fashion, reduce text book costs for students, create new revenues for universities via digital publishing arms at all colleges and universities, create learner-centered research and classroom tools, and promote free speech without the influence of media conglomerates and political interests that often suppress knowledge and free speech in the interests of profits and power (Amazon, 2007; Anderson, 2006; Apple, 2007; Bagdikian, 2000, 2005; Davis, 2004; Friedman, 2004; Lessig, 2001, 2002, 2004; Google, 2007; McChesney, 2004; Microsoft, 2007; Tapscott & Williams, 2006; The Center for Public Integrity, 2000, 2007; Willinsky, 2006).

The final commercial entity that has emerged through convergence and impacted higher education and entertainment is Google (Google, 2007; Vise & Malseed, 2005). Google (2007) began as a dissertation project at Stanford University with Larry Page and Sergei Brin (Vise & Malseed, 2005). Google (2007) developed its popularity through its search technology and the advertising revenues derived from the search technologies, its YouTube video advertising, its research technologies, and its free software properties (Vise & Malseed, 2005). Google (2007) has developed so many technologies that have blurred the line between free use, privacy rights, government intrusion, and copyright laws that its has attracted laws suits and court battles with everyone from the Bush Administration, Viacom, and Microsoft. Google (2007) has driven the Internet advertiser-based business model that has provided services and software for
free, and supplanted the traditional subscription model that was the paradigm for media companies.

The power of convergence has been discussed in this section. Also, examined were how online companies like Microsoft, Google, Amazon, Apple, and Yahoo have transformed media, consumer buying behavior and how the products and services from these companies have impacted higher education (Amazon, 2007; Apple, 2007; Castro, 2005; Farkas, 2006, 2007; Google, 2007; Holtz, 2005a, 2005; Microsoft, 2007; Tapscott & Williams, 2006). According to Rhodes (2001), Farkas (2006, 2007), and Sperling (2000) the future of higher education seemingly will be aided by these new interactive technologies such as blogging, RSS, and podcasts. These technologies have allowed for content on demand, tailored research, instant feedback, and time shifting (Amazon, 2006, 2007; Apple, 2007; Apple Computer, 2006; Anderson, 2006; Farkas, 2006, 2007; Googin, 2006; Google, 2006, 2007; Holtz, 2005a, 2006b; Kelby, 2005; Rhodes, 2001; Slater, 2004; Vise & Malseed, 2005; Yahoo, 2006; Young & Simon, 2005; YouTube, 2006, 2007; Zemsky, Wegner & Massey, 2005). Rhodes (2001), Farkas (2006), and Holtz (2005a, 2006b) have insisted that convergence has not only impacted higher education but has begun to transform it with the next wave of convergence to include digital films, multi-media players with large storage capacities, and interactive video games. Thus convergence technologies such as video games and the Internet have already demonstrated nearly four decades of success as an assessment tool in the military and research
universities and slightly more than fifteen years of use with civilians (Gee, 2003a, 2003b; Halter, 2006; Jenkins, 2006; Prensky, 2001, 2006) in education internationally. According to Gee (2004, 2005) and Jenkins (2006) serious gaming has become one of the most lucrative areas for the future of higher education.

The Next Wave: The Influx of Digital Video, Music and Games in Academia

Hollywood digital films were introduced during late summer, 2006, by Apple (2006, 2007) and Amazon (2006, 2007) as Apple and rival Microsoft (2006) continued their competition with Sony (2006, 2007) and Nintendo (2006, 2007). They have provided content for the living room as the computer has served as the master hub for entertainment, information, security, appliance and power monitoring centers, telephony through voice over Internet protocol, video and movies through Internet protocol television and digital storage (Apple Computer, 2006, 2007; Gates, 1998; Microsoft, 2006, 2007; Sony, 2006, 2007). Apple, Google, Microsoft, Sony, and Nintendo have utilized RSS, wireless technologies and podcasting to download and distribute their content, but in order for them to get in the living room they have had to enhance their current technologies such as AppleTV, Media Center, Xbox gaming platforms, Sony Playstation III gaming platforms, and the Wii gaming platforms. Some have considered purchasing (Apple, 2007; Google, 2006; Microsoft, 2006; Sony, 2006) TiVo which is the software company that is best known for its devices that directly recorded content
from cable or broadcast television digitally to create virtual time shifting just like a
digital video recorder according to Holtz (Holtz, 2005a, 2005b; Shel Holtz,
personal communication, December 6, 2005; TiVo, 2006). The adapting of TiVo
technology to multi-media devices has become available in the form of TiVo To
Go, and it is compatible with Apple products and devices that utilize Microsoft
software (TiVo, 2006; Shel Holtz, personal communication, December 6, 2006).
However, Apple has changed its software in the past to keep TiVo from
challenging its iPod business after referring to TiVo as having engaged in a form
of piracy (Apple Computer, 2006). Microsoft and Apple, as well as their gaming
rivals Sony and Nintendo, have offered differing versions of gaming, digital
storage, wireless capabilities, online multi-player capability; multi-media players,
distribution, interactivity and Internet connectivity (Apple, 2007; Microsoft, 2006;
Nintendo, 2006; Sony, 2006).

Convergence has empowered games with the ability to play online against
opponents throughout the world as well as how to get tips on playing games and
cheat codes to defeat the computer when playing solo (Bonk & Dennen, 2005;
Gee, 2003a, 2003b; 2005; Jenkins, 2006; Prensky, 2006). Multi-player online
games offer higher education students the opportunity to conduct online research
by interacting with other students on what information and concepts that a given
player must know in order to play a serious academic game well and develop a
Gaming, especially violent games and sports-based games, have traditionally been embraced by males, especially younger males; however, the creation of new reality based games such as The Sims, Wii-Fit, and Dance, Dance Revolution have begun to entice more girls and adult women to use them (Gee, 2003b; Gee, 2005; Prensky, 2006). Prensky (2006) referred to younger gamers of both genders as digital natives because these individuals have grown up with rich media based video games their entire lives. Additionally, Prensky (2006) identified gamers who have not had access to digital technology and gaming from birth as digital immigrants.

Halter (2006), Prensky (2006), and Gee (2005) have pointed to the military as developing sophisticated games and volumes of research on gaming for nearly forty years (Bonk & Dennen, 2005; Bonk & Wisher, 2000; Sitzmann et al., 2007). The military has created modern armed forces which have rapidly transformed into a fully digital defense force that trains in virtual environment. In fact, one of the most used video games in the world is the United States Army’s America’s Army game which is a free download and has been one of the most effective recruiting tools ever created (Halter, 2006; United States Army, 2006). The game has remained popular during war time, and has been utilized with the Army’s edutainment-based marketing campaign “Army Strong” and the Army’s online video reality series An Army of One that chronicles new recruits as they progress through training (United States Army, 2006). As mentioned previously, first person shooter games and other violent games have been very closely
associated with gaming; however, a new group of games titled serious games are beginning to have a major positive impact from both a financial and learning perspective on the gaming scene and education in general (Bonk & Dennen, 2005; Bonk & Wisher, 2000; Gee, 2003b, 2004; 2005; Jenkins, 2006; Prensky, 2001, 2002, 2006; Rhodes, 2001; Traci Sitzmann, personal communication, August 20, 2007; Robert Wisher, personal communication, August, 20, 2007).

By late fall, 2006, Nintendo created the first mass-produced, massively adopted, affordable, physically interactive gaming system called the Wii (Nintendo, 2006). The Wii was different from other personal gaming systems because it forced a player or multi-players to physically use their hands through swinging motions, boxing motions and other physical movements to play the games (Nintendo, 2006) while watching their simultaneous matching movements on screen. The Wii gaming console was cheaper than industry leaders Sony’s Playstation III and Xbox; and it was designed to appeal to the casual game player, women and families as evidenced by its recent marketing campaign and its sales numbers that have been exceeding the industry leaders (Nintendo, 2006, 2007). The video game industry has become a larger business than motion picture industry through its combination of militaristic, single shooter, sports, adventure, movie based, chance-based and serious based games (Bonk & Dennen, 2005; Electronic Arts, 2006; Gee, 2003a, 2005; United States Army, 2006).
Video games have offered interactivity and simultaneous multiple story lines and decision based options that require critical thinking, instant analysis, simulated consequences, behavioral modification, rapid knowledge acquisition, and enhanced development of decision making skills in high stress environments (Bonk & Dennen, 2005; Bonk & Wisher, 2000; Brazil, Kim & Starbuck, 2004; Gee, 2003a, 2003b, 2004, 2005; Prensky, 2001; 2002, 2006; Rhodes, 2001; Traci Sitzmann, personal communication, August 20, 2007; The George Lucas Educational Foundation, 2005; The New Media Consortium, 2005; Robert Wisher, personal communication, August 20, 2007). Interactive video games have consistently demonstrated the ability to enhance critical thinking, the ability to accomplish multiple tasks rapidly while under stress, team building skills, enhanced decision making while under stress; the ability to absorb knowledge more quickly and integrate new learning skills more rapidly; and the ability to adapt behavior based on simulated consequences (Bonk & Dennen, 2005; Bonk & Wisher, 2000; Brazell, Kim & Starbuck, 2004; Gee, 2003a, 2003b, 2004, 2005; Prensky, 2001; 2002, 2006; Traci Sitzmann, personal communication, August 20, 2007; Sitzmann et al, 2007; The George Lucas Educational Foundation, 2005; The New Media Consortium, 2005).

Gaming has begun to find limited acceptance in academia for learning purposes, but acceptance is coming at great acceleration with the work of researchers such as Bonk & Dennen (2005), Bonk & Wisher, (2000); Gee (2003a, 20003b, 2004, 2005), Jenkins (2006), Kvavik & Caruso (2005), Prensky (2001,
2002, 2006), Sitzmann et al, (2007) and Wisher (Robert Wisher, personal communication, August 20, 2007). According to Kvavik & Caruso (2005) Colgate University required all of its students to register all electronic devices connected to the campus network because of bandwidth issues, and preliminary research indicated that students’ online usage pattern was primarily for educational purposes, followed by communications purposes and lastly for entertainment purposes. Few schools, however, have adopted gaming as an assessment tool, despite the evidence that gaming has been more of an interactive and non-biased assessment tool that consistently provides new challenges as a gamer progresses through the next level of games (Bonk & Dennen, 2005; Bonk & Wisher, 2000; Gee, 2003b, 2004, 2005; Jenkins, 2006; Kvavik & Caruso, 2005; Prensky, 2001, 2002, 2006; Rhodes, 2001; Sitzmann et, al., 2007). Gee (2003b), Jenkins (2006), and Prensky (2002, 2006) have advocated that gaming become part of curricula nationally because of the interactive nature and the instant individual and group feedback capabilities for learners. Moreover, literature from the Defense Department, multiple disciplines, and from the United Kingdom have strongly indicated that gaming has been an effective teaching and assessment tool because of its highly interactive nature (Alberts, Gartska & Stein, 1999; Aldrich, 2002, 2004; Amory et. al, 1999; Beal & Christ, 2004; Betz, 1995; Blake & Goodman, 1999; Bonk & Dennen, 2005; Bonk & Wisher, 2000; Dempsey et. al, 1994, Dempsey et. al, 1996; Dempsey et. al, 2002; Department of Defense, 2004; Fabricatore, 2000; Helliar et al, 2000; Herz & Macedonia, 2002; Hollins, 2003;
Convergence in Miniature: The Impact of Cell Phones and Handhelds

Convergence has compelled the entertainment business to change because it has transformed into a technology and artistic business (Dizard, 2000; Farkas, 2006, 2007; Gershon, 2001; Jenkins, 2006; Lessig, 2004; Severin & Tankard, 2001; Vise & Malseed, 2005; Young & Simon, 2005). One of the major signatures of convergence devices is that they tend to be miniature versions, or enlarged versions, of standard devices with more computing power and several multi-media capabilities including cameras (Apple, 2007; Dizard, 2000; Googin, 2006; Jenkins, 2006; Microsoft, 2007; Nintendo, 2007; Nokia, 2007; Sony, 2007). Googin, (2006) and others (Apple, 2007; Motorola, 2006; Nokia, 2006; Verizon, 2006) have predicted that the digital cell phone technology will be the dominant handheld multi-media device in the future because there are more than 50 million cell phone owners in the United States alone, and this outnumbers the amount of iPod owners and laptop owners (Central Intelligence Agency, 2006). China has more than 100 million cell phone owners (Central Intelligence Agency, 2006). Googin (2006) and Nokia (2006) have advocated that the multi-media functions of cell phones equipped with video, still photography, music players, storage capability, electronic mail, and media players have become competitive with the
iPod and other handheld multi-media devices on quality, price and ease of use. However, the introduction of the iPhone in the United States and Europe in 2007 has already had companies changing designs and attempting to add new features such as a full screen video monitor, touch-based technology, individual voice messages on demand, Wi-Fi, and full Internet access to compete against Apple which already possesses iTunesU, and now AppleTV, so that a student has the ability to view a class on the small screen with the iPod or iPhone, on a medium size computer or television, or on a large digital high definition monitor or television with iTunes through the use of Apple TV (Apple, 2007; Farkas, 2007). Microsoft (2007) has introduced the flat coffee table computer with proprietary software called Surface that has enabled users to physically touch screens to move items, obtain prices, obtain data, separate multiple items and open up digital documents for viewing among other features. Gates has maintained that the touch based software and voiced based software will expand the reach of devices like cell phones and multi-media devices (Apple, 2007; Microsoft, 2007). The iPhone and the iPodTouch also have touch-based software that enables users to shrink or expand screens (Apple, 2007). Googin (2006) and others (CNN, 2007; TMZ, 2006; Yahoo, 2007; YouTube, 2006, 2007) have pointed out that cell phones have changed news coverage as many media outlets have actively begun to obtain content directly from viewers and readers on breaking news. Recent events that have disclosed police brutality in Los Angeles, police officers disguised as hooded protesters in Canada, the Virginia Tech massacre,
Michael Richards making very insensitive racial remarks on stage, terrorist attacks, terrorist recruiting and propaganda video, Gulf War coffins of deceased soldiers, and military personnel engaging in acts that border on torture all began as cell phone pictures or recordings that found their way to video sharing sites on the Internet (TMZ, 2006, 2007; YouTube, 2006, 2007).

In fact, numerous Internet web sites have developed software that converted their sites to mobile sites for handheld devices reasoning that digital cell phones, and even more expensive smart phones, were more affordable than portable laptop computers, and because there are more cell phone owners than laptop owners (Apple, 2007; Facebook, 2007; Googin, 2006; Google, 2006, 2007; Microsoft, 2006, 2007; MySpace, 2007; Nokia, 2007; Samsung, 2007; Sony, 2007; Time Warner, 2007; Yahoo, 2006, 2007; YouTube, 2007). Google (2007) has recently introduced interoperable mobile technology called Android that has enabled multiple wireless devices and cell phones to provide interoperability and an open-sourced environment by co-operating with software developers and telecommunications companies. Media companies, the NCAA (2007), and professional sports leagues with cable and online outlets have begun airing mobile episodes of their content, so that viewers can see condensed or completely new episodes of their favorite television or sports programs usually in shorter time frames for the smaller screens of cell phones, iPods and portable gaming consoles (Apple, 2007; Major League Baseball, 2007; National Basketball Association, 2007; National Football League, 2006, 2007; NewsCorp,
The cell phone and other digital handheld multi-media devices are now called the third screen; and telecommunications and cable companies have marketed in advertisement wireless phones as one of three screens with the television and computer screens comprising the other two screens (AT & T, 2006, 2007; Comcast, 2006, 2007; Google, 2006, 2007; Verizon, 2006, 2007; YouTube, 2006, 2007). The popularity, the portability, the low cost, and the personal nature of the third screen has also made it a target for everyone from advertisers, media firms, to pornographers to politicians to terrorists who want to get their messages out to their intended audiences (Apple, 2007; Current TV, 2006; Googin, 2006; Google, 2006, 2007; Jenkins, 2006; Lane, 2001; Microsoft, 2007; Motorola, 2007; Nintendo, 2007; Nokia; Sony, 2007; YouTube, 2006, 2007). In February 2009, all television will broadcast in high definition and the analog electromagnetic spectrum space will increase the ability and the traffic of handhelds like the iPhone, the iPodTouch, and gaming devices to download content, view streamed media content, send electronic mail, upload content, and make phone calls wirelessly through the clouds (Apple, 2007; Google, 2007; Tapscott & Williams, 2006). This fact might radically change the way that AT&T, Verizon, and Sprint provide products, services, and charge consumers; since, Google is the world’s largest producer of online advertising, and has now begun embedding advertisements with its YouTube videos and has entered into the area of radio advertising (Google, 2007; YouTube, 2007). The Federal Communications Commission has the power to regulate broadcasting,
and has been actively promoting telecommunications competition and granting spectrum licenses to companies like Google, Microsoft, or Apple via auction or post-spectrum auction acquisition may transform phone service to an advertising-based model or hybrid-based model with multiple access points such as Wi-Fi, WiMax, cellular, and BPL also known as broadband power line service through power companies such as Constellation Energy (Apple, 2007; Constellation Energy, 2007; Federal Communications Commission, 2007; Google, 2007; Microsoft, 2007).

In this section of the literature review, the contributions of several companies and highlighted a few of researchers who have contributed to the field was discussed. The next part of the literature review will provide a comprehensive overview of the following areas that affect the telecommunications industry and this overview will be followed by a specific discussion on the impact on the following areas that directly or indirectly affect convergence, edutainment and higher education: government policy; corporate influence, the legal system the sociological impact; the psychological impact; the impact on healthcare; the impact on diversity; the impact on labor; the impact on national security; the impact on entertainment and the impact on higher education.
The Impact of Edutainment and Convergence on Higher Education

The impact of edutainment and convergence on high education has been the ability of universities worldwide to increase access to higher education through distance learning (Rhodes, 2001). Massive distance learning was pioneered in the United Kingdom according to Rhodes (2001). One of the results of this phenomenon has been that convergence has now impacted higher education on a massive scale throughout the world as interactive technologies that have been in existence are now beginning to be transformed with gaming technologies (Baldwin, McVoy, & Steinfield, 1996; Gee, 2003a, 2003b; Gershon, 2001, Heller, 2001; Jenkins, 2006; Pavlik, 1998; Sperling, 2000; Zemsky, Wegner & Massy, 2005).

The rise of online educational institutions like the University of Phoenix, and use of distance learning by traditional universities has resulted in more choices for students seeking higher education, and financial rewards for the institutions (Baldwin, McVoy, & Steinfield, 1996; Gershon, 2001; Heller, 2001; Olesen, 1996; Pavlik, 1998; Sperling, 2005; Zemsky, Wegner & Massy, 2005). Rhodes (2001), the former president of Cornell, has maintained that the Ivy League and elite universities are unlikely to encounter issues of survival from cyber schools because most of the Ivy Leagues schools have already created cyber schools of their own, and many of their cyber schools were not cheap. In fact, Duke University (2006) charged more than $80,000 for a designer M.B.A. degree program remote degree for executives throughout the world. Smaller
universities have employed distance learning as a source of new revenue, since more classes can be theoretically offered even when physical space or additional faculty have not been available for traditional courses (Rhodes, 2001).

Internationally several nations have created mega-universities that used remote teaching via television and the Internet to reach large audiences with quality instruction often a fraction of the unit cost of conventional research universities (Rhodes, 2001; Rosenberg, 2001; Willinsky, 2006). For example, Andalou University in Turkey had nearly 600,000 students and a unit cost of one-tenth that of the average for other universities in Turkey (Rhodes, 2001; Rosenberg, 2001). China’s TV University had more than 530,000 students; Indonesia’s Terbuka University had approximately 350,000 students (Rhodes, 2001). Britain’s Open University had nearly 160,000 students at its mega-university at a unit cost of 50 percent of other universities in the United Kingdom (Rhodes, 2001). In fact, eleven countries have mega-universities with 100,000 students per university and these electronic programs do not have be low quality endeavors according to Rhodes (2001) and Rosenberg (2001). As mentioned previously many museums have embraced interactive online museums and interactive live museums that utilize new technologies such as downloadable exhibits for computers, iPods and cell phones (Hawkey, 2005). Hawkey (2005) has also maintained that interactive museums have facilitated multiple types of collaboration-between museum and learner, between institutions, and among learners themselves. For example, virtual learners can interact with live learners...
about exhibits or answer questions on a collection (Hawkey, 2005). Interactive
technologies have also enabled digital and live visitors to create a personalized
learning experience that a visitor can bookmark, save, photograph, or record with
a digital handheld device like an iPhone and upload it to a blog or website when
making a live visit or if visiting virtually (Hawkey, 2005). Hawkey (2005) regarded
webcasts as a way of introducing the human dimension to the digital, so that a
bridge exists between the live and online visitors to create greater dialogue.

The University of Phoenix has utilized online education coupled with
smaller brick and mortar complexes to provide its students with options and to
answer educational and political critics who are feeling pressure from the
financial success and student enrollment figures (Rhodes, 2001; Rosenberg,
2001; Sperling, 2000; University of Phoenix, 2006) of the Arizona school.
Traditional brick and mortar campuses such as the University of California at
Berkley (2006), Duke University, 2006, 2007; the University of Maryland at
College Park (2006) and the Massachusetts Institute of Technology (2006) offer
many, if not all, of their courses online (Apple, 2007; Heller, 2001; Rhodes, 2001;
Rosenberg, 2001; Zemsky, Wegner & Massy, 2005; Willinsky, 2006). In fact, the
Massachusetts Institute of Technology has continued to offer all of its courses
online to the general public for free; however, one would need to apply, be
accepted and pay tuition to MIT to receive college credit (Massachusetts Institute
of Technology, 2006; Willinsky, 2006).
Bergen emphasized that the future of schooling may be more tied to play than to work (Bergen, 2000). Olesen (1996) extended Bergen’s notion further by maintaining that most learning in the future will take place through a technologically mediated learning and enjoyment combination, and that learners will expect to enjoy educational experiences (Rhodes, 2001; Rosenberg, 2001; Saunders & Smalley, 2000). As mentioned previously, Robert Heyman has been credited with coining the phrase edutainment as far back as 1973 while developing and producing multi-media programs for the National Geographic Society (Google, 2007; New Canoe University, 2007). Heyman was innovator ahead of his time and he has continued promoting and producing innovative educational media materials while serving as a senior executive at the Education Development Center think tank and later as the provost for New Canoe University (Google, 2007; New Canoe University, 2007). However, Olesen (1996) was one of an expanding group of scholars, other than Heyman and Sperling (2000), to use the term edutainment and advocate its massive use in age of convergence. Bergen, Gee, Heller, and Olesen have contended that schools may no longer be the site for learning, because students in any setting (Bergen, 2000; Dizard, 2000; Gee, 2003a, 2003b, 2004, 2005; Heller, 2001; Olesen, 1996; Rhodes, 2001 Rosenberg, 2001; Zemsky, Wegner & Massy, 2005) can use edutainment and convergence technology anywhere.

Presently, institutions of higher learning have been courted by media, energy and gaming companies, students, and employers to embrace
edutainment; and several of the former are literally showing schools the money in the form of financial donations, internships and jobs for students (Apple Computer, 2006; Duke University, 2006; Farkas, 2006, 2007; Google, 2006; Lucas Entertainment, 2006; Microsoft, 2006; Rhodes, 2001; Rosenberg, 2001; Sony, 2006; Stanford University, 2006; University of Southern California, 2006; Vise and Malseed, 2005). Many students and some educators have been actively assisting and advocating the merger of edutainment and convergence so that entertainment, gaming, communications technologies, digital devices and learning techniques can be utilized to accomplish predetermined educational outcomes for students (Aldrich, 2004; Dizard, 2000; Farkas, 2006; Gee, 2003a, 2003b, 2004, 2005; Goggin, 2006; Jenkins, 2006; Olesen, 1996; Prensky, 2001, 2006; Rhodes, 2001; Rosenberg, 2001; Saunders & Smalley, 2000).

Three large multi-national technology companies, Apple, Google, and Microsoft have been attempting to accelerate the use convergence of edutainment and convergence in academia through the development of products and services such as iTunesU, the iPhone, the iPod, Xbox, Microsoft Word, Internet Explorer, Excel, PowerPoint, Google search, YouTube, the Alexandria digital library project and blogger (Apple, 2007; Google, 2007; Microsoft, 2007; Tapscott & Williams, 2006; Vise & Malseed, 2005). However, it is the development of free collaborative social networking and web based software tools such as Delicious, Digg, Facebook, Flickr, MySpace, Wordpress blogging software, Vox blogging software, Yahoo Groups, and YouTube that have
impacted universities and caused changes in everything from academic policy, academic research, how class work is done, how homework is done, how professors and students interact, and how universities interact with students and its key stakeholders (Delicious, 2007, Digg, 2007; Facebook, 2007; Flickr, 2007; MySpace, 2007; Tapscott & Williams, 2006; Yahoo, 2007; YouTube, 2007).

Technocrats Versus Anti-Technocrats: A New University Debate

This section has been devoted to a debate that has been taking place in higher education for more than three decades since Sesame Street aired and Heyman coined edutainment (Gee, 2004, 2005; Google, 2007; Heller, 2001; Jenkins, 2006; Kellner, 1990; Postal, 1993; Rhodes, 2001; Sperling, 2000). This debate has been spirited, but it has begun to become contentious as universities now have full convergence tools at their disposal (Bagdikian, 2005; Bonk & Wisher, 2000; Farkas, 2006; Gee, 2003a, 2003b; Heller, 2001; Jenkins, 2006; Kellner, 1990; Kvavik & Caruso, 2005; Postal, 1993; Rhodes, 2001; Sitzmann et al., 2007; Robert Wisher, personal communication, August 20, 2007). As more colleges fully have implemented full convergence vehicles such as Apple’s iTunesU, Cisco’s TelePresence, Google’s YouTube and Blogger, Yahoo’s Groups, and Microsoft’s Zune Marketplace, there will be a few spirited debates based on three primary issues: the administration has attempted to replace professors with technology, the administration has watered down education and it will not make a huge difference, and the professor's opportunities for

On one side of debate are the technocrats (Heller, 2001), the technocrats have advocated for implementing edutainment and convergence into the class and through interactive distance learning and gaming (Gee, 2003a, 2003b; Googin, 2006; Jenkins, 2006; Pope, 2006; Prensky, 2006; Rhodes, 2001). The technocrats have pointed out that education has always been a collaborative and competency based field that should implement edutainment and convergence in its many forms to assist the university in its mission to educate and graduate students (Aldrich, 2002, 2004; Apple, 2007; Bonk & Wisher, 2000; Gee, 2003a, 2003b; Googin, 2006; Halter, 2006; Heller, 2001; Jenkins, 2006; Leslie, 1993; Microsoft, 2007; Prensky, 2006; Rhodes, 2001; Traci Sitzmann, personal communication, August 20, 2007; Sitzmann et al., 2007; Tapscott & Williams, 2006; Robert Wisher, personal communication, August 20, 2007).

Technocrats have contended that universities should be open to innovation since much of the convergence technology was created at institutions of higher learning (Abbate, 2000; Aldrich, 2002, 2004; Boot, 2006; Gee, 2003a, 2003b; Gates, 1995, 1998; Halter, 2006; Heller, 2001; Kvavik & Caruso, 2005; O’Harrow, 2005; Willinsky, 2006; Robert Wisher, personal communication, August 20, 2007). Finally, the technocrats have asserted that distance learning has been effectively implemented in China, Turkey, Indonesia, and in the United
Kingdom which has a population similar to the United States (Rhodes, 2001). Finally, technocrats have asserted that most traditional schools and all of the Ivy League have off-site courses available and its estimated that more than 2 million people are enrolled in distance learning programs, and the University of Phoenix has experienced large enrollment and profit numbers that anti-technocrats have used their influence to attack the University of Phoenix, Regis University, and similar universities because they are gaining traction with students and employers (Farkas, 2006; Halter, 2006; Heller, 2001; Holtz, 2005a, 2005b; Jenkins, 2006; Pope, 2006; Rhodes, 2001; Sperling, 2000). Technocrats have charged that anti-technocrats have not considered that many students, especially non-traditional students, have to work, take care of children and adult relatives, have been inhibited in traditional classroom settings and the ability to time-shift allows students more time with loved ones (Farkas, Heller, 2001; Jenkins, 2006; Pope, 2006; Rhodes, 2001).

On the other side of the debate are the anti-technocrats like Kellner (1990) and Postman (1993), the anti-technocrats have maintained a majority at American universities because they have asserted that technology despite its benefits has a few crucial dark sides that subvert legitimate learning: technology is detrimental because its ease of use undermines certain mental processes; technology ruins social relationships because it discourages direct human contact; and technology often corrupts the fundamental moral foundation of societies because it makes things like war more palatable and sanitary. Despite
the vocal critics of conservative media pundits and politicians such as Sean Hannity (2006), Rush Limbaugh (2006), Bill O’Reilly (2006), and Newt Gingrich (2006) have maintained that college faculties and administrators are very liberal, many technocrats have stated that college faculties and administrators are actually conservative in nature and seldom embrace beneficial change that is student centered curricula changes and technology until they are forced to do so and this often places many institutions in competitive disadvantages (Bok, 2003; Gee, 2003a, 2003b, 2004, 2005; Heller, 2001; Jenkins, 2006; Rhodes, 2001). Several scholars have maintained that without the conservative influence of scholars such as Kellner (1990) and Postman (1993) that distance learning via edutainment and convergence would have already been implemented on a massive scale like the United Kingdom, China, Turkey and Indonesia (Bok, 2003; Gee, 2003a, 2003b; Heller, 2001; Jenkins, 2006; Rhodes, 2001; Sperling, 2000) and there would be no debate on the issue. Anti-technocrats have pointed out that higher education has been taking place nearly four hundred years in America and more than 800 years internationally without technology, so why radically change a system that has consistently passed the test of time (Gee, 2003b; Heller, 2001; Kellner, 1990; Postman, 1993; Rhodes, 2001; Tapscott & Williams, 2006). Finally, anti-technocrats have argued that the university campus experience has had certain traditions and relationships that are nurtured because of social interactions between students and professors and distance learning threatens these relationships as well as the jobs of teachers because distance
learning is nothing but an inferior form of education because it has taken away the human factor of social interaction (Gee, 2003b; Heller, 2001; Kellner, 1990; Postman, 1993; Rhodes, 2001).

According to Gee (2003a, 2003b), Heller (2001), Jenkins (2006) and others (Farkas, 2006; Prensky, 2001, 2006; Stark & Lattuca, 1997) traditional academia may be compelled to accept edutainment and convergence for the following reasons: increasingly it has been what many students prefer; it has been more convenient for non-traditional students who work and have family considerations; it has been cost effective for universities based on the experiences of international and domestic universities; the technology has been more interactive and customized to fit the needs of both the curricula and students, and media and technology corporations will use any means necessary to gain entry into an extremely profitable education market place now that their products and services have become reasonably affordable, learner-centered, student approved, and employer friendly (Bagdikian, 2001, 2005; Farkas, 2006; Gee, 2003a, 2003b, 2005; Heller, 2001; Jenkins, 2006; Lessig, 2001, 2004; McCombs, 2003, 2005; McLuhan, 1967, 1968; Pope, 2006; Prensky, 2001; 2006; Stark & Lattuca, 1997; Tapscott & Williams, 2007; The Center for Public Integrity, 2000). The ability to utilize edutainment and convergence for an individual student, an entire class, faculty assessment, evaluation, and as an interactive feedback tool that can be tailored for individuals and entire classes for a specific course based on the strengths and weaknesses of all of the participants provides
universities with constant data that is necessary to provide a student centered environment (Farkas, 2006, 2007; Gee, 2003a, 2003b, 2004, 2005; Heller, 2001; Jenkins, 2006; McCombs, 2003, 2005; Prensky, 2006; Moseley & Dessinger, 2007; Stark & Lattuca, 1997; Tapscott & Williams, 2006) that promotes interactivity and continuous improvement.

This literature review was interested in how entertainment techniques can be utilized in higher education to benefit students, professors and institutions (Apple Computer, 2006; Bok, 2003; Gee, 2003a, 2003b, 2004; Farkas, 2006; Google, 2006; Heller, 2001; Jenkins, 2006; Lessig, 2001, 2004; Sperling, 2000; Vise & Malseed, 2005; Zemsky, Wegner & Massy, 2005) while still providing quality instruction and preserving educational values (Bok, 2003; Lakoff, 2006; Rhodes, 2001; Zemsky, Wegner & Massy, 2005).

The Impact of Convergence and Edutainment on Learning Theory

The impact of convergence and edutainment on learning theory and adult learners has already influenced the Ivy League schools, flagship state universities and private and select schools with prominent science, engineering and medical schools such as Johns Hopkins, Stanford, and MIT have already instituted podcasting, video on demand, live video and audio streaming, blogs and websites to educate students (Apple, 2007; Duke University, 2007; Farkas, 2006, 2007; Gates, 1995, 1998; Gee, 2004, 2005; Jenkins, 2006; Johns Hopkins, 2006; Microsoft, 2006; MIT, 2006; Moseley & Dessinger, 2007; Rhodes,
2001; Stanford, 2006; Tapscott & Williams, 2006; Willinsky, 2006). Many of these schools have adopted the student centered approach to curricula advocated by McCombs & Whisler (1997), McCombs (2003, 2005) and Stark & Lattuca (1997) through the use of technology to recruit, assess, educate and graduate students. McCombs (2003, 2005) has been an advocate for the learner-centered approach to curriculum, teaching and learning for students ranging from kindergarten to high school, to minority and disadvantaged learners to college and adult learners in her various capacities as a professor, consultant and researcher with the American Psychological Association (McCombs & Whisler, 1997).

As mentioned previously in Chapter I, adult learning in its present state is far too complex a phenomenon to explain with one single theory (Moseley & Dessinger, 2007). In fact, Merriam (2001) has advocated that a much more vibrant model is what presently exists that allows a multitude of theories, ideas, and frameworks that permits us to see the same phenomenon from different angles. Indeed, the impact of edutainment and convergence technologies according to Gee (2004, 2005), Jenkins (2006) and Willinsky (2006) has resulted in open access that has enabled smaller and financially challenged schools to utilize the Internet to digitally publish, to gain access to research, literature, media, materials, games, simulations and other content from various viewpoints in adult learning theory to assist non-traditional and traditional students.

Edutainment and convergence, especially in video games and simulation models involves self-directed learners who solve problems immediately where
there are clear learning or performance objectives, systematic design and
implementation of learning and performance activities and consistent and
frequent evaluation and feedback (Gee, 2004, 2005; Merriam, 2001; Moseley &
Dessinger, 2007). Finally, edutainment and convergence, especially video
gaming and simulations, has enabled learners to learn from every day living
experiences as well as gaming environments to practice developing a new skills
intentionally within a highly unstructured environment (Gee, 2004, 2005; Marsick
& Watkins, 1990; Jenkins, 2006; Tapscott & Williams, 2006). The results of these
gaming, simulation, and other edutainment based learning experiences which
includes new information, past experiences, and reflection often has lead to
transformational learning that has empowered a learner to change his or her
performance or outlook (Brookfield, 1991; Freire, 1970; Gee, 2004, 2005)

Stark & Lattuca (1997) and McCombs (2003, 2005) have recommended
that learning and curriculum development become student –centered, which has
echoed the ideas of Gee, (2004,2005); Marsick & Watkins, (1990); Tapscott &
found that adult learner’s tend to prefer single-concept, single-theory courses that
focus on applying concept to relevant problems. Gee (2004, 2005) has
maintained that video games and simulations are designed as learning and
problem solving vehicles that can also enable educators and even learners to
diagnose academic strengths and weaknesses.
Finally, Zemke & Zemke (1995) and Stark & Lattuca (1997) have indicated that curricular elements are important to maximize the learning experience for adult learners, provide strategies for learning and organizing the content and provide the opportunity to provide practice, feedback and recognition. The impact of edutainment and convergence on learning theory is still in its infancy because edutainment and convergence is still developing and academics have not fully embraced the technology or the techniques like video games, simulation, role-playing, and fully interactive digital and traditional classes according to Gee (2004, 2005) and Rhodes (2001). However, the impact of edutainment and convergence has impacted adult learning theory because now researchers can design video games, blogs, podcasts and simulations to obtain feedback from students, provide recommendations and evaluations and to test and develop the many adult learning theories (Duke University, 2007; Farkas, 2006, 2007; Gee, 2004, 2005; Jenkins, 2006; Stark & Lattuca, 1997; Zemke & Zemke, 1995). In short, edutainment and convergence has impacted adult learning theory by utilizing these theories in a student-centered approach that has been advocated by Duke University (2007), Gee (2006, 2007), MIT (2006), and Stark & Lattuca (1997).

Finally, a Warning: Media Deregulation and How It Impacts Education

Government policy created by lawmakers, regulators, court decisions, judges, corporate lobbying and higher education research has acted in concert to create public policy promoting new technologies and de-regulation of the
communications industry (Abbate, 2000; Anderson, 2006; Aronowitz, 2000; Bagdikian, 2000, 2005; Baldwin, McVoy & Steinfield, 1996; Battelle, 2005; Beal & Christ, 2004; Bok, 2003; Dizard, 1998; Gershon, 2001; Pavlik, 1998; The Center for Public Integrity, 2000; United States Commerce Department, 2001; Zemsky, Wegner & Massy, 2005). The telecommunications industry, as well as higher education research, has helped to drive much of the technological advances that have developed new entertainment techniques that encouraged interactivity, play, simulation and multi-media use that is utilized in distance learning and edutainment (Gershon, 2001; Olesen, 1995; Olesen, 1998; Severin & Tankard, 2001). According to Maureen A. Lewis of the National Telecommunications and Information Administration’s Office of Policy Analysis and Development in a presentation at Morgan State University, government policies over the past four decades have created a de-regulatory atmosphere that has simultaneously promoted the development of new technologies that has resulted in media convergence, and later media consolidation (Abbate, 2000; Bagdikian, 2001, 2005; Jenkins, 2006; Leslie, 1993; Maureen Lewis, personal communication, September 29, 2001; McChesney, 1999, 2004; Vise & Malseed, 2005; Young & Simon, 2006). However, while the businesses, government agencies, and non-government organizations have adopted convergence technology and some edutainment techniques on a massive scale, education as a whole, whether it has been post-secondary, secondary or primary education has been the last major industry, and arguably the most important industry, to begin adoption of
convergence technology and edutainment (Aronowitz, 2000; Gee, 2003a, 2003b, 2004, 2005; Halter, 2006; Iacocca, 2007; Jenkins, 2006; Lessig, 2004; Prensky, 2001, 2006; Tapscott & Williams, 2006; Willinsky, 2006). Aronowitz (2000), Dobbs (2006), and Iacocca (2007) has suggested that the global competitive advantages that the United States had from the 1990's is temporary unless some institutional changes are enacted by higher education: a future of joblessness will not be a metaphor; therefore lifetime learning and even guaranteed living wages, despite its dislike by industry and political idealists, will be forced upon American society to preserve competitiveness globally and to prevent social upheaval.

The power of the media consolidating to approximately ten multi-national conglomerates worldwide have impacted higher education costs directly in the form of computer, software, energy, phone, wiring, video cameras for security and classes, publications fees and subscriptions for online and print copies, software licenses, text book costs and of course legal fees to defend the university when the media conglomerates have sued universities when students or professors allegedly violated copyright laws by downloading or copying new media and printed publications (Bagdikian, 2005; Fisher, 2004; Lessig, 2001, 2004; McChesney, 2004; Vaidhyanathan, 2001, 2004; Zemsky, Wegner & Massey, 2005).

Just Sue the Customer Because the Corporation is Always Right

In this decade, the film, music and software industries have become extremely protective of their intellectual rights, and this has caused a major rift
between academia and many of these firms that now benefit from technology that was developed from tax dollars at public universities who are now coming back to sue universities for technology that was initially created on college campuses by creative students or by federal or private grants (Bagdikian, 2005; Lessig, 2001, 2004; McChesney, 2004; Vaidhyanathan, 2001, 2004). The most recent example of this occurring was with Blackboard recently deciding to vigorously defend some of its intellectual property claiming that Blackboard created a commonly used technology and that Blackboard would demand compensation from competitors and violators (Bagdikian, 2005; Lessig, 2001, 2004) in academia. Critics of media conglomerates charged that this was an abuse of the copyright system and that the copyright system must be changed or totally overhauled because the global media conglomerates and other corporations have spent so much money in Congress over the past 22 years that lawmakers and court judges have nearly eliminated fair use and personal use protections that are based on Supreme Court precedent and existing laws (Bagdikian, 2005; Lessig, 2001, 2004). Willinsky (2006) and Lessig (2004) have recommended that higher education can successfully overcome the copyright problems by adopting open access digital publishing that is controlled by the universities under a creative commons license. According to Willinsky (2006) and Lessig (2004) higher education creates the research and literature that is utilized by commercial industries, and therefore could create more opportunities
for more knowledge to be shared from other sources because the peer review process often keeps innovative research out of circulation.

In short, the costs for digital text books, podcasts, document downloads, streaming classes, wikis, blogs and emails could publishing costs and learning materials downward or at least made affordable for students in a learner centered environment rather than a media industry driven publication process (Aronowitz, 2000; Bagdikian, 2001, 2005; Gee, 2003b, 2004, 2005; Lessig, 2001, 2004; Stark & Lattuca, 1997; Willinsky, 2006). At the end of day Aronowitz (2000), Iacocca (2007), Willinsky (2006) and Tapscott & Williams (2006) have suggested that collaboration and brainpower will drive American competitiveness in the global economy that has become increasingly technology driven, and higher education will lead the way.

In this section of the literature review an emerging theme developed that will re-occur throughout the rest of this section that sounds like the title of a famous movie: *The Good, the Bad and the Ugly*. This review of literature has focused on edutainment and convergence and how it can be utilized in higher education.

The Psychological Impact of Convergence

From a psychological perspective, the impact of convergence is profound because one can now be totally accessible 24 hours per day by email, instant messaging, pager, palm pilot, cellular phones, global positioning, voice mail other
wireless devices (Baldwin, McVoy, & Steinfield; 1996; Gershon, 2001; Jenkins, 2006; O’Harrow, 2005; Risen, 2006). The Schramm model of communication involves a sender encoding message to a receiver who decodes the message and sending it back with an encoded response is now an instant phenomenon because of direct-response technology (Pavlik, 1998; Severin & Tankard, 2001; Zettl, 2003). The concept of noise is anything that interferes (Pavlik, 1998; Zettl, 2003) with the communications process is becoming an occasional annoyance and a reason to switch one’s wireless service if calls frequently drop (Comcast, 2006; SprintNextel, 2006; Verizon, 2006). In fact, the technology has become so reliable that cross country long distance calls or radio walkie talkie calls via cell phone can actually be cheaper than a landline call (Motorola, 2006; Nokia, 2006; SprintNextel, 2006; Verizon, 2006). Hybrid communications electronic products enable one to concurrently talk on the phone while listening to music and checking one’s email with a cell phone or laptop (Farkas, 2006; Googin, 2006; Jenkins, 2006; Lessig, 2004; Motorola, 2006; Nokia, 2006; Sony, 2006).

From a psychological perspective, the concept of privacy is becoming elusive because of convergence and the fact that media properties are owned a few multi-national firms, and government agencies are actively passing new laws and policies that erode privacy rights (American Civil Liberties Union, 2006, 2007; Brzezinski, 2004; Green, 2006; Moore, 2003, 2007; Napolitano, 2004, 2007; O’Harrow, 2005; The Center for Public Integrity, 2000; The Electronic Frontier Foundation, 2006). The ability of social networking sites such as YouTube,
Facebook, Digg, Technorati, MySpace, and TMZ have the ability to instantly post video clips online and directly to cell phones for the whole world to see of everyone from public officials, corporate executives, professors, and ordinary citizens engaging in everything from professional conduct to unethical conduct to illegal activities within seconds literally because of their collaborative nature (Digg, 2007; Facebook, 2007; MySpace, 2007; Napolitano, 2004, 2007; Tapscott & Williams, 2006; Technorati, 2007; TMZ, 2007; YouTube, 2007). In fact, social networking networks such as Facebook (2007) and MySpace (2007) began as college based and youth based sites that have recently faced criticism from their customer base for marketing practices and advertising deals that allegedly intruded on the privacy rights of members, so that the social networks could monetize their large member bases through personal recommendations of trusted members within the interlinked groups. Both Facebook (2007) and MySpace (2007) have exclusive advertising deals with Internet competitors Microsoft and Google respectively, and both social networking firms have changed their policies in response to member criticism and pressure from law enforcement to prevent criminal activity such as the solicitation of minors by pedophiles which has received heavy media attention (NBC, 2007).

Technologies such as GPS or global positioning satellite have enabled corporations, private detectives, and law enforcement track a person by car, by cell phone, or by electronic chip (Moore, 2003, 2007; Napolitano, 2004, 2007; O’Harrow, 2005; Risen, 2006; YouTube, 2007) without their knowledge.
Biometric technologies that have been used to fight the war on terror at airports, 
border, and train stations have been used by local and state law enforcement 
agencies that have created intelligence agencies that have maintained data on 
private citizens without their knowledge (Moore, 2003, 2007; Napolitano, 2007; 
O'Harrow, 2005; Risen, 2006; YouTube, 2007). The recent use of electronic 
eavesdropping by federal agencies to spy on American citizens and foreign 
nationals with the cooperation of nearly all of the major telecommunications and 
nearly all of major Internet electronic mail providers alike under the provisions of 
the Patriot Act to fight the war on terror has resulted in lawsuits, public criticism, 
lobbying by the President to obtain corporate immunity, media reports, and 
Congressional investigations (American Civil Liberties Union, 2007; AT&T, 2007; 
Electronic Frontier Foundation, 2007; Google, 2007; Green, 2006; Microsoft, 
Verizon, 2007; SprintNextel, 2007; Time Warner, 2007; Yahoo, 2007; YouTube, 
case to prevent the government from having access to its customers and 
technologies as part of an effort to catch child predators by the then Attorney 
General of the United States Alberto Gonzales. Yahoo (2007) admitted to 
supplying data to the Chinese government that enabled that government to 
imprison a Chinese dissident. Yahoo (2007) later publicly apologized to the 
family of the dissident, divested itself of majority ownership in its Chinese venture 
and made reparations to the family.
Finally, identity theft became a major issue as numerous government agencies, credit companies and large universities have had their computers successfully hacked or have lost laptops with personal data of thousands of consumers, students and citizens having had their privacy compromised (American Civil Liberties Union, 2007; Electronic Frontier Foundation, 2007; Google, 2007; Moore, 2003; Napolitano, 2004, 2007; O’Harrow, 2005; YouTube, 2007).

Conclusion

This literature review chronicled the following: the historical relationship between academic, religious, government, industrial, and military institutions from antiquity to the present in using edutainment; the role of the American defense department in funding the research that led to the creation of convergence and edutainment; the commercialization of edutainment and convergence by innovative technology firms with academic ties; the role of deregulation and lobbying in shaping and transforming the entertainment business through consolidation; the implications of edutainment and convergence for higher education; the technocrats versus anti-technocrats debate; and the good, the bad, and the ugly results of edutainment and convergence; and how edutainment and convergence have impacted privacy, free speech, and academic freedom. Edutainment and convergence as a tandem has not been available to the masses for enough time because of the recent technological developments to
provide a summative evaluation in the civilian academic world at this point in time (Apple, 2007; Bonk & Dennen, 2005; Bonk & Wisher, 2000; Cisco, 2006; Farkas, 2006, 2007; Gee, 2004, 2005; Googin, 2006; Google, 2007; Intel, 2006; Jenkins, 2006; Microsoft, 2007; Prensky, 2006; Sitzmann et al., 2007; Sony, 2006; Tapscott & Williams, 2006; You Tube, 2006, 2007). If one were to evaluate true edutainment and convergence one would have to begin with year of 2006 because 2006 is the first year where there were multiple handheld multi-media devices, smart phones, cell phones, online services and gaming platforms were introduced that possessed full convergence capabilities (Amazon, 2007; Apple, 2007; Cisco, 2006; Farkas, 2006, 2007; Gee, 2003b, 2005; Googin, 2006; Google, 2007; Heller, 2001; Intel, 2006; Jenkins, 2006; Microsoft, 2007; Prensky, 2006; Sony, 2007). True convergence is defined as the ability of an electronic multi-media device to play quality video, audio, music, access data, download from the Internet and communicate with others in real time (Cisco, 2006; Farkas, 2006, 2007; Googin, 2006; Intel, 2006; Microsoft, 2006; Jenkins, 2006; Prensky, 2006; Sony, 2006).

President Bush (2004) has maintained that wireless fidelity, also known as Wi-Fi, broadband power line service, and new technologies such as white space Internet access on open high definition broadcast channels in local markets that is being promoted by some of leading software, information, and high tech companies such as Microsoft, Google and other companies are the future communication vehicles for America. White space technology, for example,
would make Internet access available to anyone with a high definition television set when high definition television becomes standard in early 2009. However, this research examined the collaborative impact of edutainment and convergence and how it could be utilized in higher education based on the work of Tapscott & Williams (2006), and Robbins (1986, 1989, 1997, 2005) and others (Gee, 2005; Prensky, 2006). There are several studies and college initiatives that have indicated that convergence technology has been effective as a learning tool (Bygdas, 2006; Campus Consortium for Environment Excellence, 2004; Duke University, 2007; Farkas, 2006, 2007; Kvavik & Caruso, 2005; MIT, 2006;).

In short, edutainment and convergence represents an opportunity for higher education to adopt a learner centered approach that speaks directly to students at a multi-sensory level and enables learners to repeatedly practice desired new skills through simulation while concurrently obtaining direct and virtual feedback and evaluation (Bygdas, 2006; Farkas, 2006, 2007; Gee, 2003a, 2003b, 2004, 2005; McCombs, 2003, 2005; Robbins, 1986, 1989, 1997, 2005; Stark & Lattuca, 1997) in a collaborative digital environment (Gee, 2004, 2005; Jenkins, 2006; Prensky, 2001, 2006; Tapscott & Williams, 2006; Willinsky, 2006). This study endeavored to advocate for the utilization of edutainment and convergence as part of an overall student-centered approach to learning, pleasure while learning, and utilizing concrete experiences with content to understand abstract concepts in collaborative, virtual and three dimensional environments (Bandler & Grinder, 1975, 1979; Farkas, 2006, 2007; Gee, 2003a,
2003b, 2004, 2005; Jenkins, 2006; Prensky, 2006; Robbins, 1989, 2005, 2007; Tapscott & Williams, 2006; Willinsky, 2006). This concludes the literature review of this dissertation. In the next chapter, the researcher will discuss the methods utilized, why they were utilized and what research model was utilized.
CHAPTER III

METHODOLOGY

Methods

This chapter sought to answer the questions presented by discussing the conundrum that researchers have utilizing qualitative research methods as opposed to quantitative research methods; why this researcher decided to utilize qualitative research methods for this study on edutainment and convergence; the struggles the researcher contended with when deciding on the use of a specific qualitative methods; why this researcher decided on a case study method for this research; and why this researcher is used technology to gather data.

I found the most precise way to answer the research questions was to review the methods section of my proposal, to relive the awe of revising the entire methods section by adding new documentation, to make the decision to use qualitative or quantitative methods, and to select a particular qualitative method, and to utilize certain technologies as a data collection method.

The Qualitative Versus Qualitative Conundrum

One of the most spirited debates within academia has been the choice of research methodology that one utilized for a particular research project (Creswell, 2003, 2005). According to Creswell (2003, 2005) there have been two primary methodologies, and one emerging methodology: qualitative research,
quantitative research and mixed methods. Merriam (1988) and later Creswell (1994) have argued that qualitative researchers are concerned and interested in the process rather than outcomes or products; meaning or how people make sense of their lives, experiences and structures of the world. The qualitative researcher has been utilized as the primary instrument for data collection and analysis (Creswell, 2003, 2005). Qualitative research has often involved fieldwork with the researcher physically going to the people, setting, sites, or institution to observe or record behavior in its natural setting; qualitative research is descriptive in that the researcher is interested in process, meaning and understanding gained through words or pictures; and qualitative research is inductive in that the researcher builds abstractions, concepts, hypotheses, and theories from details (Creswell, 2003, 2005).

Creswell’s (2003, 2005), Denzin & Lincoln (2003), Frey & Fontana (2003), and Lincoln’s and Guba’s (1992) texts were the primary works that guided this research and I chose the case study tradition which enabled this researcher to provide a holistic story on edutainment and convergence from those who utilize it (Creswell, 2003, 2005). Denzin & Lincoln (2003) and Frey & Fontana (2003) specifically provided the guidance that enabled this research to transform from a traditional qualitative study that was guided by the researcher into a participant guided study that utilized the participants as guides to this researcher in making sense of edutainment and convergence from the perspective of entertainment professionals. While there were originally three research questions that guided
this study, I found several questions emerging from the participants (Denzin &
Lincoln, 2003; Frey & Fontana, 2003) that further clarified and expanded the
three research questions; these questions “negotiated the text.”

Qualitative researchers have rejected the idea that social sciences can be
studied with the same methods as the natural and physical sciences; have felt
that human behavior has always been bound to the context in which it occurs;
hence, behavior has to be studied holistically, in context, rather than being
manipulated; and that the insider’s perspective of qualitative research has
created an intensely personal and subjective style of research (Creswell, 2003,

The Problem Statement Guided Methodological Inquiry

Much of the future of higher education has been predicated on the
convergence of technology (Dizard, 2000; Farkas, 2006, 2007; Gee, 2003a,
2003b, 2004, 2005; Gershon, 1999; Kinkaid, 1998) and even more importantly,
the ability of the media to create entertainment techniques and technologies that
can be utilized by both instructors and students (Apple, 2007; Gee, 2004, 2005;
Gill, 1998; Gill, 1978; Lessig, 2001; Microsoft, 2007; Nintendo, 2007; Nokia, 2007;
Olesen, 1996; Prensky, 2006; Sony, 2007; Tapscott & Williams, 2006; Verizon,
2007; YouTube, 2007). This research determined how entertainment techniques
could be utilized in higher education from the perspective of entertainment
professionals.
Edutainment has been a developing field, therefore, this research sought to obtain information directly from the creative people who utilize entertainment techniques regularly, rather than educators and researchers who often provide secondary data (Allendar, 1981; Calder, 1977). The problem has been exacerbated by the fact that educators and entertainment professionals have not worked together extensively to create a large body of research on edutainment and convergence that utilized entertainment techniques and technology for this writer to have utilized (Gee, 2004, 2005; Heller, 2001; Jenkins, 2006; Prensky, 2006; Rhodes, 2001; Robbins, 1989, 2003; Tapscott & Williams, 2006). There are volumes of research on instructional techniques and philosophies on learning and thinking but few linking learning theory with edutainment and convergence concepts (Hatch, 1997; Knowles & Associates, 1984; Lenz, 1982; Senge, 1990; Stark & Lattuca, 1997). However, this research distinguished itself because it focused on edutainment and convergence and its utilization from the entertainment professional perspective (Apple, 2007; Farkas, 2006, 2007; Gates, 1995; Gee, 2003a, 2003b; Google, 2006; Halter, 2006; Jenkins, 2006; Nintendo, 2006; Prensky, 2006; Rhodes, 2001; Robbins, 1989, 2005, 2007).

This research also sought to find out (Anderson, 1987; Creswell, 2003, 1998; Williams, 2003) how entertainment creative professionals utilized entertainment techniques to create interest, to create a repeat desire to view or listen to entertainment programming again and to find out which entertainment techniques were be transferable to education and why these techniques were

This study was one that sought to give voice to a group, entertainment professionals, that were usually voiceless in academic instruction and creating learner-centered classrooms and curriculum (Allendar, 1980; Bergen, 2000; Creswell, 2003; Creswell, 1998; McCombs, 2003, 2005; Robbins, 1989, 2005, 2007; Severin & Tankard, 2001; Stark & Lattuca, 1997). Further, this study sought to discover which entertainment techniques could assist educators in higher education in attracting, teaching and retaining underrepresented students.

Canadian researcher, McLuhan (1967) contended that the media is the message, and that it gradually has had effects upon individual perceptions and thoughts, especially television, because television it is multi-sensory based. He predicted that television would re-tribalize society and transform it into a global village (Dobbs, 2004; Lessig, 2004; McLuhan & Fiore, 1968; O'Harrow, 2005).

McLuhan's belief in the power of media effects has been elusive to research because McLuhan talked about effects that would take years to occur (Champy & Hammer, 1993; Dobbs, 2004; Fenton, 2005; Lessig, 2004; McLuhan & Fiore, 1967; O'Harrow, 2005; Gray, 1979; Severin & Tankard, 2001) according to Severin and Tankard.
The Researcher’s Role

There was a personal reason for embarking on this research (Creswell, 2003, 2005). This writer has worked in the communications field for the past twenty years as a communications professional and a film and television producer, director and writer. The recent history of the telecommunications industry and the current state of higher education has been two topics that have interested this writer. This researcher may interview some informants that he has worked with, or worked for, in the past on film or communications projects. If the researcher had worked with an informant in the past, he has not worked with any of the informants since 2001 on any projects. The researcher freely acknowledges this fact because it is this fact that has enabled the researcher to contact many of these busy and hard to reach professionals and obtain permission to interview them and contact others for this research project (Creswell, 2003).

Since I have been attending graduate school since 2001, I have produced fewer national films. Therefore, most of the subjects interviewed will not have worked with this researcher since 2001 as mentioned earlier. This is well within the ethical standard established by this researcher’s employer, the United States Government, of two years of contact with prior co-workers (Social Security Administration, 2005). Readers should also know that I traveled throughout the country to interview subjects, also unknown to the researcher. This writer has long been interested in why people can watch television, attend a movie, or a
show for more than hour with no problem; yet, these same people become
disinterested or bored within fifteen minutes in a classroom setting.

Since the background of this writer has been entertainment based, I was
curious as to why most educators had not worked directly with entertainment
professionals to find out what techniques entertainment professionals use, how
these techniques were employed, and which techniques were transferable to
higher education (Creswell, 2003; Jenkins, 2006; Rhodes, 2001). This writer
possesses a dual entertainment and education background and decided to limit
his informants to no more than half of the participants who have dual
entertainment and education backgrounds. Much of the existing research on the
topic of edutainment has been done mostly on children (Bergen, 2000; Gerbner,
1977; Olesen, 1996). The researcher is the owner of all research obtained;
however, the researcher used personal agreements with participants in
accordance with recommendations from Berg (2001) and Creswell (2003).

The researcher’s entire plan for the study was submitted to and approved
by the Institutional Review Board at Morgan State University for approval. In
accordance with ethical standards recommended by Creswell (2003, 2005) and
others (American Psychological Association, 2007; American Sociological
Association, 2007; American Anthropological Association, 2007), this study
provided informed consent forms, electronic correspondence and verbal
admonitions that advised informants of their voluntary right to withdraw from a
study at any time, so that a participant was not coerced into participation (Creswell, 2003, 2005).

In fact, some participants did not answer some questions that they did not feel knowledgeable enough to answer or that they felt were private in nature (Creswell, 2003, 2005). Additionally, the subjects were also advised of the purpose of the study on the informed consent form, so that they understood the nature of the research and its likely impact on them; furthermore, the participants were advised of the procedures of the study on the informed consent form, so that participants could reasonably expect to what to anticipate in the research (Creswell, 2003, 2005). The participants were also be advised of their rights to ask questions, have their privacy protected, and told of any benefits that they will accrue from participating in the study (Creswell, 2003, 2005). Subjects were also advised in writing and verbally that some of their remarks will be utilized for a documentary and online sites that will be publicly viewed (Creswell, 2003, 2005). Finally, the signatures of both the researcher and the individual participant appear on each informed consent document (Creswell, 2003, 2005).

McLuhan, Edutainment and Convergence

As mentioned previously this research endeavored to explore whether McLuhan’s (1967) assertion that the media, not the content, is the message is a view shared by many media practitioners. This research directly spoke to actual techniques utilized by media professionals on television, film, video and the
Internet. McLuhan’s assertions that there (1968) were two different manners or styles of thinking pre-dated much of the work on the two brain hemispheres. McLuhan later credited his own work directly to the research done on the hemispheres of the brain.

Entertainment, like edutainment and education, has utilized a process that appeals to both sides of the brain, and researching how entertainment professionals appeal to both sides simultaneously could prove useful in the field of higher education (McLuhan, 1978; Pink, 2006; Severin & Tankard, 2001; Singhal & Rogers, 1999). The field of edutainment is relatively new, and there has been little research in this new field that directly questions entertainment professionals on how they have utilized edutainment, convergence and entertainment techniques to educate, entertain and students in higher education. Further, there was a gap in the research on this subject because the research that exists is based on children in a field that is relatively new for adults; and many of the new technologies utilized in edutainment are less than four years old and were introduced after this research began (Apple, 2007; AT&T, 2007; Bergen, 2000; Farkas, 2006, 2007; Gee, 2006, 2007; Gladwell, 2002; Jenkins, 2007; Microsoft, 2007; Nintendo, 2007; Olesen, 1996; Sony, 2007; Vander Werrf, 1999; Verizon, 2007; YouTube, 2007).
The Data Emanated From Entertainment Professionals

This research obtained information directly from entertainment professionals through individual interviews (Creswell, 1998, 2003; Marshall & Rossman, 1995; Merriam, 1998) to learn which techniques they employed and why they employed them and did when did they use them. Moreover, this research also looked at the specific entertainment techniques from the perspective of the entertainment experts who regularly have to keep audiences engaged and informed to earn a living. Since entertainment techniques have always been utilized in edutainment (Battelle, 2003; Bergen, 1996; McLuhan, 1967, 1968; Olesen, 1996; Severin & Tankard, 2001) it was important for educators to also gain a deeper understanding of what creative minds in the entertainment field were thinking and how they constructed or simulated reality for their audiences to make a point that they wanted the audience to understand (Farkas, 2006, 2007; Frey & Fontana, 2003; Gladwell, 2002; Halter, 2006; Jenkins, 2006; Prensky, 2006). It is important to remind the reader again that there were originally three research questions that guided this study, I found several questions emerging from the participants (Denzin & Lincoln, 2003; Frey & Fontana, 2003) that further clarified and expanded the three research questions; these questions “negotiated the text.”
What This Research Specifically Investigated

This study focused primarily on various entertainment techniques from the perspective of a media practitioner (Farkas, 2006; Dizard, 2000; Jenkins, 2006; McLuhan, 1967, 1968). Edutainment and entertainment techniques have been utilized in a traditional classroom setting, a non-traditional classroom setting or in a media technology environment because they do not necessarily have to employ technology (Dizard, 2000; Gee, 2003b, 2005; Jenkins, 2006; McCombs, 2005; Prensky, 2006; Robbins, 1989, 2005, 2007). This study will investigate specifically how edutainment would have been employed in a media technology environment, in a traditional classroom setting and a hybrid media technology and traditional classroom setting from the perspective of entertainment professionals (Farkas, 2005; Gee, 2003b, 2005; Jenkins, 2006; Jones, 2003; Kirriemuir, 2002a; 2002b; Kress, 2003; Levy, 2004; McCombs, 2003, 2005; Prensky, 2001, 2006; Robbins, 1989, 2005, 2007).

Rationale and Theoretical Framework

In order for this research to be undertaken several communications theories were employed as part of the theoretical framework. The primary theories that were utilized were the following: the theory of powerful media effects espoused by McLuhan, the communications expert theory, sense making theory, the community empowerment theory, media agenda setting theory, and the technology adoption model (Atkin & Rice, 2001; Cross, 1981; Davis, 1989;
Lenz, 1982; McCombs, 2005; McLuhan & Fiore, 1965; Severin & Tankard, 2001; Wimmer & Dominick, 2000). These theories will be further explained in this chapter.

Qualitative Emphases

This study was qualitative in nature because it was investigative in nature (Creswell, 2003). Qualitative research has roots that can be traced to cultural anthropology and American sociology (Creswell, 2003; Kirk & Miller, 1986) only recently has qualitative research been incorporated into educational research (Borg & Gall, 1989; Creswell, 2003). Locke, Spirduso, and Silverman (1987) and Creswell (2003) contended that the intent of qualitative research was to understand a specific event, group, role, interaction or social situation. Qualitative research has been an investigative and exploratory process that permitted the researcher to gradually made sense of a social phenomenon by contrasting, comparing, replicating, cataloguing, and classifying the object of the study according to Creswell (2003) and Miles & Huberman (1984). It was through immersion in the daily lives of informants and through ongoing interaction in the informants' world that a researcher begins to elicit the perspectives and meaning of the informants when engaging in qualitative research (Creswell, 2003; Denzin & Lincoln, 2003; Marshall & Rossman, 1989).

This qualitative case study was searching for answers to questions on entertainment techniques that cannot be statistically measured (Creswell, 1998;
Hammersley, 1990; Lincoln & Guba, 1985; Mays & Pope, 1996, 2000). According to Kirk & Miller (1986) and Mays & Pope (2000) the philosophy of qualitative and quantitative research should be an attempt to represent or discover subtle realism, and the concept of subtle realism has been acknowledged as one that attempts to represent that reality being researched rather than to find the unquestioned truth. Entertainment (Gill, 1998) has been an art that is affected by everything from politics, economics, race, class, education, environment, customs, history, relationships and the life histories of the creative professionals who work in the field of entertainment (Garon, 2002, Hampe, 1997). There was no one prescription that could be measured quantitatively and employed by this researcher (Creswell, 2003, 1998). This research employed a qualitative research strategy that was a hybrid design of that recommended by Creswell (1994, 1998, and 2003), Denzin & Lincoln (2003), Frey & Fontana (2003), and Marshall & Rossman (1995) that utilized taped in-depth interviews with multiple digital technologies to collect data and obtain feedback from the informants. The technology that was utilized to collect data enabled the participants and the researchers to act as participant observers answering the research questions though the use of electronic mail, and after reading their interviews on the Internet via the blog sites and verify their comments for accuracy (Denzin & Lincoln, 2003; Frey & Fontana, 2003).
Individual Interviews

Individual interviews were used to learn about the entertainment professionals, their backgrounds and why they decided to enter the field (Creswell, 1998, 2003; Wimmer & Dominick, 2000). The entertainment professionals were queried about various entertainment techniques that they use and why (Creswell, 2003; Farkas, 2006; Gee, 2003b, 2005; Googin, 2006; Google, 2006; Holtz, 2005a, 2005b; Jenkins, 20006; Kelby, 2006; Microsoft, 2006; Nintendo, 2006; Schmidt, 2000, 2004; Sony, 2006; Zettl, 2003 ). The informants were then be asked were there other techniques that they would like to have utilized, but have not had the opportunity to use (Creswell, 1998; Farkas, 2006; Garon, 2002; Gee, 2003b; 2005; Googin, 2006; Google, 2006; Hampe, 1997; Jenkins, 2006; Kelby, 2006; Microsoft, 2006; Nintendo, 2006; Schmidt, 2000, 2004; Sony, 2006; Zettl, 2003).

The Focus of the Individual Interviews

Additionally, the informants were asked how can entertainment techniques be used in education (Creswell, 2003; Creswell, 1998; Farkas, 2006; Gee, 2003a, 2003b, 2005; Googin, 2006; Kelby, 2006; McLuhan, Hutchen & McLuhan, 1977; McLuhan & McLuhan, 1988; Jenkins, 2006; Prensky, 2001, 2006; Rhodes, 2001)? The entertainment professionals then explained which techniques they used or would like to use that were transferable to the field of higher education and why these techniques were transferable to higher education (Creswell, 2003; Elliot,
The informants will then be asked why these techniques have not been employed more often in education (Farkas, 2006; Gee, 2003a, 2003b, 2004, 2005; Geiger, 2004; Googin, 2006; Jenkins, 2006; Kelby, 2006; Prensky, 2001, 2006; Rhodes, 2001; Severin & Tankard, 2001). The researcher allowed the entertainment professionals to essentially tell their stories with minimal interruptions, except to move the interview along timely, because this researcher had no idea what the informant would state and why the informant would say it (Creswell, 2003; Creswell, 1998; Denzin & Lincoln, 2003; Frey & Fontana, 2003; Levy, 2004; Garon, 2002; Hampe, 1997; Levy, 2004; Zettl, 2003).

The Use of Technology, Strategies and Multiple Interviews

Most of the informants were interviewed on the Internet, via videotape, and by iPod at least twice time and at least twice via electronic mail or collaborative real time electronic mail schedule because of the busy schedules of entertainment professionals and the sharp rise in gasoline and travel costs (Creswell, 2003; 1998; Farkas, 2006; Garon, 2002; Google, 2006; Hampe, 1997; Kelby, 2006; Levy, 2004; Microsoft, 2006; Yahoo, 2006). However, the researcher used Google’s free interactive Gmail for interviewing subjects and verifying responses; Vox’s free blogging service was used to document the research through multiple media links, Wordpress’ free blogging service was also
was used with VodPod video, Facebook, Digg, Delicious, Flickr for photos and YouTube to display written transcripts, video and pictures on the blog of the informants (Delicious, 2007; Digg, 2007; Facebook, 2007; Flickr, 2007; Google, 2007; Vodpod, 2007; Wordpress, 2007; Yahoo, 2007; YouTube, 2007). The goal of this research was to interview each informant at least three to four times (Creswell, 2003, 2005) during the six month study. Creswell (2003, 2005) has recommended eight primary procedural strategies that were frequently used and simple to implement in qualitative research which will be discussed in depth later: triangulation, member checking, rich and thick descriptions, stating researcher bias openly throughout the narrative, presenting negative or discrepant information that runs counter to the themes, peer debriefing, an external project auditor, and spending prolonged time in the field.

**Rationale, Common Themes, and Research Distribution**

The rationale for this approach was that the school semester is slightly less than six months in duration, so that the entertainment professionals were able to respond to the technological, creative, political, economic, and legal changes to the field of entertainment (Creswell, 2003; Creswell, 1998; Wimmer & Dominick, 2000). The interviews were transcribed (Creswell, 1998). All common themes and themes (Creswell, 1998; Mays & Pope, 2000; Wimmer & Dominick, 2000) that created stark contrasts were edited into a documentary on this research (Garon, 2002; Hampe, 1997; Levy, 2004; McLuhan & McLuhan, 1988).
Entertainment techniques were defined and illustrated by the researcher in layman’s terms (Creswell, 2003; Creswell, 1998). The documentary was distributed through multiple free and paid Internet portals such as iTunes, YouTube, Google Video (Apple Computer, 2006; Creswell, 1998; Google Video, 2006; YouTube, 2006) and on an Internet site in parts, so that other researchers can have access to the information. Moreover, some of the printed transcripts will be placed on free blogs that may require registration for those scholars who desire to read the entire interview, the results section, the literature review, the introduction or the section on further research and future implications (Google, 2006; MySpace, 2006). The entire dissertation and a modified audio and video version of the dissertation will be available for download for a small fee from Amazon.com, iTunes, and Learn Out Loud (Amazon, 2006, 2007; iTunes, 2007; Learn Out Loud, 2007).

Qualitative research provided this researcher with the opportunity to gain an in-depth knowledge about entertainment professionals and the techniques that they employed, and how these techniques could be utilized in higher education in concert with technology (Creswell, 1998; Hampe, 1997; Levy, 2004; McCombs, 2003, 2005; McCombs & Whisler, 1997; Wimmer & Dominick, 2000).

Participants

A total of eight professionals were interviewed because of the limitations of travel, time and money on the part of the researcher and the interviewees who
have busy schedules, travel obligations and financial commitments that impact their schedules and free time (Creswell, 2003; Wimmer & Dominick, 2000). Other professionals were interviewed for the literature review, background research, and verification purposes (Creswell, 2003, 2005). Finally, a rich and descriptive narrative write up of the field interviews which may include some of the following: observations, field notes, digital video discs of the interviews, a compact discs of the interviews, and other documentation will be included in the report of findings (Creswell, 2003; Hampe, 1997; Levy, 2004; Zettl, 2003).

This research attempted to add to the body of knowledge of two relatively new fields that are closely related and spur further research of the evolving fields of edutainment and convergence (Apple Computer, 2006; Bergen, 1996; Gee, 2003a, 2003b; 2005; Hampe, 1997; Heller, 2001; Jenkins, 2006; Levy, 2004; Olesen, 1996; Parker, 1990; Robbins, 1986,1989, 1997; 2005). This study will also enable educators, entertainment professionals, and researchers to work together to create innovative and different (Garon, 2002; Gee, 2003a, 2003b; 2005; Geiger, 2004; Gladwell, 2002; Hampe, 1997; Jenkins, 2006; Levy, 2004; Rhodes, 2001; Linda Suskie, personal communication, 2005; Robbins, 1986, 1989; 1997; 20005) ways to educate students in higher education that are stimulating, entertaining, fun, and encourage interaction (Bergen, 1996, Farkas, 2006; Garon, 2002; Gee, 2003a, 2003b; 2005; Gladwell, 2002; Googin, 2006; Hampe, 2002; Heller, 2001; McCombs, 2003, 2005; Olesen, 1996; Kelby, 2006; Robbins, 1986, 1989; 1997; 2005; Sperling, 2000).
This researcher was able to gain a greater understanding of the field of entertainment, various entertainment techniques, and the messages employed in the media by creative professionals (Hampe, 2002; Levy, 2004). Further, this researcher explored which entertainment techniques and convergence technologies were utilized, and why these techniques were utilized in the entertainment field (Farkas, 2006; Garon, 2002; Gee, 2003a, 2003b; Gladwell, 2002; Googin, 2006; Jenkins, 2006; Kelby, 2006). Finally, this researcher learned which techniques were transferable to education and why they were transferable to higher education (Aldrich, 2002; Amory et al, 1999; Farkas, 2006; Garon, 2002; Gee, 2003a, 2003b; Gladwell, 2002; Googin, 2006; Jenkins, 2006; Kelby, 2006; McComb & Whisler, 1997; McCombs, 2003, 2005).

The Research Model this Study Utilized and Emulated

This research produced information on how to utilize entertainment techniques through the use of technology. Additionally, this research produced information on how to use entertainment techniques to market higher education and the intellectual property derived from education through the use of media technology and entertainment techniques. This research looked for common themes (Creswell, 1998) from the experts, and utilized an edutainment research model and data collection tool utilized by James Lipton, Broadway and Hollywood producer and the host and professor for The Actor’s Showcase (Bravo Network, 2006, Pace University, 2008) television show that airs on the NBC-
owned Bravo Network on cable television. The television show was and has continued to be an actual university course for graduate and undergraduate students who attended Pace University, and previously the New School, in New York City (Bravo Network, 2006; Pace University, 2008) employed the entertainment techniques and technological approaches described by the entertainment experts. Cable television and radio programs usually have been presented in thirteen week periods that are nearly identical standard university offerings of fifteen weeks that allow for two week examination periods for mid-term and final examinations (Bravo, 2006; Comcast, 2006; Morgan State University, 2006; New School University, 2006; Pace University, 2008; Time Warner, 2006).

Lipton utilized direct questions of entertainment professionals in three fifteen minute parts and one fifteen minute portion for his students of the subject during the course of a one hour interview that is broadcasted (Bravo Network, 2006; New School, 2006; Pace University, 2008). During the first portion of the qualitative interview, which usually took place in a theatre, Lipton begins with the life history of the individual with specific emphasis on their family life, early school years, childhood memories and inspirations (Bravo Network, 2006; Pace University, 2008). The second portion of Lipton’s interview method focuses on the subject’s transformation from a late teen to their present state as a recognized leader in the entertainment field with specific emphasis on their early successful moments and inspirations (Bravo Network, 2006; New School, 2006;
Pace University, 2008). The third portion of Lipton’s interview method focused on the recent work of the subject, their present work and their personal philosophy on the entertainment world and advice for college students. The fourth portion is an open interview session with students (Bravo Network, 2006; New School, 2006; Pace University, 2008).

Methodology and Procedures Overview

Walter Gill, the former Telecommunications chairperson at Morgan State University in his book *A Common Sense Guide to Non-Traditional Urban Education* (1998) asserted the notion that creative artists have initiated and influenced social change throughout history because they have forged a link between art and resistance that moves “beyond art for art’s sake.” Gill further contended that it was the responsibility of teachers to hold the work of creative artists in high esteem and attempt to relate these creative works into the world of students, as students perceive it for improved academic achievement to take place.

Heller (2000) postulated in his book *The States and Public Higher Education Policy: Affordability, Access and Accountability* that higher education should give serious consideration to embracing communications technology and developing edutainment in the twenty-first century to compete for students against online universities and distance learning providers like the University of Phoenix (Apple Computer, 2006; Farkas, 2006; Garon, 2002; Googin, 2005;
Hampe, 1997; Jenkins, 2006; Kelby, 2006; Levy, 2004; Microsoft, 2006; Nintendo, 2006; Prensky, 2001; 2006; Sony, 2006; Sperling, 2000; Vise & Malseed, 2005). Olesen (1996) maintained that edutainment and digital convergence technology are two of the top ten technologies for the next ten years in terms of profitability and providing a consumer service. It was important to note at this juncture that throughout this study the phrase edutainment techniques, convergence, and the phrase entertainment techniques will be used interchangeably, unless specifically identified by the researcher. The rationale for this was that edutainment techniques, convergence, and entertainment techniques tend to mirror each other due to the influence of convergence technology (Bravo Network, 2006; Farkas, 2006; Gates, 1995, 1998; Jenkins, 2006; New School, 2006; Vise & Malseed, 2005; Young & Simon, 2005).

This qualitative research aimed to collect information directly from creative entertainment professionals, and utilized the information collected from the research participants to create a virtual digital construct in the form of a blog and eventually a documentary after the defense of the dissertation (Bravo Network, 2006; Farkas, 2006; Creswell, 2003; Garon, 2002; Hampe, 1997; Jenkins, 2006; Kelby, 2006). This construct utilized edutainment techniques and convergence technology to provide data to educators to do the following: provide accredited courses to adults in higher education in a manner that profits professors and institutions financially. This construct also provided information on how students could obtain degrees in partnership with brick and mortar institutions, through the
podcasts, video podcasts, cell and smart phones, free Internet video on demand site, live simulcasts on satellite radio and television, TiVo to go, gaming platforms, and on demand or scheduled digital cable or satellite broadcasts. (Apple Computer, 2006; Farkas, 2006; Googin, 2006; Google, 2006; Microsoft, 2006; Nintendo, 2006; Sony, 2006; Vise & Malseed, 2005; YouTube, 2006). This research was a case study, but it utilized a variety of qualitative research techniques, which will be presented next in the research design and theoretical framework section.

Research Design and Theoretical Framework

A study of this nature required a theoretical framework of several communications theories as a rationale for selecting the type of study that was conducted: sense making theory, expert theory, community empowerment theory, media agenda setting theory, the technology adoption model, and the powerful media effects theory (Atkin & Rice, 2001; Davis, 1989; Severin & Tankard, 2001; Wimmer & Dominick, 2000).

This research was a qualitative case study (Creswell, 1998; Merriam, 1988; Yin, 1989) that combined intensive interview techniques, micro-ethnographic techniques and phenomenological techniques (Berg, 1997; Lindlof, 1991). Merriam (1988) asserted that there was no standard format for reporting case study research. Creswell (1998) contended that the overall intent of the case study ultimately shapes the larger structure of the written narrative.
The overall intent of this research was to investigate how entertainment techniques can be utilized in higher education from the perspective of entertainment practitioners through in-depth interviews, observations, electronic mail, field notes and documents (Hampe, 1997; Levy, 2004; Stake, 1995; Wolcott 1990b).

According to Wimmer & Dominick (2000) the most important advantage of in-depth interviews was the wealth of detail that it provides. Moreover, Wimmer & Dominick (2000) maintained that there are six reasons why intensive interviews were unique: they usually use smaller samples; they provide detailed background about the reasons subjects provided certain answers; they allowed for lengthy observation of subjects’ nonverbal responses; they were usually very long and often took more than one session; they were customized to individual subjects; and they were influenced by the interview climate, and the degree of rapport that was established between the interviewer and the subjects.

In this study, sense making theory was employed (Atkin & Rice, 2001; Creswell, 2003; Severin & Tankard, 2001) because sense making theory required that subjects be interviewed in settings, like home or work, or where they felt comfortable providing information, and were more likely to provide personal or confidential thoughts freely while knowing that they were being observed and taped. In this research, most the subjects were accustomed to being interviewed and interviewing individuals, since the subjects are media
professionals with decision-making authority or the ability to influence or affect the final media product.

In this study communications expert theory was used by the researcher as part of the research design, and the community empowerment theory was also used. Communications expert theory required that the researcher obtain information directly from communications professionals who possessed expertise in utilizing entertainment techniques (Atkin & Rice, 2001). Furthermore, communications expert theory according to Atkin & Rice (2001) also involved getting information from the experts’ perspective, which required the researcher to immerse himself into the field for extensive periods of time (Severin & Tankard, 2001). The community empowerment theory was also utilized because this research took place within the entertainment professional community and directly gave voice to professionals working in the entertainment community (Atkins & Rice, 2001; Berg, 1997; Severin & Tankard, 2001; Wimmer & Dominick, 2000).

The technology adoption model (Davis, 1989; Venkatesh & Davis, 2000) was utilized in this research because the technology adoption model is user-centered just as Stark & Lattuca (1997) and McCombs (1997, 2003, 2005) have maintained that instruction and curricula was student centered. The technology adoption model has been characterized as such: users adopt new technologies if the technology has a perceived ease of use and the technology assists the user in completing the task that the user has desired to complete (Davis, 1989, Venkatesh & Davis, 2000). This study investigated whether entertainment
professionals inform professors on how to utilize edutainment and convergence, so that these techniques were perceived as easy to use and could aid professors in educating students (Davis, 1989; Venkatesh & Davis, 2000). This research attempted to identify how edutainment and convergence could be learner-centered and how it could also be faculty friendly (Amazon, 2007; Apple, 2007; Bandler & Grinder, 1975, 1979; Blackboard, 2007; Farkas, 2006, 2007; FESTA Futurelab, 2004; Gee, 2003a, 2003b, 2004; 2005; Google, 2007; Halter, 2006; Jenkins, 2006; McCombs, 1997; McLuhan, 1967, 1968; Microsoft, 2007; Prensky, 2006; Robbins, 1989, 2005, 2007; Stark & Lattuca, 1997; Tapscott & Williams, 2006; Yahoo, 2007; YouTube, 2007).

Media agenda setting was employed as a result of media professionals being queried about how entertainment techniques can be utilized in higher education and delivered to the public through a variety of electronic mediums (Wimmer & Dominick, 2000). Media agenda setting theory asserts that the media prioritizes what should be seen, heard and read, and what will not be seen, heard, and read on media outlets (Wimmer & Dominick, 2000). The recent media consolidation of media worldwide (Bagdikian, 2005; Lessig, 2001, 2002, 2004) gives credibility to this notion. In this research the media set the agenda for the discussion once the basic research questions were asked by the researcher (Wimmer & Dominick, 2000).

This study was also part micro-ethnographic according to Berg (1997) because it is more concerned with analyzing a smaller subgroup or profession. In
this study the profession consists of 6 entertainment professionals who provided their opinions on how entertainment techniques can be utilized in higher education. Micro-ethnographic studies have been characterized by four qualities according to Wimmer and Dominick (2000), micro-ethnographic studies puts the interviewer in the middle of the topic under study because the researcher goes to the data rather than the data going to the researcher; micro-ethnographic studies emphasized studying an issue or topic from the subject’s frame of reference; micro-ethnographic studies involved spending a considerable amount of time in the field; and micro-ethnographic studies utilized a variety of research techniques including observation, interviewing, diary keeping, photographs, and videotapes.

This study began as a case study, yet it emerged, in part, as a phenomenological one (Creswell, 1998) because it did the following: the study focused on the phenomenon of edutainment and its application in higher education; the study produced a final product that was the result of the descriptions of the subjects; and the study will be heuristic because it helped people understand what was being studied and it developed new insights and perspectives (Wimmer & Dominick, 2000).

Those informants who agreed to participate in the study received a seven question, open-ended questionnaire gathered demographic and occupational data to prepare for the interviews.
Participants in this study were recruited based on their employment in the field of entertainment (Creswell, 2003). The participants were contacted electronically, by phone and email, to confirm their participation in the study (Appendix A). The researcher will utilize personal contacts, referrals from subjects, also known as snowballing, and online industry materials to contact subjects in various cities.

No inducements were offered, but refreshments were offered before, during and after the interviews.

Procedure

As previously mentioned, eight to twelve participants were contacted by phone or electronic mail to participate in the study based on the investigators status as an experienced member of the entertainment community. They were advised that the interviews will be conducted utilizing the style of Lipton (Bravo Networks, 2006; Pace University, 2008) and similar questions; however, these interviews did not have a studio audience consisting of students and peers. The investigator sent an informed consent form via electronic mail, a questionnaire, a release form, and a project summary with the recruiting letter during the initial contact, even if that contact is done by phone. These items can be viewed at the end of this study as appendices (Appendix A; Appendix B; Appendix C).

The investigator made final decisions on the number of participants based on availability of the participant for interviews and scheduling. The
Investigator attempted to obtain participants from various occupations within the entertainment world, so that there was representation from both old and new media professionals who helped to create convergence and edutainment. After the number of participants has been confirmed, the investigator utilized the seven question, open-ended, questionnaire to obtain detailed demographic information about the participants (Appendix B; Appendix C). The investigator then made arrangements for the initial and follow-up interviews at this time, so that the media professional was able to make time for the investigator on his or her schedule. Once the dates and times were established the media professional I asked the media professional to complete the questionnaire and return it with identifying information via email. This information was later coded for privacy.

The participants changed the initial plan for the interviews. The reason was because of their busy schedules and their desires to become directly involved in the research as collaborators more than subjects. Each of the subjects requested that the interviews be conducted by electronic mail and phone combinations before the in-person interviews to prepare for the live interview. This is very similar to the pre-production method utilized in the entertainment field (Zettl, 2003). The subjects would complete the interviews via the Internet and return the results via email and then in every instance the participants would call me and methodically explain, question, discuss, and elaborate on why they answered the way that they did and why they chose not to answer specific questions in a few cases. This actually made the live interviews
flow very smoothly because the participants had created rapport on their own terms as described by Creswell (2003, 2005), Bandler & Grinder (1975, 1979) and others (Robbins, 1989, 2005). This pattern continued throughout the rest of the study with the exception of one subject who was exclusively interviewed by electronic mail and phone. This participant provided the most in-depth answers and the most frequent phone calls to explain her answers after returning her answers via electronic mail. Each live interview was videotaped with a professional video camera, an iPod and an Apple G4 computer. The investigator took digital and hand notes during each live and telephone interview, and later while viewed the tape or listened to the iPod or computer throughout this research. The initial one-hour meeting consisted of three separate interviews covering three separate interviews that were usually around 20 minutes each in length, and followed the script of the Internet interviews.

The interviews resembled the look, sound and feel of a live radio interview show, a live television show, and a magazine feature article with a question and answer format concurrently. The result was the creation of a multi-media based blog that resembled a full multi-media site in its look and feel. The first interview was biographical in nature and followed a pre-planned script based on the demographic information received on the questionnaire. In this session, the participants talked about why and how they decided to pursue their chosen careers, their key influences and the role of education in this process and they put it in writing and confirmed their answers when they returned their electronic
mail answers (Bravo Network, 2006; Pace University, 2008). The researcher agreed to post writings and pictures first at the request of the participants. Video and audio of the interviews would be posted after the researcher had successfully defended at the request of the participants because of the detailed nature and time required to edit and post these data. However, the participants insisted that I posted video clips and pictures of leading figures in the literature on the blogs and video sites to introduce the audience to the subjects of edutainment and convergence.

The second interview session followed the electronic mail, telephone, and in-person approach that were developed by the participants in collaboration with this researcher. During this second interview, the participants discussed their philosophy on how the entertainment business is changing due to convergence, and how convergence is impacting them in their professions. The investigator talked about the devices being utilized for the interview and discussed the subject and brought some of the literature on the subject into the discussion in layman’s terms as well as technical terms (Apple, 2006; Bravo Network, 2006; Creswell, 2003; Microsoft, 2006; New School, 2006; Sony, 2006).

The third interview session discussed the role of convergence and how it was impacting higher education in the form of edutainment. The investigator attempted to discover how the individual participants will utilize convergence and edutainment in higher education. Finally, the investigator obtained information on how an edutainment based system would work, which technological and
entertainment techniques would he or she would apply and why they would apply these techniques (Bravo Network, 2006; Pace University, 2008). The information was electronically stored on the iPods, an Apple Computer, Internet blogs, digital video tape, and on digital video discs and audio discs. The video clips were viewed later and the audio was listened to via the iPod and via car stereo (Apple Computer, 2006; Creswell, 2003; Edutainment and Convergence, 2007; Edutainment and Convergence Today, 2007). All transcripts were created and forwarded to the participant electronically. The investigator encouraged the participants to provide ways to utilize edutainment and convergence in higher education for the ensuing meetings as a homework assignment. An electronic diary and paper notebooks were kept by the investigator throughout the entire study, so that he could reflect on the study as it took place and provided insights for the end of the study (Creswell, 2006; Kelby, 2006). The participants were provided with an informed consent and a debriefing form (Creswell, 2006; Wimmer & Dominick, 2002).

The investigator developed follow-up questions based on the prior interviews, electronically mailed them to the participants and the participants would return their answers with a phone call and a follow-up interview to discuss their answers, elaborate on why they answered the way that they did, and created a dialogue. When I met with subject for the next in-person interview, the conversation would continue beginning with our last conversation and their individual answers. In essence, the participants began to collaborate on each
future meeting and urged me to put up the blogs, advised me on how to set up the blogs, evaluated and critiqued my choices of color and layout, and assumed co-ownership of the content that featured them. They approved all content before it was posted, and even sent colleagues and friends to the site. The next meeting followed the same three session approach and format to find out updates in the participants’ lives and careers (Bravo Network, 2006; Creswell, 2003; Pace University, 2008). The investigator attempted to accompany the participant while doing their job during this interview (Creswell, 2003). When this was not possible, the investigator accompanied the subject during part of their day and simulated how the professional performed their jobs. This was followed about an updated discussion about impact of technology on their careers and education. Finally, the investigator arranged a final meeting with the individual participants. This meeting followed the same format as the other two meetings (Bravo Network, 2006; Pace University, 2008). As mentioned previously the investigator utilized the Internet to forward ask all of the questions to the participants and then verified all answers in person or by phone. One participant was interviewed exclusively on the Internet and by phone to follow-up, document, and discuss the participant’s responses. One participant was interviewed by phone and the Internet simultaneously and later interviewed in Marina del Rey, California. Noise and clouds negated the video and audio taping of these interviews. These interviews were repeated via the Internet and telephone simultaneously. The investigator attempted to get a philosophical opinion on
edutainment and convergence and its implications for higher education (Bravo Network, 2006; Pace University, 2008). The investigator obtained specific information from the participants again on how they would implement edutainment and convergence and encouraged to demonstrate techniques to the investigator (Creswell, 2003; Gee, 2003a, 2003b; Jenkins, 2006; Rhodes, 2001).

All data was transcribed and coded electronically. This coded electronic data was then transferred to paper. The investigator looked for themes visual, auditory and kinesthetic (Creswell, 2003) themes from the video and audio tapes and make note of them. The investigator also looked to utilize qualitative software to look for themes from the transcripts electronically. These data and the analysis will be reported in chapter IV of this study, and discussed further in chapter V of the dissertation study. A documentary was created from the video and audio clips and photographs from the interviews. This concludes the discussion of the methods section as this dissertation moves forward to chapter IV and examine the responses obtained from the informants (Creswell, 2003).
Chapter IV

INTERVIEWS

Overview

This chapter presents the data secured from the research study.

The collaborative nature of this open-sourced study and the technological transformations that have taken place within the past year has compelled the researcher to provide a brief overview of the convergence technologies that were used to collect, store and distribute data electronically utilizing interactive convergence technologies with the advice and consent of the subjects (Willinsky, 2006). However, at this juncture, I note that this chapter of the study is a non-traditional in its structure because the research questions, especially the grand tour question, do not lend themselves to one simple response nor does it lend itself to simple, causal discussion. I found the participants had uniquely different perspectives inasmuch as they had particular specialties within the production process even though they may have shared the same title (Creswell, 2003, 2005; Denzin & Lincoln, 2003; Frey & Fontana, 2003). Furthermore, while several participants were producers, many focused on different aspects of the production process that consisted of pre-production, production, and post-production. Therefore, this researcher structured this chapter as an ongoing dialogue to answer the research questions holistically, allowing the reader an intimate view of the participants’ responses (Creswell, 2003, 2005; Denzin & Lincoln, 2003;
Frey & Fontana, 2003). The reader is asked to follow the questions as they emerged from the study and to keep in mind the responses as they were derived from the actual study. In other words, a research design emerges from the researcher’s interaction with the participant—this was not originally expected.

Essentially, this approach utilized both a classic qualitative research technique and a classic edutainment technique called storytelling to paint a vivid picture for the reader (Bandler & Grinder, 1975, 1979; Creswell, 2003, 2005; Denzin & Lincoln, 2003; Frey & Fontana, 2003; Ramsundar, 2006; Robbins, 1986, 1989, 1997, 2005). I found that I moved from a structured interview process to an unstructured one, in which the questions were framed in an active, emergent process—in this way, I felt I “got into the minds and thoughts” of the participants and gained access to the setting of the participants as producers and entertainers (Bandler & Grinder, 1975, 1979; Denzin & Lincoln, 2003; Frey & Fontana, 2003; Robbins, 1986, 1989, 1997, 2005). As researcher, I found insiders to the edutainment and convergence concepts who were willing to act as informants and guides to my journey of understanding (Creswell, 2003, 2005; Denzin & Lincoln, 2003; Frey & Fontana, 2003). As Denzin and Lincoln (2003) and others (Bandler & Grinder, 1975, 1979; Robbins, 1986; 1989, 1997; 2005) would explain, trust and rapport became the guiding principles behind the interviews; these authors, then, might explain the following interviews as those which are “creative, forget how-to rules, and (ones) that themselves to the ever changing situations they face” (Frey & Fontana, 2003, p. 80). Hence,
edutainment techniques have been utilized hopefully to tell a creative story—and this in concert with the convergence tools that were utilized to gather data and tell the story electronically via the Internet and blogs (Edutainment and Convergence, 2007; Edutainment and Convergence Today, 2007).

Convergence Technologies Utilized to Collect Data

The data were collected in accordance with recommendations by Creswell (2005) through online and onsite interviews by utilizing the following convergence technologies: the Internet, two iPods; a Macintosh G4 laptop computer; a Dell desktop personal computer with Windows XP; Firefox browser and Linux open sourced software; a still digital camera; a Canon XL1 professional mini-DV digital camera; a Sony consumer mini-DV digital camera; a Motorola 930 smartphone; the Sprint Network; the T-Mobile Network; the AT&T Network; the Verizon Fios Network; Google Docs including Gmail, Shared Docs and e blogger software; Vox blogging software; Wordpress blogging software; iPhoto still photography software; Final Cut Pro HD professional digital editing software; and iTunes software (Apple, 2007; AT &T, 2007; Canon, 2007; Dell, 2007; Digg, 2007; Delicious, 2007; Facebook, 2007; Google, 2007; Microsoft, 2007; Mozilla Foundation, 2007; Motorola, 2007; Sony, 2007; Sprint Nextel, 2007; T-Mobile, 2007; Verizon, 2007; Vox, 2007; Wordpress, 2007; Yahoo, 2007; YouTube, 2007).
Convergence Tools Used to Verify and Post Data

All data collected were submitted or re-submitted via the Internet for simultaneous verification; and the process allowed the informants the opportunity to clarify or modify their answers (Creswell, 2005). While many of the questions posed to the participants were essentially the same, others were tailored to address the specific areas of entertainment expertise of the informants. After verification the data were posted on several blogs in the form of an online broadcast interview (Edutainment & Convergence Today, 2007; Edutainment & Convergence's Blog, 2007; Edutainment Today On You Tube, 2007; Edutainment & Convergence on Technorati, 2007; Technorati, 2007; Vox, 2007; Wordpress, 2007; You Tube, 2007) utilizing many of usability guidelines recommended by Nielsen (2000), blogging industry practices and the options provided by the software of the blogging companies (Digg, 2007; Facebook, 2007; Newscorp, 2007; MySpace, 2007; Technorati, 2007; Vox, 2007; Wordpress, 2007; You Tube, 2007) and guidelines suggested by the participants of the study.

The first blog that was established online by this researcher was titled Edutainment and Convergence Today (2007) with the Wordpress software at http://edutainmenttoday.wordpress.com. In addition, ancillary blogs were established online by this researcher through links at the Edutainment & Convergence Today site to http://edutainmentandconvergence.vox.com and a You Tube site at the following website address:
http://www.youtube.com/edutainmenttoday. The name of the primary blog was Edutainment and Convergence (2007) and this site utilized Vox (2007) blogging software and enabled the researcher to publish research results and several of the books utilized in this study as part of the literature review. The second blogging site was a video blog created with flash-based software on YouTube with the name Edutainment Today on YouTube (2007). Edutainment Today on YouTube (2007) utilized compilations of actual video that utilized edutainment and convergence for teaching purposes; news and commentary videos were posted on technology and communications issues; videos of business and academic leaders were also posted on the site; artistic videos of artists, poets, comedians, entertainers and singers with cultural, political and educational themes were posted; videos with political figures speaking on the issues of the day were also posted. All of the subjects provided tips and feedback on the content, look and feel of the blogs (Edutainment Today On YouTube, 2007).

Several social networking sites were created on Blogspot (2007), Digg (2007), Delicious (2007), Facebook (2007), MySpace (2007), Reddit (2007), Technorati (2007), and Yahoo (2007) under the name of this researcher, Edutainment Today, N321 Media, and Seeufilms. The purpose for the creation of these multiple online sites was for the distribution of content on multiple platforms on the subjects of edutainment and convergence content for open research purposes (Edutainment & Convergence’s Blog, 2007; Edutainment & Convergence Today, 2007; Edutainment Today On YouTube; Willinsky, 2006).
The blogs were primarily constructed with black backgrounds and primarily utilized the color orange for questions and yellow gold for answers with white and blue lettering for headings when the template permitted (Edutainment & Convergence's Blog, 2007; Edutainment & Convergence, 2007; Edutainment Today, 2007; Edutainment Today On You Tube, 2007; Vox, 2007; Wordpress, 2007; You Tube, 2007). There were some exceptions for points of emphasis, but the blogs were branded with an orange, yellow gold, white, blue, and black color scheme (Castro, 2005; Edutainment & Convergence’s Blog, 2007; Edutainment & Convergence Today, 2007; Edutainment Today On You Tube, 2007; Edutainment Today on Technorati, 2007; Facebook, 2007; MySpace, 2007; NewsCorp, 2007; Nielsen, 2000; Technorati, 2007; Vox, 2007; Wordpress, 2007; You Tube, 2007).

Research Ethical Considerations and Agreements Obtained

All subjects agreed to have their identities, likenesses, voices and images used for the blogs, podcasts, videos and any subsequent audiovisual products and the interviewer would not post any data that the informants did not want aired publicly. Only one informant requested that one piece of personal data not be disclosed publicly and this request was honored. All informants were reminded verbally and in writing that they had the right to withdraw from this study at any time and all informants still agreed to participate (Creswell, 2005).
Demographic Data

I began my dialogues with participants by gathering demographic data including as age, marital status, highest degree earned, occupation, specialized certification or licensure, birth order and years in the business are listed. The eight participants in this qualitative study were identified through this researcher's experiences as a producer and director in the entertainment industry. This researcher freely acknowledges his work with at least half of the participants in the past; however, it had been approximately five years that I had worked with any of these professionals. Two of the participants resided in New York City, and three of the participants resided in the San Antonio/Austin, Texas area; one of the participants lived in the Los Angeles area; one of the participants lived in Los Angeles when the study began but later moved to Milwaukee, Wisconsin; and one of the participants resided in the Washington-Baltimore area.

Purposive sampling and snowballing were utilized to gather the participants. The first participant selected directly recruited three subjects: another former Disney co-worker, an independent producer who was also working for a local television station in Texas, and a regional producer in Texas who was later promoted to a new job in New York City. The first subject from Los Angeles was directly recruited by this researcher with the assistance of another producer in Los Angeles who had originally introduced this researcher to that producer and editor during a project in 1999—the individual served as the editor and colorist for my three of my films. One of the participants was recruited
during a trip to a New York where I was testing the recording capabilities of the iPod on 5th Avenue in New York City while accompanying a friend to an audition for the NBC television program, Law and Order. Moreover, the second participant from Los Angeles was introduced to the researcher by a fellow producer at a film shoot on campus when he was a director of photography on a shoot in Baltimore. The final participant had been selected by the researcher because of his background as a new media and communications professor and a producer of national, regional, and local films.

Five of the participants were men and three were women. Six of the participants were producers with various specialties. One of the producers (Producer 1) had also specialized as a director of photography for several feature films and television shows for the Walt Disney Company and other industry leaders. He also worked as a college film professor for a Pac 10 university in Los Angeles. Producer 2 was a specialized editor and colorist for Richard and Esther Shapiro Entertainment in Beverly Hills; he also worked on network sports television in Los Angeles and Milwaukee and several independent productions. Producer 3 worked primarily in production in Texas, but also worked in advertising and production in New York City. Producer 4 worked as a regional producer in the mid-Atlantic region and a full-time college professor. His specializations were as producer, director and editor. Producer 5 worked as a local television producer, but after winning an award became an independent freelance producer. Producer 6 had been an independent producer and was a
form teacher. Participant 7 was a director of marketing for a large academic institution after working for the Walt Disney Company. Finally, Participant 8 was a make-up artist and a licensed hair stylist for several feature films, government films, and military films.

All of the participants had educational degrees or special training in the communications industry. Six had communications related degrees. The women held bachelor degrees from accredited universities in the United States except one; however, this subject was the only subject with a licensed to practice her craft. Four of the males had at least a bachelor degree, and one of the men had an associate degree. The men over age forty as a group had the highest levels of education of any group. The one participant with a graduate degree was an African American male. One of the female participants was an Ivy League graduate with two bachelor degrees. One of the male participants was a graduate of a Big Ten school. One of the male participants was a graduate of a Pac Ten institution. Two of the participants, one male and one female, were graduates of the University of Texas system. One of the male participants was a graduate of a historically black university. Finally, each of the eight participants had degrees or licensure from accredited universities or state governing bodies in the states of California, Florida, Maryland, Pennsylvania, Texas, and Wisconsin.

The ages of the participants ranged from thirty to approximately fifty. The oldest participant did not disclose his full age, but stipulated that he was
approximately fifty years old. All of the women were under the age of forty. Three of the male participants were at least forty years old; five of the participants were under the age of forty.

Four men and one woman were married. One man was single, as were two of the women. All of the male participants over the age of forty were married. None of the female participants were parents. Two of the married men over forty were parents, and men under thirty were parents. One participant had more than one child. Two of the participants (one man and one woman) were only children. Two of the participants were youngest children with multiple siblings. Two of the participants were the oldest siblings. One was female and one was male and both had siblings of the same sex. One subject was an adopted child. Two subjects did not disclose their birth orders or number of siblings.

The female with the most work experience had approximately 16 years of experience. The youngest member of the study was a female with eight years of experience. All three of the males who were at least forty years old had at least 20 years of experience or more. One male had 28 years of experience. One of the males in his thirties had slightly more than 10 years of experience, and the other male in his thirties had nine years of experience. All of the participants had experience working on federal or military entertainment or edutainment projects at the national level except one. At least five were aware of the role of the specific military in the development of convergence, and one could not remember specifics but was aware of the military role in convergence since the participant
worked as a military filmmaker. Three of the participants had been teachers. Three had to train others during the regular course of performing their jobs since they often have worked as freelancers in the course of their jobs.

All of the participants had experience in working on projects in languages other than English. Three of the subjects were completely bi-lingual. Four of the subjects reported being somewhat bilingual because they had lived, worked, or attended school in the states of California, Florida, New York and Texas in diverse work environments.

Emerging Interview Questions: From Structured Questions to Negotiated Text

Next I turned to the actual interviews and the various responses of each informant in the order that the questions were asked. A brief explanation was given for each question series (Creswell, 2005). This research utilized the open-sourced research concept advocated by Willinsky (2006) and modified it by providing total transparency which was possible and advantageous when qualitative research was employed because it provided the study an authenticity through real people who can be seen, heard, and viewed (Creswell, 2005). While there were originally three research questions that guided this study, I found several questions emerging from the participants that further clarified and expanded the original research questions; these questions “negotiated the text.” The first research question was the grand tour question, while the next two questions were the primary supporting questions. Brief summaries of the
participants' answers have been provided, and followed by the first names of the individual participants and their individual responses without quotation marks. A word of caution, nearly all of the participants utilized the vernacular of the Internet in their answers. For example, the repeated use of punctuations was used to add emphasis to an answer, or three periods were used to indicate that the participant was thinking, or all capital letters were used to indicate shouting or strongly stating an answer. It is important that the reader distinguishes between the direct quotes provided via the Internet where three periods indicate thinking, and when this form of punctuation is utilized to indicate that the quote was part of a larger quote during the rest of this study. The researcher freely admits that these correct quotes and Internet vernacular were kept in tact to accurately reflect the words and meanings of the participants in an unconventional form and format that differs from traditional formatting.

Grand Tour Question

How can entertainment techniques and technology be utilized in higher education?

Qualitative Themes from the Findings

Open coding has been the described by Strauss and Corbin (1998) as the analytic process that reveals and identifies concepts that have been broken down into distinct parts, observed and examined closely, and compared for differences and similarities (Ramsundar, 2006). Furthermore, it has been advocated by
Strauss and Corbin (1998) that line by line coding is essential for a researcher to develop categories in an expeditiously despite its time-consuming approach (Ramsundar, 2006). The findings presented from the research questions list the first names of the subjects and demographic data that was provided in the interviews as this study utilized a modified version of open-sourced research advocated by (Willinsky, 2006). As mentioned previously, the subjects agreed to have their names, identities, likenesses, and personal information revealed online for the blogs, and the subjects were reminded verbally, on tape and via the Internet, they could withdraw from the study at any time or modify any answer they did not want revealed. One participant requested the researcher not disclose one piece of demographic in the online interview, and this request was honored. The research questions were tailored for the individual participants based on their occupations; therefore, the research questions were modified to obtain answers to the grand tour question and the two supporting research questions. The participants have been quoted verbatim in their responses to maintain their voice and to support the themes that were revealed.

A summary of the themes that emerged from open coding the findings for each questions were as follows:

- definitions of edutainment and convergence,
- new technologies,
- learning styles and strategies,
- types of educational formats,
disruptive new technologies and experiential based learning;
the Disney impact, gaming and simulation,
competencies for teachers and learner centered approaches,
iTunesU and educational access,
transference and interactivity,
competencies and access;
the military and technology connection,
academic effectiveness and intellectual property and fair use,
government action and effectiveness,
role of edutainment convergence with disadvantaged students, minorities,
warnings and surprises, and
emerging edutainment and convergence trends.

Definitions of Edutainment and Convergence

Each of the participants provided his or her definition of edutainment and convergence. This entry discussion served as an ice breaker between the researcher and the respondents.

New Technologies

Participants who answered this question indicated that learners could learn more effectively through the use of multi-media and sensory-based tools. However, one participant did not believe that learners learn more effectively with
these tools. Another participant believed that the edutainment techniques were effective because "they provide the human touch." At least three participants expressed concern about the impact on the socialization process for students if convergence technologies were embraced without caution.

Learning Styles and Strategies

Edutainment techniques such as role-playing, hands on training, oral exams, visual aids, and interactivity were cited as effective methods of teaching. However, one participant directly accused the society and the education industry of failing students.

After the participants provided their individual definitions of edutainment and convergence, the grand tour question was addressed. Since the grand tour question was broad in nature, sub questions were utilized to obtain answers to the grand tour question. At the end of each sub question a brief analysis of the participants’ responses. At the end of each research question the general theme or themes were listed.

Grand Tour Question

How can entertainment techniques and technology be utilized in higher education?
Themes: Disruptive Technologies and Experiential Learning

Disruptive New Technologies and Experiential Learning: The Definition of Edutainment and Convergence

Can you explain the concept of edutainment and what it means to you?

Can you explain the concept of convergence and what it means to you?

The participants’ definitions for edutainment and convergence and all of their responses from this point forward have been cited verbatim without the use of quotation marks. In the spirit of transparency the first names of each of the participants have been used to accurately document each statement.

Definitions of Edutainment and Convergence

Aaron:

Edutainment is the entertaining delivery of educational content. It means creating a seamless presentation that draws people to the message without hitting them over the head with the lesson. Convergence is the application of new technologies and media in the delivery of content. In my current role, convergence means to deliver messages in multiple mediums. The shift to convergence will spell the end of many museums that do not position themselves to embrace multiple content delivery methods.

Cesario:

Edutainment to me when I hear it spoken is just like it sounds: the unification of two furies that guide and enlighten all ages in today’s world! My understanding of
convergence is the coming together of various technologies and (entertainment and media) tools used currently.

Eric:
Edutainment is convergence!

Erin:
Edutainment and convergence, to me, is being able to combine the entertainment industry with the education industry to teach people and reach a much broader audience than a local college or university, for example.

Jeff:
Edutainment is embedding lessons of education through forms of entertainment. Utilizing new media and technology has made this a reality.

Convergence is the power of media and the media consumer to interact.

Jesse:
The concept of “edutainment” obviously to me means bringing education and entertainment together to form one medium or “convergence” that will satisfy a need or inspire or promote education by capturing and holding the attention of the viewer.

Sadia:
Edutainment – educating while entertaining. Convergence – where two ideas or concepts meet (similar to “overlap”).

The participants generally agreed that edutainment was defined as the merger of educational methods and interactive communications with entertainment
techniques, communications methods and technology to deliver messages. Convergence was defined as coming together of multiple media devices and technologies to deliver digital content electronically to audiences through multiple digital platforms. The participants indicated that edutainment and convergence were bringing together the education and entertainment industries and were in fact converging.

New Technologies - Learning Styles and Strategies

The sub themes that emerged from coding of the participants’ responses were: learning styles, skills and strategies under the general theme of disruptive new technologies and experiential learning. Researchers Bandler and Grinder (1975;1979) developed a concept of neuro-linguistic programming based on the codifying the methods, research and observations of psychotherapist Milton Erickson during the 1970s. One of his students, Anthony Robbins, commercialized their research concepts of visual, auditory, and kinesthetic representations as definite ways that people learn and process information and skills when combined with core beliefs, and practice through repetition.

New Technologies - Learning Styles and Strategies

Do you think that learners can learn more effectively if their individual learning styles can be digitally identified, evaluated and utilized through the use of multi-media and sensory-based tools and exercises?
Aaron:
Yes. The trick, in my mind, is to do it without undermining the value of equally important social skills that are taught and nurtured in the classroom. I worry about delivery that is so specialized, students interact more with a terminal than with each other.

Cesario:
Personally I do believe we have already tapped this idea and are using on some levels.

Erin:
Absolutely! Visuals and hands-on is the best training out there, in my opinion.

Jeff:
I don’t know that there is any reason not (with strong emphasis) to use digital technology, especially if it allows for effective learning. If stimulating the senses allows for a greater learning experience then it must be practiced in the educational setting.

Jesse:
No, I do not think learners can learn more effectively if their styles can be digitally identified.

Sadia:
Look, I think we are failing in our responsibility to educate our population. I think we should “re-create” history and gets the kids more involved. Simply putting them in front of a computer will not solve the problem. They need to read source
material (for example, actually read Emerson’s work) and then discuss it, or role-play it. Role-play is a very effective technique in teaching a foreign language. I’d like to see more oral exams, even group oral exams. Where one kid is Abraham Lincoln and one is George Washington and one is Thomas Edison for example and they each have to answer questions about what was important during their lifetimes.

Discussion of New Technologies – Learning Styles and Strategies

Most of the participants who answered this question indicated that learners could learn more effectively through the use of multi-media and sensory-based tools. However, one participant did not believe that learners learn more effectively with these tools. Another participant believed that the edutainment techniques were more effective because they provide the human touch. At least three participants expressed concern about the impact on the socialization process for students if convergence technologies were embraced without caution. Edutainment techniques such as role-playing, hands on training, oral exams, visuals and interactivity were cited as effective methods. One participant directly accused the society and the education industry of failing students. The sub themes that emerged from coding were learning styles, skills and strategies under a general theme of disruptive new technologies and experiential learning. Has the present digital world entirely re-shaped our entire world to the point that digital natives may actually think and process information differently and more
quickly because of their ability to multi-task in a society and employment market that demands that students multi-task, learn by doing, practice tasks virtually through simulation and develop creative solutions utilizing teamwork?

Cesario:
I would have to agree. It is apparent that we are having to deal and process more information at an exponential rate. Now that our society has become information rich we are all digital natives on various levels. My take is when the next information age takes hold; man’s quest for knowledge will encompass that of his own mainframe the human brain. We haven’t even scratched the levels or storage space that is available in our brain. When this happens our rate of tactile convergence will sky rocket.

I do wonder how teamwork might be affected by our technological advances.

Jeff:
Too often we may be shutting out the outside world and have less face-to-face interaction due to iPods, the Internet and other devices. It could be possible to be technologically advanced but be a social outcast in a one-to-one or group environment. As for multitasking, I do believe that the digital world has allowed people to be better capable of handing several things simultaneously.

Jesse:
The visual element, the use of multi-media etc, is all fine and good but.

(pause)...What’s missing is the human element. The digital age has fragmented our society to the point of being ridiculous.
The participants acknowledged that the convergence technology has enabled beneficial things such as multi-tasking, instant communications in multiple formats, and time shifting convenience; however, two of the subjects expressed concerns that human relations may be adversely impacted as well as concepts such as teamwork. The three respondents to this question were all producer/directors. The sub themes that emerged from coding of the responses were learning styles, skills, and strategies under the general theme of disruptive new technologies and experiential learning.

**Learning Styles and Strategies**

Why do you think so many students who are digital natives, students who grew up their entire lives with gaming and computers, find traditional classes taught by digital immigrants, people who did not grow up with gaming and computers, very boring?

Jeff:

The stimulation in the classroom is not found for these students who grew up with the current technology. A talking head is fine if tied with current technology. The subject reported that the classroom experience lacks the every day non-traditional digital experience that learners experience with their cell phones, computers, gaming platforms and handheld multi-media devices. The sub
themes that emerged from coding of the response were learning styles, skills, and strategies under the general theme of disruptive new technologies and experiential learning.

Learning Skills and Strategies

As a colorist and editor how important is the use of color, appearance of the professor, the actual classroom setting and the use of graphics, images, audio files and music in keeping the attention of audiences?

Jeff:
All of these elements are helpful in keeping the attention of the audience. A comfortable mood and atmosphere can be set by the use of lighting, color tones and even the look of the professor or instructor. Traditional teaching methods tied with these factors only add to the learning experience for the student.

Discussion of Learning Skills and Strategies

The subject described the use of color tones; lighting and even the look of the professor are helpful in keep the attention of the audience and that these elements help create a comfortable mood and atmosphere for learners. The subject also asserted that traditional teaching methods combined with edutainment techniques could only add to the learning experience for the student. The sub themes that emerged from coding of the response were
learning styles, skills, and strategies under the general theme of disruptive new
technologies and experiential learning.

Learning Styles and Strategies

Has the hyper pace of digital technology made traditional schooling which
is largely based on expanded methods developed during the 11\textsuperscript{th}, 12\textsuperscript{th} and 13\textsuperscript{th}
centuries, and then re-developed during the 18\textsuperscript{th}, 19\textsuperscript{th} and 20\textsuperscript{th} centuries, a boring
exercise for modern students who require more stimulation and more self-
tutoring and researching with games?

Cesario:

It really depends on what one has experienced within that life span. During those
first centuries we learned and ingested the prime principles. When man
modernized we adapted those ideas and groomed ourselves to stretch that
knowledge to move to the here and now. As we go further we will again be
testing new skills and fashioning them to perpetuate once again. The stimulation
is going to be the same as before only more refined.

The subject reported that man has gradually improved educational through the
course of time and has adopted new methods gradually too. The subject reported
that the stimulus would be the same as before but it would be more refined. The
sub themes that emerged from coding of the response were learning styles,
skills, and strategies under the general theme of disruptive new technologies and
experiential learning.
Learning Styles and Strategies - Types of Educational Formats

Could this slow pace of higher education which is the total opposite of the real world creating a problem for students when they arrive in the real world because it takes away their creativity and forces them to conform and think in a standard way that higher education often mandates because of its emphasis on standardized tests, drills and rote learning approaches?

Cesario:

One word comes to mind: knowledge. We do live in a antiquated system of higher learning. But isn't that what we experience before we leave the nest. The old ways of teach us the root. Our true belief system has to be jarred in the real world. In my mind it is a rite of passages. To learn one way that of the old, then break out of the box and apply new ideas to that box.

The subject asserted that the current system of higher education is antiquated. He added that the core belief system of knowledge has to be jarred in the real world as a rite of passage, and that new ideas have to be combined with old ideas. The sub themes that emerged from coding of the response were learning styles, skills, and strategies under the general theme of disruptive new technologies and experiential learning.
Disruptive New Technologies and Experiential-Based Learning (EBL)

Okay, I have to ask you about the iPhone because it has created a lot of attention. What do you think of having a phone that adjusts to how you move physically and how you can obtain rich media, data and phone calls simultaneously?

Rebeca:

I think it’s fantastic! I can’t wait to get my very own. It’s so great to be able to portably access all the media you need at your fingertips. Most newer cell phones offer many services simultaneously, but not quite the way Mac does (smiling sarcastically icon used).

Discussion on Disruptive New Technologies and Experiential-Based Learning

The participant explained her reaction to the iPhone and why is important as a convergence and edutainment tool. She explained that the iPhone provides portable access to media content with the Apple software interfaces which are general regarded in the industry as having a high degree of ease of use for video editing, word processing, and downloading and storing content on portable devices and computers. The sub themes and general themes that emerged from coding of the response were disruptive new technologies and experiential learning.

Disruptive New Technologies and EBL—Storytelling
How would you utilize this device in the storytelling and role-playing process of education?

Rebeca:

I’d use it as a tool, an aiding device. For storytelling, use the video capabilities!

LOL (laughing out loud)!

The participant explained that she would use the iPhone as a storytelling tool and use its video capabilities. The sub themes that emerged from coding were learning styles, skills, and strategies and the general themes that emerged from coding of the response were disruptive new technologies and experiential learning.

Disruptive New Technologies and EBL—New Technologies

What do you think about gesture and touch based technology such as the Wii, the new coffee table computer from Microsoft and the new miniature gesture technology that has also been developed by Apple for its iPods and the iPhones?

Aaron:

Love it. The easier it is to access information, and/or create virtual environments that assist in the training, the better.

Cesario:

I see it as advancement only and marvel at what it has done so far.

Jeff:
Personally, I am a technology freak. I can’t wait for the iPhone to hit the market. The convergence with the other Mac technology will be the attraction to a user such as myself. As for the other touch based technology, there is ample opportunity for it to benefit our day-to-day lives and simplify our hectic worlds (He stated he was even more impressed with the ability of the iPhone to seamlessly interface with personal computers because of the convergence of Apple software with hardware after seeing the iPhone in person).

Sadia:
It’s cool and a big step forward technologically speaking. But I’m really not that impressed with the Wii. I am unfamiliar with the other products you mentioned.

Discussion on New Technologies and Experiential-Based Learning (EBL)

The participants expressed enthusiasm for the gesture-based technology and how it can aid in learning and daily living. One participant again noted that she was not that impressed by the Wii gaming platform. One participant described himself as a self-professed technology freak. The sub themes and the general themes that emerged from coding of the response were disruptive new technologies and experiential learning.
Will phone keys become relics as voice-based and touched based technologies begin to partially or in some cases totally replace traditional touched-based technologies on phones, televisions, radios and other devices?

Cesario:

For some people yes the old school tools and uses for them will fade. I am a traditionalist and will be one of the last to convert. It is all about perception and how much one needs these devices.

Jeff:

I could see a number of the advancing technologies replacing the likes phones and other devices. It is also likely that the technology may simply supplement what we use on a day-to-day basis today.

Sadia:

I can see things are headed that way. But there will always be people who prefer to touch rather than simply speak. It’s part of how we are hard-wired from birth.

Discussion on Disruptive New Technologies and Experiential-Based Learning

The participants commented that voice-based and touched based technologies would replace traditional tools such as phone keys. One participant stated that that he would be one of the last to convert and suggested that perception drives the need for new technology. Another participant suggested that he envisioned a number of advancing technologies replacing phones and
other devices. A third participant stated that she could see technology headed in this direction. She also added that some people prefer to touch rather than speak. The sub themes and the general themes that emerged from coding of the response were disruptive new technologies and experiential learning.

Disruptive New Technologies and EBL—Affects and Effects

Can you explain the iPod, YouTube, and MySpace effects now that students, professors, public figures and ordinary citizens can now have their thoughts, words or actions instantly recorded, uploaded, disseminated and shared worldwide within minutes or even second? Is this a reason in your opinion that many professors fear losing their academic freedom for things they may say in the classroom?

Aaron:

It may be. There have certainly been examples of professors at public universities voicing opinion and experiencing dramatic, and unexpected, backlash because of the speed with which their thoughts were disseminated worldwide. While many may be more guarded in their thoughts, I imagine and equal number will enjoy sharing their perspectives with a larger audience. In any case, a larger audience will most certainly lead to new debates on tolerance regarding freedoms of speech and expression.
Cesario:

These are just outlets such as free thoughts which are available to anyone. The real question is what is of any use on these sites and why we are so enamored with them? It has become a paradise for everybody to do anything and post it. Teachers beware!

Erin:

Well, I guess I would have to say that while higher education is expanding and improving all the time, we still have a ways to go. I think the possibilities for the next generation are endless.

Jeff:

Technology is a double edge sword in this case. We have the ability to utilize the technology for gain, but also for the sensational. This of course makes many professors skeptical. Unfortunately, there is no correct answer or easy solution to this.

Discussion on New Technologies and Experiential Learning.

The participants reported that these new outlets for free thoughts and free speech present a double-edged sword because it will present ideas to a larger audience; however, unpopular free thoughts and free speech presented by professors has resulted in a dramatic backlash in some cases. One participant reported that a larger audience would more than likely lead to new debates on tolerance and freedoms of speech and expression. One participant warned
teachers to be careful of what they say because of the omni-presence of convergence technologies that enable words and images to be uploaded in seconds to a worldwide audience. Another subject was more optimistic and cited the potential for higher education was endless with the assistance of edutainment and convergence technologies. Finally, another subject asserted that there are no easy solutions because of the double-edged nature of convergence technologies to be sensational as well as helpful for education. Most of the subjects indicated that free speech might be chilled in part because of the convergence technologies. The sub themes that emerged from coding of the response were learning styles, skills, and strategies under the general theme of disruptive new technologies and experiential learning.

Disruptive Technologies and EBL—Informal and Formal Training

Would you say that volunteering, internships and working in the field is more important than formal education in learning and gaining experience in the entertainment field?

Aaron:

I lean on my formal education every day and only hire individuals with degrees, but I will always hire the candidate with the hands-on experience before I hire someone with an education and no experience.
Cesario:
It can be if that is what you need to do in order (to) gain skills necessary to succeed.

Erin:
I would have to say yes on that because I know a lot of self-taught makeup artists. It's good to have the education, if that is what you strive for, as far as a makeup school. What I have noticed is directors and producers don't really care as long as you can do the work...as long as you can perform, it doesn't matter if you went to a makeup academy or not.

Sadia:
That's a tough question. I think you need a combination of both. Formal education is very important because you learn the correct way to do things – handle a camera, set up a shot etc. Working in the field gives you hands-on experience which is very helpful – you can learn a lot!

Formal training (even if it's free classes at the public access station) shows me that you are serious about this work. Volunteering and interning is important because you also need real-world experience. Start where you can, and try to balance both sides of the equation. Sooner or later, a lack of formal training will show and people will lose respect for you. Buy a book and read it! Learn what standard procedure is! If you want to work with good people, you have got to know what you’re doing!
Simply having money will not make you a good producer. You have to have a clear vision and know how to communicate it.

Discussion of Disruptive New Technologies and Experiential Learning

The subjects indicated that while formal education can be an important learning tool; field-based education is a more important learning experience for learners. One subject indicated that only hires individuals with degrees, but he favors candidates with experience to compliment their degrees. Another subject stated that informal might be more important if it is what one needs to gain skills necessary to succeed in the workforce. One subject stated that some employers in the field do not care if a person has the formal education as long as they possess the technical expertise from informal education and training. Another subject stated that a combination of formal and informal education is needed because formal education teaches one the correct way to do things while informal education provides one with experience in the field. The sub themes that emerged from coding of the response were learning styles, skills, and strategies under the general theme of disruptive new technologies and experiential learning,
The Disney Impact Gaming and Simulation

Primary support research question 1

Which entertainment techniques do you believe are best suited for transferring to education and please explain why by providing specific examples?

As a former Walt Disney employee can you explain how much Disney has contributed to higher education through its use of edutainment and convergence in its theme parks, media outlets and distribution of content to change the way that Americans, and most of the world, embrace the fun factor and learning?

The Disney Impact Gaming and Simulation

Aaron:

Nobody does it better. Disney embraces the notion that people are drawn to a good story. It started with animated movies, and expanded to vacations. With Epcot, Disney looked to tell a story that entertained and educated. It is not easy encouraging people to spend their vacation dollar on an educational experience, but if you can make it entertaining, it’s a different ballgame.

In my mind, the same holds true for higher education. Want to drive more students to math and science? Make it entertaining! At the very least make it more visual. Those who argue that education shouldn’t be entertaining are losing students.

Erin:
I worked for Radio Disney as a member of the Promotions Team. We went to various locations, in and around San Antonio. We did interactive games for the kids to win prizes and also did dance-offs for the kids and their parents to win prizes. We would also often ask them questions about Disney movies to win a Grand Prize, which would usually be a DVD or movie passes to the next Disney film. I guess the education aspect would be getting the kids to interact well with each other, especially with the hula-hoop competition because of the challenging tricks they had to do. And, asking them questions about Disney movies was challenging because they would have to remember character names or something that was associated with that character, like Cinderella and losing her slipper at midnight.

Jesse:

There is no connection with Disney other than just work. I shot a lot of kid shows and promos for them through various freelance producers over the years, nothing special.

Discussion on the Disney Impact Gaming and Simulation

The participants agreed that Disney has utilized entertainment-based storytelling to attract people to its theme parks and movies. One participant cited his experience with Disney as an example for higher education when he stated that if higher education wanted to drive more students to math and science higher education would have to make these disciplines entertaining. This subject
asserted that those who argue that education should not be entertaining are losing students. Another subject spoke of how Disney utilized everything from interactive games to dance offs to quiz contestants about Disney stories and products. A third subject did not directly address the question. The sub theme that emerged was the Disney effect under the general themes of transference and interactivity, competencies and access.

**Competencies for Teachers and Learner Centered Approaches**

Since you are the only licensed cosmetologist in this study, I have a specific question on personal appearance as an edutainment tool.

As a professional makeup artist and hair stylist, how important is physical appearance for a professor or teacher in a classroom setting or through a video based class on the Internet or television? Explain.

Erin:

LOL! Again, I think I just answered that in a previous question. I can't emphasize enough how important personal appearance is. Especially as an educator, you need to be a role model, just like kids look up to entertainers and celebrities as role models.

**Discussion on Competencies for Teachers and Learner Centered Approaches**

The subject stated that the physical appearance for a professor or teacher in a classroom setting, on the Internet and on television was very important and
that educators need to be role models who are looked up to like celebrities. The sub theme that emerged was the Disney effect under the general themes of transference and interactivity, competencies and access: transference and interactivity, competencies and access: educational access.

Transference and Interactivity and Competencies and Access.
What new media technologies and techniques have you been working with lately and do you see any being able to transfer to higher education?
Cesario:
Lately I have been doing some web blogs. I feel that blogging is useful for students and teachers for communication purposes.
Jeff:
Recently I have provided video support for conferences that were being webcast. Additionally, I have produced a number of videos specifically for the web. I see more and more live webcasts or podcasts, which will be delivered not only over the internet, but over cellular technology for immediate or delivery upon demand.
Sadia:
Blip.tv and YouTube (online video distribution sites). I'm certified in Final Cut Pro and in Digital Camera for the 3-Camera Studio.
You know what bothers me?? That “The College Board”, the people who give us the SAT’s and AP exams have become our Department of Education in many ways. They dictate what students are taught. Why can’t we learn American
History through films and music and literature?? I feel like so many of us are ignorant about our own culture – myself included. I've been renting a lot of old movies from the library – Academy Award winners and nominees. They are AMAZING (capitalized letters indicates strong emphasis on the Internet which is where this interview took place)! And then I look at some of the garbage that Hollywood puts out nowadays and I have to wonder “Does no one know any better?? (double question marks indicate a strong question or a rhetorical question)” Can’t we do something about this??

And if I may go off on a tangent here – some of today’s music really is just noise! And these lyrics! Someone drove by my apartment recently, late at night with the stereo blasting. The lyrics to the song went “I drank my d—k (expletive deleted).” OH MY GOD. How gross is that? And then there was this song a few years ago “Lick my p---- (expletive deleted) and my crack”. YUCK. Is that really necessary? What possible good does that do in the world??

I think if we included some music education – how to read music, for example – and studied examples of good music from all genres, including rap and hip hop, we would have better educated consumers. And that would lead to better quality art.

Discussion on Transference and Interactivity and Competencies and Access

The participants cited blogs, webcasts, podcast, cellular casts, You Tube and Bip.Tv as new technologies that they have been utilizing that have the ability
to be transferred to higher education. One subject used blogs and two cited two video websites, podcasts and video on demand as technologies that they utilize and can transfer to higher education. One participant was critical of the College Board and the educational establishment that has emphasized standardized high stakes testing as the primary mechanism for measuring student achievement in the age of convergence tools like film, the web and competency based exams exist. This participant was very explicit in criticizing the entertainment industry for its marketing of content that was more interested in sexual exploitation than educating young people when the content has the potential to do so. This participant endorsed music education and the usage of various musical genres including rap and hip-hop as educational mediums. The sub themes that emerged were competencies for teachers and learner centered approaches under the general themes of transference and interactivity and competencies and access.

Interactivity and Competencies and Access

Which entertainment techniques and technologies do you utilize most often in your job and why? Which techniques would you like to use but have not had the opportunity to do so yet? Which technologies do you believe may offer some of the best hopes for the future of education for both students and teachers?
Aaron:

In the future, all exhibits at the museum will be designed to appeal to multiple senses, and content will be delivered using multiple techniques. Currently, the museum utilizes character performers to bring the stories of historical figures to life.

The production team also tries to include scenes in each exhibit that create an environment for the exhibit. An example is the dragon’s lair that has been developed for the museum’s *Here Be Dragons* exhibit. It features an audio-animatronic dragon that breathes smoke and warns guests of the dangers associated with visiting its lair.

We want to use all technologies in the future, particularly the ones that allow the museum to compete with other delivery methods, particularly the Internet and television. I believe the technologies that draw students and teachers into the conversation, allowing them to become a part of the story, will enjoy the most success.

Jeff:

I have in recent months used video to provide support for a real estate training program. Adding graphics and the moving images to this educational setting brings added value, retention and interest to those attending the program. Again, placing this in a delivery method such as a cellular technology allows for remarkable opportunities.

Jesse:
In cinematography there is no “most often utilized’ technique. You will never use the same technique twice (pause)...ever. It’s not realistic. The technique changes per script, per shoot, per client, per time of day (pause)...and after pre-production, it’s the magic of the movement. You use the right tools for the right job to make it happen for the director.

Sadia:
Honestly I think all the technology is there, all the art is there, we just need to find someone to sit down and synthesize it all. I’d like to break down American history decade by decade and spend one week on each segment. From 1705-1715 for example and look at the music, literature, science, politics, fashion and important issues of the time. In a 5 day week, we would cover 2 years each day. What I see is a real lack of integration. In high school I did a big project on Ralph Waldo Emerson. That guy was AMAZING. But my fellow students never read him. I think it’s very sad that we know so little about the incredible people who made this country GREAT. We learn boring history from boring books.
Someone needs to overhaul the whole system and INTEGRATE everything as I said earlier. I can certainly help with this, but it’s probably more than I can do alone.
Lucretia Mott was an amazing American. I never learned about her at school. I found a book in the library and read it.
We learn almost nothing about South America and that’s a disgrace. Simon Bolivar tried to create a “United State of South America” – how cool is that! And he almost succeeded.

You know, they have McDonald’s all over the world. McDonald’s, Coca-Cola, Nike – they all have ads in a bunch of different languages. Why aren’t using this material to teach foreign languages? It would be so easy!

Why don’t we use music to teach foreign languages? Why aren’t we incorporating the websites of newspapers in Paris, Madrid, Barcelona, Frankfurt into our language classes??? This seems so obvious!

Why can’t American kids learn Biology or Chemistry in Spanish or French or German? That way you’d get two for one – real exposure to the foreign language in action and knowledge of a science.

Discussion on Interactivity and Competencies and Access.

Overall, the respondents to this question expressed that how they utilized convergence technology and which techniques that they would like to use in the future. The respondents cited video, the Internet, moving images, graphics, and animatronics as key components for the future of education for both students and teachers.

One participant cited utilizing edutainment in the form of character performers in museums and convergence technologies such as animatronics, the web and video so that museums can compete with television and the Internet.
This participant expressed a desire to utilize the technologies to appeal to multiple senses with multiple techniques so that learners and teachers are immersed into the learner environment virtually. Another participant explained that he used video to support a real estate training program and that moving video and graphics that will aid in retention and interest for learners.

One participant stated that there was no one technique that he utilized and it varied according to the project. Another participant stated that she believed that all of the technology exists but that it will need to be synthesized with education. This participant expressed the viewpoint that music and advertisements that have been utilized successfully by multi-national corporations in foreign nations can be utilized to teach things like languages, history and literature. This participant cited the integration of edutainment with convergence technologies as a necessary tool for learners. The sub themes that emerged from coding were competencies for teachers and learner centered approaches and the general themes that emerged were transference and interactivity and competencies and access.

Transference and Interactivity

How can these techniques be transferred to academia via edutainment and convergence? Which tools would you utilize either separately or in unison to teach students various courses either in person or through distance learning? Rebeca:
Websites, blogs, video diaries, instant messenger, texting, cell phones and smart phones, portable devices like iPods, social networking sites, email, and ftp sites to exchange large quantities of information.

Discussion on Transference and Interactivity

This participant cited video, audio, texting, email, blogging and web tools such as social networking cites and handheld multi-media devices as tools that can transfer from the entertainment world to the education world. Further, this participant specifically addressed how specific web based tools and handheld multi-media technologies can be utilized in concert with educational content for distance learning purposes. The sub themes that emerged from coding were competencies for teachers and learner centered approaches and the general themes that emerged were transference and interactivity, competencies and access.

iTunesU and Educational Access and Transference and Interactivity

Can you explain how distance learning will change once the entertainment techniques and technologies are infused into courses and how they are presented?

Jeff:
The ability to download and replay a lesson, view live web videos from any area of the world will make education available when before it required attendance at
the specific one time location only. The added utilization of entertainment will serve to promote increased education.

Rebeca:

They’ve already made such a big impact on campuses all across the world (iTunesU). I can enroll to take a course in Europe if I wanted to take a course in Europe if I wanted via distance learning. All I would need is access to a computer and the Internet, and perhaps a web-cam or mic to have any interaction. The further technologies advance the easier it will be for students to benefit from theses distance learning courses without feeling they’ve gotten cheated out of a one on one experience with the classroom or the instructor.

Discussion on iTunesU and Educational Access and Transference and Interactivity

The respondents both cited that podcasts and web video have already made time-shifting possible for students and the addition of entertainment techniques will make it easier to attend class without feeling that they have missed a class because the learners will have the ability to replay a class on demand. One participant pointed out that the transference and interactivity & competencies and access utilization of entertainment would serve to promote increased education, while the other participant expressed the worldwide impact of distance learning through universities in Europe and iTunesU. The sub themes
that emerged from coding were competencies, access, and iTunesU under the
general themes of transference and interactivity and competencies and access.

Transference and Interactivity and Competencies and Access

Which entertainment techniques do you believe are best suited for transferring to
education and please explain why by providing specific examples?

Aaron:
Technologies that are affordable and can be easily situated in the classroom and
the museum.

Cesario:
Video mediums and games for their visual properties for example! IPods have
become that perfect tool for teacher and student. Why? Well it is small enough
and can hold vast sums of information. It is portable and handy to use for video
and data use (and audio too).

Erin:
In training professors to understand how much their image is important in
educating their students because students learn more when they have a
professor that looks more professional…rather than someone who looks like they
just rolled out of bed. As far as techniques go, interactive video… especially for
those of us who are visual learners… is the most effective to learn and the
technology is already here to make that happen.
Jeff:
Entertainment is done through storytelling, whether comedic or dramatic or analytical. Telling a story is thus something which I believe enhances a production for the learning environment.

Jesse:
In an academic environment, the new tools, technology and techniques that I personally use can benefit anyone wanting to learn the craft of cinematography or to make a good movie (storytelling). They are too deep and involved to explain at this time. As a DP (Director of Photography), I have to strike a balance between art and science by using light, texture, color and depth to tell a story with the use of digital technology and (pause)…some old school techniques.

Sadia:
Advertisements, as I mentioned above. Comedy skits – like Saturday Night Live. Several countries have popular sketch comedy shows. They are short, the language tends to be simple, and everybody loves to laugh.
The respondents cited affordable technologies, video mediums, games, portable handheld devices, interactive video, the physical image of the professors, and storytelling through various means, advertisements and comedic skits.

Discussion on Transference and Interactivity and Competencies and Access
Generally, the participants agreed on the use of portable devices, gaming and storytelling through the use of comedy, drama and analytical approaches.
There was one participant who expressed the importance of lighting, color and texture in education. Video games and iPods were mentioned by at least two participants. One participant expressed a desire to train professors on how important their physical image is when educating students. Finally, one participant expressed the importance of comedy in the learning process by citing that everyone loves to laugh. The sub themes that emerged from coding were competencies and access and competencies for teachers and learner centered approaches under the general themes of transference and interactivity and competencies and access.

**Competencies for Teachers and Learner-Centered Approaches**

Do you think that education, especially higher education, can make school more interesting by taking things that you do such as image making for marketing oneself into the community so that a student can learn complicated abstract theories in concrete and practical ways in the real world? Could college students or anyone benefit from an image makeover before a college interview, job interview or before a major presentation at school or work? Why? Why not?

Erin:

Yes, definitely. It all goes back to that visual thing I keep talking about, right? Seriously, though, image is everything. Like they say, you only have one chance
to make a first impression - and only about 30 seconds at that. So how you present yourself can make the difference in your success.

Discussion on Competencies for Teachers and Learner-Centered Approaches

The participant emphasized her viewpoint that the visual imagery is critical by stating the adage that one has 30 seconds to make an impression, and how presenting oneself can have an impact in the educational and professional worlds. The sub themes that emerged from coding were competencies for teachers and learner centered approaches under the general themes of transference and interactivity and competencies and access.

Transference and Interactivity and Competencies and Access

How would you utilize interactive video games in the classrooms?

How would you utilize cell phones and smart phones like the Blackberry, the Treo or the new iPhone in the classroom?

Aaron:

In our case, the museum is our classroom. We would use interactive video games to lead students through battles in Texas history, participate in day-to-day interactions were necessary for early settlers, learn more about the technologies that are being in Texas (at NASA for example), and experience what Texas will be like in the future based on different factors that students can influence. We would use cell phones for delivery of content and to host chat rooms.
Discussion on Transference and Interactivity and Competencies and Access

This participant advocated utilizing interactive video to teach students history, learn more about technology and utilize cell phone for the delivery of content. The sub themes that emerged from coding were access and learner centered approaches under the general themes of transference and interactivity and competencies and access.

Transference and Interactivity and Competencies and Access

How would you utilize interactive video games in the classroom?

Cesario:
They would only have instructional applications only and no outside clutter. Only problem is some tools have import connections and would be easy access and change.

Rebeca:
I would somehow incorporate lesson plans into games where students have the opportunity to join in the game and compete with their participating classmates.

Sadia:
As outlined above, to make history, literature or even math more interactive.
Discussion on Transference and Interactivity and Competencies and Access

All of these respondents suggested using video games in the classroom for instructional purposes, to make specific courses more interactive and to provide students with the opportunity to become physically embedded within the game. One participant, however, stressed that instructional applications be the only applications in the games, but acknowledged that some tools have import connections that can easy to access and change. One participant stated that she would utilize video games to create learning through immersion within the game and competition with fellow learners. Finally, another participant suggested using games to make math, history, literature or even math more interactive. The subthemes that emerged from coding were access and learner centered approaches under the general themes of Transference and interactivity and competencies and access.

How would you utilize interactive video iPods and video games in the classrooms? How would you utilize cell phones and smart phones like the Blackberry, the Treo or the new iPhone in the classroom?

Cesario:
It would help bridge learning disorders and narrow focus for students to their work. The abuse would come from students that see this from of technology as a toy. Especially when so many kids know how to manipulate or enhance their iPods.

Erin:
They can be used as a teaching tool for visual learners and group study, with the games tailored to the subject being taught. As for cell phones, many have video recording capabilities now and that could be helpful for lectures instead of taking notes.

Discussion of Transference and Interactivity and Competencies and Access

The two respondents suggested that video iPods, video games, and cell phones could be used to assist students with learning disorders and narrow focus for students to their work while assisting visual learners and creating tailored group study on the subject being taught. One participant recognized that there might be some abuse from students who view new technology as a toy especially because they possess the knowledge to manipulate or enhance their iPods. Another participant suggested that cell phones with video recording capabilities could be helpful for lectures instead of taking notes because the lecture could be recorded or even downloaded later and replayed.

The sub themes that emerged from coding were access and learner centered approaches under the general themes of transference and interactivity and competencies and access.

How would you utilize cell phones and smart phones like the Blackberry, the Treo or the new iPhone in the classroom?
Rebeca:

I would create a chat forum where students could link up wherever they were and compare notes or create blogs to show assignments along with the students’ responses. You could send out assignment assignments as emails that they could access with a cell phone, Blackberry, or any other PDF. Assignments could also be answered the same way you’d reply to an email.

Students could play along as individuals or games can be designed to play as groups or teams. Students would greatly appreciate and benefit from learning via interactive games. I guarantee less students would fall asleep in class!

Sadia:

I’m not a big fan of these technologies. Don’t use a Blackberry or Treo, have not seen an iPhone yet.

Discussion on Transference and Interactivity and Competencies and Access

The participants were split into two camps: supportive of edutainment techniques in concert with convergence technology and those who were less-supportive of convergence technologies and more supportive of edutainment techniques.

One participant was supportive of the technologies and suggested that students could create chat forums and blogs for assignments and uses emails to smart phones. This participant maintained that students could play games as individuals or teams so that there could be learning from interactive games and
guaranteed that students would not fall asleep in class. The other participant expressed that she was not a big fan of the new cell phone technologies. The sub themes that emerged from coding were access and learner centered approaches under the general themes of transference and interactivity and competencies and access.

Transference and Interactivity and Competencies and Access

How about utilizing video podcasts and audio podcasts in concert with video games as the assessment tool or test to find out what students are learning? Can you describe the advantages and disadvantages of using podcasts and video games in the classroom?

Rebeca:
I think any games or podcasts should only be used a supplemental tool to accompany existing teaching methods. In no way do I think one should replace the other. Perhaps an advantage would be simply a way (of) bringing entertainment value to learning may actually work. And a possible disadvantage would be that students become overly dependent on relying on video stimulation in all aspects of their life to bring it into the classroom also means training and certifying teachers in a whole new and radical way.

Discussion on transference and interactivity and competencies and access

This participant suggested that video podcasts and audio podcasts should be used as a supplemental tool to accompany existing teaching methods. She
suggested that an advantage may that of bringing entertainment value to learning while a disadvantage may be that students may become overly dependent on video stimulation in all areas of their lives and teachers would have to trained and certified in a whole new and radical way. The sub themes that emerged from coding were access and learner centered approaches under the general themes of transference and interactivity and competencies and access.

Transference and Interactivity and Competencies and Access
How about utilizing video podcasts and audio podcasts in concert with video games as the assessment tool or test to find out what students are learning? Can you describe the advantages and disadvantages of using podcasts and video games in the classroom?

Jeff:
The advantage to podcast and video game technology is that it can be a means of reaching young people in a way never thought possible. Students may not even be aware they are learning through such edutainment ventures. The disadvantage to the technology is one assumes that all students have the ability to afford the technology and have it available to them. Additionally, reading and comprehension may not be benefited by the technology.
Sadia:

Again, I’d like to see more oral exams. Technology is great but we need to apply it correctly. It’s not the be-all and end-all. We are still humans and we need to learn how to get along with each other!

Transference and Interactivity and Competencies and Access

The participants had positive thoughts but were cautious. One participant cited podcasts and video game technology is that it can be a means of reaching young people in a new way never thought possible and that students may not even realize that they are learning. He suggested that reading and comprehension may not be benefited by the technology and that all students may not be able to financially afford the new technology. The other participant maintained that more oral exams be utilized, but suggested that technology is great but needs to be applied correctly because it is not the be-all and end-all. She warned the interviewer that people have to socialize and learn how to get along with one another. The sub themes that emerged from coding were access and learner centered approaches under the general themes of transference and interactivity and competencies and access.
Discussion on Transference and Interactivity and Competencies and Access

Can you explain how you can utilize entertainment techniques such as blogs and wikis to teach students how to write and research on any subject by becoming a reporter, a producer and an editor?

Cesario:
For one you can write the story or paper as an informative piece by digitally taping themselves and transferring the information into a common place for all to see. Use editing software that all must first learn. The benefit would come from the individual seeing themselves and their peers.

Jeff:
The technology of blogs, wikis and the like allow for opportunities to express opinions, research, interact with others and therefore learn.

Rebeca:
Send them out with cameras and mics and have them report their own stories. When they’re done shooting them, I’d have them edit the piece and prepare it to air on “TV” for their classmates (Rebeca defined TV as the Internet or video sites like You Tube, Facebook, MySpace or iTunes).

Sadia:
Ack!! You can do this on paper, too! The Internet is a great research tool. But I think it all starts on paper. You need to learn how to organize thoughts and write clearly. I have not seen that taught effectively on the Internet or through video games.
All of the respondents to this question saw beneficial uses for blogs and wikis as teaching tools. However, one participant suggested that while the Internet was a great research tool, students could use paper too. Another participant suggested using video reports by having learners to tape, edit and transfer video to a common site for viewing by all students in a class. Another participant stated that blogs and wikis create opportunities to express opinions, research, and interact with others and learn as a result of the entire process. One participant suggested that students really treat a project like a true news story in the field complete with microphones and cameras and not just a web camera.

The sub themes that emerged from coding were access and learner centered approaches under the general themes of transference and interactivity and competencies and access.

Transference and Interactivity and Competencies and Access

How would you utilize cell phones and smart phones like the Blackberry, the Treo or the new iPhone in the classroom?

Cesario:

Class work based instruction applications only so that there are not distractions while you have a captive audience.
Jeff:

I believe that the cell phone needs to stay out of the classroom environment. The use of the cell phone to download podcasts, video instruction and other useful learning means is available for students in study halls, on the bus, in the dorm, home or elsewhere.

Sadia:

I'm not a big fan of these technologies. Don't use a Blackberry or Treo, have not seen an iPhone yet.

Discussion on Transference and Interactivity and Competencies and Access

This question was followed up again with the participants after the introduction of the iPhone via phone interviews. Two of the participants essentially maintained the same answers; however, all three respondents indicated that phones can be utilized for learning but could be disruptive. One participant wanted cell phones limited to instruction applications only to prevent distractions with a captive audience. Another participant expressed that she was not a big fan of cell phones yet. Another participant expressed the thought that cell phones were appropriate for use in study halls on the bus, in the dorm, home and elsewhere, but not in the classroom. The sub themes that emerged from coding were access and learner centered approaches under the general themes of transference and interactivity and competencies and access.
Transference and Interactivity and Competencies and Access

What do you think of all of the positive press and profits that interactive Wii game is having? Have you played with a Wii yet?

This subject was not familiar with the Wii gaming console but admitted having using similar gaming platforms in the past and expressed the thought that games have the opportunity to teach and entertain because she had seen relatives learn from similar games.

Rebeca:

Can’t say that I have! I’m not familiar with Wii, sorry. I personally don’t own or use these gaming platforms much but I have in the past and I do think games have the opportunity potentially teach in addition to entertaining. I’ve seen my young nieces & nephews experience learning from similar computer games.

The sub themes that emerged from coding were gaming and simulation under the general themes of transference and interactivity and competencies and access.

Transference and Interactivity and Competencies and Access

What do you think of using a similar gaming system as a teaching tool that put the student in the world of learning?

Jeff:

The Wii game system, which I have demoed, is not only an incredible technology for entertainment, but it will help get young and old off the sofa at home and
perhaps onto a real golf course. More titles likely could be added geared toward interactive learning.

Rebeca:

Like I said before, if you can spark students’ interest in a more contemporary method, why not! I’m all for it.

Discussion and Transference and Interactivity and Competencies and Access

The participants maintained that interactive games can spark students’ interest and new game titles could be added that were geared toward interactive learning. The sub themes that emerged from coding were gaming and simulation under the general themes of transference and interactivity and competencies and access.

Transference and Interactivity and Competencies and Access

What do you think of all of the positive press and profits that the interactive Wii game is having? Have you played with a Wii yet? Do you believe that interactive games such as Dance Dance Revolution and the Wii games such as the boxing, golf and other games may assist higher education in combating obesity in America because these games require one to move and exercise their entire bodies?
Cesario:

If a game can help motivate someone to move and stay fit then that is a plus. I will never own a gaming system because I have other things to occupy my life. We have a lot of positive tools that are making that difference in this world.

Sadia:

Dude, I’ve played on a Wii and it was okay, at best. Sort of cool from a technology standpoint but I would much prefer to simply go outside and play tennis or baseball or go bowling at a real bowling alley. Why do we need a computer to get people to exercise? What’s wrong with talking to each other outside in the fresh air and playing a game the old-fashioned way?

Discussion and Transference and Interactivity and Competencies and Access

The respondents suggested that the game can help motivate someone to stay fit and were cool from a technology standpoint. Both participants indicated that they did not own a gaming system or that playing outside or bowling on a real bowling alley or exercising outside does not require a computer. The subthemes that emerged from coding were gaming and simulation under the general themes of transference and interactivity and competencies and access.
Themes: Gaming and Simulation; Transference and Interactivity; and Competencies and Access

What do you think of using a similar gaming system as a teaching tool that puts the student in the world of learning?

Cesario:
That just might work if the activity was solely based on an educational principle.

How would you utilize interactive video games in the classrooms?

Jeff:
The potential exists to develop video games exclusively for interactive learning and usage in the classroom. This means of edutainment, enforces learning for younger students who again have grown up in the post-MTV era.

Sadia:
How would that be different from a video game? I'm sorry I don't think I understand.

Discussion on Gaming and Simulation; Transference and Interactivity; and Competencies and Access

The participants suggested that interactive video gaming systems might work if based on an educational principle and used exclusively for interactive learning and usage in the classroom. However, one participant expressed that she did not fully understand since a gaming system and a video game are the same. The sub themes that emerged from coding were gaming and simulation
under the general themes of transference and interactivity and competencies and access.

Themes: Gaming and Simulation; Transference and Interactivity; Competencies and Access

Researchers such as Gee (2003a, 2003b, 2004, 2005) and Prensky (2001, 2006) maintain that students learn critical thinking, teamwork, enhanced decision making, consequences, contingency planning, problem solving skills, dedication, resilience and evaluation skills by playing games, even the violent games, and that most of attention on video gaming has been based on negative first person shooter games.

What is your take on their ideas from their research?

Jeff:

My opinion is that video gaming can be a positive entertainment experience, when practiced in moderation. Exercise, reading and interacting with others outside of a video game arena make for a well-rounded young person.

Sadia:

I still think you learn more skills by interacting with real live people in the real world – playing sports, playing a card game, or even a board game (Monopoly, etc.).
Discussion on Gaming and Simulation; Transference and Interactivity;
Competencies and Access

The participants had differing thoughts on this question. One participant favored convergence in the form of video games in moderation while the other participant tended to favor traditional edutainment through human interaction. The participants suggested that interactive video gaming systems might work if based on an educational principle and used exclusively for interactive learning and usage in the classroom. However, one participant expressed that she did not fully understand since a gaming system and a video game are the same. The sub themes that emerged from coding were gaming and simulation under the general themes of transference and interactivity and competencies and access.

Can you explain how you can utilize entertainment techniques such as blogs and wikis to teach students how to write and research on any subject by becoming a reporter, a producer and an editor? Would you train all teachers in higher education as producers and directors who must learn to understand and utilize direct communications skill and technologies that assist them in developing students who become the stars?

Aaron:
This is a sticky subject in the museum business, because the historical integrity of the content is so important. The thought of submitting historical perspectives in a public forum among people with few “recognized” credentials, and allowing them to share their perspectives is terrifying to many in academia. Having said
that, I can see many applications for blogs, particularly as forums for sharing and explaining evolving customs and traditions. I would certainly advocate training in the field for professionals in higher education.

The participant suggested that blogs have the potential for educational forum for sharing and evolving educational customs and traditions and advocated training in the field for higher educational professionals despite the concerns of traditional academia. The sub themes that emerged from coding were competencies for teachers and learner centered approaches under the general themes of transference and interactivity and competencies and access.

Can you explain how you can utilize entertainment techniques to teach students how to become a reporter and write better?

Rebeca:

Send them out with cameras and mics and have them report their own stories. When they’re done shooting them, I’d have them edit the piece and prepare it to air on “TV” for their classmates (Rebeca defined TV as the Internet or video sites like You Tube, Facebook, MySpace or iTunes).

The participant contended that students could learn the communications, research and writing skills of a reporter by actually going on location in the field and videotaping and writing their own media stories and posting them electronically on the Internet through various free video and social networking sites. The sub themes that emerged from coding were competencies for teachers
and learner centered approaches under the general themes of transference and interactivity and competencies and access.

How would you train teachers utilizing entertainment techniques, technology and devices? What skills do students develop by playing games, and utilizing multimedia devices that are crucial to education?

Aaron:
Use the same specialized training you discussed earlier (blogging).
Visual for the teachers that need the hands-on and rote/lecture for the teachers who are trained to learn accordingly.

Discussion on Transference and Interactivity and Competencies and Access.
Would you train all teachers in higher education as producers and directors who must learn to understand and utilize direct communications skill and technologies that assist them in developing students who become the stars?

Cesario:
There is no one-way to retrain educators. It must be understood first then evaluated for consumption. Visually, I feel is the best way to accomplish these goals. We are all students and the order of learning will be done differently.

Erin:
That doesn't really pertain to my work, but I think it's very important for faculty to stay current with new technology because the students will definitely know.
One participant contended that there was no one way to re-train educators, but visual training may be the best way. The other participant suggested that it was important for faculty to stay current with new technology.

The sub themes that emerged from coding were competencies for teachers and learner centered approaches under the general themes of transference and interactivity and competencies and access.

How would you train teachers utilizing entertainment techniques, technology and devices? What skills do students develop by playing games, and utilizing multi-media devices that are crucial to education?

Erin:
The students could probably train them! Students learn a lot skills…hand-eye coordination, multitasking - even developing competitive skills. And, if you have to plan to succeed in life, you're going to have to be competitive no matter what industry you work in.

Jeff:
Teachers too will require training through the tools they themselves will be using. The role of video and film producer/director will likely become that of educator as well.

The participants contended that teachers could receive specialized training as bloggers and visual training for some teachers. He also emphasized that students learn critical thinking and decision-making skills by playing gaming and using multi-media devices. The sub themes that emerged from coding were
competencies for teachers and learner centered approaches under the general themes of transference and interactivity and competencies and access.

Playing Video Games Enhance Student Hand-eye Skills, Quick Thinking Ability and Problem Solving Skills

The participants emphasized teachers could be re-trained and students could learn several skills crucial to education. One participant suggested that students could train teachers on how to utilize technology. Another participant suggested that the role of video and film producer/director would likely become that of an educator as well. The sub themes that emerged from coding were competencies for teachers and learner centered approaches under the general themes of transference and interactivity and competencies and access.

Rebeca:
Again, like I said before, they’d need to be re-trained in the new technologies. Back to school my friends or you could ask your 5 year old. They know all about computers and new technologies (smiling icon).

The participant commented that teachers will need to be re-trained and return back to school to learn about new technologies.

The sub themes that emerged from coding were competencies for teachers and learner centered approaches under the general themes of transference and interactivity and competencies and access.
Can you describe how you would change the way you were taught and future students would be taught by utilizing edutainment techniques and convergence technology? Please be specific.

Rebeca:

I would have it offered as an elective form of learning that parents and children could decide on their own if that learning method would be appropriate for them. Offer students their own laptop and all the software they’ll need.

The participant explained how she would change the way she was taught and how future students would be taught using technology. The sub themes that emerged from coding were competencies for teachers and learner centered approaches under the general themes of transference and interactivity and competencies and access.

Some studies have suggested that there is a digital divide between students and teachers and that many teachers’ refusal to adopt or inability to learn how to effectively interweave technology and entertainment techniques into the classroom has been a large reason why some studies have suggested that some technologies are not effective. What is your position on this matter and what can be done to convince old school teachers to adopt these new techniques and technologies and to train educators on how to utilize new technology and media properly?
Cesario:

I believe that traditional teachers must adopt these new methods. Only as time moves forward, they will have to accept the transition and adapt on various levels at their own pace.

Jeff:

Educators are intelligent people with an incredible ability to learn. This makes them people who are likely to be more successful by learning to adapt to changing technology. If educational institutions require the instructors to learn to understand these technologies I see them being more affective than not.

Sadia:

Again, it’s a matter of creating a new syllabus that integrates (e.g.) source material from the time as well as films made about that time.

The participants maintained that educators will have to adopt new methods such as edutainment and convergence technology and that most educators possess the ability to adapt. One participant suggested that a new syllabus be created that integrates the traditional approach with new methods and technology. The sub themes that emerged from coding were competencies for teachers and learner centered approaches under the general themes of transference and interactivity and competencies and access.

How would you utilize this device (the iPhone) or other multi-media devices in the storytelling and role-playing process of education?
Cesario:

I could see myself telling a story with the sound effects it would generate. Having it respond to questions. It would be part of the teaching process not the main tool in the process.

The participant explained how he would use the iPhone in the storytelling process. The sub themes that emerged from coding were competencies for teachers and learner centered approaches under the general themes of transference and interactivity and competencies and access.

Which tools would you utilize either separately or in unison to teach students various courses either in person or through distance learning?

Cesario:

Ipods would be primarily used as a visual based tool for homework based teaching. Blogging would be used as a communication medium.

The participant explained how he would utilize iPods and blogging for homework-based teaching and as a communication medium. The sub themes that emerged from coding were competencies for teachers and learner centered approaches under the general themes of transference and interactivity and competencies and access.

On making schools more interesting the participant expressed that education, especially higher education, can teach students complicated abstract theories in concrete ways in the real world. The sub themes that emerged from coding were competencies for teachers and learner centered approaches under
the general themes of transference and interactivity and competencies and access.

Jeff:
The uses of iPods, cell phones, smart phones, gaming devices and multi-media technologies in higher education by schools like Duke and Apple’s ITunesU have been applauded by some researchers as part of a new wave of student-centered classes because they enable student to attend classes through time-shifting, in real time or after class to re-enforce ideas and to study. Do you consider this to be effective uses of technology to teach even if some researchers disagree because they cannot get quantitative results that they need to have? What do student centered classes and curricula mean to you?

Jeff:
If the opportunity exists to learn then it needs to be utilized. If the technology is at our disposal then it needs to be injected into the classroom. The students have the flexibility to re-enforce a lesson will be at an advantage.

The participant explained that the technology at one’s disposal needs to be injected in the classroom and if the opportunity exists to learn then it needed to be utilized. Furthermore, the participant commented that technology provided students with the flexibility to re-enforce a lesson would be at an advantage. The sub themes that emerged from coding were competencies for teachers and learner centered approaches under the general themes of transference and interactivity and competencies and access.
Do you think that there has too much emphasis and research done on standardized testing, drills and traditional learning methods that there has been little room for edutainment techniques and convergence technologies to be given serious consideration in academia?

Jeff:

Having three children of my own I am very much aware of the emphasis on standardized testing. I don’t know that the old ways of testing are necessarily indicative of the honest results of an individual’s ability. An example of this is my oldest son who typically does poorly on standard tests. He is also very much involved in graphics, computer techniques and animation and does quite well when tested under those conditions.

The participant provided a criticism of high stakes testing and provided a personal example of how competency based assessment and instruction. The sub themes that emerged from coding were competencies for teachers and learner centered approaches under the general themes of transference and interactivity and competencies and access.

Do you believe that colleges may be forced to adopt student-centered curricula and classes because of the pressure of high tuition, new technologies, political demands to graduate more college students and deliver more bang for the taxpayer buck and the pressure from business leaders to produce more well-prepared workers?
Jeff:
Yes, I do believe that colleges will be forced to embrace the current technology. Those educational institutions that fail to do so may even cease to exist. The participant suggested that colleges would be forced to embraced edutainment and convergence, and warned that educational institutions that do not adapt to this trend may cease to exist. The sub themes that emerged from coding were competencies for teachers and learner centered approaches under the general themes of transference and interactivity and competencies and access.

Transference and Interactivity, Competencies and Access: Gaming and Simulations
Do you believe that gaming and simulations can effectively measure and assess the academic progress and effectiveness of individual students, the class and the professor? If you believe this to be true, please explain why it is true?
Aaron:
Yes. The performance of an individual cannot be accurately predicted or assessed without seeing that individual in the hands-on, real-world situation from which they are being assessed. Success in simulation dictates success on the part of the student in the class, and the professor.
It may not, however, predict with any certainty, the same individual’s ability to adapt to social settings that cannot be replicated in the simulation.

Erin:

I definitely think so because it's very interactive. And, I know I keep going back to the visual aspect, but I think it's the absolute best learning tool available.

The respondents indicated that gaming and simulation could effectively measure and assess academic progress and individual students, the class and the professor. The sub themes that emerged from coding were gaming and simulations under the general themes of transference and interactivity and competencies and access.

Transference and Interactivity, Competencies and Access: Competencies for Teachers and Learner Centered Behavior

What skills and technology competencies do you think that modern educators will need to become successful edutainers with students? Why do they need these skills?

Aaron:

All of them! Kids have an amazing grasp on emerging technologies. Educators will need to understand them just to be part of the conversation. Students need to want to go to school. If schools can’t compete with emerging technologies for the attention of their students, the credibility of the education system will be undermined.
Cesario:
The most important role would be a producer because this person is responsible for the content, actors, manpower and equipment. That is just the tip of the iceberg.

Erin:
I think I just answered that in the previous question!

Would you train all teachers in higher education as producers and directors who must learn to understand and utilize direct communications skill and technologies that assist them in developing students who become the stars?

Jeff:
I don’t believe it is necessary to train higher educators as producers or directors of a visual or audio medium. In reality professors, teachers and instructors are already the directors of their environment. They simply need to be educated continuously on new technology and how to inject it into the classroom.

Sadia:
I think if someone developed the syllabus (as I described above), most educators would be able to follow it.

Do I think teachers need to become web-literate and design multi-media lessons? No, actually. I think the entertainment industry should step up and design the lessons (that’s the hard part) and then get input from the educators. To ask the educators to become innovators is counter-productive. Build a better system, show the educators how it works, then have them explain how they
would adapt it. You see, it’s not just a question of bringing computers into the classroom. It’s about re-creating how we teach. Most educators don’t have the power to change the system – and what I’m suggesting is a radical departure from the way things are currently done. It’s unfair to put the burden on the educators. They have enough to worry about.

Overall, the participants indicated that modern educators would need the skills and competencies of a producer and director because this position requires technological, artistic knowledge of content, interpersonal communication skills and a creative approach.

One participant stated that educators would need to have a grasp on emerging technologies because young people are digitally literate. Two participants suggested that educators need the competencies of a producer and director. Another participant suggested that educators might not have to be trained as producer/directors because they already act in this capacity as educators. It was suggested that the entertainment industry get involved in assisting educators with their training and contended that educators have not been provide the power to become change agents in this discussion. The sub themes that emerged from coding were gaming and simulations under the general themes of transference and interactivity and competencies and access.

Since most of communication is non-verbal according to basic communication research, why is it very important that professors and educators be skilled communicators first and foremost?
Jeff:

Communication is such an important part of every area of study. You could be the greatest chemist or historian, but without effectively communicating with students and peers, one could be a poor educator. The participant emphasized that communication is at the heart of all education and that educators who are not effective communicators are not good educators. The sub themes that emerged from coding were gaming and simulations under the general themes of transference and interactivity and competencies and access.

Transference and Interactivity, Competencies and Access: Teacher Competency and Learner Centered Approaches

Can you explain how this research can be utilized to assist individual learners especially students who have not performed well in the traditional learning environment which is wedded heavily to the Socratic method teaching style?

Aaron:

This kind of technology can supplement lessons with “hands on” education without leaving the classroom. It addresses the visual need for students to “experience” the lesson, improving odds that information is retained.

The participant explained how technology could supplement tactile education so that students can experience the lesson. The sub themes that emerged from
coding were teacher competency and learner-centered approaches under the general themes of transference and interactivity and competencies and access. Do you think that education, especially higher education, can make school more interesting by taking classrooms into the community so that student can learn complicated abstract theories in concrete and practical ways in the real world?

Aaron:
Yes, I do believe that applying technology and bringing the classroom to the community can make school more interesting and therefore be retained and understood more by those students who otherwise would not have the opportunity for the understanding of various subjects.

The participant emphasized that applying technology and bringing the classroom to the community can make school more interesting and provide the opportunity for the understanding of various subjects. The sub themes that emerged from coding were teacher competency and learner-centered approaches under the general themes of transference and interactivity and competencies and access. With the explosion of reality-based television, do you think that traditional distance learning classes could be transformed into edutainment based programming that utilize color, quick edits, commercial breaks and music to keep the attention of students by providing information in short quick bursts that gives students the time to think and question?
Jeff:
While personally not being a big fan of reality TV programming, techniques from such programs could be injected into the classroom environment to allow students to give the attention they need to give to various areas of study. Emphasis on important facets of a subject could be achieved then through colorized visual effects, audio enhancements and fast paced editing.

A participant explained how some entertainment techniques from reality-based television techniques could be implemented into traditional distance learning classes to create edutainment-based classes. The sub themes that emerged from coding were teacher competency and learner-centered approaches under the general themes of transference and interactivity and competencies and access.

Transference, Interactivity and Access: iTunesU, iPods and Educational Access
What do you think of the concept of iTunesU enabling participating universities to distribute their classes and intellectual properties for free?
What do you think of universities like MIT placing their classes on the Internet for anyone to take for free?

Aaron:
I believe this is the first step in making education more accessible, particularly to individuals who have the means to purchase technology, but more difficulty
getting to the classroom. I still worry about the impact on social skills and

diminished networking opportunities.

Cesario:

If you can do the work and it is available to you then it is justified.

Erin:

It's awesome because of the rising cost of education. That's what holds so many

people back.

Jeff:

iTunesU is an example of convergence, where education can be made readily

available for students in a way that is not the norm. If this is a way for students to

learn then we must encourage its use.

Jesse:

No comment on the iTunes deal with the universities except it’s all about the

money. I very rarely download anything anymore (pause)...too many hidden

spams and viruses.

Sadia:

I think it’s great. Knowledge is meant to be shared. There might be some

copyright issues – you don’t want people claiming they developed ideas that they

clearly stole from someone else – but overall I think that sharing knowledge is a

good thing.

Overall the participants were enthusiastic about iTunesU as a form of

edutainment and convergence that can help keep down educational costs, share
knowledge and aid in the learning process. However, some participants worried about the lack of socialization, and the potential long-term profit motives that caused one participant to be suspicious about iTunesU as a covert money making machine of the future for the universities and Apple.

The sub themes that emerged from coding were iTunesU, iPods, and educational access under the general themes of transference and interactivity and competencies and access.

What do you think of universities like MIT placing their classes on the Internet for anyone to take for free?

Sadia:

Awesome. I’m not sure if most people have the interest or discipline to take a course from MIT on-line, but it’s great that they are sharing their knowledge with the public.

The sub themes that emerged from coding were iTunesU, iPods, and educational access under the general themes of transference and interactivity and competencies and access.

What do you think of Duke University creating the Digital Duke Initiative after successfully piloting a study and adopting it campus wide of distributing free iPods to students who register and take courses that digitally record, create and distribute podcasts to students who can then listen at their leisure?
Aaron:
I worry about the impact on social skills, discipline, and diminished networking opportunities. This could, of course, be a reflection of the fact that I come from an “older” generation that was taught to rely on relationships.

Cesario:
Why is this not being adopted at other schools (nationwide) so we all can use these techno gadgets? Answer, a place like Duke can afford to use these ideas and run with it. Somehow we need to perfect information distribution. So everyone can benefit for it.

Erin:
Awesome again! This is great, too, if a student is ill or even hospitalized, but still able to take advantage of educational opportunities.

Jeff:
Duke University is thinking outside of the box. Establishing yet another stream of potential education is another fine example of convergence in education. Whether in the classroom or dorm room a student is now able to further his or her studies and skill set.

Jesse:
Digital Duke? Same as the previous answer, it’s all about the money. Read between the lines people and get smart (pause)...the key word here is “kickbacks (laughing).” Like I said before (pause)...The digital age has become the new flea market. Can you imagine someone (a company) saying, “Hey let’s
re-invest some of our funds from the iTunes deal to find the next black biotech genius of the future. (laughing).”

Sadia:

Well, I have mixed feelings about this. Some people primarily intake information through their ears, and this would be great for them. Other people use their eyes as their dominant sense; they need to see things written down. The iPod concept would not help them very much (In the verification interview Sadia was informed that transcripts can be posted on iPods).

The participants expressed concerns about the detriment to social skills, discipline, and networking. Institutions like Duke having the money and potentially making money and the loss of the written word. However, many participants also viewed the Digital Duke project and online classes from universities like MIT as a beneficial thing that involved academia thinking outside of the box and implementing convergence technologies. The sub themes that emerged from coding were iTunesU, iPods, and educational access under the general themes of transference and interactivity and competencies and access.

Has the present digital world entirely re-shaped our entire world to the point that digital natives may actually think and process information differently and more quickly because of their ability to multi-task in a society and employment market that demands that students multi-task, learn by doing, practice tasks virtually through simulation and develop creative solutions utilizing teamwork?
Jeff:

I do wonder how teamwork might be affected by our technological advances. Too often we may be shutting out the outside world and have less face-to-face interaction due to iPods, the Internet and other devices. It could be possible to be technologically advanced but be a social outcast in a one-to-one or group environment. As for multitasking, I do believe that the digital world has allowed people to be better capable of handling several things simultaneously.

The participant expressed a concern that has the socialization process may be hampered by less face to face contact because of the technological advances; however, the participant later admitted that digital technology has enabled people to be better capable of handling several things simultaneously. The sub themes that emerged from coding were iTunesU, iPods, and educational access under the general themes of transference and interactivity and competencies and access.

Has the hyper pace of digital technology made traditional schooling which is largely based on expanded methods developed during the 11th, 12th and 13th centuries, and then re-developed during the 18th, 19th and 20th centuries, a boring exercise for modern students who require more stimulation and more self-tutoring and researching with games?

Jeff:
I do see that traditional methods could be seen as boring. If only educators were to increase the methods of convergence and use the technology available they would be able to inject both traditional and modern methods into the classroom. This participant agreed that traditional educational methods could be seen as boring and could use an injection of edutainment and convergence. The sub themes that emerged from coding were gaming and simulation under the general themes of transference and interactivity and competencies and access.

Could this slow pace of higher education which is the total opposite of the real world creating a problem for students when they arrive in the real world because it takes away their creativity and forces them to conform and think in a standard way that higher education often mandates because of its emphasis on standardized tests, drills and rote learning approaches?

Jeff:

While the slow pace of learning is a contrast from many real world situations, breaking into the work place and putting in long days on the job is a rude awakening to students who have hours and days to study. This is true both today and in the past when technology was not as advanced.

This participant admitted that traditional education has been slow paced and may not resemble the reality of the professional world. The sub themes that emerged from coding were gaming and simulation under the general themes of transference and interactivity and competencies and access. Can you describe
how you would change the way you were taught and future students would be
taught by utilizing edutainment techniques and convergence technology? Please
be specific.

Erin:
I am a more visual learner so I prefer being taught the way my mom taught me
with visuals like pictures, flash cards, and illustrations. I could look at the
photographs and illustrations and I could tell what the writing was all about in the
books. I would use podcasts; especially an iPod because it is compact and
portable and I can see and hear everything.

Jeff:
I completed my college studies 20 years ago so certainly there is a great
difference in the world of learning today. I don’t know how I could accurately
compare the way students are taught today. I can say though, the use of
edutainment with the implementation of subtle music in the background of a
classroom, podcasting lectures and converging graphics and video
demonstrations complete with power point type bullet points to enforce a point of
interest would be incredibly helpful in learning. I believe the retention would be
enhanced and improved for students.

The participants explained how they would change the way that they were
taught utilizing edutainment techniques and convergence technology.
The sub themes that emerged from coding were learner strategies, learning styles, and learner centered approaches under the general themes of transference and interactivity and competencies and access.

There were twin sets of themes that emerged from the data collected from the participants for this research question. Just as edutainment and convergence have been inextricably connected for this study: transference and interactivity were tied together and competencies and access were tied together by the participants in their responses to the second research question and the sub-questions that emanated from this research question.

The primary set of twin themes that emerged from the participants' responses to the second research question was: transference and interactivity and competencies and access.

Primary Support Research Question 2

Why has a government agency like the military embraced gaming and simulation as training and spent billions of dollars on these technologies as a teaching tool while the education community as a whole is still arguing about effectiveness when the military and certain elite research universities have been utilizing these technologies since the late 1950s and early 1960s as part of the space program and the Department of Defense?

Are you aware that the military has been conducting research using interactive video games and simulation technology for nearly 40 years for
educational and training purposes? How can these new technological techniques be examined for proof that they can or will make a difference in both teaching and learning?

Aaron:
Yes. In fact, I had the opportunity to participate in research on a virtual military helicopter-training prototype in Orlando, Florida in the late 90s.

Cesario:
No I didn’t know that. We must reinvent the applications of old school teachings. By using web based outlets using information rich sites so that the student can feel at ease.

Erin:
Yes. The military complex is always light years ahead of everyone else.

(Erin indicated in the verification session by phone that she worked for the Army on training videos that utilized interactive convergence technology during the interview verification process).

Jeff:
I am aware of the technology used by the military. I do hope that this technology is made available for students with difficulty comprehending and retaining information provided of course it doesn't interfere with the freedoms we have grown to appreciate (Jeff indicated during the interview verification session by phone that he utilizes a post production editing, coloring and digital mastering technology called ASIVA that was developed directly by his former boss the late
Jack Mayesh who was a former high level Hollywood and defense industry executive who worked with the stealth aircraft project when it was classified. This researcher had worked with Mayesh on several projects in the late 1990’s, 2000 and 2001 and interviewed him on convergence for his master’s research project.

Jesse:

I’m out of touch with any Pentagon stuff (This participant admitted during the verification phone and Internet interview that he worked for the Air Force as a filmmaker and was aware). Yes, I am aware of the government use of these technologies and worked with many of them as a filmmaker and director of photography.

Most of the subjects admitted to being aware of the Pentagon’s use of gaming and simulation technologies for educational and training purposes. One subject worked in the entertainment portion of a military component that made films, public service announcements and documentaries even though he admitted being out of touch with recent Pentagon work when interviewed for verification. The sub themes that emerged from coding of the participants’ responses were: government action and effectiveness: military and technology connection.

Are you aware that the military has conducted research using interactive video games and simulation technology for nearly 40 years for educational and training purposes? Can you explain how this research can be utilized to assist individual
learners especially students who have not performed well in the traditional learning environment which is wedded heavily to the Socratic teaching method?

Erin:

Like I said, visual learning is the best technique. Learning differences are a lot more common than many think. It's not that we can't learn...the majority of us are very intelligent and creative...our brains just work differently. I think it's about time that technology caught up to us...what we've known all along!

Rebeca:

Yes, I had heard of the military's use of games and simulation technology before. I think further research would show that games could really serve as a valid teaching tool. As I stated earlier, we don't all absorb information the same. What may work for one student may not work for another.

Sadia:

Socratic method? Not from what I've seen. From what I understand, Socratic method is very interactive and the teacher asks questions to the students, set up in such a way as to arrive at a predetermined conclusion. Much of today's learning is geared towards standardized tests.

Video games, where history comes to life or famous novels form the basis of the action, could be very helpful in education.

Erin admitted knowing and working about the military use of video games and simulation technology, but she answered the second question by suggesting
that visual learning is the best technique and that learning differences are more common than many think.

Rebeca admitted knowing that the military used games and simulation techniques and predicted that further testing would demonstrate that games would serve as a valid teaching tool.

Sadia supported the traditional Socratic method as very interactive, and concluded by stating that much of today’s learning is geared towards standardized tests.

The sub-theme that emerged from coding of the participants’ responses was: the military and technology connection.

Why has the military embraced gaming and simulation as training and spend billions of dollars on these technologies as a teaching tool while the education community as a whole is still arguing about effectiveness when the military has been utilizing these technologies since the late 1950s and early 1960s as part of the space program?

Cesario:

Because it works and it keeps one interested. Role-playing builds thinking and rethinking of different scenarios.

Jeff:

I think a large part of it is due to traditional learning in classrooms. Likely another factor is that the military is dealing with adults, while education also involves younger people.
Sadie:

Well, the obvious answer is that the military spends billions of dollars on sophisticated equipment and therefore wants people well trained before they touch it!

The military takes people who are a product of our education system; it is not an alternative to it. So there might be some cross-over, but again it all depends on what the objectives are. Teaching someone to read or do fractions does not require millions of dollars of technology.

The participants explain that the military has adopted gaming and simulation because it works, keeps students interested, and the government needs well-trained people to operate expensive and sophisticated equipment. One participant suggested that traditional education in classrooms might be part of the problem.

The sub themes and the general themes that emerged from the participants’ responses were: government action and effectiveness.

Do you believe that gaming and simulations can effectively measure and assess the academic progress and effectiveness of individual students, the class and the professor? If you believe this to be true, please explain why it is true?
Jeff:

To best understand how gaming and simulations can effectively measure and assess progress and effectiveness, we need to look no further than what is done in the military and space programs in effect by our own government.

The participant indicated that the military has already answered the question of effectiveness since it has utilized gaming and simulations in the serious academic work utilized by the military industrial complex and the space program. Effectiveness is measured is through performance and understanding of real world situations.

The sub themes and general themes that emerged from the participant’s responses were: government action and effectiveness

Should teachers be concerned or elated because students now have the ability through individual sensors to inform a professor when they are having problems during a lecture?

Jeff:

Technology which benefits the student needs to be utilized. Professors who do not embrace the technology in the classroom environment will be left behind by those who are more media and technologically advanced.

The participant maintained that technology that benefits the student should be utilized, and that teachers will be left behind if they do not adopt new technology. The sub-theme that emerged from the participant’s response was effectiveness under the general themes of government action and effectiveness.
Do you believe that a cross-disciplined major called edutainment and convergence may eventually become a reality because of the blending of communication skills and techniques coupled with educational content, theories, research and methods and the dissemination through multiple media platforms such as phones, multi-media devices, free Internet services such as iTunes and YouTube, free search tools such as Google and Yahoo and free storage, interactive recording and research capabilities of blogs and wikis like the one we are using for these interviews? Explain why, and how you would utilize these media platforms together and separately?

Cesario:
Yes, I think there will a new major because everything is overlapping in the world of knowledge and technology. When it comes to communication and education, you must be a good communicator to be a good educator because you with education and communication it is all about sending and receiving the right message. With new technology there is a sociological process going on, it is just different and more frequent because now people can see each other by cell phone, by webcam or they can just talk on the phone or text each other. The iPhone just made this process easier. The edutainment will be merged within the convergence. It's a marriage.

Eric:
Yes, most definitely it will become a new major.
Erin:
Yes, I think it will become a new major.

Jeff:
Edutainment will continue to grow and be accepted. Technology is not only here to stay but improving and expanding on a regular basis. I could see the introduction of edutainment into typical standard subject matters to encourage, enforce and educate.

Rebeca:
Yes.

The participants stated that edutainment and convergence could evolve into a cross-disciplined major. The sub-themes and general themes that emerged from the participants' responses was government action and effectiveness. Is this good news for the concept of fair use? Where is the fine line between fair use and copyright infringement in your opinion now that international media conglomerates control most entertainment content? Will amateur, semi-professional and professional video, audio and multi-media content on websites like You Tube, iTunes, Amazon, Sony’s Playstation Online, Yahoo Tv and Microsoft’s X-Box and Zune Marketplace threaten traditional broadcast, cable, satellite and entertainment companies' position?

Cesario:
There will be a techno war come from this ramped feast. A change is going to infringe on someone along with lawsuits.
(In the verification interview he cited examples of Viacom suing Google’s YouTube; Blackberry’s parent company, Research in Motion, settled infringement case; Cisco sued Apple over the iPhone name and settled; The publishing industry suing Google for copying books from academic libraries from universities worldwide for its digital Alexandria Library Project on a teleconference later).

Problem is nothing will be settled any time soon!

Jeff:

Fair use and copyright infringement will continue to be a difficult challenge to the digital police of the future. This remains to be seen as to how it will best be handled in the future.

I think websites which stream content online; provide more potential for would be producers to get their content out to audiences. I also see television using the internet as a primary method for delivery of its images in the future. We could see broadcasters; video rental stores and movie theaters gradually disappear in favor of sites such as You Tube and iTunes

Jesse:

I feel strongly about protecting image rights. Nobody really cares until it affects them personally, then they’re involved emotionally and financially because it’s their profits or rent money that is eroding.

Sadia:

Rather than venture a guess, let me stick to what I know. When movies were first created, people said the theatre industry would die. It didn’t. When TV was
introduced people said the movie industry would die. It didn’t. When the Internet became popular, people said print media (newspapers, magazines) would die. It didn’t. What happened each time is that the existing industry/industries adapted. There used to be around 150 Broadway Theatres in NYC. That’s not the case anymore. Cable TV didn’t kill network TV.

Fair use vs. copyright? That’s tough. Let me put it this way – if someone wants to study a song I wrote, that’s fair use. If someone wants to use my song in a commercial or a video, then I should have the right to choose (grant permission) or refuse (deny permission).

The participants explained that lawsuits would continue over intellectual property rights because the lines between fair use and intellectual property rights have been blurred by new technologies. One participant was vehement in his position that content owners should have their intellectual property rights strongly enforced. The twin sub themes that emerged from the participants’ responses was: government action and effectiveness: intellectual property and fair use. Did laws like the Digital Millennium Copyright Act of 1998 and the Telecommunications Act of 1996 swing the pendulum too far in the direction of businesses by allowing to media firms to consolidate, control content distribution and sue more easily for perceived violations weaken the First Amendment’s notions of free speech, the right to protest the government and fair use in academia and entertainment? What can be done?

Cesario:
I think so, but the reason was based on keeping up with consumer swapping of information. My view as of today, we must be proactive and give feedback to the policy makers.

Jeff:

To begin with I wanted to add that I believe the DMCA forces all companies producing video equipment to support one company, Macrovision, for copy protection technology. This is a clear monopoly and downright wrong. Additionally, the DMCA has been criticized for making it too easy for copyright owners to encourage website owners to take down infringing content and links when it may not in fact be infringing. When website owners receive a takedown notice, it is in their interest not to challenge it, even if it’s not clear if infringement is taking place, because if the potentially infringing content is taken down, the website will not be held liable. So yes it has gone too far!

Jesse:

Until personally “create” something or become attached to an “invested” project, you will never understand it. It’s not just content; it’s your baby. You made it from scratch. You made it work. You devoted all your time and energy to your baby (pause)…whether it’s a script, movie, short, painting or original photo, it’s still your baby (pause)…you created it, you own it. The key word or solution to all this piracy is “licensing,”

The participants took sides on the issue of the Digital Millennium Copyright Act of 1998. Two of the participants took strong stances, taking stances that were more
pro-consumer, and one participant took a strong pro-industry stance. The twin sub themes that emerged from the participants’ responses were government action and effectiveness: intellectual property and fair use.

Will the future of the music industry be tied largely to the field of edutainment because of the power to communicate, educate and inform of art forms such as hip hop music? How about visual mediums like art with free sites like YouTube that combine art with music? How about student interviews and research?

Cesario:
If we let limits stand in our way then we are going to have a hard time with big business and their foothold on all levels.

Jeff:
I see convergence in media such as hip-hop music to be a great vehicle not only for the artists, but an exceptional means to retain, educate and reach students and would be learners. Utilizing music in research and interviews could continue to be a touchy area, as it is technically piracy to use popular music in such ways.

Sadia:
There is a big difference between slapping something together and posting it on YouTube and actually having a message. Again, it all goes back to education. If more people understood more about music (how to read it, how to write it, how to play it), we all would be a lot better off!!
The future of the music industry in the field of edutainment was deemed by participants to have potential as a great vehicle but may be threatened by the music industry and artists. The sub-themes and general themes that emerged from coding of the participants’ responses were effectiveness, intellectual property and fair use.

But first, I would like to ask you what do you think about the recent by Apple and EMI to release their music without technology restrictions, known as DRM – digital rights management, that prevents interoperability or sharing of music content, or even video or print content?

Aaron:
Companies have a responsibility to make money for their shareholders, and I believe competition is healthy, so I had no problem with DRM. Let the best platform win!

Having said that, companies like Apple and EMI are clearly sensitive to the desires of buyers who do not want to contend with restrictions. Fewer restrictions certainly appear to generate stronger brand loyalty.

Erin:
I think eliminating all restrictions will affect the revenue stream for artists, so I'm not sure how good of a thing it is. So far as gaming platforms go…don't know a thing about it other than what my husband tells me. He's very into all the new technology…he and his best friend are definitely techno-nerds.
Jeff:
The use of DRM may be a barrier to future technologies designed to permit data to be read only on particular machines, over certain periods. This could make future data recovery impossible with the changing of technology.

Sadia:
This hits a deeper issue which is the distribution of wealth in this country -- How much money does one person (artist) really need?? If I write a number one song, I will make millions and millions of dollars. At what point do my “rights” need to be protected? No one should be able to steal my song, or use it without my permission of course. But for how long do I need to make money off of it? Are the radio rights different from the Internet rights, are they different from making a video for my song and posting it on YouTube?
These are tough questions. I’m a composer and a writer. It breaks my heart that so many artists are struggling while a chosen few make gobs and gobs of money. Often it’s not a question of talent – it comes down to who you know and making a decision to become part of the “PR machine”.
Some performers, who make millions of dollars singing, have bad voices. The technology in the studio today can fix just about anything. That bothers me. I think we need to be more supportive of the creative process. We should reward good work – talent and hard work – and we should make it easier for more people to make a living by developing their creativity.
Participants expressed some concerns about digital rights management and the impact on artists—how some companies have dealt with the issue. The sub-themes that emerged from coding of the participants’ responses were intellectual property and fair use under the general themes of government action and effectiveness.

Will the music, film and broadcast industries continue to sue their customers and potential customers for piracy, or stealing as they call it, for sharing entertainment content by copying, storing and sharing content that consumers have legally purchased? Is this stealing or does the customer own content once they buy it if they are not financially benefiting?

Jeff:

I believe that if the consumer is not gaining financially from the video or audio content then they should be able to use it – once they have purchased the media. The technology though should not be shared, but controlled through the distributor or creator. The media should allow for backups by the individual who purchased the media.

Sadia:

Back before CD’s were popular, everyone bought cassette tapes, and before that it was albums. No one ever complained about “mix tapes” that were widely circulated – people would make compilations from the various tapes or records in their collections, put them all on a cassette tape and give them to friends. No
one in the industry complained about this, perhaps because all the content had been purchased?

The participants grappled with the intellectual property rights issue and yet argued for fair use. The sub themes that emerged from the participants’ responses were intellectual property and fair use and the general themes were government action and effectiveness: intellectual property and fair use. Will the music, film and broadcast industries continue to sue their customers and potential customers for piracy, or stealing as they call it, for sharing entertainment content by copying, storing and sharing content that consumers have legally purchased? Is this stealing or does the customer own content once they buy it if they are not financially benefiting?

Cesario:

The real question as I see it—is will edutainment and convergence be limited to these rules and regulations? If there is money involved and a customer to sell it to then we will see people get sued. In my book that is not right. A participant discussed copyright issues and the power of money and he maintained that the industry would sue its customers because it had the power to sue them based on the present laws and greed. The sub-themes that emerged from coding of this participant’s response were and intellectual property and fair use under the general themes of government action and effectiveness.

Do you believe that educators may become the rock stars of tomorrow because most universities, like most businesses, are de-emphasizing full-time tenure
positions and utilizing part-time adjunct professors, because they are cheaper, and this offers part-time instructors to keep ownership of their intellectual research properties and disseminate and sell it or broadcast it on sites like YouTube, iTunes, ZuneMarketplace, and Amazon?

Cesario:
I would like to see educators stay employed full time and have what they teach stay compartmentalized and owned by them. Only that will never happen while they work at established institutions. In my opinion teachers are not given any room to maneuver so only a limited amount of people learn their techniques.

Jeff:
I don’t know if educators will be rock stars, but I do think they will need to be more creative to be effective in their methods to reach students and therefore be desired and approached by secondary education institutions.

Jesse:
Rock stars?! Good Lord! Try “EduSellers,” The Internet has become a giant digital “flea market” of our time. Get a B.A. in two days! No payments for one year! Twenty-two percent interest fees! It’s all about fast and cheap.

Sadia:
Rock stars? Maybe not. In general, we teach what already exists. When we learn to teach “CREATIVITY”, then we will be asking rock stars to become educators!
The participants had differing thoughts on this subject despite supporting the disseminating of content and sharing knowledge. Most participants do not believe educators will be the new rock stars, but may have new financial opportunities in the digital age. One participant stated that educators would become something else: edu-sellers as part of a digital flea market. The sub-themes that emerged from the participants’ responses were intellectual property and fair use under the general themes of government action, and academic effectiveness.

It has been suggested by many within the academic and political communities that these new technologies are gimmicks and do not truly educate and that education must be serious because that is the tradition. What is your response to this line of thinking? Could this line of thinking be one reason why higher education has not embraced these technologies en masse like the military has done?

Cesario:
It was a gimmick at first, only now it is the only way we can connect to all ages and that is the truth of edutainment and convergence. This society is based on tradition and for it to change will take time and effort. The military has tapped into a loose situation and capitalized on it.

Jeff:
If we do not allow the technology to be used to enhance our lives in an educational setting we are missing an opportunity to utilize the new media which
is such a large part of our daily lives. Traditional education needs to be merged with these technologies to increase awareness and reach students.

The participants explained why the military has been an early adopter of gaming while academia has been slow to adopt gaming. The themes that emerged from coding of the participants’ responses were academic effectiveness and government action and academic effectiveness.

A researcher named Linda Suskie once suggested to me that part of the problem with education is that there is mismatch between the learners and the instructors because most learners are primarily visual combination learners who must see and then attempt to do to gain a competency or skill and most instructors are polar opposites who learned through the traditional rote style of lecture, listen, note take and learn. The visual element is missing and the simulation in real time is missing, do you think that this mismatch is a problem and that video games are popular because they utilize fast cutting visual action, music, sound effects, interactivity and the ability to practice building their skills over and over again?

Aaron:

Yes. Teachers are not blind to this phenomenon. In many cases, they simply lack the resources and training to position them to best accommodate the emerging multi-sensory needs of new generations of students.
Cesario:

About 16 years ago this was the only method used, and for me it was hard to grasp. In around about way yes this was a problem for many. Unfortunately the act of repetition with video games is the new training ground for today's youth.

Erin:

Yes, absolutely - as I just described in the previous.

Jeff:

I do think that video games and films are something that have changed the MTV generation and audience and the way they are viewing images with fast passed cutting and imagery. With that being said, utilizing a technology such as a power point presentation in an educational forum allows for the learner to have points of significance reinforced visually in a way that the younger users are accustomed.

Jesse:

Educators have no control over the games or the manufacturers of the games. It starts with the parents (pause)...period. Parents (pause)...watch your kids. Spend time with your kids. It’s not rocket science.

Sadia:

Again, why reinvent the wheel? Students will learn what they are passionate about – that can be poetry, music, fashion, politics, physics, film, sports...

I think we are really missing the point here. What do we want our kids to learn? What are the basic core competencies they need to know?? What part of American history is “important”. Do we need to memorize every President?
Maybe so if you want to major in Poli Sci. Do we need to learn about the history of patents? Maybe so if you want to be an engineer. Should you read all of Shakespeare’s sonnets? Maybe so if you want to be writer.

We need to tailor what we teach to each child’s interests. It’s not a matter of “HOW” we teach; it goes much deeper than that into WHAT we are teaching.

The participants had diverse thoughts on this question even though most agreed that there was a mismatch between learners and educators. Some participants questioned why should the wheel be re-invented and maybe what should be examined is what students are being taught. Another participant questioned the entire gaming industry and accused it of disenfranchising teachers. Another participant suggested that video games and films have changed the younger generation because of the fast cutting nature of the video images on MTV, video games and action oriented films. Another participant indicated with some regret that the repetitive nature of video games was helpful with students. The emerging sub themes from coding the participants’ responses were academic effectiveness under the general theme of government action and effectiveness.

Do you see edutainment and convergence as a bridge to assisting minorities and students from lower social economic backgrounds into mainstream in America in academic areas such as math, science and engineering which currently lacks substantial female, low income and minority student and professional representation according to experts such as Bill Gates and George Lucas who have been lobbying for and spending their own money to assist educating
students from disadvantaged backgrounds and teachers who are interested in utilizing edutainment and convergence as educational tools?

Aaron:
I certainly hope so. I also hope that as lawmakers learn the value of edutainment and convergence approaches, they will direct technologies to populations that are traditionally underserved, or are unlikely to have access to these technologies at home.

Cesario:
We must all be up to speed in the learning department. If edutainment and convergence is the key then we must all embrace this way of thinking and move with it. No matter what their social status is everyone needs to have more than just a fighting chance. Our future is at stake, and now we do have various mediums at our disposal. Therefore it is a moral must that we give everyone a wholehearted chance.

Erin:
Yes, I think it would make a huge difference because everyone should have a dream and strive for success in their life and have the opportunity and means to do it. Edutainment and convergence levels the playing field so everyone can achieve.

Jeff:
While I do see that edutainment and convergence can be a bridge to assisting minority students, getting these technologies into the hands of these minorities
outside of the classroom could be the greatest challenge. This is where the disadvantaged could see a wider gap in resources.

Jesse:

Bridge the gap? It will never happen. That’s like asking someone from the Hamptons to share their home with a homeless person. I have to remind everyone that during the Katrina crisis the dolphins were saved before any minority was saved from the blistering heat. The reason? The dolphins have a high ROI (pause)…return on investment.

Overall, the participants expressed hope and thought that edutainment and convergence could help to bridge the gap. There was one dissenter who suggested that some wealthy individuals have not embraced the mindset of Gates and Lucas. The sub themes that emerged from coding of the participants’ responses were emerging edutainment and convergence trends: the role of edutainment and convergence with disadvantaged and minority students

Do you see edutainment and convergence as a bridge to assisting bilingual students mainstream in America in academic areas such as science and engineering that currently lack substantial minority representation?

Rebeca:

If edutainment can serve as a useful stepping stone to bilingual students then I’m all for it. I’m all for it now and think it serves as a tool regardless of the language issue. Not all students learn the same. What works for one may not work for
another and being able to offer alternate methods of education can only increase students’ success rates.

You also divulged in a prior conversation that you have worked on multi-language productions, can you explain how edutainment and convergence will impact students who are not native English speakers?

Sadia:

Oh my goodness! Such a simple question with a complex answer!

In Brazil, I saw that there is some prejudice towards learning English, especially among the lower class. Some people feel that learning English makes you a “snob” or less Brazilian.

My goal is to teach all Brazilians English “by mistake” (ha ha ha) by imbedding mini-English lessons into cool a cool TV series.

It’s interesting because there can be a similar attitude in the African-American community regarding what I call “Business English”. The fact is, speaking “Business English” can land you a better paying job. It doesn’t make you “white”!! Another project I’d like to launch is a “Business English” DVD where I interview successful black lawyers, accountants, dentists, professors etc. to show that there is a time and a place for “Business English” and you can still “chill with your homies” on your own time.

Two of the bi-lingual participants were hopeful that edutainment and convergence could act as a bridge to assisting bilingual students mainstream in America. One participant advocated edutainment and convergence assisting in
this process and she cautioned that not all students learn the same way and that alternate methods can help student success rates. The other participant with a slightly different version of the question takes the bi-lingual argument and explains how learning English has resulted in cultural resentment for some in Brazil. She then explained how she observed this phenomenon among African American students that she taught who rejected using business English because it has been viewed as being white by some students. The sub themes that emerged from coding of the participants' responses were emerging edutainment and convergence trends: the role of edutainment and convergence with disadvantaged and minority students.

Emerging Edutainment Trends – Surprises: The Dyslexia Connection

You also divulged in a prior interview that you have dyslexia and that you have utilized visual, audio and other communications techniques as part of your learning style, can you explain what some of these techniques are and how people with disabilities like dyslexia can benefit from edutainment and convergence technologies?

Cesario:

I watch and apply what I see on television for example. This way I use a frame of reference to ensure what I do is right.
In a prior conversation you mentioned that your mother utilized visual edutainment techniques to aid you in overcoming dyslexia, can you explain what she did and how it helped you to learn?

Erin:
My Mom had read an article about Tom Cruise and Cher and how they learned lines on film sets. So, my Mother started reading my homework to me, which helped me memorize things easier. And, later, I ended up utilizing that technique with an actor I worked on, on a film set, who had ADHD.

Sadia:
You disclosed in a follow up interview confirming your demographic information that your mother was a teacher who specialized in special education, can you explain?

Yes, my mother was a special education teacher. She utilized edutainment techniques. She worked with kids with dyslexia.

Three of the subjects had connections with dyslexia a known challenge to learning and cognition. Two of the subjects had been diagnosed with dyslexia as adolescents. Both of them utilized edutainment techniques such as storytelling and visual techniques as learning solutions. The third subject with a dyslexia connection had a mother who was a teacher who specialized in special education and worked with children with dyslexia. The themes that emerged from the coding of the participants’ responses were surprises: the dyslexia connections.
Emerging Edutainment and Convergence Trends: Other Surprises

Now that we have discussed all the changes that have occurred within your life, I want to briefly discuss what you think of some of the changes in the entertainment field that have resulted from convergence like the new video gaming platforms like the Wii, the Sony PS3 and the XBox Elite?

Cesario:

We are in an exciting age right now. Technology is changing from one day to the next. Only it seems that the gaming industry has taken lead in this round. It has to be balanced; Games are so interactive that it is hard to engage a young adult with lecture-based methods. It is time to adopt the gaming industries styles and hone in on them.

The participant explained how interactive games and other technologies have created exciting times that have suggested that gaming industry techniques be adopted by education. The emerging themes were emerging edutainment and convergence trends.

Can you explain the iPod, YouTube, and MySpace effects now that students, professors, public figures and ordinary citizens can now have their thoughts, words or actions instantly recorded, uploaded, disseminated and shared worldwide within minutes or even second? Is this a reason in your opinion that many professors fear losing their academic freedom for things they may say in the classroom?
Participants emphasized how new media such as iPods; You Tube and MySpace may have emerged as assets for spreading knowledge and chilling free speech.

Cesario:
These are just outlets such as free thoughts which are available to anyone. The real question is what is of any use on these sites and why we are so enamored with them? It has become a paradise for everybody to do anything and post it. Teachers beware!

Jeff:
Technology is a double edge sword in this case. We have the ability to utilize the technology for gain, but also for the sensational. This of course makes many professors skeptical. Unfortunately, there is no correct answer or easy solution to this.

Erin:
Well, I guess I would have to say that while higher education is expanding and improving all the time, we still have a ways to go. I think the possibilities for the next generation are endless

Jesse:
I can only say the effects of having MySpace, Facebook, You Tube is not good. It’s exposing how desperate people are for attention. There is a “see me” mentality going on. It’s like some giant attention deficit disorder phenomena running rampant throughout the web and the only people that can see what is
really going on is the bad people wanting to do harm and take advantage of the weak. I have nothing against these sites, but no one’s interested in education. They want to see “shock and awe” entertainment.

Emerging Edutainment and Convergence Trends: Surprises

I understand that you are a MENSA member. Can you explain what MENSA is, who can be a member, and how you have been associated with the organization?

Sadia:

MENSA is an organization for people who score in the top 2% on an intelligence test. They have their own test that people can take, and they also accept a wide variety of tests. For example, I got in based on my PSAT scores. Anyone with test scores in the top 2% qualifies. Local MENSA chapters host “Test Days” that are open to the public. If you have a high enough score, you are invited to join.

The concept of IQ tests came out of Great Britain when they needed a way to identify people with high intelligence to fly airplanes. The first MENSA chapter was in Great Britain.

I have been a member of MENSA in Washington, DC; in New York City; and in Rio de Janeiro, Brazil. MENSA is really a social organization. If you think about it, being outside of the norm can be a real disability. MENSA provides a forum to
make friends. There are many Special Interest Groups (SIG’s) that organize events and activities such as Games Night, Wine Tastings, Restaurant Night, etc. MENSA has a very active Gifted Children component. Some MENSA members are in elementary school!

Some members feel that with our vast intelligence, MENSA could be a real force for positive change. That hasn’t really happened yet, in part because communication among MENSA groups in different countries is not very organized. With the Internet, that is starting to change.

While I lived in Rio de Janeiro, MENSA held an international board meeting there. I was on hand to help translate. I was also on the National Leadership Development Committee here in the US. I was the producer on a project to put the most popular workshop on the Internet so more people could access it. I provided the voice-overs and designed the “talking PowerPoint” slides.

On a more personal level, it is my mission to break down the stereotype that MENSAns are arrogant nerds! I created a 7 minute film about 3 NYC MENSAns called “Smart and Cool”. It is available on YouTube and Blip.tv. This was a project for a class I took at the Manhattan Neighborhood Network and it is on their website as well.

You can also check out www.startime.com/MENSA to see headshots of MENSAns. I created this site to help Casting Directors and Producers find camera-ready MENSA talent. One woman on the site is a real Beauty Queen; several of the women are or were models.
One participant was a MENSA member who discussed the organization and what it does. The sub theme that emerged from coding this participant’s response was emerging technology trends: surprises.

Emerging Edutainment and Convergence Trends: The Sociological Impact

Is there socialization with the use of convergence technologies? Or is the socialization different?

Cesario:
There is socialization with new technologies but it is different socialization and more of it because you can communicate more frequently.

Eric:
Yes, there is definitely socialization it is just different.

Erin:
Yes, there is socialization.

Jeff:
Yes there is socialization.

Sadia:
Socialization is fine when using new technology when you already know the person you are seeing or communicating with a person because this is a two dimensional version of a three dimensional person, email is only one dimensional because its normally words unless it’s a video or picture email. However, I do know from personal experience that you can “know” someone through email or
telephone simply by communicating with someone through mutual art interests.

This was written art in the form of a script!

The participants discuss the sociological impact of new technologies and generally agree that there is socialization, but socialization of another type. The sub themes that emerged from coding was the sociological impact under the general theme of emerging edutainment and convergence trends: the sociological impact.

Do you believe that a cross-disciplined major called edutainment and convergence may eventually become a reality because of the blending of communication skills and techniques coupled with educational content, theories, research and methods and the dissemination through multiple media platforms such as phones, multi-media devices, free Internet services such as iTunes and YouTube, free search tools such as Google and Yahoo and free storage, interactive recording and research capabilities of blogs and wikis like the one we are using for these interviews? Explain why and how you would utilize these media platforms together and separately?

Cesario:

Yes, I think there will a new major because everything is overlapping in the world of knowledge and technology. When it comes to communication and education, you must be a good communicator to be a good educator because you with education and communication it is all about sending and receiving the right message. With new technology there is a sociological process going on, it is just
different and more frequent because now people can see each other by cell phone, by webcam or they can just talk on the phone or text each other. The iPhone just made this process easier. The edutainment will be merged within the convergence. It’s a marriage.

Eric:
Yes, without a doubt I see edutainment and convergence becoming a new major.

Jeff:
Edutainment will continue to grow and be accepted. Technology is not only here to stay but improving and expanding on a regular basis.

I could see the introduction of edutainment into typical standard subject matters to encourage, enforce and educate.

Sadia:
There will be a new major that uses edutainment and convergence, but someone will give it a new name and claim it as an original idea.

The participants overall expressed an overall optimistic role of the future of education with the utilization of edutainment and convergence by predicting that it could become a cross-disciplined major in the future. The sub themes that emerged from coding of the participants’ responses were emerging edutainment and convergence trends: the future of edutainment as a college major.

What do you think the future of education will be with the utilization of edutainment and convergence?
Aaron:
The future is bright, but it will not be without significant growing pains. It will require new funding, teacher training, creativity, and sensitivity to conditions that cannot be replicated in simulations.

Cesario:
It has to be. Because we need to empower those who are on the fence who might quitting and give them the push in order to move forward. That's not to say we abandon our traditional ways completely. We must modify them as well.

Erin:
Oh, wow! There's no end to the possibilities. The technology is changing all the time…for the better. You can literally have virtual classrooms with students from around the world, so you have not just educational opportunities, but cultural exchange, too. A perfect example is the commercial with the boy dancing that is shared around the world through the Internet and crosses all cultures.

Jeff:
Education will be enhanced by the utilization of edutainment and convergence. Reaching students in a way that they are accustomed will benefit them in their future. Yet, getting the technology into the hands of all students will continue to be a challenge. Will minorities and the poor be left behind further? - A question that we cannot answer today.

Rebeca:
There’s no limit to how far it can go and how fast it can spread with positive results. I think edutainment is the way of the future with our ever-growing technologically advanced world we’re living in. Gracias and good luck with your remaining interviews!

Sadia:

I hope we can educate more people more effectively.

The participants that responded to this question generally asserted and agreed that the future of higher education would be optimistic utilizing edutainment and convergence methods and technologies, and that the society as a whole would benefit including those from disadvantaged backgrounds. The sub themes that emerged from coding the participants’ responses was the future and the general themes were emerging edutainment convergence trends.

Has your view on the future of education become more positive or negative since participating in this study?

Cesario:

I am encouraged by what we are capable of doing for our future generations and how they will compete in a global market as leaders and thinkers.

Jeff:

I am excited for the future of learning and educating. Future students will have so many more tools available to them then the generations before them.

A few of the early participants explain their thoughts on the future of higher education since participating in the study and were both positive about the future
of higher education. The sub themes that emerged from coding was the future under the general theme of emerging edutainment and convergence trends.

The bottom line question is this: after all of what we have talked about in this study at the end of the day would you use or recommend the use of edutainment techniques and convergence technology that we have talked about in the classroom?

Cesario:
Yes, I would straight up use them (edutainment and convergence)!

Erin:
Yes! Because it works for all types of students! Especially the visual learners like me.

Jeff:
Yes!

Rebeca:
Absolutamente! (Absolutely in Spanish with strong enthusiastic emphasis)

Sadia:
Yes, absolutely be it should in the classroom. It needs to be done in the right way with the educational content!

Participants were contacted for final verification to find out whether or not they would utilize edutainment and convergence in the classroom after providing their insights, concerns and experiences. All of the participants that were reached agreed, personally endorsed the use of edutainment and convergence and
recommended the use of edutainment and convergence in the classroom for educators. All of them provided enthusiastic affirmative or yes responses. One participant answered absolutely in Spanish to indicate her strong level of approval. These answers were obtained through convergence technology through the use of a smart phone through text messages and all of the answers were received within five minutes of the original text message on a Friday, September 14, 2007 after 9:30 in the evening. The sub themes that emerged from the coding of the participants’ responses were emerging edutainment and convergence themes and academic effectiveness under surprises. After this exhaustive discussion with participants, the researcher turns to his field notes.

**Researcher's Field Notes**

The interviewer’s field notes constituted the most challenging, annoying, and tedious part of the project. It would have been even more difficult without the use of convergence technology. Since I am a visual, tactile and audio combination learner, I utilized the Internet to create a flagship blog Edutainment and Convergence, a flagship video blog site Edutainment Today on YouTube, a flagship social networking site on Facebook, two flagship news and research information aggregator sites on Digg.com and delicious and several ancillary blogs, video sites, social networking sites, email accounts, photo sites and several news and media aggregator sites. These convergence web-based tools coupled with convergence cellular technology enabled me to forward my
questions via the Internet, verify interview statements and post these interviews with updates. Moreover, I was able to transform the flagship and ancillary blogs into online media publications with political, technology, education, entertainment and communication news, commentary, research interviews features, and debate.

I found that being a motion picture producer/director with an academic and convergence research background was invaluable. I was able to marry my multi-disciplined skills and training and utilize them during the interviews with some very talented and unique individuals. Transcribing the interviews was analogous to the post-production process because both of these processes are tedious and detailed ones. I re-lived each interview when transcribing and verifying the interviews through the Internet and by cell phones with the subjects. Having said that, I hope the future of dissertations allows for video and audio transcripts that automatically caption with software when played.

The Interviews and the Subjects

I marveled at each of the subjects because they pointed out to me something that I have always suspected: communications skills are at the heart of the education process. In truth, this research was led by me as the producer and director but the participants were the stars and the co-producers along with my advisors. I was awed by insights, thoughts and perspectives that each of these individuals contributed to this project.
Aaron was able to bring an executive and marketing perspective to the field of education after working in the entertainment field mostly with Disney for nearly a decade. I found Aaron to be the consummate professional. He also had a corporate management background with Disney and had an academic administrator’s perspective with the University of Texas that was critical to this research since he was a media professional working in academia. He was a moderate technocrat who was sensitive to the academic tradition but confident that edutainment and convergence could be successfully incorporated into academia.

I met Cesario while giving a speech at a Texas college during a conference when he was a talented student in 2000. He had also been one of my students during a workshop that I taught at that same conference and I was impressed that he had incorporated many of my methods into his own unique style and had become an award winner director of a documentary. I loved the fact that he was as fearless in providing his thoughts as he was in his directorial style that has been unconventional and daring.

Eric has been a classmate in both undergraduate and graduate school and had worked on me with several projects in the past. I had interviewed him originally for my literature review because of his expertise as a professor, producer/director, editor, and a communications director for a local government. I must thank my chairperson for encouraging me to consider making him a subject. He clearly would be classified as a technocrat. As a professor and the
last participant admitted into this study, which was ironic since he interviewed me back in 2003 when I saw the connection and merging of edutainment and convergence. He was surprisingly more progressive in his views in 2007 than he was in 2003 when he, another producer Charles Roggero, and I predicted that handheld multi-media devices such as iPods, Sony PSPs, the Blackberry, the Treo and the now the iPhone would be the future of convergence and change the delivery of higher education content. With the emergence of iTunesU in 2007 after its pilot in 2006, our predictions have come to fruition. I was amazed at his foresight, his frankness, and the encouragement that he offered. He echoed the importance of communications as the core of education.

I found Erin’s name in a San Antonio production guide after she received a favorable recommendation from the San Antonio Film Commission in 1999. She arrived on the set for the interview, got the job, and immediately put her assistant to work for me. The assistant was her mother who would later become a production coordinator and associate producer who urged me to get my doctorate, and to talk to Erin about participating in this study. Erin was able to communicate the importance of one’s physical appearance and how it impacts the communications process. Furthermore, she provided a unique perspective because she had also worked on military projects that utilized convergence, Disney projects and numerous entertainment and political projects with public figures, celebrities, actors and ordinary citizens. When I finished my analysis I realized that she was the key to this study because she directly recruited Aaron,
Cesario and Rebeca to this study. I had worked with her before on national productions in the past, but it had been five years since I had worked with her and she had changed from a shy, un-assertive and competent professional into a confident, assertive, and extremely competent producer who recently had been awarded the assignment to be the first make up artist to work on Michelle Obama for the Texas Democratic Party which recently appeared in a national publication.

Jeff was the second participant that I selected for the study that agreed to participate. However, he was the fourth subject that I interviewed because of the snowballing that took place in the San Antonio area. I met Jeff in 1999 in Beverly Hills, California when he was the lead colorist, and editor for Richard and Esther Shapiro Entertainment. Jeff edited at least seven of my national government pieces with the Hollywood flair that I needed over the course of three years. We became re-acquainted during my final year of master’s degree studies when I produced and hosted a video for my graduate internship project in Los Angeles, and the subject of the video was Jeff’s former boss and one of my entertainment mentors the late Jack Mayesh. Jeff was able to bring the corporate Hollywood perspective, the television network perspective and the independent producer perspective. Jeff was definitely a co-producer of this study like his fellow participants. He was the one who suggested that I take my ideas and this project to the Internet, and he became the first participant of the participants to become a consultant on the look and feel of the blogs and the interviews and how they were taped on location. He started the trend by having
me film him in Long Beach, California, with the Queen Mary cruise ship as a background image. Jeff was candid, expressive and innovative during the interviews.

Jesse was introduced through Keith and Dr. Linda Mehlinger, my former classmate, when he was lighting and filming a film at the Murphy Fine Arts Center. I interviewed Jesse on the beach at Marina del Rey, California. Unfortunately, the audio technology did not work well that day, so I decided to interview him through electronic mail and to verify by cell phone and electronic mail. Jesse was the most direct participant of a group of direct participants about the promise and the danger of convergence. He was very concerned about digital property rights for producers and the digital flea market on the Internet. He even referred to educators as edu-sellers. He was the most experienced of all the participants and he was also the most likely the closest of the participants who was an anti-technocrat without being one. His concern was the sociological impact of technology. He has produced independent films, has been a director of photography, a lighting director, a cinematographer and a still cameraman. I really enjoyed interviewing him because he always the voice of innovation with caution and care for people.

Rebeca was introduced to me in 1999 when she arrived on my set as an intern when I had produced my first set of films in San Antonio. The next year she became my lead intern and later had risen to the level of an associate field producer by the time the films were finished. I had lost track of her until Erin
tracked her down for the study. I was both impressed at her growth, her decisiveness and her creative approach to this study. I was truly shocked when she admitted in one of her interviews that I had a big part of her entering the industry. She really added a sense of adventure and fun to this project when she immediately had me deviate from my standard indoor interview to an outdoor interview in historic San Antonio in a horse drawn carriage and a sit down interview at the Alamo at midnight. I truly learned about taking measured risks from her and I was proud but a little worried when she moved she moved to New York to get her current advertising agency job.

I met Sadia when I was doing an iPod recording experiment on 5th Avenue in New York City in 2006. I had also accompanied an actor friend to an audition and Sadia and I had an interesting conversation about producing. Sadia was an educator, singer, and actor who had become a producer. When I told her about my study she was glad to help me. She is a member of MENSA and an Ivy League graduate who had attended the University of Paris, and I only found out these interesting facts when I began the interviews. Sadia not only brought her considerable intelligence to this study, but she also brought her teaching and performing talents to this study. She was direct, inquisitive, and extremely decisive. Whenever she had a problem with a question she would call me on the cell phone, email text and me. Sadia is also multi-lingual and well traveled so also gave the study an additional international flair.
When one reads the interviews on the Internet, hears any of the interviews or views any of the interviews it was clear that each of participants had their own unique personality and definite points of view on education, entertainment, edutainment and convergence. The camera did not seem to affect their answers and they had no problem answering any questions in a candid manner even though they knew and agreed to have their identities and answers published on the Internet. In fact, I became more protective over their answers during the verification process than they were. These interviews were fun, and I had as much fun with the people that I did not know as I did with the people that I did know. The dissertation interviews felt like the interviews that I had done for work throughout the years. I felt that this was the production of my life, but my associate producers made the hard part the easy part. I am deeply grateful to each of them for agreeing to participate in an open digital study in a study that can safely be said to be an advocacy based one. I am truly grateful to each of them.

Summary

This chapter presented a summary of the results and some brief analysis from the research study. The participants' demographics data and themes generated from the findings of this study were also included and presented in this chapter along with some of the highlights of my digital notes.
In the next chapter of this study, a summary of the themes that emerged from the findings. Moreover, a brief discussion will examine the themes from the findings and how they relate to the existing literature. Finally, the implications of the findings of this study and recommendations for further research will also be discussed in Chapter VI.
CHAPTER V

SUMMARY OF RESULTS

Overview

This chapter of the study presents a summary of the results and findings obtained from the research data obtained from the participants. The grand tour question and additional research questions are answered specifically, generally, and concurrently because the nature of this study. A short discussion of the findings and the themes that emerged will follow, accompanied by direct quotes from the participants. Finally, emergent themes and categories will be presented. An attempt to characterize each entertainment professional is also presented as an insight into their comments and general discussions. Implications of the research findings are discussed along with recommendations for future research on edutainment and convergence.

Summary of the Results and the Findings

Edutainment and entertainment often revolve around a story being told as a metaphor for a larger life or educational lesson (Bandler & Grinder, 1975, 1979; Robbins, 1986, 1989, 1997, 2005). Each of the participants in this study is employed in the entertainment business as a professional who tells stories with words, images, sounds, music, and art that they create both individually and collectively as part of a larger collaborative process much like entertainment. Ladson-Billings (1999) and Ramsundar (2006) have contended that storytelling is
a potent approach that can be utilized to challenge the dominant viewpoint or paradigm of a society because storytelling enables one to understand, feel, and interpret meaning within a necessary context. One of the participants, Jeff, explains the importance of storytelling in the entertainment and the learning environment by stating, “Entertainment is done through storytelling, whether comedic or dramatic or analytical. Telling a story is thus something which I believe enhances a production for the learning environment.”

Overall, the participants of this study generally agreed and provided data telling their stories about entertainment techniques and convergence technology which can be utilized in higher education. These entertainment techniques and technologies are, according to the respondents, transferable to higher education as universities nationally and internationally demonstrate the effectiveness of edutainment and convergence. The participants explained in their narratives that edutainment and convergence are tools that can be incorporated into traditional brick and mortar, informal field-based learning environments, and virtual classrooms as part of a learner-centered approach that puts the student first and places the professor in the role of the producer and director who “creates stars out of students.” Some participants reported that educators were already acting in the capacity of a director, but would need constant retraining to keep up with the constant change of technology. A few participants recommended that educators be trained in part as communicators, and some predicted that
edutainment and convergence could become a multi-disciplined major in the future.

Participants also mentioned that convergence creates a content delivery system that allows students to time shift, and attend classes when employment demands, illness, child care, commuting times, family concerns, and energy costs prevent a student from being able to attend class or to attend class on time. Additionally, several participants indicated that there are financial considerations that make the adoption of convergence a potential source of revenue for universities and professors who develop the intellectual property that is distributed through multiple digital platforms. In fact, the literature supports this notion because convergence enables universities to distribute content worldwide instantly with opportunities for marketing the university brand to potential students, alumni, donors, parents, employers, potential faculty, potential staff and other stakeholders (Bok, 2003; Heller, 2001; NCAA, 2007; Rhodes, 2001; Sperling, 2000; Tapscott & Williams, 2006). On the other hand, participants expressed concern that financial motives and conservative administrators, looking for proof of effectiveness, have prevented edutainment and convergence from being adopted in the United States although some elite universities seem to have begun implementation.

Several participants expressed concerns about the education system including the following: it is antiquated, has failed students, is too invested in high-stakes testing and traditional rote learning, is too cozy with commercial
interests, is not interested in alternative methods of assessment that demonstrate competencies and teamwork; is focused on the theoretical without acknowledging the importance of blending the experiential with the theoretical that is necessary in the professional world, is not interested in utilizing project based and presentation based learning that enables students to develop to develop critical thinking and communications skills, is technologically illiterate from top to bottom, is not interested in new methods or technologies, is too slow paced for digital natives, is producing teachers who are technologically disconnected from their students who are often not highly technologically savvy, is elitist, is discriminatory, and is not interested in leveling the educational playing field because of the costs of higher education and the new technology.

Also participants questioned the socialization process as it relates to the utilization of convergence: is the face-to-face, teacher-learner construct of classroom integration lost? Some participants rejected this idea and indicated while there may be a socialization problem—it is just a different socialization problem and the era of current students and upbringing may impact their thinking on this issue. However, despite their reservations about the socialization process and the educational system that does not value the importance of communications skills and technological competence, the participants as a whole recommended the use of edutainment and convergence as a teaching tool with higher education that can be incorporated into the learning process whether the environment was traditional, informal and experiential, or virtual in nature.
The concerns over socialization produced an unexpected finding in that while edutainment and convergence are “digital twins who often act concurrently, appear identical in appearance, and behave the same; they still have separate finger prints, slight different retinal scans, and have different DNA.” Those who favored edutainment with limited or no convergence I have deemed as classical edutainment advocates and those that favored the use of edutainment with moderate or massive levels convergence technology have been characterized as edu-convergers for the purpose of delineation between the two.

The use of McLuhan and Fiore’s (1967, 1968) theory of media effects perspective in conjunction with media agenda setting theory perspective gives voice to a group of media professionals who have previously not been heard in higher education administration. Therefore, direct quotes will be utilized throughout this chapter to emphasize the findings that emerged from the themes.

Edutainment and Convergence Defined by Participants

The participants generally fell into two camps when defining edutainment and convergence: the participants who defined edutainment and convergence separately and the participants who defined edutainment and convergence by tying them together. The participants generally agreed that edutainment was defined as the merger of educational methods and interactive communications with entertainment techniques, communications methods and technology to deliver messages. Aaron, a marketing manager for a cultural museum for the
University of Texas at San Antonio, generally summed up the definition of edutainment by stating, “Edutainment is the entertaining delivery of educational content. It means creating a seamless presentation that draws people to the message without hitting them over the head with the lesson.” Cesario, an award winning documentary film independent producer and director defined edutainment more dramatically by stating, “Edutainment to me when I hear it spoken is just like it sounds: the unification of two furies that guide and enlighten all ages in today’s world!” Jeff, a Beverly Hills based producer, editor and colorist now living in Wisconsin, defined edutainment in its duality by saying, “Edutainment is embedding lessons of education through forms of entertainment. Utilizing new media and technology has made this a reality.” Sadia, a New York independent producer, actor, linguist, and Ivy League graduate succinctly defined edutainment as “Educating while entertaining!”

As mentioned previously, the participants defined edutainment and convergence as inextricably tied together. Eric, a college professor and producer and director, defined edutainment and convergence by stating, “Edutainment is convergence!” Erin, a key make up artist and hair stylist for several feature films and national videos, defined edutainment and convergence by replying, “Edutainment and convergence, to me, is being able to combine the entertainment industry with the education industry to teach people and reach a much broader audience than a local college or university for example.” Rebeca, a producer and New York City advertising professional for one of the largest
Hispanic advertising agencies defined edutainment by saying, “… entertainment used in educating people.” Jesse, a Hollywood independent producer and a director of photography for several Hollywood studio productions, defined edutainment and convergence by saying, “The concept of edutainment obviously to me means bringing education and entertainment together to form one medium or convergence that will satisfy a need or inspire or promote education by capturing and holding the attention of the viewer.”

Convergence was generally defined as the coming together of multiple media devices and technologies to deliver digital content electronically to audiences through multiple digital platforms. The participants indicated that edutainment and convergence seemed to be bringing together education and entertainment industries, which are converging.

Aaron defined convergence by stating, “Convergence is the application of new technologies and media in the delivery of content. In my current role, convergence means to deliver messages in multiple mediums. The shift to convergence will spell the end of many museums that do not position themselves to embrace multiple content delivery methods.” Cesario provided a similar definition of convergence, “My understanding of convergence is the coming together of various technologies and (entertainment and media) tools used currently. Jeff provided a market-based approach to his definition of convergence by stating, “Convergence is the power of media and the media consumer to interact.” Rebeca defined convergence by saying, “Convergence is
Sadie defined convergence quite simply by stating, "Convergence – where two ideas or concepts meet (similar to overlap)."

Themes and General Findings from the Results

The following general themes emerged from this study as the general findings: (a) disruptive technologies and experiential learning, (b) transference and interactivity; competencies and access, (c) edutainment methods, portable devices, new media, and computer logistics, (d) The transformational impact of convergence, (e) experiential formal and informal learning with convergence, (f) experiential formal and informal learning with convergence, (g) emerging edutainment and convergence trends, (h) the military, government action, and the technology connection, and (i) the supporting literature. The findings that emerged from these themes and the sub-themes will be discussed in the ensuing section. The general findings are also discussed below for the grand tour question. The grand tour question was the driving force behind this study and the answers to the accompanying two research questions by the participants actually served to answer the grand tour question directly.

Grand tour question: How can entertainment techniques and technology be utilized in higher education?

The following entertainment techniques can be utilized in higher education according to the entertainment professionals who participated in this study:
storytelling, music, advertisements, writing, reporting, rap, poetry, art, dance, photography, hair styles, make up, wardrobe coordination, color matching and utilization, lighting, natural sound, audio recording, radio, visualization and sensory-based simulation, acting and presenting, role playing and games, comedy and oratory, video recording, and video production. Convergence technologies that can be utilized in higher education, according to the entertainment professionals who participated in this study, include the following: digital video games, blogs, websites, social networking tools, social bookmarking sites, video sharing sites, photo sharing sites, free software sites, online multimedia stores, digital cameras, iPhones and iPods, smartphones and cell phones, computer software, wireless technologies, digital video recorders, digital storage devices, personal computers, and handheld digital devices.

Disruptive technologies and experiential-based learning (EBL)

The sub-themes that emerged from this study under the general themes were interesting. Under the general theme of disruptive new technologies and experiential-based learning, the participants acknowledged that convergence technology has enabled beneficial things such as multi-tasking, instant communications in various formats, and time shifting. For example, Cesario commented, “… It is apparent that we are having to deal and process more information at an exponential rate. Now that our society has become information rich we are all digital natives on various levels. My take is when the next information age takes hold; man’s quest for knowledge will encompass that of his
own mainframe the human brain. We haven’t even scratched the levels or storage space that is available in our brain. When this happens our rate of tactile convergence will sky rocket. I do wonder how teamwork might be affected by our technological advances.” Jeff echoed with similar comments and concerns, “Too often we may be shutting out the outside world and have less face-to-face interaction due to iPods, the Internet and other devices. It could be possible to be technologically advanced but be a social outcast in a one-to-one or group environment. As for multitasking, I do believe that the digital world has allowed people to be better capable of handling several things simultaneously.” Jesse was even more direct when he commented, “The visual element, the use of multi-media etc, is all fine and good but … (pause) …what’s missing is the human element. The digital age has fragmented our society to the point of being ridiculous.”

Several of the participants indicated that learners could learn more effectively if their individual learning styles could be digitally identified, evaluated and utilized through the use of multi-media and sensory-based tools and exercises. Jeff represented this viewpoint when he stated, “I don’t know that there is any reason not to use digital technology, especially if it allows for effective learning. If stimulating the senses allows for a greater learning experience then it must be practiced in the educational setting.” Cesario confirmed this line of thinking when he commented, “Personally I do believe that we have already tapped this idea and are using on some levels.”
However, one participant, Jesse, did not believe that learners learn more effectively with these tools when he replied, "No, I do not think learners can learn more effectively if their styles can be digitally identified."

Another participant believed that the edutainment techniques were more effective when they utilize sensory-based approaches. Erin exemplified this approach when she said, "Absolutely! Visuals and hands-on is the best training out there, in my opinion. "At least three participants expressed both support for edutainment and concern about its impact on the socialization process for students if convergence technologies were embraced without caution. Aaron summed up this viewpoint by stating, “…the trick, in my mind, is to do it without undermining the value of equally important social skills that are taught and nurtured in the classroom. I worry about delivery that is so specialized, students interact more with a terminal than with each other." Edutainment techniques such as role-playing, hands on training, oral exams, visuals and interactivity were cited as effective methods. Sadia endorsed this line of thinking and directly accused the society and the education industry of failing students when she stated, “Look, I think we are failing in our responsibility to educate our population. I think we should re-create history and get the kids more involved. Simply putting them in front of a computer will not solve the problem. They need to read source material (for example, actually read Emerson’s work) and then discuss it, or role-play it. Role-play is a very effective technique in teaching a foreign language. I’d like to see more oral exams, even group oral exams. Where one kid is Abraham
Lincoln and one is George Washington and one is Thomas Edison for example and they each have to answer questions about what was important during their lifetimes.”

One participant reported that the classroom experience lacks the every day non-traditional digital experience that learners experience with their cell phones, computers, gaming platforms, and handheld multi-media devices. Jeff maintained, “The stimulation in the classroom is not found for these students who grew up with the current technology. A talking head is fine if tied with current technology.” Sadia replied, “… we learn boring history from boring books. Someone needs to overhaul the whole system and INTEGRATE (e.g., all capitals on the Internet means strong emphasis and shouting) everything as I said earlier. I can certainly help with this, but it’s probably more than I can do alone.”

Cesario described the current education system in critical terms because of its emphasis on standardized tests, drills, and rote learning approaches by stating, “One word comes to mind: knowledge. We do live in an antiquated system of higher learning. But isn’t that what we experience before we leave the nest. The old ways of teach us the root. Our true belief system has to be jarred in the real world. In my mind it is a rite of passages. To learn one way that of the old, then break out of the box and apply new ideas to that box.” Jeff expressed doubts about the heavy reliance of the education system on high stakes standardized tests when he stated, “Having three children of my own I am very much aware of the emphasis on standardized testing. I don’t know that the old
ways of testing are necessarily indicative of the honest results of an individual’s ability. An example of this is my oldest son who typically does poorly on standard tests. He is also very much involved in graphics, computer techniques and animation and does quite well when tested under those conditions.” Sadia, an Ivy League graduate who also studied at the University of Paris and was a former educator, was arguably the most critical of the educational establishment when she commented, “You know what bothers me? That The College Board, the people who give us the SAT and AP exams have become our Department of Education in many ways. They dictate what students are taught. Why can’t we learn American History through films and music and literature? I feel like so many of us are ignorant about our own culture – myself included.”

Another sub-theme that emerged was the use of the iPhone, iPods, blogs, wikis and web tools like iTunes, YouTube, Facebook and MySpace. This theme was more evident when the discussion later turned to the transference of entertainment techniques and technology to education that indicated there was a link between utilization of entertainment techniques and technology and their transference to higher education. For example, Rebeca explained that she would use the iPhone for educational purposes, “I’d use it as a tool, an aiding device. For storytelling, use video capabilities!” Jeff added, “The convergence with the other Mac technology will be the attraction to a user such as myself. As for the other touch based technology, there is ample opportunity for it to benefit our day-to-day lives and simplify our hectic world.”
Transference and Interactivity and Competencies and Access

From a strictly edutainment perspective one participant cited music education as critical to education by stating, “I think if we included some music education – how to read music, for example – and studied examples of good music from all genres, including rap and hip hop, we would have better educated consumers. And that would lead to better quality art.”

From a strictly convergence perspective, participants cited blogs, webcasts, podcasts, cellular casts, You Tube and Bip.Tv as new technologies that they have been utilizing that have the ability to be transferred to higher education. Rebeca summed up this perspective by stating the transferability of the following web tools and technologies, “Websites, blogs, video diaries, instant messenger, texting, cell phones and smart phones, portable devices like iPods, social networking sites, email, and ftp sites to exchange large quantities of information.” Cesario agreed by stating, “I feel that blogging is useful for students and teachers for communication purposes.” Sadia concurred by succinctly recommending two video sharing sites saying, “Blip.tv and YouTube.”

The sub-themes that emerged under the general themes of transference and interactivity and competencies and access were equally compelling. The use of the Internet as a course distributor either through iTunesU commercially or directly through college websites were viewed mostly positively as part of a learner centered approach to higher education. Overall the participants were
enthusiastic about iTunesU as a form of edutainment and convergence that can help keep down educational costs, share knowledge, and aid in the learning process. Aaron exemplified this enthusiasm when he said, “I believe this is the first step in making education more accessible, particularly to individuals who have the means to purchase technology, but more difficulty getting to the classroom.”

Cesario replied, “If you can do the work and it is available to you then it is justified. “ Erin exclaimed, “It's awesome because of the rising cost of education. That's what holds so many people back.” Jeff contended, “iTunesU is an example of convergence, where education can be made readily available for students in a way that is not the norm. If this is a way for students to learn then we must encourage its use.” Sadia was cautiously optimistic when she said, “I think it’s great. Knowledge is meant to be shared. There might be some copyright issues – you don’t want people claiming they developed ideas that they clearly stole from someone else – but overall I think that sharing knowledge is a good thing.”

One participant worried about the lack of socialization, and the potential long-term profit motives caused another participant to be suspicious about iTunesU as a covert money making machine of the future for the universities and corporations like Apple. Aaron expressed his concerns about socialization by stating, “I still worry about the impact on social skills and diminished networking opportunities. Jesse was overtly suspicious when he said, “No comment on the
iTunes deal with the universities except it’s all about the money. I very rarely
download anything anymore (pause)…too many hidden spams and viruses.”

Some participants viewed the Digital Duke project and online classes from
universities like MIT as a beneficial thing that involved academia thinking outside
of the box and implementing convergence technologies in a learner centered
approach. Erin voice her support by stating, “Awesome again! This is great, too,
if a student is ill or even hospitalized, but still able to take advantage of
educational opportunities.” Sadia concurred by replying, “Awesome. I’m not sure
if most people have the interest or discipline to take a course from MIT on-line,
but it’s great that they are sharing their knowledge with the public.”

Jeff supported the use of convergence technology by saying, “Duke University is
thinking outside of the box. Establishing yet another stream of potential education
is another fine example of convergence in education. Whether in the classroom
or dorm room a student is now able to further his or her studies and skill set.”

Participants, even those who were supportive of such efforts by
universities, expressed concerns about the detriment to social skills, discipline,
and networking, institutions like Duke University having the money and
potentially making money, and the loss of the written word. Aaron expressed his
concerns by saying, “I worry about the impact on social skills, discipline, and
diminished networking opportunities. This could, of course, be a reflection of the
fact that I come from an ‘older’ generation that was taught to rely on
relationships.” Cesario was openly supportive of these initiatives; however, he
openly questioned why these programs like Digital Duke were not accessible for all college students nationwide when he stated, “Why is this not being adopted at other schools (nationwide) so we all can use these techno gadgets? Answer, a place like Duke can afford to use these ideas and run with it. Somehow we need to perfect information distribution. So everyone can benefit for it.” Jesse was highly suspicious of the profit driven education when he sarcastically replied, “Digital Duke? Same as the previous answer, it’s all about the money. Read between the lines people and get smart (pause)...Like I said before (pause)...The Internet has become the new digital flea market. Can you imagine someone (a company) saying, ‘Hey let’s re-invest some of our funds from the iTunes deal to find the next black biotech genius of the future (laughing).”

Edutainment Methods, Portable Devices, New Media, and Computer Logistics

Generally, the participants agreed on the use of portable devices, gaming and storytelling through the use of comedy, drama and analytical approaches. Aaron cited the use of affordable and portable technologies in education by stating, “Technologies that are affordable and can be easily situated in the classroom and the museum.” Cesario commented on how he would use video mediums, games and the iPod by stating, “Video mediums and games for their visual properties for example! IPods have become that perfect tool for teacher and student. Why? Well it is small enough and can hold vast sums of information. It is portable and handy to use for video and data use (and audio too). Jeff
explained his experience with video mediums for the Internet by stating, “…I have produced a number of videos specifically for the web. I see more and more live webcasts or podcasts, which will be delivered not only over the internet, but over cellular technology for immediate or delivery upon demand.”

The participants emphasized the importance of the images, color, lighting, physical appearance, texture and advertisements. Jesse expressed the important of lighting, color and texture in education by stating, “In an academic environment, the new tools, technology and techniques that I personally use can benefit anyone wanting to learn the craft of cinematography or to make a good movie (storytelling). They are too deep and involved to explain at this time. As a DP (Director of Photography), I have to strike a balance between art and science by using light, texture, color and depth to tell a story with the use of digital technology and (pause)…some old school techniques.” Jeff echoed Jesse’s remarks on the importance of lighting and color, and also placed importance on the physical appearance of the professor or teacher by saying, “All of these elements are helpful in keeping the attention of the audience. A comfortable mood and atmosphere can be set by the use of lighting, color tones and even the look of the professor or instructor. Traditional teaching methods tied with these factors only add to the learning experience for the student.” Erin advanced Jeff’s thoughts when she expressed a desire to train professors on how important their physical image is when educating students by stating, “In training professors to understand how much their image is important in educating their students
because students learn more when they have a professor that looks more professional…rather than someone who looks like they just rolled out of bed. As far as techniques go, interactive video… especially for those of us who are visual learners…is the most effective to learn and the technology is already here to make that happen.”

Finally, Sadia suggested using advertisements because of the ability of advertisements to constantly repeat short messages. Sadia expressed the importance of advertisements and comedy in the learning process by stating, “Advertisements, as I mentioned above. Comedy skits – like Saturday Night Live. Several countries have popular sketch comedy shows. They are short, the language tends to be simple, and everybody loves to laugh.”

Instant access, distance learning, and instant replay of learning content

The importance of instant international access on a variety of digital platforms of educational content, and the ability to repeatedly view entertainment and educational content was advocated by two of the participants (Farkas, 2006, 2007; McLuhan & Fiore, 1967, 1968; Tapscott & Williams, 2006). Jeff contended, “The ability to download and replay a lesson, view live web videos from any area of the world will make education available when before it required attendance at the specific one time location only. The added utilization of entertainment will serve to promote increased education.” Rebeca echoed Jeff’s comments when she said; “They’ve already made such a big impact on campuses all across the world (iTunesU). I can enroll to take a course in Europe if I wanted to take a
course in Europe if I wanted via distance learning. All I would need is access to a computer and the Internet, and perhaps a web-cam or mic to have any interaction. The further technologies advance the easier it will be for students to benefit from these distance learning courses without feeling they’ve gotten cheated out of a one on one experience with the classroom or the instructor.”

The Transformational Impact of Convergence

Convergence has transformed traditional technologies such as phone keys with voice-based and touched-based technologies alternatives to supplement visual devices like close-captioning which were developed in part for people with disabilities (Apple, 2007; Microsoft, 2007). At least two participants commented that voice-based and touched based technologies would replace traditional tools such as phone keys. However, one participant, Cesario, acknowledged that that he would be one of the last to convert and suggested that perception drives the need for new technology when he replied, “For some people yes the old school tools and uses for them will fade. I am a traditionalist and will be one of the last to convert. It is all about perception and how much one needs these devices.” However, Jeff suggested that he envisioned a number of advancing technologies replacing phones and other devices when said, “I could see a number of the advancing technologies replacing the likes phones and other devices. It is also likely that the technology may simply supplement what we use on a day-to-day basis today.”
A third participant, Sadia, stated that she could see technology headed in this direction when she replied, “I can see things are headed that way. But there will always be people who prefer to touch rather than simply speak. It’s part of how we are hard-wired from birth.” Moreover, old media such as television sets, still cameras, radios, video cameras, recording devices, video cassette recorders, games, and telephones have been digitally transformed by convergence into portable personal devices such as iPods, iPhones, the Zune, the Treo, the Blackberry, the Sony Watchman, the Sony e-book reader, the Sony PSP, the Nintendo, and the Amazon Kindle e-book reader that utilize the Internet and wireless technologies to share, record, store, transfer, and view or listen to content.

Experiential Formal and Informal Learning with Convergence

Another area that the participants indicated was important was the role of experiential learning as part of the formal and informal learning process in a learner-centered environment. Experiential education is a collaborative form of formal and informal education that often employs the utilization of storytelling, role-playing, interactive video, podcasts, blogs, video gaming, and interactive multi-media through distance learning, internships, mentoring, co-operative education, work study, volunteering, apprenticeships, and employment (Gee, 2004, 2005; Heller, 2001; Prensky, 2001, 2006; Rhodes, 2001; Sitzmann et al., 2006; Sperling, 2000; Tapscott & Williams, 2006; Robert Wisher, personal...
communication, August 20, 2007). Tapscott & Williams (2006) advocate the use of collaboration across discipline lines through the use of edutainment and convergence tools that are often learned and utilized informally in one-on-one and small group settings such as the work and internship environments.

The participants had definite thoughts on how to utilize edutainment and convergence to technologically train educators that ranged from training as a communications professional to video games to going back to school. For example, Jeff contended that educators perform in the same capacity as producers and directors in the film industry when they develop stars or pupils in the case of education when he stated, “Teachers too will require training through the tools they themselves will be using. The role of video and film producer/director will likely become that of educator as well.” Cesario contended, “There is no one-way to retrain educators. It must be understood first then evaluated for consumption. Visually, I feel is the best way to accomplish these goals. We are all students and the order of learning will be done differently.” Jeff warned that professors who did not adopt technology would be left behind by those professors, who adopt new technology by stating, “Technology which benefits the student needs to be utilized. Professors who do not embrace the technology in the classroom environment will be left behind by those who are more media and technologically advanced.”

Aaron also favored a combination of approaches when he stated, “Use the same specialized training you discussed earlier (blogging) … visual for the
teachers that need the hands-on and rote/lecture for the teachers who are trained to learn accordingly. Students learn critical thinking and decision making skills.” Erin had an innovative solution when she suggested that students use video games to train educators and fellow students when she said, “The students could probably train them! Students learn skills … hand-eye coordination, multitasking - even developing competitive skills. And, if you have to plan to succeed in life, you’re going to have to be competitive no matter what industry you work in.” Rebeca summed it up saying, “Again, like I said before, they’d need to be re-trained in the new technologies. Back to school my friends or you could ask your 5 year old.”

Gee (2004, 2005) and Prensky (2006) have supported the use of video games in higher education, and have maintained that games promote critical thinking and multi-tasking. All of the respondents to this question saw beneficial uses for blogs, video production, video sites, video games, and wikis as teaching tools. The participants encouraged the use of blogs, social networking sites and video sharing sites like YouTube as both a learner-centered and a teaching tool. Recent literature from Castro (2005) and Farkas (2006, 2007) and Tapscott & Williams (2006) supports the use of blogs, podcasts and wikis for entertainment purposes and for educational purposes but not with the specific degree or innovative manners described by the participants. Farkas (2006, 2007) and Tapscott & Williams (2006) have advocated collaborative and innovative uses of new media. Cesario exemplified this observation by saying, “For one you can
write the story or paper as an informative piece by digitally taping themselves and transferring the information into a common place for all to see. Use editing software that all must first learn. The benefit would come from the individual seeing themselves and their peers.” Jeff maintained that blogs and wikis create opportunities for research and interactivity by saying, “The technology of blogs, wikis and the like allow for opportunities to express opinions, research, interact with others and therefore learn.” Rebeca suggested that students really treat a project like a true news story in the field complete with microphones and cameras and not just a web camera by saying, “Send them out with cameras and mics and have them report their own stories. When they’re done shooting them, I’d have them edit the piece and prepare it to air on ‘TV’ for their classmates.”

However, Sadia strongly cautioned about the total use of technology and favored a blended edutainment approach with technology as a research tool by stating, “Ack!! You can do this on paper, too! The Internet is a great research tool. But I think it all starts on paper. You need to learn how to organize thoughts and write clearly. I have not seen that taught effectively on the Internet or through video games.” Rebeca summed up how the competitive nature of video games could be utilized for learning by stating, “Students could play along as individuals or games can be designed to play as groups or teams. Students would greatly appreciate and benefit from learning via interactive games. I guarantee less students would fall asleep in class!”
Educators as Rock Stars and Future Content Owners

The participants had differing thoughts on educators becoming the new rock stars despite supporting the disseminating of content and the sharing knowledge via the Internet and new media. Most participants did not believe educators will be the new rock stars, but may have new financial opportunities in the digital age. Farkas (2006, 2007) and Jenkins (2006) agreed that digital technology might offer potential new opportunities for educators. Cesario replied, “I would like to see educators stay employed full time and have what they teach stay compartmentalized and owned by them. Only that will never happen while they work at established institutions. In my opinion teachers are not given any room to maneuver so only a limited amount of people learn their techniques.”

Eric contended, “Yes, many teachers will become rock stars. I’m going to be rock star,” Jeff was not as confident as Eric when he stated, “I don’t know if educators will be rock stars, but I do think they will need to be more creative to be effective in their methods to reach students and therefore be desired and approached by secondary education institutions. “

However, Jesse had more fortune on his mind than fame when he said, “Rock stars! Good Lord! Try edu-sellers. The Internet has become a giant digital flea market of our time. Get a B.A. in two days! No payments for one year! Twenty-two percent interest fees! It’s all about fast and cheap.”
Sadie exclaimed, “Rock stars? Maybe not! In general, we teach what already exists. When we learn to teach creativity, then we will be asking rock stars to become educators!”

Emerging Trends: The Blending of Video Games with Edutainment and Convergence Tools

Gee (2004, 2005), Prensky (2001, 2006), Sitzmann et al., (2006), and Wisher (Robert Wisher, personal communication, August, 20, 2007) contend that video games are an effective approach to simulate theoretical and applied educational theories and practice through the blend of edutainment techniques with convergence technologies through handheld, wireless, desktop computers, laptops, smart phones, cell phones, and portable gaming devices. All of these respondents suggested using video games in the classroom for instructional purposes, to make specific courses more interactive and to provide students with the opportunity to become physically embedded within the game. Cesario insisted, “They would only have instructional applications only and no outside clutter. Only problem is some tools have import connections and would be easy access and change.” Rebecca suggested competition when she stated, “I would somehow incorporate lesson plans into games where students have the opportunity to join in the game and compete with their participating classmates.”
Sadie explained, “As outlined above, to make history, literature or even math more interactive.” Cesario supported Rebecca’s notion of immersing the student in the world of learning by saying, “That just might work if the activity was solely based on an educational principle.” Jeff summed up the potential for edutainment-based interactive games in learning by commenting, “The potential exists to develop video games exclusively for interactive learning and usage in the classroom. This means of edutainment, enforces learning for younger students who again have grown up in the post-MTV era.”

The participants indicated formal and informally learning were important and stressed a blend of both formal and informal learning. Sadia emphasized this as a conundrum, stating: “That’s a tough question. I think you need a combination of both. Formal education is very important because you learn the correct way to do things – handle a camera, set up a shot etc. Working in the field gives you hands-on experience which is very helpful – you can learn a lot! Formal training (even if it’s free classes at the public access station) shows me that you are serious about this work. Volunteering and interning is important because you also need real-world experience. Start where you can, and try to balance both sides of the equation. Sooner or later, a lack of formal training will show and people will lose respect for you. Buy a book and read it! Learn what standard procedure is! If you want to work with good people, you have got to know what you’re doing! Simply having money will not make you a good producer. You have to have a clear vision and know how to communicate it.”
Most of the participants indicated that while formal education can be an important learning tool; field-based education is a more important learning experience for learners. Aaron exemplified this approach when he maintained, “I lean on my formal education every day and only hire individuals with degrees, but I will always hire the candidate with the hands-on experience before I hire someone with an education and no experience.” Cesario supported this notion by stating, “It can be if that is what you need to do in order (to) gain skills necessary to succeed.” Erin added, “I would have to say yes on that because I know a lot of self-taught makeup artists. It's good to have the education, if that is what you strive for, as far as a makeup school. What I have noticed is directors and producers don't really care as long as you can do the work...as long as you can perform, it doesn't matter if you went to a makeup academy or not.”

Emerging Trends: The Potential of the iPod, the iPhone, and New Media for Learners

Technology devices such as the IPod and smart phones like the Blackberry, the Treo, and the iPhone were advocated my many of the participants as both teaching tools and leaner-centered approaches to teaching. Aaron and Cesario expressed enthusiasm and awe at the iPhone and its potential in education because of its ease of use and multiple functions as both a handheld unit and convergence device. Aaron exclaimed, “Love it. The easier it is to access information and create virtual environments that assist in the
training, the better.” Cesario replied, “I see it as advancement and marvel at what
it has done.” However, Sadia favored more traditional edutainment methods with
converged fused with it when she stated, “Again, I’d like to see more oral exams.
Technology is great but we need to apply it correctly. It’s not the be-all and end-
all. We are still humans and we need to learn how to get along with each other! “

Three respondents suggested that video iPods, video games, and cell
phones could be used to assist students with learning disorders and narrow
focus for students to their work while assisting visual learners and creating
tailored group study on the subject being taught. There seemed to be a
connection between their responses and the fact that at least two participants
had dyslexia and another two participants had relatives in their immediate
families who worked with students with learning disabilities. Cesario contended,
“It would help bridge learning disorders and narrow focus for students to their
work. The abuse would come from students that see this form of technology as a
toy. Especially when so many kids know how to manipulate or enhance their
iPods.” Erin suggested that cell phones with video recording capabilities could
be helpful for lectures when she said, “They can be used as a teaching tool for
visual learners and group study, with the games tailored to the subject being
taught. As for cell phones, many have video recording capabilities now and that
could be helpful for lectures instead of taking notes.” Rebeca favored cell
phones and multiple new media in her thoughts on how she would use cell phone
by saying, “I would create a chat forum where students could link up wherever
they were and compare notes or create blogs to show assignments along with the students’ responses. You could send out assignment assignments as emails that they could access with a cell phone, Blackberry, or any other PDF. Assignments could also be answered the same way you’d reply to an email."

Emerging Trends: The Disney Effect on Edutainment and Convergence

One unexpected twist of this research was that three of the subjects had worked for Walt Disney in various capacities and cited Disney as an edutainment innovator with its theme parks, media properties, and innovative uses of enjoyment or the fun factor to educate its patrons. Erin explained how she utilized the fun factor as a member of the Radio Disney promotions team, “We did interactive games for the kids to win prizes and also often ask them questions about Disney movies to win a grand prize, which would usually be a DVD or movie passes to the next Disney firm. I guess the education aspect would be getting the kids to interact well with each other, especially with the hula-hoop competition because of the challenges tricks they had to do. And, asking them questions about Disney movies was challenging because they would have to remember character names or something was associated with that character, like Cinderella and losing her slipper at midnight.”

Aaron summed up the fun factor appeal of Disney’s brand of edutainment when he said, “Nobody does it better. Disney embraces the notion that people
are drawn to a good story. It started with animated movies, and expanded to vacations. With Epcot, Disney looked to tell a story that entertained and educated. It is not easy encouraging people to spend their vacation dollar on an educational experience, but if you can make it entertaining, it’s a different ballgame. In my mind, the same holds true for higher education. Want to drive more students to math and science? Make it entertaining! At the very least make it more visual. Those who argue that education shouldn’t be entertaining are losing students.”

Jesse explained his Disney connection and how Disney has been able to successfully create a corporate brand through the utilization of a family friendly marketing program that creates lifetime customers who have children who become lifetime fans through the use of edutainment to create a lasting positive image in the mind’s of children and their family with the Disney family photo with Mickey Mouse, theme park rides like the Dumbo ride, and the infectious singing of Disney songs and advertisements. Jesse commented, “... I shot a lot of kid shows and promos for them through various freelance producers over the years, nothing special. Disney’s approach to edutainment was a corporate approach to get the kids for life. If you go into the world of Mickey Mouse, you’ll be a Mickey Mouse fan forever.”
Emerging Trends: Surprises: Movement, Techniques, Images and Blended Approaches

A surprise that resulted from this study were the thoughts of the participants about which entertainment techniques and new technologies they utilized most in their jobs, which technologies that they would like to use, and why techniques offered the best hopes for the future of education for both students and educators. The participants answered differently based on their jobs. Jesse cautiously pointed out that techniques change depending on the director and that knowing how to use the right tools is crucial by saying, "In cinematography there is no "most often utilized' technique. You will never use the same technique twice (pause)...ever. It's not realistic. The technique changes per script, per shoot, per client, per time of day (pause)...and after pre-production, it's the magic of the movement. You use the right tools for the right job to make it happen for the director."

Jeff pointed out that movement was critical too when he spoke of how he used video to support a commercial real estate training program by saying, “Adding graphics and the moving images to this educational setting brings added value, retention, and interest to those attending the program.” Jeff cited cellular technology as a new technology with future potential when he commented, “…cellular technology allows for remarkable opportunities.” However, Sadia and Aaron tied together the concepts of edutainment and convergence together by stressing the importance of integrating the two and the potential of museums to
become the learning center of the future that integrates edutainment and convergence in a virtual interactive setting and a physical interactive setting that enables visitors to interact with content, exhibits, and one another through handheld digital convergence devices with Internet access like an iPhone, an iPodTouch, a cell phone, a SonyPSP or a Zune.

Sadia maintained, “Honestly I think all the technology is there, all the art is there, we just need to find someone to sit down and synthesize it all. I’d like to break down American history decade by decade and spend one week on each segment … from 1705-1715, for example, and look at the music, literature, science, politics, fashion and important issues of the time.” Aaron summed his thoughts up in great detail by stating, “In the future, all exhibits at the museum will be designed to appeal to multiple senses, and content will be delivered using multiple techniques. Currently, the museum utilizes character performers to bring the stories of historical figures to life. The production team also tries to include scenes in each exhibit that create an environment for the exhibit. An example is the dragon’s lair that has been developed for the museum’s ‘Here Be Dragons’ exhibit.’ It features an audio-animatronic dragon that breathes smoke and warns guests of the dangers associated with visiting its lair. We want to use all technologies in the future, particularly the ones that allow the museum to compete with other delivery methods, particularly the Internet and television. I believe the technologies that draw students and teachers into the conversation, allowing them to become a part of the story, will enjoy the most success.”
Emerging Edutainment and Convergence Trends – the Minority Connection

This study also found that there were several emerging edutainment trends that emerged from the data. The theme that emerged was the use of edutainment with minorities and the disadvantaged. Overall, the participants expressed hope and thought that edutainment and convergence could help to bridge the educational gap between minorities and mainstream America.

Aaron advocated hope for the use of edutainment and convergence, “I certainly hope so. I also hope that as lawmakers learn the value of edutainment and convergence approaches, they will direct technologies to populations that are traditionally underserved, or are unlikely to have access to these technologies at home.” Cesario urged the use of edutainment and convergence by saying, “We must all be up to speed in the learning department. If edutainment and convergence is the key then we must all embrace this way of thinking and move with it. No matter what their social status is everyone needs to have more than just a fighting chance. Our future is at stake, and now we do have various mediums at our disposal. Therefore it is a moral must that we give everyone a wholehearted chance.” Erin optimistically commented, “Yes, I think it would make a huge difference because everyone should have a dream and strive for success in their life and have the opportunity and means to do it. Edutainment and convergence levels the playing field so everyone can achieve.” Jeff asserted that edutainment and convergence can be a bridge for minorities,
but was concerned about minority students receiving the technology in their hands when he stated, “While I do see that edutainment and convergence can be a bridge to assisting minority students, getting these technologies into the hands of these minorities outside of the classroom could be the greatest challenge. This is where the disadvantaged could see a wider gap in resources." There was one dissenter who suggested that some wealthy individuals have not embraced the mindset of Bill Gates and George Lucas who have devoted time and money to ending the digital divide and the educational divide in America through their foundations and even funding schools. Jesse was pessimistic on edutainment and convergence being allowed to fully bridge the gap when he said, “Bridge the gap? It will never happen. That’s like asking someone from the Hamptons to share their home with a homeless person. I have to remind everyone that during the Katrina crisis the dolphins were saved before any minority was saved from the blistering heat. The reason? The dolphins have a high ROI (pause)...return on investment.”

However, two of the bilingual participants were optimistic about the edutainment and convergence assisting bilingual students. Rebeca replied, “If edutainment can serve as a useful stepping stone to bilingual students then I’m all for it. I’m all for it now and think it serves as a tool regardless of the language issue. Not all students learn the same. What works for one may not work for another and being able to offer alternate methods of education can only increase students’ success rates.” Sadia commented, “In Brazil, I saw that there is some
prejudice towards learning English, especially among the lower class. Some people feel that learning English makes you a “snob” or less Brazilian. My goal is to teach all Brazilians English “by mistake” (ha ha ha) by imbedding mini-English lessons into cool a cool TV series. It’s interesting because there can be a similar attitude in the African-American community regarding what I call “Business English”. The fact is speaking “Business English” can land you a better paying job. It doesn’t make you white.”

Emerging Edutainment Trends – Surprises: The Dyslexia Connection

Another edutainment and convergence trend that emerged was the dyslexia and learning disability connection. Two of the subjects admitted having dyslexia and two other subjects had relatives in their immediate family who worked with students with dyslexia and other learning disabilities. Cesario explained how he used edutainment techniques to overcome dyslexia by stating, “I watch and apply what I see on television for example. This way I use a frame of reference to ensure what I do is right” Erin explained how her mother utilized edutainment methods to teach her how to overcome dyslexia when she said, “My Mom had read an article about Tom Cruise and Cher and how they learned lines on film sets. So, my Mother started reading my homework to me, which helped me memorize things easier. And, later, I ended up utilizing that technique with an actor I worked on, on a film set, who had ADHD.” Sadia explained that her mother utilized edutainment as an educator, “Yes, my mother was a special
education teacher. She utilized edutainment techniques. She worked with kids with dyslexia.”

Participants emphasized how new media such as iPods; You Tube and MySpace may have emerged as assets for spreading knowledge and chilling free speech. Cesario asserted that the freedom of the web could also be a danger for teachers expressing their thoughts, “These are just outlets such as free thoughts which are available to anyone. The real question is what is of any use on these sites and why we are so enamored with them? It has become a paradise for everybody to do anything and post it. Teachers beware!” Jeff acknowledged the carrot and the stick power of convergence technologies by saying, “Technology is a double edge sword in this case. We have the ability to utilize the technology for gain, but also for the sensational. This of course makes many professors skeptical. Unfortunately, there is no correct answer or easy solution to this.” Erin was optimistic but concerned when she stated, “Well, I guess I would have to say that while higher education is expanding and improving all the time, we still have a ways to go. I think the possibilities for the next generation(s) are endless” Jesse was more pessimistic about many social networking and web tools when he said, “I can only say the effects of having MySpace, Facebook, You Tube is not good. It’s exposing how desperate people are for attention. There is a ‘see’ me mentality going on. It’s like some giant attention deficit disorder phenomena running rampant throughout the web and the only people that can see what is really going on is the bad people wanting to do harm and take advantage of the
weak. I have nothing against these sites, but no one’s interested in education. They want to see “shock and awe” entertainment.”

Cesario commented that socialization does exist by stating, “There is socialization with new technologies but it is different socialization and more of it because you can communicate more frequently.” Eric commented, “Yes, there is definitely socialization it is just different.” Erin replied, “Yes, there is socialization.” Jeff replied, “Yes there is socialization.” Sadia contended, “Socialization is fine when using new technology when you already know the person you are seeing or communicating with a person because this is a two dimensional version of a three dimensional person, email is only one dimensional because its normally words unless it’s a video or picture email. However, I do know from personal experience that you can “know” someone through email or telephone simply by communicating with someone through mutual art interests. This was written art in the form of a script!”

The future is bright for edutainment and convergence according to the participants. In fact, the participants overall expressed an overall optimistic role of the future of education with the utilization of edutainment and convergence by predicting that it could become a cross-disciplined major in the future. Cesario replied, “Yes, I think there will a new major because everything is overlapping in the world of knowledge and technology. When it comes to communication and education, you must be a good communicator to be a good educator because with education and communication it is all about sending and receiving the right
message. With new technology there is a sociological process going on, it is just different and more frequent because now people can see each other by cell phone, by webcam or they can just talk on the phone or text each other. The iPhone just made this process easier. The edutainment will be merged within the convergence. It’s a marriage.” Eric contended, “Yes, without a doubt I see edutainment and convergence becoming a new major.” Jeff exclaimed, “Edutainment will continue to grow and be accepted. Technology is not only here to stay but improving and expanding on a regular basis. I could see the introduction of edutainment into typical standard subject matters to encourage, enforce and educate.” Sadia maintained, “There will be a new major that uses edutainment and convergence, but someone will give it a new name and claim it as an original idea.”

Emerging Trends: Edutainment as a Cross-Disciplined Major

The participants that responded to this question generally asserted and agreed that the future of higher education would be optimistic utilizing edutainment and convergence methods and technologies, and that the society as a whole would benefit including those from disadvantaged backgrounds. Erin enthusiastically replied, “Oh, wow! There’s no end to the possibilities. The technology is changing all the time…for the better. You can literally have virtual classrooms with students from around the world, so you have not just educational opportunities, but cultural exchange, too. A perfect example is the
commercial with the boy dancing that is shared around the world through the Internet and crosses all cultures.” Sadia stated, “I hope we can educate more people more effectively.” Cesario commented, “It has to be. Because we need to empower those who are on the fence who might be quitting and give them the push in order to move forward. That’s not to say we abandon our traditional ways completely. We must modify them as well.”

Jeff candidly stated, “Education will be enhanced by the utilization of edutainment and convergence. Reaching students in a way that they are accustomed will benefit them in their future. Yet, getting the technology into the hands of all students will continue to be a challenge. Will minorities and the poor be left behind further? (This is) a question that we cannot answer today.”

Rebeca enthusiastically contended, “There’s no limit to how far it can go and how fast it can spread with positive results. I think edutainment is the way of the future with our ever-growing technologically advanced world we’re living in.” Aaron summed up the future of edutainment and convergence by saying, “The future is bright, but it will not be without significant growing pains. It will require new funding, teacher training, creativity, and sensitivity to conditions that cannot be replicated in simulations.”

Military, Government, and Computer Influences

Why has a government agency like the military embraced gaming and simulation as training and spend billions of dollars on these technologies as a
teaching tool while the education community as a whole is still arguing about effectiveness when the military and certain elite research universities have been utilizing these technologies since the late 1950s and early 1960s as part of the space program and the Department of Defense?

Overall, the participants that responded endorsed and recommended that video games and simulation were incorporated into curricula and classrooms because of the successful implementation of training and education by the Pentagon and defense-based industries in developing scientific, medical, technological, and communications research for national defense and space exploration and these finding are supported by the literature (Boot, 2006, Carroll, 2006; Leslie, 1993; O'Harrow, 2005; Tapscott & Williams, 2006). Generally, these participants contended that the military had already decided that the use of edutainment and convergence as a learning and training tool because the military and most civilian agencies have adopted convergence over the years and spent billions on the technologies (Bonk & Wisher, 2000; Bonk & Dennen, 2005; Boot, 2006, Carroll, 2006; Leslie, 1993; O'Harrow, 2005; Tapscott & Williams, 2006; Dr. Robert Wisher, personal communication, August 20, 2007).

Most of the participants were aware of the military’s use of edutainment and convergence, and some participants had personal experience working with the military or government organizations that employed these techniques. Aaron disclosed this fact by stating, “Yes. In fact, I had the opportunity to participate in research on a virtual military helicopter-training prototype in Orlando, Florida in
the late 90s.” Erin agreed with Aaron’s assessment when she stated, “Yes. The military complex is always light years ahead of everyone else. I worked on training videos where the military used interactive virtually technology to educate soldiers.” Erin indicated in the verification session by phone that she worked for the Army on training videos that utilized interactive convergence technology during the interview verification process.

Jeff concurred, “I am aware of the technology used by the military. I do hope that this technology is made available for students with difficulty comprehending and retaining information provided of course it doesn’t interfere with the freedoms we have grown to appreciate.” Jesse indicated that he was aware of the military use of convergence technology when he stated, “I’m out of touch with any Pentagon stuff. Yes, I am aware of the government use of these technologies and worked with many of them as a filmmaker and director of photography with the military and government organizations.”

Rebeca acknowledged that she was aware of the military utilization of edutainment and convergence and asserted that research would prove the educational effectiveness of video games, “Yes, I had heard of the military’s use of games and simulation technology before. I think further research would show that games could really serve as a valid teaching tool. As I stated earlier, we don’t all absorb information the same. What may work for one student may not work for another.”
Ironically, research from Bonk & Wisher (2000) and Bonk & Dennen (2005) supported Rebeca’s assertion. Moreover, I had the opportunity to interview Robert Wisher, the head of Advanced Distributed Learning, which is a defense-based research organization with Defense Department ties, and his office complex and research laboratories in Alexandria, Virginia, were full of dozens of commercial video games that were used for research and testing purposes (Dr. Robert Wisher, personal communication, August 20, 2007). Wisher pointed out that convergence tools such as video games have proven themselves as effective learning tools in both the classroom for civilian government agencies and military personnel, and in the field for job performance combat readiness and other researchers agree with Wisher and the participants responses (Bonk & Dennen, 2005; Bonk & Wisher, 2000; Gee, 2003a, 2003b; 2004, 2005; Sitzmann et. al, 2006; Dr. Traci Sitzmann, personal communication, August 20, 2007; Dr. Robert Wisher, personnel communication, August 20, 2007).

Wisher maintained that Advanced Distributed Learning, commonly known as ADL, routinely tests video games, distance learning, software, and hardware; moreover, ADL research has indicated that gaming and web-based instruction are effective learning tools and comparable to classroom instruction depending on its usage (Bonk & Dennen, 2005; Bonk & Wisher, 2000; Gee, 2003a, 2003b; 2004, 2005; Halter, 2006; Sitzmann et. al, 2006; Dr. Traci Sitzmann, personal
Wisher suggested that institutions of higher learning have been slow to adopt convergence technologies, but would do so in the future because of the success of the military, government organizations, corporations and some elite universities and the opportunity to present educational content in a learner friendly delivery system, and again the literature supported the participants’ responses in part (Apple, 2007; Bonk & Dennen, 2005; Bonk & Wisher, 2000; Duke University, 2007; Farkas, 2006, 2007; Gee, 2003a, 2003b; 2004, 2005; Google, 2007; Halter, 2006; Sitzmann et. al, 2006; Dr. Traci Sitzmann, personal communication, August 20, 2007; YouTube, 2007).

The participants explained that the military has adopted gaming and simulation because it works, keeps students interested, and the government needs well-trained people to operate expensive and sophisticated equipment. Cesario explained why the military has adopting gaming and simulation by saying, “Because it works and it keeps one interested. Role-playing builds thinking and rethinking of different scenarios. “Jeff provided his explanation as to why the military invested billions in gaming and simulation technology for education and training by stating, “I think a large part of it is due to traditional learning in classrooms. Likely another factor is that the military is dealing with adults, while education also involves younger people.” Sadia summed up why the military and the government had invested billions of dollars in gaming and
simulation technology, research, education, and training, by saying, “Well, the obvious answer is that the military spends billions of dollars on sophisticated equipment and therefore wants people well trained before they touch it! The military takes people who are a product of our education system; it is not an alternative to it. So there might be some crossover, but again it all depends on what the objectives are. Teaching someone to read or do fractions does not require millions of dollars of technology.”

The participants also indicated that gaming and simulation could effectively measure and assess academic progress and individual students, the class, and the professor. Indeed, the literature supported part of the participants’ responses (Bonk & Dennen, 2005; Bonk & Wisher, 2000; Gee, 2003a, 2003b, 2004, 2005; Sitzmann et. al, 2006; Dr. Traci Sitzmann, personal communication, August 20, 2007; Dr. Robert Wisher, personal communication, August 20, 2007).

In fact, Dr. Sitzmann indicated in a brief conversation with me after my interview with Dr. Wisher that gaming and simulation could be used as an assessment tool, and then provided me with a comprehensive research study, that she led, that examined multiple studies to assist me with this study. Aaron advanced this notion by stating, “Yes. The performance of an individual cannot be accurately predicted or assessed without seeing that individual in the hands-on, real-world situation from which they are being assessed. Success in simulation dictates success on the part of the student in the class, and the professor. It may not, however, predict with any certainty, the same individual’s
ability to adapt to social settings that cannot be replicated in the simulation.” Erin emphatically endorsed this notion by stating, “I definitely think so because it's very interactive. And, I know I keep going back to the visual aspect, but I think it's the absolute best learning tool available.”

Jeff summed up the effectiveness of gaming and simulation by stating, “To best understand how gaming and simulations can effectively measure and assess progress and effectiveness, we need to look no further than what is done in the military and space programs in effect by our own government. How effectiveness is measured is through performance and understanding in real world situations.”

Government action has created strife between content owners and consumers. Government action such as the passing of laws like the Digital Millennium Copyright Act of 1998 caused strong reactions from the participants. The participants explained that lawsuits would continue over intellectual property rights because the lines between fair use and intellectual property rights have been blurred by new technologies. One participant was vehement in his position that content owners should have their intellectual property rights strongly enforced. Another participant argued that there has been a historical tension when new mediums emerged and the existing media felt threatened economically by the new media. The existing literature has supported all of the comments of the participants concerning fair use, intellectual property rights, industry lobbying efforts and government action to create new pro-industry laws
with consumer sounding names that deregulated the industry and reduced consumer rights to fair use (Bagdikian, 2000, 2005; Davis, 2004; Lessig, 2001, 2004; McChesney, 2004; The Center for Public Integrity, 2000).

The twin sub themes that emerged from the participants’ responses were: intellectual property and fair use. Eric replied, “We’ll be in court forever!” Cesario contended, “There will be a techno war coming from this ramped feast. A change is going to infringe on someone along with lawsuits.” Jeff maintained, “Fair use and copyright infringement will continue to be a difficult challenge to the digital police of the future. This remains to be seen as to how it will best be handled in the future. I think websites which stream content online; provide more potential for would be producers to get their content out to audiences. I also see television using the Internet as a primary method for delivery of its images in the future. We could see broadcasters; video rental stores and movie theaters gradually disappear in favor of sites such as You Tube and iTunes. As a Hollywood content owner, Jesse strongly advocated the rights of content owners by firmly stating, “I feel strongly about protecting image rights. Nobody really cares until it affects them personally, then they’re involved emotionally and financially because it’s their profits or rent money that is eroding.”

Sadia demonstrated the conundrum facing content owners when she argued for both sides by saying, “Rather than venture a guess, let me stick to what I know. When movies were first created, people said the theatre industry would die. It didn’t. When TV was introduced people said the movie industry
would die. It didn’t. When the Internet became popular, people said print media (newspapers, magazines) would die. It didn’t. What happened each time is that the existing industry/industries adapted. There used to be around 150 Broadway Theatres in NYC. That’s not the case anymore. Cable TV didn’t kill network TV. Fair use versus copyright? That’s tough. Let me put it this way – if someone wants to study a song I wrote, that’s fair use. If someone wants to use my song in a commercial or a video, then I should have the right to choose (grant permission) or refuse (deny permission).”

The participants took sides on the issue of the Digital Millennium Copyright Act of 1998. Again, the literature supports arguments from both sides on responses by the subjects (Apple, 2007; Bagdikian, 2005; Davis, 2004; Jenkins, 2006; Lessig, 2001, 2004; McChesney, 2004). Two of the participants took strong stances that were more pro-consumer, and one participant took a strong pro-industry stance when asked generally about whether the DMCA had gone too far in protecting the rights of content owners. Cesario commented generally by stating, “I think so, but the reason was based on keeping up with consumer swapping of information. My view as of today, we must be proactive and give feedback to the policy makers.” Jeff argued vehemently against the DMCA by stating, “To begin with I wanted to add that I believe the DMCA forces all companies producing video equipment to support one company, Macrovision, for copy protection technology. This is a clear monopoly and downright wrong. Additionally, the DMCA has been criticized for
making it too easy for copyright owners to encourage website owners to take
down infringing content and links when it may not in fact be infringing. When
website owners receive a takedown notice it is in their interest not to challenge it,
even if it’s not clear if infringement is taking place, because if the potentially
infringing content is taken down, the website will not be held liable. So yes it has
gone too far! However, Jesse vehemently disagreed with Jeff, another
Hollywood professional, by saying “Until (you) personally “create” something or
become attached to an invested project, you will never understand it. It’s not just
content; it’s your baby. You made it from scratch. You made it work. You devoted
all your time and energy to your baby (pause)…whether it’s a script, movie, short,
painting or original photo, it’s still your baby (pause)…you created it, you own it.
The key word or solution to all this piracy is licensing.”

Digital Rights Management and Disagreements

Participants expressed some concerns about digital rights management
and its impact on artists and how some companies have dealt with the issue as
consumers have resisted copy protections and some European nations have
passed laws aimed at eliminating digital rights management. The literature
addresses this in part by taking both sides of the debate and being silent on
some of the responses by the subjects (Apple, 2007; Bagdikian, 2005; Davis,
2004; Jenkins, 2006; Lessig, 2001, 2004; McChesney, 2004). Aaron explained,
“Companies have a responsibility to make money for their shareholders, and I
believe competition is healthy, so I had no problem with DRM. Let the best platform win! Having said that, companies like Apple and EMI are clearly sensitive to the desires of buyers who do not want to contend with restrictions. Fewer restrictions certainly appear to generate stronger brand loyalty.” Erin commented, “I think eliminating all restrictions will affect the revenue stream for artists, so I’m not sure how good of a thing it is. So far as gaming platforms go…don’t know a thing about it other than what my husband tells me. He’s very into all the new technology…he and his best friend are definitely techno-nerds.”

Jeff replied, “The use of DRM may be a barrier to future technologies designed to permit data to be read only on particular machines, over certain periods. This could make future data recovery impossible with the changing of technology.

Sadia expanded the issue to a deeper issue by stating, “This hits a deeper issue which is the distribution of wealth in this country -- How much money does one person (artist) really need? If I write a number one song, I will make millions and millions of dollars. At what point do my “rights” need to be protected? No one should be able to steal my song, or use it without my permission of course. But for how long do I need to make money off of it? Are the radio rights different from the Internet rights; are they different from making a video for my song and posting it on YouTube? These are tough questions. I’m a composer and a writer. It breaks my heart that so many artists are struggling while a chosen few make gobs and gobs of money. Often it’s not a question of talent – it comes down to who you know and making a decision to become part of the PR
machine. Some performers, who make millions of dollars singing, have bad voices. The technology in the studio today can fix just about anything. That bothers me. I think we need to be more supportive of the creative process. We should reward good work – talent and hard work – and we should make it easier for more people to make a living by developing their creativity.”

The participants also grappled with the intellectual property rights issue and yet argued for fair use. Indeed the literature speaks to some of the issues of fair use and intellectual property rights (Bagdikian, 2000, 2005; Davis, 2004; Lessig, 2001, 2004). Jeff explained, “I believe that if the consumer is not gaining financially from the video or audio content then they should be able to use it – once they have purchased the media. The technology though should not be shared, but controlled through the distributor or creator. The media should allow for backups by the individual who purchased the media.” Sadia commented, “Back before CD’s were popular, everyone bought cassette tapes, and before that it was albums. No one ever complained about “mix tapes” that were widely circulated – people would make compilations from the various tapes or records in their collections, put them all on a cassette tape and give them to friends. No one in the industry complained about this, perhaps because all the content had been purchased?”

One participant discussed copyright issues and the power of money and he maintained that the industry would sue its customers because it had the power to sue them based on the present laws and greed. Lessig (2001, 2004),
McChesney (2004), and Bagdikian (2000, 2005) have argued that media industry greed is the root of the litigation more than piracy because the media industries have refused to adopt a new business model (The Center for Public Integrity, 2000). Cesario’s comments agreed in part with the literature, but not completely when he stated, “The real question as I see it is will edutainment and convergence be limited to these rules and regulations? If there is money involved and a customer to sell it to then we will see people get sued. In my book that is not right. “

Two participants explained why the military has been an early adopter of gaming while academia has been slow to adopt gaming and new media as teaching and learning tools on a massive scale. Cesario explained, “It was a gimmick at first, only now it is the only way we can connect to all ages and that is the truth of edutainment and convergence. This society is based on tradition and for it to change will take time and effort. The military has tapped into a loose situation and capitalized on it. “Jeff maintained, “If we do not allow the technology to be used to enhance our lives in an educational setting we are missing an opportunity to utilize the new media which is such a large part of our daily lives. Traditional education needs to be merged with these technologies to increase awareness and reach students.”

The participants acknowledged the ability of video games and other edutainment and convergence tools to utilize and tap into multi-sensory approaches to learning and teaching. The literature speaks to this in part but not
completely (Bonk & Wisher, 2000; Bonk & Dennen, 2005; Gee, 2003a, 2003b, 2004, 2005; Halter, 2006; Prensky, 2001, 2006; Dr. Robert Wisher, personal communication, August 20, 2007). Aaron pointed out that teachers are aware of the fact that students can learn through multi-sensory based edutainment and convergence methods and technologies for learning when he said, “Yes. Teachers are not blind to this phenomenon. In many cases, they simply lack the resources and training to position them to best accommodate the emerging multi-sensory needs of new generations of students.”

Cesario asserted the value of convergence technology by commenting, “About 16 years ago this was the only method used, and for me it was hard to grasp. In around about way yes this was a problem for many. Unfortunately the act of repetition with video games is the new training ground for today's youth.” Erin replied, “Yes, absolutely - as I just described in the previous.” Jeff contended, “I do think that video games and films are something that have changed the MTV generation and audience and the way they are viewing images with fast paced cutting and imagery. With that being said, utilizing a technology such as a Power Point presentation in an educational forum allows for the learner to have points of significance reinforced visually in a way that the younger users are accustomed.” Jesse expressed his dissatisfaction with the fact that educators have no control over the games or the game manufacturers when he replied, “Educators have no control over the games or the manufacturers of the games. It starts with the parents (pause)...period. Parents (pause)...watch your kids.
Spend time with your kids. It’s not rocket science.” Sadia favored edutainment techniques more than convergence by stating, “Again, why reinvent the wheel? Students will learn what they are passionate about – that can be poetry, music, fashion, politics, physics, film, sports …”

Supporting Literature

The literature supported the comments of the participants. Research by Bonk & Wisher (2000), and books and research by Gee (2003a, 2003b, 2004, 2005), Prensky (2006), Tapscott & Williams (2006) and others (Halter, 2006; Bonk & Dennen, 2005; Jenkins, 2006; Sitzmann et al., 2004; have indicated that new media such as gaming and simulation can be effective for academic purposes as learner centered tools and assessment tools, especially when the instructor is digitally literate. Moreover, the participants indicated that the Pentagon and other government agencies, as well as elite universities throughout the world, have already proven that edutainment and convergence can be effective whether it utilizes video, audio, multi-media, video games and simulation, and this view is supported by the literature (Bok, 2003; Boot, 2006; Friedman, 2005; Gee, 2004, 2005; Halter, 2006; Jenkins, 2006; O’Harrow, 2005; Rhodes, 2001; Sperling, 2000; Tapscott & Williams, 2006).

In fact, much of the success of the global economy has been largely attributed to the successful implementation of convergence as well as the ability of American universities to create satellite campuses worldwide utilizing a system
created by the British Open University model (Bok, 2003; Duke University, 2007; Friedman, 2005; Rhodes, 2001; Sperling, 2000; Tapscott & Williams, 2006; University of Maryland, 2007). The government action of creating this technology through defense grants and projects and de-regulation has created global media conglomerates who have vigorously lobbied political bodies for laws like the Digital Millennium Copyright Act of 1998 which has enabled companies to wage an ongoing campaign of lawsuits and electronic eavesdropping against ordinary citizens and universities for piracy and in the process threatened notions of academic freedom, fair use, free speech, and privacy (Bagdikian, 2005; Boot, 2006; Davis, 2004; Dobbs, 2006; Lessig, 2001, 2002, 2004; McChesney, 2004; Moore, 2003; Napolitano, 2007; O’ Harrow, 2005; Risen, 2006; The Center for Public Integrity, 2000, 2007).

Participants indicated that video games and multi-media simulation that are sensory based are effective learning tools if utilized properly, but they also discussed the advantages and disadvantages of their usage as well. Rebeca exemplified this by stating, “I think any games or podcasts should only be used a supplemental tool to accompany existing teaching methods. In no way do I think one should replace the other. Perhaps an advantage would be simply a way (of) bringing entertainment value to learning may actually work. And a possible disadvantage would be that students become overly dependent on relying on video stimulation in all aspects of their life to bring it into the classroom also means training and certifying teachers in a whole new and radical way.” Jeff
expressed the ability of podcasting and video game technology to creating through non-traditional means that are learner centered while simultaneously expressing concerns about costs and cognition, “The advantage to podcast and video game technology is that it can be a means of reaching young people in a way never thought possible. Students may not be aware they are learning through such edutainment ventures. The disadvantage to the technology is one assumes that all students have the ability to afford the technology and have it available to them. Additionally, reading and comprehension may not be benefited by the technology. “The disruptive nature of these technologies; however, caused some participants to consider an outright ban or urge caution in the use of cell phones in the classroom. Cesario advocated the cautious use of cell phones in the classroom under specific conditions by saying, “Class work based instruction applications only so that there are not distractions while you have a captive audience.”

Jeff, on the other hand, was adamant in his belief that cell phones are useful learning tools that should be utilized on campus, study hall, the home, and everywhere else but the classroom when he said, “I believe that the cell phone needs to stay out of the classroom environment. The use of the cell phone to download podcasts, video instruction and other useful learning means is available for students in study halls, on the bus, in the dorm, home or elsewhere.” Sadia summed it up by stating, “I'm not a big fan of these technologies.” However, several participants maintained that educators would have to develop
technology competencies so that edutainment and convergence can be implemented into the classroom as part of a learner centered approach to higher education. Cesario emphasized this by saying, “I believe that traditional teachers must adopt these new methods. Only as time moves forward, they will have to accept the transition and adapt on various levels at their own pace.” Sadia echoed Cesario’s thoughts by stating, “Again, it’s a matter of creating a new syllabus that integrates (for example) source material from the time as well as films made about that time.”

Jeff summed it up by commenting, “Educators are intelligent people with an incredible ability to learn. This makes them people who are likely to be more successful by learning to adapt to changing technology. If educational institutions require the instructors to learn to understand these technologies I see them being more affective than not. He also warned institutions of higher learning to adapt to new technology by stating, “Yes, I do believe that colleges will be forced to embrace the current technology. Those educational institutions that fail to do so may even cease to exist.”

Overall, the participants indicated that modern educators would need the skills and competencies of a producer and director, because this position requires technological competency, artistic knowledge of content, interpersonal communication skills and a creative approach. When asked which technological skills that modern educators will need, Aaron responded, “All of them! Kids have an amazing grasp on emerging technologies. Educators will need to understand
them just to be part of the conversation. Students need to want to go to school. If schools can’t compete with emerging technologies for the attention of their students, the credibility of the education system will be undermined.” Cesario emphasized the types of multiple skills and competencies that modern educators will need by stating, “The most important role would be a producer because this person is responsible for the content, actors, manpower and equipment. That is just the tip of the iceberg.” Jeff cited the fact that most educators are already directors and may simply need continuous education on new technology when he said, “I don’t believe it is necessary to train higher educators as producers or directors of a visual or audio medium. In reality professors, teachers and instructors are already the directors of their environment. They simply need to be educated continuously on new technology and how to inject it into the classroom.”

Sadia gave a provocative response when she suggested, “I think if someone developed the syllabus (as I described above), most educators would be able to follow it. Do I think teachers need to become web-literate and design multi-media lessons? No, actually. I think the entertainment industry should step up and design the lessons (that’s the hard part) and then get input from the educators. To ask the educators to become innovators is counter-productive. Build a better system, show the educators how it works, then have them explain how they would adapt it. You see, it’s not just a question of bringing computers into the classroom. It’s about re-creating how we teach. Most educators don’t
have the power to change the system – and what I’m suggesting is a radical departure from the way things are currently done. It’s unfair to put the burden on the educators. They have enough to worry about."

Another subject that most of the participants agreed on was the evolving academic nature of edutainment. The participants stated that edutainment and convergence could evolve into a cross-disciplined major. The literature was silent on edutainment and convergence as a cross-disciplined major. Cesario replied, “Yes, I think there will a new major because everything is overlapping in the world of knowledge and technology. When it comes to communication and education, you must be a good communicator to be a good educator because with education and communication it is all about sending and receiving the right message. With new technology there is a sociological process going on, it is just different and more frequent because now people can see each other by cell phone, by webcam or they can just talk on the phone or text each other. The iPhone just made this process easier. The edutainment will be merged within the convergence. It’s a marriage.” Eric commented, “Yes, most definitely it will become a new major."

Erin agreed by saying, “Yes, I think it will become a new major.” Rebeca succinctly responded by saying, “Yes.” Jeff agreed and provided an in-depth response by stating, “Edutainment will continue to grow and be accepted. Technology is not only here to stay but improving and expanding on a regular
basis. I could see the introduction of edutainment into typical standard subject matters to encourage, enforce and educate.”

Summary

The findings of this study were similar to the body of literature and different from the body of literature because of the rapid development of technology and the ability of these new technologies to seamlessly blend with new technologies in virtual, miniature, standard, and large formats (Apple, 2007; AT&T, 2007; Facebook, 2007; Farkas, 2006, 2007; Google, 2007; Microsoft, 2007; Nintendo, 2007; NewsCorp, 2007; Nokia, 2007; O’Harrow, 2007; Sony, 2007; Time Warner, 2007; Verizon, 2007; Vise & Malseed, 2006; Vox, 2007; Viacom, 2007; Walt Disney, 2007; Wordpress, 2007; Yahoo, 2007; You Tube, 2007).

General findings from the entertainment professionals

As a group, the entertainment professionals were supportive of the use of edutainment and convergence as part of a learner-centered approach to higher education. All of the participants with one notable exception contended that edutainment and convergence when utilized with existing educational theories and methods provided a learned-centered approach that enabled students to learn both traditionally and non-traditionally and formally and non-formally. Most of the participants expressed concerns about the socialization process and how it could be negatively impacted by convergence technologies. Some participants indicated that their viewpoints could have been influenced by their age and the
fact that they were digital immigrants and may not totally have the same feelings
towards technology that a digital native who grew up with convergence
technologies from birth. A few of the participants acknowledged that convergence
technologies offer socialization, but a different type of socialization.

As a whole the participants indicated that they valued edutainment
because edutainment can utilize face-to-face interactivity and the technological
tools that appeal to the senses. The entertainment professionals generally did
not approve of the current emphasis on high stakes standardized testing and
traditional rote learning and drills as accurate assessment tools. The participants
cited experiential learning, role-playing, and simulation and gaming as tools that
could both assess and build competencies. In fact, the participants emphasized
project based learning, practical based learning through internships and
employment, live presentations, and interactive blogs as more accurate
assessment tools of student competencies on a given subject. While the
participants generally supported convergence tools like iPods, video games,
computers and cell phones, as a group they maintained that edutainment tools
that promote human collaboration and traditional methods can improve education
if these tools are integrated and utilized in tandem to appeal to different learner
styles. Moreover, some of the participants who were producers, directors, and
editors maintained that use of the color back as a background color for video
based or multi-media rich Internet sites and portable devices and flat screen
television with black and dark screens has been the result of television and film
techniques superceding traditional web rules as evidenced by black backgrounds on ABC News, NBC News, iTunes video and television sections, Zune Marketplace and other sites. Cesario exclaimed, “We are in an exciting age right now. Technology is changing from one day to the next. Only it seems that the gaming industry has taken lead in this round. It has to be balanced; Games are so interactive that it is hard to engage a young adult with lecture-based methods. It is time to adopt the gaming industries styles and hone in on them.”

In Chapter VI, the study turned to discussions, implications, recommendation for further study, and conclusions.
CHAPTER VI
CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS

Edutainment and entertainment often revolve around a story being told as a metaphor for a larger life or educational lesson (Bandler & Grinder, 1975, 1979; Robbins, 1986, 1989, 1997, 2005). Ladson-Billings (1999) and Ramsundar (2006) have seen storytelling is a potent approach utilized to challenge the dominant viewpoint or paradigm of a society. They conclude storytelling enables one to understand, feel, and interpret meaning within a specific context. One of the participants, Jeff, explained the importance of storytelling in the entertainment and the learning environment, “Entertainment is done through storytelling, whether comedic or dramatic or analytical. Telling a story is thus something which I believe enhances a production for the learning environment.”

Themes and General Findings from the Results

The following general themes emerged from this study as the general findings: (a) disruptive technologies and experiential learning, (b) transference and interactivity; competencies and access; (c) edutainment methods, portable devices, new media, and computer logistics; (d) the transformational impact of convergence; (e) experiential, formal, and informal learning with convergence; (f) emerging edutainment and convergence trends; (g) the military, government action, and the technology connection, and the (h) supporting literature.
After an introduction of the concepts and definitions of edutainment and convergence, our storytellers’ ideas emerged into themes that discussed the modern influences of technology as a focus for academic instruction and learning. Generally, the participants were somewhat cautious when deciding if academics were actually ready to comply with edutainment and convergence in their own classrooms, but they were also hopeful that such inclusion would greatly aid in the delivery of classroom learning. As the researcher, I moved from agreement to astonishment sometimes when I realized the fervency of these professionals when they talked about “changing the educational environment.”

The nature of this research and the qualitative emphasis was also somewhat of a surprise to me, since I was armored with ready structured questions, which fell by the wayside as the participants took over the interviews with their versions of questions that needed answering and concepts that needed further examination. The research was, then, a voyage of discovery for me, revealing the breadth and depth of the participants’ knowledge and interest in the topic. Their personalities are revealed below.

Philosophical Approach and Profound Comments of Each Participant

This study utilized the edutainment technique of digital storytelling and convergence technology to gather data, discover emerging themes, and analyze data. This portion of the chapter provides a succinct summary of each participant’s philosophical approach and their individual responses along with
what I considered my favorite and their most profound statement from each of them.

Aaron, the academic, focused on the use of edutainment and convergence in the classroom as a way to incorporate the “fun factor” into learning, as a way of stimulating the learner. Aaron suggested museums run by institutions of higher learning could have a major impact on learning. Aaron openly worried about socialization, but also attributed this feeling to his age. As a former Disney employee Aaron was aware of the use of edutainment in maintaining the attention of spectators, viewers and listeners. The military, Aaron explained, has already proven the effectiveness of video games, handhelds, biometric and personal technologies and simulation technologies in the classroom, in the field of battle, in space exploration and in research. Overall, Aaron saw edutainment and convergence utilized inside and outside the classroom, and he cited examples such as the Internet and handhelds as technologies transferable to higher education. My favorite quote from Aaron was when he explained what communications and technological skill sets modern educators would need in the future: “All of them! Kids have an amazing grasp on emerging technologies. Educators will need to understand them just to be part of the conversation. Students need to want to go to school. If schools can’t compete with emerging technologies for the attention of their students, the credibility of the education system will be undermined.”
Cesario, the doubter, discussed the use of edutainment and convergence in the classroom as a tool; however, he was a strong supporter of socialization as well. Cesario maintained that edutainment and convergence can be utilized in higher education and transferred through tools like the iPod and the Internet; however, Cesario also was not aware of the military’s uses of these technologies, but once he was made aware of this fact Cesario maintained that the military was using these technologies because they work. Highly critical of the educational establishment, Cesario described it as antiquated. He was also critical of the fact that elite universities and their students have utilized edutainment and convergence technology en masse while the educational establishment has not supported mass adoption of the use of edutainment and convergence. Cesario cited that digital literacy would be important for all teachers, and recommended that teachers and professors be trained as motion picture producers and directors who create stars out of the students. Cesario suggested the use of new media such as blogging for digital storytelling purposes.

My favorite quote from Cesario was, “We must all be up-to-speed in the learning department. If edutainment and convergence is the key then we must all embrace this way of thinking and move with it. No matter what their social status is everyone needs to have more than just a fighting chance. Our future is at stake, and now we do have various mediums at our disposal. Therefore it is a moral must that we give everyone a wholehearted chance.”
Erin, the socializer, advocated the use of edutainment and convergence. Erin maintained the importance of the physical appearance of the professor, and suggested that the physical appearance of the professor impacts students and the professors. She saw professors as role models preparing students for the professional world where appearance is important to employers and employees attempting to advance. She believed that teachers receive edutainment training on how to use visual techniques and improving their appearance because of their status as role models. Enthusiastic about the use of edutainment techniques because her mother utilized visual edutainment techniques to assist her in learning in high school to overcome dyslexia, Erin suggested that convergence technology such as the Internet and handhelds can assist students with disabilities, minorities, and working students through virtual education. She advocated that edutainment and convergence can be utilized in higher education and can be transferred to higher education in visually based formats. Erin even suggested that students could educate the educators on how to utilize convergence technologies for learning purposes. Finally, Erin maintained that the military was ahead of the rest of society on the use of edutainment and convergence, and she was personally aware of this through her work with the military.

My favorite comment from Erin was: “Oh, wow! There’s no end to the possibilities. The technology is changing all the time…for the better. You can literally have virtual classrooms with students from around the world, so you have
not just educational opportunities, but cultural exchange, too. A perfect example is the commercial with the boy dancing that is shared around the world through the Internet and crosses all cultures."

Eric, the advocate, was the most supportive participant of the use of edutainment and convergence in the classroom and outside of the classroom based on the fact that he admitted to using You Tube, MySpace, Facebook, iTunes, Brightcove, videogames, and other video sharing and social networking sites for learning, homework, class work and practical experience. Eric's dual role as an experienced producer (twenty years) and as a professor (a decade) added a unique dimension to the study. He advocated the use of cell phones in the classroom and outside of the classroom for learning, family, and safety purposes. Eric was also a fierce advocate of using technology as a boost to keep the attention of students in the classroom setting, and to maintain their attention outside of the classroom by speaking to students in their own world as he referred to it. Moreover, Eric maintained that traditional educators have always used edutainment with the technology of the day, and that convergence has blurred the line between technology, entertainment, communication and educational methods. Eric also advanced the notion that academia as a whole will have to embrace edutainment and convergence as part of the learning process for students and professors inside and outside of the classroom setting. Citing support for new media technologies that encouraged user generated content, social networking and video sharing for learning and entertainment
purposes, Eric asserted that a new form of community news through digital means has been created. Predicting that copyright concerns would create court cases for the foreseeable future, Eric maintained that companies will continue to lobby for laws that favor content owners, and consumers would continue to download content for free.

My favorite quote from Eric was; “If we’re talking entertainment it is my job as an educator to get this information out (to) you. I’ve got to get this information out to you. I’ve got to get it out to you in a way that is going to satisfy you, that is going to satisfy you for your dollars. So I am an entertainer, I have to be an entertainer.”

Jeff, the enthusiast, explained the use of edutainment and convergence was a learning tool for higher education with a proviso--there were some limitations. He cited the iPod, the Internet, cell phone and smart phones like the iPhone as edutainment and convergence tools that could be transferred to education. However, Jeff asserted that cell phones were too disruptive for use in the classroom, but acceptable for use in study hall and outside the classroom. Aware of the military’s use of edutainment and convergence Jeff maintained that the military utilized the technology because it worked. However, like other participants, Jeff was concerned about the socialization process because of convergence technology. Jeff was also supportive of the use of video games and digital literacy for professors and teachers. Jeff had a moderate view on copyright laws as long as individuals were not becoming enriched financially. Finally, Jeff
was also disappointed that one company was driving media protection in the video business.

My favorite quote from Jeff was, “Education will be enhanced by the utilization of edutainment and convergence. Reaching students in a way that they are accustomed will benefit them in their future. Yet, getting the technology into the hands of all students will continue to be a challenge. Will minorities and the poor be left behind further? … A question that we cannot answer today.”

Jesse, the questioner, was more supportive of edutainment than convergence as a whole. Highly suspicious of the influence of commercial interests in higher education, Jesse referred to them as edu-sellers and the Internet as a digital flea market. Jesse maintained that some visual techniques could be utilized and transferred into higher education. Jesse was also aware of the military’s successful use of edutainment and convergence. Like other participants, Jesse expressed concerns that the socialization process needs to be preserved. Jesse maintained that companies like Disney use effective edutainment techniques to create branded patrons for life who have been captivated by the edutainment experience. Supporting digital literacy and ongoing training for teachers, Jesse maintained that teachers actually serve as motion picture directors in the class setting and that effective communications skills were critical to the success of professors or instructors at any educational level. Jesse was the most avid supporter of content owners’ rights and supported the industry groups’ efforts to inhibit copyright infringement.
My favorite quote from Jesse was his comment on the education industry being influenced by commercial publishing interests: “Rock stars! Good Lord! Try edu-sellers. The Internet has become a giant digital flea market of our time. Get a B.A. in two days! No payments for one year! Twenty-two percent interest fees! It’s all about fast and cheap.”

Rebeca, the change agent, was supportive of the use of edutainment and convergence in higher education as a tool that merged with existing educational methods. Rebeca cited the fact that edutainment and convergence could be transferred into higher education and utilized in a variety of manners. Advocating the use of new media tools, Rebeca maintained that having students creating blogs and video news stories would maintain interest and improve observation, listening and writing skills that take place during the video editing process. In fact, Rebeca suggested that teachers would constantly have to be re-educated to keep up with the changing technologies. Moreover, Rebeca was extremely supportive of the use of iPods and the Internet for learning as a tool in the classroom and outside of it. Finally, Rebeca maintained that new tools like video games and iPhones could also be used as learning tools for students.

My favorite quote from was Rebeca was when she stated her support for edutainment, convergence, and teacher training, “I think any games or podcasts should only be used as a supplemental tool to accompany existing teaching methods. In no way do I think one should replace the other. Perhaps an advantage would be simply a way (of) bringing entertainment value to learning
may actually work. And a possible disadvantage would be that students become overly dependent on relying on video stimulation in all aspects of their life to bring it into the classroom also means training and certifying teachers in a whole new and radical way.”

Sadia, the culturalist, was more supportive of edutainment techniques than convergence techniques and expressed concerns about the socialization process because of the over-reliance on technology. Sadia maintained that edutainment and convergence can be utilized in higher education and that these techniques and technologies are transferable. Advocating the use of new media, Sadia specifically recommended the use of You Tube, Blip.tv and Final Pro Cut by Apple as technologies that are transferable. Sadia cited the use of role play, oratory, drama and music as edutainment techniques that can transfer into higher education. Critical of traditional education and the educational testing industry, Sadia cited the need for more competency-based forms of assessment such as oral exams, presentations and project based learning.

Sadia maintained that edutainment and convergence could be used to teach language skills and cultural understanding. In fact, seizing on the transformative nature of edutainment, Sadia suggested that edutainment could be a tool to assist students of any background to become more interested in a given subject matter. Sadia was supportive of concepts like iTunesU, Digital Duke and MIT online as being great tools for sharing knowledge but she had some mixed feeling because some people like to write things down and copyright
issues. Finally, Sadia pointed out that the military would not spend billions of
dollars on convergence technologies if they did not work.

My favorite quote from Sadia was: “There will be a new major that uses
edutainment and convergence, but someone will give it a new name and claim it
as an original idea.”

Recommendations for Future Research

I would recommend a national quantitative study with entertainment
professionals that focused on the themes and the findings of this study to verify
the findings of this study. Future research may also examine and chronicle the
impact and effects of current and future technologies in the educational process,
as well as the each of the fifteen implications discussed previously. A mixed
methods study may be employed to study the development of edutainment and
convergence with entertainment professionals. Furthermore, a mixed methods
study with academic professionals and entertainment professionals that focused
on the themes and findings of this study could serve to compare and contrast the
thoughts, words and recommendations of these two different groups. Finally, I
would conduct a longitudinal mixed methods study that would utilize focus groups
and individual interviews, so that the academic and the entertainment
professionals could jointly discuss edutainment and convergence and the issues
that will arise in the future as technology develops and new research on learning
methods and student–centered approaches emerges.
Future research can also focus on efforts to keep knowledge public and reform copyright laws so that terms such as academic freedom and fair use are more than an academic concept, but a political reality that businesses would be compelled to respect under the law (Bagdikian, 2000, 2005; Battelle, 2005; Lessig, 1999, 2001, 2004; Napolitano, 2004, 2007; The Center for Public Integrity, 2000; Vise & Malseed, 2005). Academia has to be very careful that it does not become too identified as an instrument of corporate and government institutions (Bagdikian, 2005; Giroux & Giroux, 2004; Lessig, 2002, 2004; Moore, 2003; Napolitano, 2004, 2007; O’Harrow, 2004; Risen, 2005; Rosen, 2001).

Finally, a rhetorical question was advanced: Can a professor freely present provocative ideas in a class setting in a university when the class is being televised live and recorded for instant worldwide distribution without fear of retribution because of convergence technology? (Brin, 1998; Kaplin & Lee, 1995; Moore, 2003; Napolitano, 2004, 2007; O’Harrow, 2005; Risen, 2006; Rosen, 2001). Only time and future litigation will provide the answer to this question, but it also gives rise to another rhetorical question: If academic freedom was originally instituted at The Academy to protect professors and students for views expressed on campus, does this same level of academic freedom extend to the digital classroom in an open society where the public can view or listen to course in today’s politically charged environment? (Apple Computer, 2006; Brin, 1998; Moore, 2003; Napolitano, 2004, 2007; O’Harrow, 2005; Risen, 2006; Rosen, 2001).
As I thought about the implications of academic freedom, I decided to use convergence technology one last time to find out if the participants would still use the technology. Each of the participants were sent a text message with the following message, “The bottom line question is this: after all of what we have talked about in this study at the end of the day would you use or recommend the use of edutainment techniques and convergence technology that we have talked about in the classroom?” The participants that answered responded within five minutes. Cesario answered, “Yes, I would straight up use them (edutainment and convergence)!” Erin sent a text: “Yes! Because it works for all types of students! Especially the visual learners like me.” Jeff replied, “Yes!” Rebeca replied, “Absolutamente! (Absolutely in Spanish with strong enthusiastic emphasis).” Sadia was adamant: “Yes, absolutely! It should be in the classroom. It needs to be done in the right way with the educational content.”

The Future of Edutainment and Convergence

This research examined the merging and utilization of edutainment and convergence in higher education from the perspective of entertainment professionals. At the end of the day, this research found that one process and one word lay at the heart of all education, edutainment, entertainment and technology: communication. Jeff epitomized this discovery and summed up this study by saying, “Communication is such an important part of every area of study. You could be the greatest chemist or historian, but without effectively
communicating with students and peers, one could be a poor educator."

To be sure, education is literally impossible without communication, and this is why edutainment and convergence offer unlimited possibilities for the future of learning and learners. Perhaps essential is that all stakeholders in the educational process have a greater understanding of how entertainment techniques and new technology can work in concert to create a learner-centered environment that results in students and educators who are critical thinkers, leaders, and team-oriented with digital skills, professional skills, and communications skills that are necessary to compete in the global economy of the twenty-first century. McLuhan (1967, 1968) maintained that the media is the message, and that electronic media would create a global village that would enable citizens to create electronic extensions of their minds and bodies. Perhaps, higher education will embrace edutainment and convergence so that scholarly knowledge can explore every available outlet.
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Appendix A
November 13, 2006

Dr. Rosemary Gillett-Karam
Center for Higher Education Leadership and Policy
School of Education and Urban Studies
Morgan State University

Dear Dr. Gillett-Karam:

Following a review of the materials submitted to the IRB with respect to the research being conducted by your student, Chris Heidelberg, titled “Edutainment & Convergence: How Can Entertainment Techniques and Technology Be Utilized in Higher Education”, I am pleased to inform you that IRB Approval is hereby granted for the project.

Please note that this approval is for a one-year period from the date of this letter. You should also note that it is your responsibility to inform the IRB as soon as possible should there be a substantial change in the study methodology.

Do not hesitate to contact me at X3527, or Dr. Isuk at X3447 should you have any questions.

Sincerely,

Anna R. McPhatter, Ph.D., LCSW
IRB Chairperson

Cc
Dr. Edet Isuk, IRB Administrator
Appendix B
Interview Questions

The following questions will act as guides for the conversations between the investigator and the subjects. There is no particular order in which these questions will be asked. The questions may or may not be addressed and additional questions or subjects may arise as informants respond to other questions. Follow-up interviews may include new questions or clarification of prior questions. There is no “right” or “wrong” answers. All information provided will be verified by the investigator for accuracy.

Three research questions will guide this study:

How can entertainment techniques and technology be utilized in higher education?

Which entertainment techniques and technologies do you utilize most in your profession, and which entertainment techniques and technologies do you believe have the most potential for higher education? Explain why.

How would you incorporate the entertainment techniques and technologies into the classroom, curriculum, homework, learning laboratories, studios and libraries?
Other questions may include, but will not be limited to:

- Would you describe how you would design a multi-disciplined education major that incorporated edutainment and convergence for prospective teachers, and continuing education for existing faculty?

- How would you utilize edutainment and convergence from a marketing standpoint to recruit and retain students?

- How would you utilize online and cellular marketing research to obtain constant feedback on student services, administrative policies, new policies and faculty evaluation?

- How would you utilize edutainment and convergence technologies such as video games, cell phones, wireless devices and iPods to assist with assessment or testing improvement for students on internal and national standardized test?

- How would you utilize interactive and standard audio and video to improve the learning, research and studying processes?

- How would you utilize convergence technologies to create innovative research, data storage, papers and presentations?
Appendix C
Talent Release Form

1. For good and valuable consideration herein acknowledged as received,
   I, ________________________________________ hereby grants to
   ______________________________________(Doctoral Student Producer/Director),
   his heirs, legal representatives and assignees for whom this producer/director is acting and those acting with his authority and permission (hereinafter collectively referred to as the "Users", the irrevocable and unrestricted right and permission to take, use, publish and republish video, audio, film, words, photographs, online, telephony, wireless and other images, words and audio of the talent, without limitation, reproductions thereof in which the talent may be included, in whole or in part (hereinafter collectively referred to as the photographs, video, audio, photographic, online, wireless, print, and online images and audio).

2. The electronic and still images, audio and words may be used for promotion, art, editorial, advertising, trade, in form including but not limited to television and motion pictures, magazines, books, video recordings, audio recordings, printed works, online media or other media, known or unknown at this time, or any other lawful purpose whatsoever.

3. The talent/model hereby waives an right to inspect or approve the finished product or products and advertising copy or other matter that may be used in conjunction therewith or the use to which it may be applied. The dissertation committee and the student producer will evaluate this dissertation documentary and podcast for the dissertation title “Edutainment & Convergence: How can entertainment techniques and technology be utilized in higher education.

Talent signature _____________________________ Date ________

Student Producer signature _____________________ Date ________

Witness signature ____________________________ Date _________

Witness signature _____________________________Date _________