Media Convergence At The High School Level: Why Should High School Journalism Classes Use Technology Currently Used By Professional Publications?

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MEDIA CONVERGENCE AT THE HIGH SCHOOL LEVEL-
WHY SHOULD HIGH SCHOOL JOURNALISM CLASSES
USE TECHNOLOGY CURRENTLY USED BY
PROFESSIONAL PUBLICATIONS?

being

A Thesis Presented to the Graduate Faculty
of the Fort Hays State University in
Partial Fulfillment of the Requirements for the
Degree of Master of Liberal Studies

by

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ABSTRACT

The digitization of media organizations has brought about changes in both the organization and the practices of journalism, which have resulted in a change in how the news is made. Media convergence has required news organizations to combine online media, broadcast news, and print media to create news stories. This thesis will examine why convergence has become necessary for professional publications and how they are converging. The research includes original research gathered from surveying journalism schools to understand how colleges are preparing students for careers in the professional media. High school journalism programs were also surveyed to identify how high schools are preparing students for a future in journalism. Through the examination of the technology currently used by journalism schools and in high school journalism classes, this research shows the technological skills students have when they enter j-schools and explain the foundation that students should have before entering journalism programs.
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CHAPTER ONE: INTRODUCTION

Journalist Finley Peter Dunne said that the purpose of journalism is “to comfort the afflicted and afflict the comfortable” (quoted in Foust, 2008, p. 3). However, the current changes in journalism have left some journalists and news organizations feeling uncomfortable and afflicted (Beckett, 2008). One of these changes is how information is reported. Today journalists are no longer print or broadcast journalists, but rather journalists who report using multiple media platforms. “By the end of 2002, roughly half of the news professionals surveyed (48%) reported that they produced news content for multiple media platforms on a routine basis; that was true both in merged media (50%) and non-merged media (48%)” (Huang, Davison, Shreve, Davis, Bettendorf & Nair, 2006, p. 90).

In August 2006, the Economist magazine ran a cover story entitled “Who killed the newspaper?” which chronicled the basic changes affecting the media industry (“Who killed the newspaper?,” 2006). Geneva Overholser, professor at the University of Missouri, stated in an assessment of journalism that “journalism as we know it is over” (Gant, 2007, p. 13). This has become reality for journalism schools and professional journalism organizations.

Journalism is at a unique moment in history. News and information have never been more abundant. Journalists today have a limitless amount of information available, and they are able to contact resources anytime and anywhere (Beckett, 2008). The media industry is currently at a crossroad as print circulation declines and more people turn to the Internet as the main source of information (Project for Excellence in Journalism, 2010). “Convergence is not an option anymore. It is certainly an essential part of being
in the media business today. How far you go with it or what shape it takes is still yet to be resolved. There’s no question that we all have to be going down that path” (Schindler, 2010, p. 43).

The Web is driving the change in the way that information, opinions and ideas are acquired and then shared with the public. Lew Friedland, of the University of Wisconsin Madison’s School of Journalism and Mass Communication, said that the current trend is not a fad but rather the future of the media (Gant, 2007). Friedland believes that “the center for thinking is not completely in the newsroom anymore. The Web makes it possible for citizens to think in public together. This is the underlying reality of the news industry for the next 30 to 50 years” (quoted in Gant, 2007, p. 12).

Today’s journalists are aware of the audience’s need to receive information in a variety of ways (Weldon, 2007). However, some publications are not able to have a Web presence due to the staff’s lack of knowledge. In a survey of Nebraska newspapers, editors stated that “lack of technological experience was the number one barrier to implementing convergence” (quoted in Schindler, 2010, p. 31). The editors also said that lack of education was another reason for not implementing convergence (Schindler, 2010).

This raises the question about the education of journalism students. “Throughout the world, colleges and universities in the mass communication discipline are experiencing transition, integration, and convergence” (Kang & Kang, 2010, p. 5). A Nebraska editor said that “as technology advances, equipment becomes cheaper, and young people enter the field, they know how to use all that stuff, that it will just become a much more natural process” (Schindler, 2010, p. 38).
Students are encouraged ”to prepare themselves to the best of their ability to be able to report/edit the news in a variety of platforms and to learn how to truly engage readers/listeners/viewers in what they are writing about” (Huang et al., 2006, p. 90 & 91). Jan Leach of Kent State University said, “I’d be surprised if any newspaper editor would hire a student right out of j-school who didn’t have a good understanding of writing and producing online” (Idsvoog, 2007, p. 63).

Due to this demand from the professional media, university journalism educators have questioned whether an academic model or a professional model is more appropriate for journalism education. The professional model of journalism education puts emphasis on vocational training, which focuses on skill development. The academic model approach focuses on both academic and professional needs (Wharton-Michael, 2009). The media industry has attempted to gain an influence over professional degree programs by asking “universities to deliver graduates with vocational skills, using such mechanisms as accreditation programs and sponsorship to gain leverage in curriculum planning” (Nolan, 2008, p.734). The principles of accreditation for journalism programs, developed by the Accrediting Council of Education in Journalism and Mass Communication (ACEJMC), have addressed the needs of the professional media by outlining “the professional values and competencies or outcomes that are expected of journalism graduates” (Wharton-Michael, 2009, p. 5).

Journalism school faculty believe that students should be trained for the current media industry. In a data analysis of journalism faculty members, one participant responded stating, “We should want to offer students opportunities to learn specific skills that they’ll use in various communication occupations. We should want to provide them with opportunities to learn the context in which those occupational skills are applied: the

This focus on vocational training is now a part of high school journalism programs. Many journalism classes across the country participate in a Career and Technical Education (CTE) program, which provides federal and state funding to schools to purchase equipment to improve students’ technical skills. The goal of the CTE program is to provide a seamless transition to post-secondary education, certifications, and degrees (Cavender, 2009). “High school journalism educators are well aware of the changes affecting the media industry and deem it appropriate to tailor their programs to mirror these changes” (Roschke, 2009, p. 63).

“The complexities of 21st century living, demands of 21st century careers, and success in postsecondary education require students to integrate and apply information” (Hudis, 2005, p. 8). Education in CTE programs offers students a college-preparatory academic curriculum and a challenging technical curriculum. This focus helps students transition from high school, to post-secondary education, then to the workplace (Hudis, 2005). To ease this transition, it is important that high schools provide students with the skills and knowledge to be successful in college and the workplace. With the current changes in the media, it is important that high school students gain knowledge and learn skills that can be transferred to their post-secondary education and workplace.

This thesis will examine media convergence at the high school level and explain why high school journalism classes should use technology currently used by professional publications. Chapter two will define media convergence and explore how the media profession has changed because of online news. It will also explain how students are
being prepared for careers in the media industry at both the high school and post-secondary levels. Chapter three will explain the surveys given to high school journalism programs and journalism schools. The college survey researched the skills high school students need to know in order to be successful in journalism programs in college, and how colleges are preparing students for careers in the professional media. The high school survey inquired how high schools are preparing students for a future in journalism. Chapter four will analyze the results of both surveys. Finally, chapter five will comment about additional studies that need to be done.
CHAPTER TWO: NEWS ORGANIZATIONS LEADING THE WAY IN CONVERGENCE—
WHY HIGH SCHOOLS SHOULD FOLLOW.

In spite of thousands of newspaper journalists losing their jobs, journalism is still alive but simply in a different form. Print publications are currently struggling because digital technology has changed the way of getting news and information. For decades, print newspapers dominated the publication marketplace. However, now many individuals choose not to pay for a daily print publication when it can be viewed online free. Many believe that it is crucial that a new publication marketplace be formed before print publications disappear (Briggs, 2010).

Some blame this change in the media on the emergence of the Internet; however this change had already been under way before the Internet appeared. The various advances in technology have offered opportunities never imagined in the past, and have resulted in the “demassification” of the media industry (Meyer, 2009). The digitization of media organizations has brought about organizational changes and changes in the practices of journalism because media convergence has changed the making of the news (Jenkins, 2004).

The changes in professional media have required educators to evaluate and modify how journalists are trained to meet the needs of the current media industry. This literature review will answer five questions. First, what is media convergence? Second, how has the professional media changed? Third, what are the elements of online media? Fourth, why is digital media attractive to the millennial generation? Finally, how should journalism students be educated in media convergence?
Media Convergence

Individuals need to understand that convergence is the new and old media coming together. Convergence has been a part of some newsrooms since the 1990s and is one of the current buzzwords in online journalism (Weldon, 2007). Media convergence is defined as “a situation in which multiple media systems coexist and where media content flows fluidly across them. Convergence is an ongoing process or a series of intersections between different media systems and not a fixed relationship” (Dwyer, 2010, p. 24). Media convergence includes “all forms of mediated communications including video, audio, data, text, still photo and graphic art” (Roschke, 2009, p. 2). Convergence changes the relationship between current technologies, industries, markets, genres and audiences (Jenkins, 2004). Digitalization and technological convergence allows television, radio and the Web to share information among journalists since the content that media organizations create can be used in more than one medium (Erdal, 2007). An example of this overlap would be a newspaper and a television station combining their news gathering resources and one journalist producing content for broadcast, print and the Internet all at the same time (Foust, 2008).

In 1996, Dahlgren made a comment relevant to online journalism: “Journalism is carried out in specific institutional circumstances, within concrete organizational settings and under particular technological conditions. The advent of cyberspace will inevitably influence the factors which shape how journalism gets done - and may well even colour how we define what journalism is” (Dahlgren, 1996, p. 60). “The Internet not only embraces all the capabilities of the older media (text, images, graphics, animation, audio, video, real-time delivery) but offers a broad spectrum of new capabilities” (Foust, 2008, p. 7).
Convergence comes with both opportunities and challenges for online journalism and journalism in general. It requires journalists not to focus on a single medium and to think outside the box when it comes to deciding the medium to use to report stories. However, some argue that convergence weakens journalism because fewer journalists are on the street and in the newsrooms covering stories (Foust, 2008). The downsizing of reporters in newsrooms can result in difficult stories not being covered, and less competition among journalists to uncover challenging stories or stories that individuals may not want uncovered.

Economic pressures may continue to pressure newsrooms to move to convergence (Foust, 2008). Many news organizations have decreased the number of reporters on staff since convergence allows one reporter to do the job that once was done by many. The use of this new media technology has lowered production and distribution costs, while increasing the channels for news to be delivered and allowing media content to be recirculated in new ways. The portability of computers has allowed the media to be everywhere (Jenkins, 2004).

The consumers of the news are not the same as the past. The old consumers are considered to be passive and enjoy sitting at home reading the newspaper, while the new consumers are active and are wandering due to the availability of laptops and smartphones, making it hard for this group to establish loyalty to a network or media organization. This is an extreme change for some publications, since in the past their focus had been on publishing newspapers, magazines or books with little involvement in other media aspects (Jenkins, 2008).

Changes in the media landscape are driven by changes in technology. Particularly in
developed societies, access to the Internet (via a computer, a handheld device such as an advanced mobile phone or an organizer, etc.) means that individuals can post content accessible to many. That ability is no longer the preserve of the “mass” media. The Internet is enabling conversations among human beings that were simply not possible in the era of mass media (Tambini, Leonardi & Marsden, 2008). The Internet allows members of the audience to have greater control of information by allowing them to choose the information that they want and choose when they would like to retrieve it (Foust, 2008).

The digital revolution has created the assumption that the new media will replace the old, since the Internet allows easier access to media content. However, many do not feel that this will be the case since the old media have a distinct function (Jenkins, 2008). Some believe that a multimedia version of a story does not serve the readers the same way as an in-depth version of the story. Others are concerned about the potential “burn out” due to the new demands of convergence. The new demands and time constraints placed on journalists are due to the 24-hour news cycle, the need to beat the competition in reporting breaking news, and the need to constantly update information available online. Ellen Goodman, a Boston Globe columnist, believes that convergence takes away from good journalism. Goodman argues that it takes time to think about what will be written, and convergence does not allow this due to the various media types and the time constraints (Corrigan, 2004).

Even though there may be opposition to media convergence, this media movement is the future of journalism. Rather than opposing the change, it is important to examine why
this transformation has taken place.

How the Professional Media Changed

The changes in the professional media have been brought on by the change in technology and how consumers want to acquire their media. The Pew Research Center for the People and the Press found that more than one third of people under 25 do not consume news on a daily basis. This group grew up in a technological world, so to make news attractive to members of this age group it is important to find a way to make news fit into their lives. This is why many news organizations post stories and articles on Facebook, provide an opportunity to blog, and provide an opportunity to interact with other users online (Greenhow, & Reifman, 2009). Online media distribution allow the reader to become a part of the news experience by using blogging and reader-generated comments (Jenkins, 2004).

Rupert Murdoch, the executive director of News Corporation, predicted how the consumption of media would change. In his speech at the meeting of the American Society of Newspaper Editors (ASNE) in 2005, Murdoch addressed the changes that would be taking place in the newspaper industry. He discussed the “fast developing reality” of the challenges that would affect the media (Allan, 2006, p. 2). Murdoch said, “Scarcely a day goes by without some claim that new technologies are fast writing the newsprint’s obituary” (quoted in Allan, 2006, p. 2). He also forecasted that the challenge ahead was applying the print mindset to the new digital media, especially since many of the veterans had little knowledge of the Web and the new technologies. Many believe that the aspects that made journalism thrive in the past can help make it a
success despite the current changes in technology (Allan, 2006).

Murdoch explained how the Digital Natives will “never know a world without ubiquitous broadcast Internet access” (Allan, 2006, p. 2). Since this generation will access news and information differently from previous generations, it is crucial that the media be aware when, how, where and from whom this group acquires news and information. In his speech, he also predicted the crisis that the newspaper industry would face. He encouraged the media to “improve our journalism and expand our reach” (Allan, 2006, p. 2). The majority of Digital Natives do not buy the print form of the newspaper but rather get it in other formats. In the new environment that Murdoch predicted in 2005, the Digital Natives are no longer passive readers of the news, they are interactive participants with the news. Members of this group post content and video on the Internet. This change has taken the power away from the journalists and put it in the hands of the citizens. Journalists no longer define what is talked about, but rather the public influences the news by posting observations, experiences, opinions and concerns on the Internet. Technology allows anyone to publish information at little to no cost, when in the past they may have been restricted by either not having printing capabilities or the financial resources (Gasser & Palfrey, 2008). The Internet also allows readers to take information in short bursts, rather than being overwhelmed with large pieces of information found in the newspaper (Weldon, 2007).

The new media environment continues to change journalism and the community that reads it. Newspapers are struggling with including new information in stories that readers may have not already seen online earlier in the day. Editors and reporters are challenged by how they can make daily information more applicable to their audience. David
Croteau and William Hoynes wrote in their book, *The Business of Media*, that the change in content is one of the most noticeable changes in the media industry. They go on to mention that “if we accept that the media influences society, then we can understand how significant change in media structure and practices can alter not only media content, but also the nature of the media’s influence on society” (Croteau & Hoynes, 2005, p. 191).

In addition to dealing with technology, the newspaper industry is dealing with depleting revenue, layoffs and filings for bankruptcy. The main reason for this is the loss of interest in print publications. Most media buyers and industry analysts have concluded “that newsprint was about as enticing to Web-age readers as a game of Pong would be to an X-Box owner” (Brunelli, 2009, p. 7). Tony Chan, journalism professor at the University of Washington at Seattle, concurs: “Print, as we know it, is dead. Print is a ‘Dead Man Walking’” (quoted in Rogers, 2009, para. 5). Sreenath Sreenivasan, a Columbia University journalism professor, agrees, “The newspaper business could not be in worse shape” (quoted in Rogers, 2009, para. 7).

The digitalization of media has resulted in changes in both the organization and practices in journalism. Technological, media, and organizational convergence has influenced how news is made. It has made the production of news more complex and differentiated by requiring organizations to deliver both print media and broadcast media on their websites (Erdal, 2007). The media model differentiate their content to target “specific audience groups based on demographics, places the media use [laptop, cell phone, etc.], and sales method” (Picard, 2002, p. 142). These changes require journalists to be multi-skilled workers. Donald Matheson, of the University of Canterbury in New Zealand, did a survey on the relationship between newspapers, online newspapers and other emerging web formats. Matheson found that online journalism can result in
“broader and more profound changes and redefinitions of professional journalism and its [news] culture as a whole” (Deuze, 2003, p. 203). The new media delivery modes still bring readers meaningful stories, only in different forms.

“This new media environment will continue to change the notions of community and journalism, creating distinctions between the elite and the masses,” said Bruce A. Williams, of the University of Illinois at Urbana-Champaign (quoted in Weldon, 2007, p. 84). Online journalism has changed the rules for reporting the news and who exactly reports information. “Everyone is becoming a journalist,” said Jeff South, associate professor at Virginia Commonwealth University (quoted in Weldon, 2007, p. 84). Due to the reduction of staff, many news organizations are publishing more information produced by non-professionals because this information is inexpensive to produce (since the organization does not have to pay a salary to these individuals) (Henry, 2007).

Elements of Online Media

In the beginning of online journalism, most of the sites were associated with print and broadcast organizations, and online sites were viewed as additions to the main news business. These sites now are considered the pioneers of online journalism (Foust, 2008). “We’ve got to be a continuous operation. Our content’s got to be available not when we say it should be there. Not on the basis of a linear TV or a linear radio schedule, but on the basis of what they [users] want when they want it,” said Adrian Van Klaveren, the BBC’s deputy director and controller of production (quoted in Foust, 2008, p. 63). This also creates a drive to beat the competition and make sure that the readers of the site are not disappointed (Foust, 2008).

In 2006, the Pew Research Center reported that 31 percent of people regularly accessed their news online; this is an eight percent increase from six years earlier (Callahan, &
Thornton, 2007). Later the Research Center found that approximately three out of four Americans get their news online (Foust, 2008). The reason for this increase is that online journalism allows for expanded coverage through the use of multimedia. Some may want to read a story, others may prefer to see a video, while others may want to hear the audio version of a story. Online journalism allows the reader to choose content based on his or her preference. Additionally, the Internet has overcome the spatial and temporal limitations of the previous media, since newspapers and magazines were only able to provide readers limited information due to space constraints (Foust, 2008). The Internet offers limitless space for stories to be posted.

It is essential for a news website to contain breaking news and various multimedia tools. Time is more of a factor for online stories, because a story warning drivers of a car accident would not be relevant in the print newspaper the next day (Briggs, 2007). Since the Internet is instantaneous, it is expected that the information will be constantly updated. Readers also expect websites to be interactive. Interactivity allows stories to be told in new and intriguing ways, without the limitations of the print and broadcast media (Foust, 2008). Interactive news stories allow readers to see what the journalist originally posted along with what others have posted on the topic. Interactivity helps to build relationships with readers that attract them to online news sites. Most sites provide chat rooms, bulletin boards, blogs and other types of forums to allow readers to participate in news stories (Foust, 2008).

Wikis are web pages that allow individuals to create and edit content and are an example of interactive media. Wikipedia is an example of a wiki, since volunteers and unofficial experts can write a page and many have the ability to revise it. This site receives more that 14,000 hits every second and offers readers over one million articles-
compared to the 80,000 that can be found in the *Encyclopedia Britannica* (Weldon, 2007). Wikis can be connected through hyper-linking to show the relationship among aspects of the information (Foust, 2008). Wikinews, a part of Wikipedia, offers the interactivity many media consumers desire by promising to deliver “the free news source you can write” (Weldon, 2007). The site also enlists an army of Wikinewsies who contribute thousands of news reports (Weldon, 2007).

User-generated information also helps the reader to become better informed and an active part of the story (Foust, 2008). Through the use of personal computers and cell phones, individuals can now not only be content consumers but also content producers. Cell phones and digital cameras have allowed short video clips to be captured and published on websites (Cianci, 2009). However, it is important to remember that the key factors in online journalism are accuracy, trustworthiness, insight, analysis, new angles and relationships (Gasser & Palfrey, 2008).

“Information is coming at people in very new ways and they are bombarded with it all day. Right now the questions are about how media-literate the citizens are to sort out the information and understand what the rules are and how the information is passing through the gates,” Williams said (quoted in Weldon, 2007, p. 70). Even though a wide variety of media is available, it is important that publications use the right media to tell the story. It is also important to include community-contributed content edited by someone with a journalism background (Glaser, 2009). This step is necessary since the Associated Press Guidelines for Responsible Use of Electronic Services instructs journalists to use “strictest standards of accuracy to anything [found] on electronic services. The Internet is not an authority. E-mail addresses and Web page sponsorship can easily be faked” (quoted in Callahan, & Thornton, 2007, p.18).
The millennial journalists believe that the new media tools that are available are enhancing journalism (Turner, 2009). Individuals are now empowered to compete, argue, and spread knowledge in what Thomas L. Friedman calls “the flat world” (quoted in Pletka, 2007). For example, the website YouTube potentially gives anyone who knows how to upload video on the Internet tremendous influence. YouTube, a website purchased by Google, which allows anyone to upload, download, or watch amateur or professional videos, is essentially a free distribution center for a worldwide audience. The Press Enterprise, in a November 2006 article entitled “Beating Video Shows Power of YouTube,” highlighted how an alleged beating of a suspect by the police that was captured on video using a cell phone and subsequently uploaded to the YouTube website sparked an FBI investigation of the incident. After just one month of being posted on the site, 155,000 people had watched the clip that helped to propel the investigation forward. Without this type of exposure, the investigation likely would not have occurred (Pletka, 2007).

This trend of citizens with no journalism background posting news information on websites is called citizen journalism. Citizen journalism allows individuals who are not journalists to provide information and analysis. This comes at a time when publications across the country are reducing staffs; however, the demand for news still exists. Citizen journalism has come to fill this void. Students were warned of this change in the August 2006 issue of the *Quill*, the magazine published by the Society of Professional Journalists. The magazine included an article that informed students that they “must prepare for the future of citizen media” (Gant, 2007, p.14).

Citizen journalism is a part of a broader tendency in which the public determines what it wants to watch, read, listen to, and when, rather than passively taking in whatever
editors or producers select. Although a small percentage of what appears on the web sites like Facebook, MySpace or YouTube could be considered journalism, their popularity makes it evident that the Web has transformed consumers into the roles of producers. *Time* magazine realized individuals were in control of the Information Age, so in 2006 the magazine declared “You” its “Person of the Year” (Gant, 2007).

Citizen journalism allows people to serve as “reporters” when unexpected circumstances are thrust upon them. An example of citizen journalism reporting a story is Hurricane Katrina. Many mainstream media outlets were not onsite when the disaster hit, so citizen journalists told the stories of the devastation (Weldon, 2007). The most prized piece of citizen journalism is the famous “Zapruder film.” The recording of President John F. Kennedy’s assassination was made by Abraham Zapruder, a manufacturer of women’s clothing, while he was standing in Dallas’s Dealey Plaza as the president’s motorcade drove by. Over 40 years later, news organizations still are soliciting video and eyewitness accounts from citizen reporters (Gant, 2007).

The largest change in the past few years is the growth of and the emphasis on intense local coverage produced by citizens. An observer of the Virginia Tech massacre posted a now famous video with a cell phone camera before journalists could get to the remote crime scene. This change in coverage has allowed journalists a new venue to learning about people and places, locating sources, and finding stories that may previously have flown under the media’s radar (Callahan, & Thornton, 2007).

The first online newspaper featuring the work of citizen journalists was OhmyNews International, founded in South Korea in 2000 by Oh Yeon Ho. In 2005, OhmyNews had more than thirty-eight thousand citizen reporters around the world and an estimated half a million readers every day (LuStout, 2005). With the slogan, “Every citizen is a
reporter,” Ohmynews offers news and commentary from around the world, a model copied in this country by self-appointed “media foot soldiers” (Weldon, 2007).

Citizen journalism, also called participatory journalism or open-source journalism, is a way that many journalism sites are trying to increase user involvement. The information provided by the audience is called user-generated content (Foust, 2008). Evidence suggests that citizen journalism is prompting improvements within the traditional media. Citizen journalism has also impelled traditional news organizations to be more creative and more responsive to the interests of their audience. How this form of journalism is transforming “old” media organizations should not be surprising. An emerging news media organization is changing existing ones. Just as television dramatically affected print-news, particularly with the advent of 24 hour news channels, the dissemination of news through the Internet is transforming and will continue to transform all news media. This complements with Michael Schudson remarks in *The Sociology of News* that as “history keeps happening,” the “media keep changing…” (quoted in Gant, 2007, p. 198).

Goskokie.com, BackFence.com, YourHub.com, citizenjoe.org, NorthwestVoice.com, MyMissourian.com, bakersfield.com, and so many other citizen journalism sites have taken the power of the press and handed it to the people. Cyberjournalist.net, created and written by Jonathan Dube, hosts a Citizen Media Initiatives list. In September 2005, Dube listed thirty-five citizen journalism media sites in this country. By July 2006, that number had doubled to seventy-seven citizen media sites documented (Weldon, 2007).

The citizen journalist can distribute news items that have not been filtered through the editorial control in place for established media. The content put on the Internet by the citizen journalist is not covered by codes of journalistic ethics and enforcement mechanisms (Tambini et al., 2008). There is not currently any mechanism in place for
accountability and social responsibility when it comes to citizen journalism; many feel that a code of conduct needs to be created (Fernando, 2009). The blogosphere is not subject to the same mechanisms of accountability as the online versions of newspapers, where traditional accountability systems are extended (Tambini et al., 2008). The implication of citizen journalism for traditional media is that blogs can provide independent and alternative news compared to what is found in the mainstream media (Deibert, 2008).

Blogging has also changed how many newspapers deliver information, since blogging allows readers to personally respond to the news. Blogging is a tool that allows an individual to publish something for the world to immediately be able to view, and it allows an individual to regularly update the information. Blogs also allow the audience to intervene and influence the content (Kline & Burstein, 2005). Blogging has allowed everyone to report on the war in Iraq and Afghanistan, sometimes bringing awareness of the narrowness in the media’s accounts (Jenkins, 2004).

“Blogging is opinion mixed with rumor mixed with hearsay and no vetting process,” said Walt Harrington of the University of Illinois (quoted in Weldon, 2007, p. 79). However, some believe the changes brought about as a result of blogging may be good for journalism. “Weblogs are the anti-newspaper in some ways,” J.D. Lesica wrote in the book We’ve Got Blog: How Weblogs Are Changing Our Culture (quoted in Weldon, 2007, p. 81). Lesica states that the editorial process tends to filter out information in a story to the point that it is unexciting. Blogs do not go through the same process, so this information tends to seem more sincere (Weldon, 2007, p. 81).

The impact of blogging was recognized during the events that transpired after 9/11. Unconfirmed sources allowed the media to effectively record the events as they unfolded.
(Weldon, 2007). All communication systems such as cell phones, Internet and phone services were disrupted in New York due to the Trade Center attacks. Blogging and other forms of citizen journalism provided newsrooms with information about the attack that journalists were unable to obtain on their own (Neria, 2006). In 2004, blogging played a role in the presidential elections by driving candidate Howard Dean to the front of the Democratic Party nomination (Jenkins, 2004). “The influence of bloggers is only going to get greater and greater and I’m not convinced that’s a bad thing,” said Keven Willey, vice president and editorial page editor at the Dallas Morning News, at the 2005 AEJMC conference in San Antonio (quoted in Weldon, 2007, p. 81). Bloggers have also received money to be sent as independent reporters to acquire unfiltered information to be put on the bloggers’ site (Jenkins, 2004).

Blogging has made disseminating information fast, interactive and unrestrictive. Some of the common characteristics of a blog are: frequently updated journals written in conversational style, links to other news and information on the Web along with blogger analysis, and a comments section that allows readers to post their thoughts (Briggs, 2007). According to Rolls, Eddie Brennan, a lecturer in media Dublin Institute of Technology, believes that blogging has also allowed stories to be brought to the attention of the mainstream media. An example of this would be the Drudge Report, created by Matt Drudge, who exposed President Clinton’s encounters with Monica Lewinsky. The story was not confirmed by sources, but it found its way into the mainstream news agenda (Rolls, 2006). Another example occurred in 2004 when bloggers pointed out the errors in a “60 Minutes II” story on President George W. Bush’s Air National Guard service, resulting in CBS Evening News anchor Dan Rather retiring (Aikat, 2009).
Jay Rosen, associate professor at New York University’s Department of Journalism, is an advocate of this new “public journalism.” Public journalism is when people who are not journalists play a roll in collecting, reporting, and evaluating and disseminating the news. Rosen believes that the news industry must connect to the real concerns of the public, and public journalism allows this to happen (Kline & Burstein, 2005).

Why Digital Media are Attractive to the Millennial Generation

The opportunity to be active participants in the news has made the digital media appealing to younger generations (Winograd & Hais, 2008). The Millennial generation, also referred to as Digital Natives, was born in the midst of the changes within traditional media. The first of the Millennial generation was born in 1982 and reached the age of 28 in 2010, while members of the X-Generation ranged from 29 to 50, and the Baby Boomers ranged from 51 to 65 (Jonas-Dwyer & Pospisil, 2004). The media industry must address the thirty-seven year span between these age groups, along with the difference between how the Millennials and the older generations (Baby Boomers and the Gen-Xers) get their information (Winograd & Hais, 2008).

All generations consider the television an important source of information. The older generations place an importance on traditional media sources such as print media, broadcast radio, and other print information (i.e. candidate pamphlets). However, the younger generations tend to make group decisions (or let others influence their decision making) by using the Internet or even asking friends and family. The Millennials also tend to get their news from nontraditional media sources such as “The Daily Show” and “The Colbert Report” (Winograd & Hais, 2008). Dr. Augie Grant, a Newsplex Academic Liaison, said, “Traditional patterns of sending output to print, broadcast, and online
publications are being supplanted by new ways of organizing and reporting the news” (quoted in Jones, 2003, p. 6).

The Millennial generation has grown up in a world of cell phones, pagers, and the Internet. This generation takes notes in class on computers, gets its information from blogs and wikis, and is asked to turn off cell phones in class. This group has been labeled as one of the most diverse generations that can navigate difficult software that troubles previous generations, and is able to complete tasks while listening to music and talking on cell phones. The Millennials are “stimulus junkies,” individuals who want immediate responses and who communicate through text messaging. These individuals also seem to be the first to embrace new technologies (Dziuban, Moskal, & Hartman, 2004).

Don Tapscott first coined the term “Net Generation” in his book Growing Up Digital to describe a generation shaped by a new, networked, visually rich, digitally constructed communication and information world (Tapscott, 1998). In this environment, all the world’s locations, maps, and places can be stored digitally as 1s and 0s on a GPS small enough to be held in a child’s hand (Pletka, 2007). Instant messaging and email are the typical way for teenagers today to communicate; as a result this group tends to have a lot of technology and expects a lot from technology (Jonas-Dwyer, & Pospisil, 2004).

Digital Natives have been shaped by a society that is constantly connected, and this is an important value to many of them. The cell phone is tremendously flexible and provides a wide range of portable media and communication services that embed it in all aspects of society. In the past, culture was segmented by clearly defined times and tasks between the worlds of business, family, entertainment, and education. Now the cell phone acts as a way of connecting to segments of people’s lives all the time and anywhere (Pletka, 2007). Most American youth have this type of access and portability. For
example, seventy percent of American teenagers now have a cell phone. Whether they are checking the scores of a baseball game, ordering movie tickets, or text messaging, the cell phone is a constant part of their lives. Even at school, where some administrators have banned cell phones, phones are tucked away in purses and pockets, ready to use at a moment’s notice (Pletka, 2007).

The form of a Digital Native’s feedback loops varies. A person may write a post to her blog to critique a story she saw on CNN. She might comment on someone else’s blog or on a wiki or a bulletin board. She may even send an email to a listserv or to a network news program. If she is especially creative or passionate about a subject, she might create her own podcast or video log (or vlog). The idea is that she may react publicly to the story or remake and retell it in some fashion. Digital tools enable her to have an impact on the way the story is told. This feedback loop should be taken seriously. The increased level of engagement with information, and the world around a Digital Native, is beneficial for her own learning process (Gasser & Palfrey, 2008). Murdoch agreed that Digital Natives want to control their news when he said, “Young people don’t want to rely on a Godlike figure to tell them what’s important. They want control over their media, instead of being controlled by it” (quoted in Allan, 2006, p.2).

Digital Natives have become reliant on being virtually connected to all the information they need. Social networking sites allow these individuals to stay connected to people all over the world through instant messaging and sharing of images. These Natives are reliant on being instantly connected to all the information they need to make their life decisions. Individuals in this group spend a large amount of time instant messaging their friends, both online and using their cell phones (Gasser & Palfrey, 2008).
Among the most popular sites that are keeping this generation connected are MySpace, Xanga, and Facebook (Montgomery, 2009).

Even though studies show that teens are spending more time on the Internet, there is no evidence that they are spending less time viewing traditional media (i.e. TV, music or print). It is simply being viewed in different formats (Gasser & Palfrey, 2008). For example, individuals can watch TV programs on the Internet or on their cell phones, or view the daily paper on their Kindle.

According to Nielsen/NetRatings, MySpace users of voting age, not just Millennials, are three times more likely than non-users of the same age to interact online with politicians, and 42 percent are more likely to watch politically oriented videos online (Winograd & Hais, 2008). Due to the growing presence of Millenials on these sites, many companies created sites to get their name out to this group. These companies have found that social networking sites are perfect places to get feedback from the audience using a product or service. This also allows the companies to develop one-on-one relationships with customers (Gunning, 2009). Since the majority of high school students in the US are members of a social networking site, this allows publications direct access to this market. The information-rich environment in which the Net Generation lives has influenced its communication, and without digital communication, this generation would feel isolated (Pletka, 2007).

The Millennial Generation wants to share its ideas and experiences online, making this the prime way to contact this age group. Forty eight percent of the Millennial journalists use the various social networking sites to assist in their reporting and to engage their audiences and stay connected with their community (Turner, 2009). A reason for this is that social networking sites such as Facebook allow tagging of meta data, or “information
about information.” Tagging allows users to create labels, or categories, for data such as photos that make it easier for the users to find the data. When an item is tagged, a note will automatically appear on all of their friends’ News Feeds as well as News Feeds of friends of their friends. Social networking also provides widgets, or small web-based applications, that can be imported and posted to the web site. These widgets can be used to inform viewers of events or give directions about a certain process (Winograd & Hais, 2008).

Groups realize that this age group is using media sites, so the Internet has proven to be a key way to reach the Millennials. The 2008 presidential candidates were aware that it was essential to contact this group, and the best way to do so was through the Internet. Every 2008 presidential candidate had a profile on MySpace, and viewers had the opportunity to donate to a candidate or drag an ad for that candidate onto their page (Winograd & Hais, 2008).

The Net Generation prefers not to have face-to-face contact with others and prefers to send a text message to another person. This generation wants to immediately communicate with others; it believes that otherwise the conversation is dull. Collaborative learning, social online frameworks, and individualized feedback are also expectations of the Net Generation (Pletka, 2007). It is essential for the media to become active in the media-sharing communities that exist within social networking sites to attract the Net Generation (Greenhow & Reifman, 2009).

An example of the media being aware of their Millennial audience occurred in April 2007 when the Collegiate Times, Virginia Tech’s newspaper, needed to know who was alive and who did not survive the Virginia Tech massacre, so the staff used Facebook and other social media sites. The reporters did not take the information posted as being facts,
but rather they contacted those individuals to see what they knew about the incident. With the information gained from the social networking sites, these student journalists beat the global competition by hours. The social networking sites are increasing in popularity among news organizations, especially those who want to win over the younger and more tech savvy crowd (Callahan & Thornton, 2007).

Since digital media are used to attract the millennial generation, it is important that journalists are trained how to use these sites to attract viewers. Professional publications have led the way in media convergence, and it is essential for high school journalism programs to follow.

How to Educate Journalism Students in Media Convergence

High school journalism programs are the training grounds for aspiring young reporters who plan to pursue journalism as a career. Studies have shown that students who participate in high school journalism programs are more likely to continue those activities in college and beyond, compared to those with no previous training. Colleges are aware of these statistics, so they are attempting to create journalism programs that will encourage students to pick their college based upon their journalism school. The media industry is adjusting to convergence, and journalism schools are restructuring curriculum to meet the needs of the profession. Universities across the country are trying to find the best approach for preparing students for employment in today’s media market (Roschke, 2009).

Convergence has brought a challenge to journalism educators, who are trying to adopt the best journalism practices for students and stay informed of the changes in the media industry. The Internet has allowed the broadcast news to go from television sets to computers and various mobile devices. The Web allows segments of news programs that
highlight a topic to be posted, which are more user friendly to viewers compared to
watching the entire newscast. Podcasting is an example of how online audio is
challenging traditional radio, mainly because listeners now can take their audio anywhere
on various listening devices (Pryor, 2006). The Internet has also allowed journalists to
design stories that do not have to be accessed in linear order. This allows stories to be
structured so that the reader can select segments of a story since one segment is not
dependent on the other (Foust, 2008).

The change in technology and new uses of this technology have allowed high school
publications to better reach their target audience- high school students. Scores at sporting
events can be updated every quarter or half during the actual game. Convergence also
allows publications to put segments of games or competitions online, which can increase
traffic to the site because some of these audiences may have been overlooked in the past
in print publications (Pryor, 2006).

Today’s students need a new approach to knowledge acquisition and problem solving
to help them move into the work force. This group is more diverse than previous learners.
Many freshmen in college are more technologically competent than the faculty, mainly
due to 80 percent of the students having computers by the time they enter college. By the
time that these students enter college, 78 percent have used the Internet for homework
purposes and two thirds have used email. Education must meet the needs of the current
generation of learners (Dziuban et al., 2004).

The Millennials’ high expectation of technology poses a challenge for education; the
institutions with the aging infrastructures may make it a challenge to meet the needs of
these tech-savvy students (Jonas-Dwyer, & Pospisil, 2004). In 2005, when addressing the
nation’s governors, Bill Gates said, “Training the workforce of tomorrow with today’s
high schools is like trying to teach kids about today’s computers on a 50-year-old
mainframe” (quoted in Alonso-Zaldivar, 2005, p. 1). These concerns are also shared by
the American Youth Policy Forum, which criticized high schools by finding that “while
the world around us continues to change at unprecedented rates, most high schools have
been slow or resistant to change” (Brand, & Partee, 2000, p. iii). Because the Net
Generation has been shaped by an environment that is “information and communication
rich, team-based, visually-based, and instantly responsive, they often recoil from isolated,
lectured-based, information-dated, responsive-deficient learning comprised of outdated
technologies from the mid-20th century” (Pletka, 2007, p.13).

The outdated technology found in some journalism classrooms cannot properly
prepare students for the journalism field. Traditionally a journalism student would learn
about one career, like being a newspaper reporter, and then he or she would take a job at
a small paper and work his or her way up to a larger paper. Now reporters must be able
to work as a one-person operation; they must be able to blog, create a podcast, and create
video reports while managing editorial and business responsibilities (Glaser, 2009).

Changes in media require a change in how future journalists are educated. There are
no longer limited venues from which people can obtain their news. Individuals now can
get their news from Twitter feeds, virtual communities, and social networks (Legrand,
2009). The mainstream media use Twitter and other social media to assist them in
reporting key issues and time-sensitive stories (Maderazo, 2009). Many Southern
Californians received information about the 2009 wildfires through Twitter feeds. This
was beneficial since they could follow the updates on their cell phones (Legrand, 2009).

“The Power of the Net [is] to change the system. Technology is a steam roller. You
either drive it or it runs over you,” said Michael Robertson, the co-founder of MP3.com (quoted in Winograd & Hais, 2008, p 144). The Net Generation is changing both education and the global marketplace. It is the responsibility of educators to train this generation how to use the Internet and make smart choices in its Internet use. However, teachers are concerned that the educational systems cannot keep up with the constant changes in digital technology. This also raises concerns due to the lack of current technology: the information that is being taught may be obsolete (Palfrey, 2008).

This can be a problem when it comes to training students for the technology that they will be using in the real world. High school journalism programs are the training grounds for aspiring journalists (Roschke, 2009). Since this age group forms a foundation for the future of journalism, it is essential for high schools to be receptive to meeting the needs of these students. The merging of information and communication also allows the Millennial Generation to gain technical skills and competencies (Palfrey, 2008). As the professional media changes and adapts to media convergence, colleges have already begun to revamp their programs to meet the professional demand, and it is necessary for high school programs to follow. There appears to be a loss of interest in traditional journalism (Winograd & Hais, 2008). Students today have grown up with an “information-age mindset,” which has put more demands on schools to teach this “new Millennial generation” and to design learning environments that allow students to communicate using a wide range of media (Jonas-Dwyer & Pospisil, 2004).

Journalism educators have been discussing media convergence for almost ten years, and so many have changed classroom curriculum and increased equipment and software to help prepare students for the future of journalism (Weldon, 2007). In *Bridging*
Newsrooms and Classrooms, Professor Edgar Huang’s team concluded that journalism schools should provide cross-media knowledge to their students because “multi-dimensional news reporting in multiple media platforms will be tomorrow’s way news is presented” (Huang et al., 2006, p. 254). Journalism schools are eager for high schools to begin the convergence process (Roschke, 2009). Both journalism educators and professionals are trying to decide how educators can prepare young journalists for careers in today’s media that require the ability to use multiple newsgathering skills. A study found that teaching convergence in education is necessary for journalists who will work in multiple-media news operations (newspaper, TV, radio, Internet) (Zoch, 2003).

It is necessary for students to be introduced to professional multimedia, and students should be assisted in understanding how the delivery information is constantly changing. However, this is impossible if the technology is not available or restricted. Students should also be taught how to cooperate and collaborate, just as they would in a professional newsroom. Young journalists should have a foundation in print, online and broadcast and be willing to acquire new skills once in the workplace. These individuals must always be willing to learn, such as a still photographer learning how to shoot video or a television reporter learning to write a feature story (Thelen, 2002).

Journalism labs need to have up-to-date technology for students to learn these skills necessary for the job market (Thelen, 2002). However, many schools do not have the funds to pay for the necessary technology. To assist in this matter, high schools could follow the example of journalism schools, which attempt to get support through corporate philanthropy to create “convergence lab newsrooms” (Corrigan, 2004).

Schools are constantly encouraged to use digital technologies to promote team-based
learning, where students are placed in digital environments so that they can learn to work in teams. Interactions and the sense of an online community are essential elements for the Digital Natives to learn online. This is what already takes place in many journalism classrooms. Many staffs use Google documents, which allow multiple people to view and edit documents and to collaborate in reviewing stories. Google documents also allow students to research, write, and create collaboratively online. These skills will assist all students as the digital community evolves. Acquiring these skills prepares students for the working world, since these students will be required to collaborate (Palfrey & Gasser, 2008).

One obstacle that many schools face is dealing with the Internet filters that are in place. These filters not only create a hindrance in convergent classrooms by not allowing journalists access to most social networking sites, but filters also take the responsibility away from students to make decisions online. Even though the filters are used to monitor the quality of information, these filters create content quality problems since the sites that would provide the best information cannot be accessed, so sites of lesser quality are used (Palfrey & Gasser, 2008). The Kaiser Family Foundation conducted a study in 2002 that found “that the most restrictive level of filtering setting blocked 25 percent of legitimate health-related sites” (Finger & Lee, 2010, p. 253). This also creates a censorship issue since schools are in effect choosing what information students can view. Without these roadblocks, educators would be able to use technology effectively in everyday curriculum and prepare students to use resources to which students will have access in the professional world. The Digital Native has grown up putting its information in an online profile, on MySpace, on Facebook, in blogs, or on a YouTube video. This generation needs to be taught how to be responsibly creative online (Palfrey & Gasser, 2008).
Teaching students how to use various forms of digital technology is essential to preparing them for a journalism career, since the common trend in newsrooms is the use of mobile journalists (mojos), or one journalist doing the job that was once done by many. These individuals are also referred to as backpack journalists, since they carry a variety of tools to allow them to report from the field. A mojo’s backpack includes equipment that allows him or her to produce news stories, blogs, post photos, video or audio for a story. These items include a laptop to report a news story wherever the reporter is, wireless Internet connection, a video camera (that can also shoot still photos), and an audio recorder (Briggs, 2007). A backpack journalist gathers information and produces stories for more than one type of media. For example, a journalist may cover an event for a newspaper story, while shooting video to be broadcast on television and posted on the Web site (Foust, 2008). Mobile phones, handheld video camera, and laptops with Internet access allow today’s journalists to be more productive than they could have been five years ago (Beckett, 2008).

The Medill Journalism School at Northwestern University of Chicago stresses that journalism students should be versatile. “We’re telling students they must be prepared to practice journalism across all platforms, and not to think of themselves as T.V. journalists, newspaper journalists, or even Web journalists. Everybody must be able to do a bit of everything,” said Steven S. Duke, the director for training and associate professor (quoted in Rogers, 2009, para 13). Temple University journalism professor Linn Washington agrees with this multi media approach to journalism, stating that professors at Temple train students to use software such as Dreamweaver, Photoshop and Flash so that they are prepared for the various forms of media (Rogers, 2009). Linda Davis, an associate dean at the University of Kansas, said that convergence curriculum requires the
willingness of instructors to “learn new skills and knowledge across media platforms” (Auman & Lillie, 2008, p. 361). Universities desire students to have basic skills in multi-media technology when they enter journalism school, and this foundation should be laid in the high school journalism classroom (Auman & Lillie, 2008). Amidst the broad spectrum of media innovation, there is still a demand for journalism classes at colleges and universities. Bechtel said that the enrollment at UNC at Chapel Hill is strong, and some students are being turned away from classes due to the lack of space (Rogers, 2009).

Many universities are trying to find out exactly how to teach journalism with the constant changes and determine the model of journalism education. Journalism programs, such as the Walter Cronkite School of Journalism and Mass Communication at Arizona State University, are also concerned about the shift to digital and the uncertain future of the media industry (Stelter, 2009). A study reported that out of the universities surveyed, 85 percent have “adapted their curriculum, or have begun to adapt it in response to the industry’s trend towards convergence” (Auman & Lillie, 2008, p. 360). Andy Bechtel, an assistant journalism professor at the University of North Carolina at Charlotte, said in regard to the future of journalism, “No one is sure what the future holds, but it is apparent in the growth of readership at news sites that people still want professionally produced news” (quoted in Rogers, 2009, para 34).

A Poynter Institute for Media Studies seminar mentioned how “a convergent curriculum is a tougher discipline, more rigorous for students, faculty and staff” (Auman & Lillie, 2008, p. 368). Tim McGuire, a professor at ASU, said that despite the struggling industry, the areas of advertising, public relations, broadcast, print programs are still popular. McGuire says that students are enrolling in these classes because they realize
that “the model is broken” and they want to fix it. A survey done at the University of Georgia in 2007 found undergraduate enrollment in journalism programs at an all time high. Nicolas Lemann, the dean of Columbia’s graduate journalism school, confirms the increased number of students majoring in journalism. Lemann notes that the print media track dropped to 49 percent of journalism majors in the fall of 2009 compared to 64 percent of journalism majors in 2007, and the digital track is up 10 percent (Stelter, 2009). This change in media focus at journalism schools suggests that high schools across the country should consider similar changes.

Many journalism students are still unaware of social media, blogs, micro-blogs and feed readers (Hermida, 2009b). “Tomorrow’s journalists need to take the initiative to teach themselves about rapidly changing technology” (Legrand, 2009, para. 2). Paul Bradshaw, a journalism professor at Birmingham City University, said that students who choose not to adopt social media tools are setting themselves up for failure as a journalist. “If you are a journalist who isn’t curious about the web, then you may find yourself seriously limited as the industry shifts or, worse still, not being a journalist for very long,” Bradshaw said (quoted in Hermida, 2009a, para. 6).

The research that will be presented contributes to the previous literature review by explaining the steps that high schools and colleges have taken towards media convergence. The study will also explore whether high school journalism programs should use technology used by professional publications and what skills are necessary.

The next chapter will discuss the methodology of the surveys distributed to 109 college journalism programs and 232 high school journalism programs that examined if and how students are taught about media convergence.
CHAPTER THREE: METHODOLOGY

Two surveys were developed; one for high school journalism programs and the other for journalism schools in colleges. Both surveys were approved by the appropriate review procedure. The high schools were selected based on the Journalism Education Association (JEA) Digital Media list of high schools that have online scholastic media sites. All 206 high schools listed by JEA were emailed surveys. The colleges and universities were selected from Accrediting Council of Education in Journalism and Mass Communications (ACEJMC) accredited programs. ACEJMC is the agency responsible for the evaluation of professional journalism and mass communications programs in colleges and universities. There are 113 accredited programs in journalism and mass communications at colleges and universities in the U.S., and surveys were emailed to all of them. The instrument used for data collection were self-administered surveys where most of the questions could be answered by checking a box or responding to open-ended questions. Respondents received a link to the online survey.

The goals of the questions of the college survey were to identify what skills high school students need to have in order to be successful in journalism programs in college, and to identify how colleges are preparing students for careers in the professional media industry (see Appendix A). The goals of the questions of the high school survey were to provide information about what skills high school students need to be successful in college journalism programs and in the professional press and whether high schools are teaching high school students what colleges thought those students need to know (see Appendix B).

Separate introduction letters, which included the survey link, were emailed to the selected schools in each group. The introductory letter stated that response to the survey...
would be understood as voluntarily agreeing to participate in the survey. SurveyMonkey, the survey software, was used for both surveys, which automatically tracked which schools replied. Participation was voluntary; there was no penalty if participants chose not to participate. Participants could complete all or part of the survey. A follow-up was conducted 15 days after the date on which the survey first became available on the Internet; a second follow-up was conducted 15 days after that.

Using the results of the surveys, this thesis will test the following hypotheses:

H1: There is a relationship between the size of a journalism program and the variety of ways a program prepares students for the profession.

H2: Some universities focus not only on digital media, but also print media to provide students with a rounded journalism education.

H3: Some high schools and colleges are moving towards convergence so that students are prepared for media convergence and the digital world.

H4: Some high school and college students are being taught technology, software, and Web 2.0 tools used by today’s professional media.

H5: Even though journalism is a changing field, based on enrollment in journalism schools it is clear that many students are still interested in pursuing it as a career.

H6: High school students are being taught the multi-media skills and knowledge that colleges think those students should have.
CHAPTER 4: RESEARCH RESULTS

The purpose of the high school and college surveys was to identify what resources are currently being used at both levels, and what skills each journalism educator believes students should obtain. The surveys also identified whether or not educators at both levels support students moving towards media convergence. The tables at the end of the chapter report the number of respondents rather than the percentage responding.

College Survey

Surveys were emailed to colleges and universities that are members of the Accrediting Council on Education in Journalism and Mass Communication (ACEJMC) (see Appendix A). A survey was emailed to 109 colleges and universities three times in 15-day intervals (to both those who responded and those that did not), and 35 (32%) responded to the survey. Of those responding, 39% were in the South, 29% were in the Midwest, 13% in the West, 13% in the North, and 6% in the East portions of the United States. The community sizes ranged from 5,000 to 6.9 million, and the school sizes from 800 to 45,000 students. The number of journalism majors at the schools varied from 18 to 1,250, with a total of 9,852 students majoring in journalism.

The areas of concentration offered to journalism majors varied by college and university. Of the 28 colleges that responded, the most common concentrations offered at the responding schools were broadcast journalism (50%), print journalism (39%), electronic/multimedia journalism (25%), advertising (25%) and photojournalism (21%). Other concentrations that were offered were public relations (14%), news/editorial (14%), convergence (14%), online (11%), mass communication (7%), business journalism (7%), newspaper (7%), magazine (7%), professional track (3%), strategic communications
(3%), sports journalism (3%), visual journalism (3%), news (3%), news media production (3%), and integrated marketing communications (3%).

Thirty-one of the colleges responded that said they were preparing students for media convergence and the digital world in various ways. Ninety percent of the schools taught students using a convergent curriculum (print, web, and broadcast), and these schools also taught students to use Web 2.0 tools such as blogging, RSS feeds, and social networking. Students were offered partnerships with the local media at 77% of the schools, and students were taught online media ethics at 68% of the schools (Table 1).

These 31 schools offered various forms of student-run college media, with the most common being newspaper (97%) and radio (87%). Other forms included television (68%), online media (61%), magazine (48%), public relations (36%), advertising marketing (32%), yearbook (23%), and specialty publications (19.4%) (Table 2). For those schools that do not publish a print version of the yearbook, the main reasons were the lack of interest or lack of funds.

The 31 schools responded they that have newspapers, and these papers are published at various intervals from daily to every two weeks. Most schools published weekly (40%), next is daily (30%), followed by four days a week (11%), twice a week (11%), three days a week (4%) and every two weeks (4%). Most of the schools published a newspaper online along with the print version (90%). None of the schools responding published exclusively online. The reasons for not publishing only online were because there is still interest in the print version, the print version was still profitable, and the online version would not generate enough funds to pay the reporters.

Of the 30 colleges that responded, 73% of the respondents believe that high schools and colleges should move away from traditional media and move towards convergence.
Of the 76 high school advisers that responded, 58% of advisers that believe high schools and colleges should move towards convergence. Eighty three percent of respondents felt that traditional and convergent media are not mutually exclusive since they both incorporate traditional media principles and values, so students could really benefit from learning both. Respondents commented how students need to learn to tell stories on multiple platforms and use Web 2.0 tools because of the current industry and how colleges are currently changing their curriculum (Table 3). The respondents also mentioned that the foundations of reporting, writing, and content would remain key in all forms of journalism.

Of the 30 that responded, 83% of the colleges believed that high school journalism classes should use technology currently used by professional publications. Ninety-eight percent of high school advisers agreed that high school students should be using the technology used by colleges and professional publications. Of the 79 high school advisers that responded, 20% commented that technology should not trump a focus on the basics and the fundamentals of good writing and reporting. Technology is constantly changing; however, writing, reporting and ethics do not change. College journalism programs agreed that the use of professional technology prepares students for the real world, and most of this technology is already available in high school classrooms.

Most colleges that responded expect students to come to college with some skills and abilities pertaining to digital media, and most high schools surveyed agreed they should train students in skills relating to digital media. Of the 30 that responded, 46% of the colleges wanted students with strong writing and editing skills. Respondents stated that the technology available at high schools varies depending on the size and the financial situation of the school, which was verified by the high school survey. Other skills that
colleges expected high school students to have when they enter journalism programs included technological/computer skills (21%), video/audio (21%), social media (17%), photography (14%), multimedia (7%), web design (7%), use of specific software (3%), content management (3%), the business of media (3%), and online research (3%). Some of the schools (18%) expected students to come in with little to no skills or technological experience; they would teach students the skills they need.

According to the 30 colleges that responded, the two most essential skills that journalism students must possess to be successful in today’s professional media are the ability to use digital technology (96%) and multimedia storytelling (96%). Of the 77 high schools that responded agreed that the use of digital technology (94%) and multimedia storytelling (81%) are essential skills journalism students must possess. Other essential skills of high school journalists included shooting video (93%), editing photos (87%), shooting still photography (87%), producing video (83%), editing video (83%), computer assisted reporting (77%), and using web design tools (67%) (Table 4). A few respondents (6%) did not believe journalism students must be convergent in all areas, but rather be given an opportunity to specialize. Others (13%) commented that it is more important for students to have writing and reporting skills, along with a sense of journalism ethics.

Of the 30 respondents, the majority considered being able to use a digital camera (93%) and using an online database (90%) as essential skills to be successful in today’s professional media. Respondents also deemed it important that students know how to use Web 2.0 technologies (73%), Photoshop software (73%), InDesign software (60%), Web design software (47%), Illustrator software (20%), and satellite technology (10%). Most of the colleges used InDesign software (93%) and Photoshop software (93%) in journalism/publication classes (Table 5). Of the 78 that responded to high school survey,
Photoshop software (98%) and InDesign software (89%) were also used in most high school journalism/publication classes. Colleges also use Flash software (86%), Dreamweaver software (69%), and Illustrator software (45%) (Table 6). Other software that is commonly used included Avid, Drupal, Final Cut, Audacity, Soundslides, and Garage Band. Some respondents (10%) stated that since software will constantly be changing over time the knowledge of how to use specific software is not as important as being comfortable learning new technology in a variety of media. Three percent of the respondents stated that it is more important for students to get hands-on experience.

High School Survey

Many students get “hands-on experience” in high school. To gain the high school journalism advisers’ perspectives on media convergence, a survey was emailed to schools listed on the Journalism Education Association’s (JEA) digital media site (see Appendix B). The survey was emailed to 232 high school journalism advisers three times in 15-day intervals (to both those who responded and those that did not), and 85 (36%) responded to the survey. Of those responding, 29% were in the South, 35% were in the Midwest, 10% in the West, 15% in the North, and 11% in the East portions of the United States. The community sizes ranged from 1,085 to eight million people, and the school sizes from 350 to more than 5,000 students. The number of journalism students at the schools varied from six to 268, with a total of 6,432 students enrolled in journalism classes.

The journalism courses offered to students varied by high school. Of the 80 high schools that responded, the most common classes offered were introduction to journalism (66%), yearbook (54%), and newspaper (51%). Other courses that were offered were video productions/ television/ broadcast journalism (26%), journalism two (advanced journalism) (20%), photography/photojournalism (16%), media production/media
technology/ media arts (11%), media writing/writing for publications (7%),
magazine/literary magazine (5%), convergent media (2%), radio (2%), journalism three
(2%), journalism four (2%), television occupations (1%), advanced media (1%), and
sports writing (1%).

The 80 high schools that responded offered various forms of student-run media, with
the most common being yearbook (99%) and newspaper (89%). Other forms included
television (49%), online media (45%), magazine (35%), advertising marketing (11%),
radio (6%), and public relations (1.3%). Sixty-nine respondents (86%) had a print
newspaper (Table 7). The schools with print newspapers published in various printing
cycles ranging from every two weeks to quarterly. Of the schools with print newspapers,
90% planned to continue to produce a print product. The main reason for this was that the
print product was well read by the community. The print product allowed students to ask
more in-depth questions than television media, and allowed students to write longer
articles than on the web. Seventy-one percent of the respondents published newspapers
online, but only seven percent publish exclusively online. The main reasons that many of
the schools do not publish exclusively online were because students like to receive the
print version of the paper, members of the student body do not have access to the
Internet, and funding still exists for the print publications.

Sixty high school advisers responded that they have websites and used various sources
to create the site. The two most popular sites used to create school websites were
schoolnewspapersonline.com (21%) and highschooljournalism.org (25%). Other sites
that were used include: WordPress (18%), the school district’s website (12%), Joomla
(6%), Drupal (3 %), Go Daddy(3%), Google (1%), iPage (1%), Your student news (1%),
Web Studio (1%), and Bluehost (1%). Fifty-seven high school responded that their
websites offered a range of features. The most common features found on sites were multimedia features (72%), photo albums (58%), paid advertising (46%), blogging (44%), and Facebook/Twitter feeds (35%) (Table 8). Other features found on sites include polls/surveys, video, and comment sections.

Sixty-one high schools responded that their schools used a variety of ways to gather reader feedback about the publications’ website(s). Most respondents used a feedback section on their website (48%), while others used surveys (16%), email (30%), Google analytics (6%), focus groups (2%), Facebook (2%) and story rate clicks (2%). Several schools (33%) did not use methods for gathering readers’ feedback (Table 9). The majority of schools (62%) attracted people to their website through social networking sites (Facebook, Twitter, etc). Additional methods included posters (37%), email alerts (30%), text alerts (11%), and using Web 2.0 tools (11%) (Table 10). Other methods of promoting the publication’s website were activities/special events (6%), school announcements (6%), ads placed in the print editions (6%), school website (3%), teasers for the website in print edition (2%), and e-newsletters (2%).

Of the 61 high schools that responded, 53% of the schools monitored their online traffic. The schools accomplished this in a variety of ways including Google Analytics (27%), site counter (9%), Wordpress (5%), blog talk radio (2%), and iPage update (2%). The average number of visits to publication websites ranged from 75 to 60,000 views per month. Most schools (75%) said that readers have been receptive to the online media.

Of the 74 high schools that responded, 69% prepared students for media convergence and the digital world. Students were taught using Web 2.0 tools such as blogging, RSS feeds, and social networking (37%). Students were taught online media ethics (58%), and students were offered partnerships (24%) with local media (Table 11). The most common
software used were Photoshop (97%) and InDesign (89%). Other software in journalism/publication classes included Illustrator (49%), Flash (17%), Dreamweaver (12%), Adobe Premiere (8%), Final Cut (3%), Soundslides (3%), iMovie (3%), Quark (3%), Microsoft Office (2%), Wordpress (1%), iPhoto (1%), After Effects (1%), and Webstudio (1%) (Table 12). Those surveyed felt that the ability to use digital technology (94%), editing photos (81%), multimedia storytelling (81%), shooting still photography (79%), and computer assisted reporting (74%) were essential skills journalism students must possess to be successful when pursuing journalism in college. The college survey agreed that some of the essential skills for high school journalism students are shooting still photography (87%) and computer assisted reporting (77%). Other skills included using web design tools (68%), shooting video (65%), producing video (62%), and editing audio (58%) (Table 13). Besides these skills, college respondents (10%) consider the ability to write clearly and coherently, ability to research, and the ability to use the AP stylebook important. Four percent of colleges responded that technological skills will put students at an advantage; however, it is (according to the respondents) more important for them to have a solid understanding of reporting, basic law and ethics, and editing skills (Table 4).

Out of the 75 high schools that responded, the most common Web 2.0 tools that students utilized in the high school journalism classroom are Google Documents (57%), YouTube (33%), and Issuu (29%). Other tools commonly used include Flikr (22%), School Tube (20%), Vimeo (3%), Picasa (1%), Smug Mug (1%), Picnik (1%), Animoto (1%), and Facebook/Twitter (1%). Of those surveyed, 30% did not have students utilizing Web 2.0 tools (Table 14). One reason for this, according to the respondents, is that the Web 2.0 sites are blocked at the respondents’ schools (3%). These results are similar to
the college survey where 40% of students utilized YouTube and 11% of students utilized Flickr in the journalism classroom.

Of the 77 high schools that responded, the most common social networking sites used by high schools to post information such as scores, news updates, and promotions for publications were Facebook (57%) and Twitter (33%). Other social networking sites used included MySpace (1%), School Loop (1%), iChat (1%), iCal (1%), and wikis (1%) (Table 15). Of those high schools surveyed, 38% did not use social networking sites. Some of the reasons that these schools did not use social networking sites were that they are blocked at the school (9%), the sites have been banned at school, or district policy states that they cannot be used at school. Those that used the social networking sites use the sites to promote issues of the newspaper, push people to the online publication, post breaking news, invite submissions, provide links to information, share photos and video, and post updates. Seventeen percent of colleges said that these social networking skills are important for high school students who will be majoring in journalism.

Of the 76 high schools that responded, 57% reported that high schools and colleges should move away from traditional media and move towards convergence, while 25% did not suggest this change should occur. Nine percent said that journalists of the future need to be able to not only report, but also write, take pictures, shoot video and edit. Respondents to the high school survey stated that traditional media is expensive and there is a space limit. Online media sites give readers more of an opportunity to participate through interactive elements on the site. However, others (18%) reported online media should not replace traditional media, but rather the two should work together. Twenty-two percent reported it is important to keep students’ focus on the tenets of good journalism, which include reporting, writing, editing, and ethics. This was in agreement
with colleges where 20% said that writing is the skill that journalism students must possess to be successful in today’s professional media.

Of the 79 high schools that responded, 98% of the advisers reported that high school journalism classes should use the technology currently used by colleges and the professional media. The college survey reported 73% of colleges believed that high schools should move away from traditional media and move towards convergence. Sixteen percent of high school respondents reported that it is the job of high school journalism programs to get students ready for college and the real world. Two percent of high school respondents reported that journalism advisers should strive to provide their students the best instruction and the best equipment so that the students can be competitive. Three percent of high school respondents reported that high school students who do not have access were at a disadvantage when they go to college, so they must have exposure to the new media. Some respondents said that their students do not have access to this technology outside of school. However, four percent of high school respondents mentioned that due to the financial situations of some schools, the schools are unable to afford up-to-date technology or keep up with what the professionals are using.

Convergence Training

The information collected in the surveys complements the information presented previously in the literature review. High school journalism advisers who participated in the survey supported researchers in the conclusion that high school is the training ground for students who aspire to study journalism. Ninety-eight percent of the advisers surveyed reported that high school journalism programs should use the technology currently used by college and professional media so that the students are prepared for life after high
school. As mentioned in the literature review, high school can be a training ground for media convergence (Roschke, 2009), and, based on the survey results, high school journalism advisers are teaching various aspects of media convergence to their students. However, many schools are making that training a challenge since several of the Web 2.0 and social networking sites are blocked at school, or school districts are concerned about the liability of placing the publication on line. The filters that many schools have in place make it an obstacle for journalists to access quality sites to research information for stories (Palfrey and Gasser, 2008).

Eighty-percent of the high school advisers are already teaching various aspects of media convergence, while 100 percent of the colleges surveyed are teaching aspects of media convergence. Seventy-two percent of high schools surveyed post various multimedia content to their web site(s). The literature review also illustrated how convergence allows publications to post up-to-the-minute information online and attract audiences that may have been overlooked in print publications (Pryor, 2006). Eighty-six percent of the high schools use an array of media tools to attract readers to their website(s).

Some respondents stated that in order for students to be able to communicate in a variety of media they need to have a strong foundation of journalistic basics. Seventeen percent of high school journalism advisers said it is important for students to have a firm foundation of traditional journalism concepts before the focus is placed on using technology. Twenty percent of the colleges responded that laying the foundation of writing and reporting is important because this provides students the ability to communicate across platforms.
Ninety-seven percent of college respondents reported that they believe students should learn various forms of digital technology. Ninety-four percent of the high school journalism advisers were in agreement with the colleges that students should learn various forms of digital technology. This concurs with the information in the literature review since one of the common trends in the newsroom is the use of mobile journalists (Briggs, 2007). These skills are necessary since journalists now cover stories for print, broadcast, and the Web at the same time (Foust, 2008).

The next chapter will examine whether the hypotheses were substantiated and what further research could be done.
Table 1: How colleges prepare students for convergence

<table>
<thead>
<tr>
<th>Activity Description</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students are taught using a convergent curriculum (print, web, and br...)</td>
<td>25</td>
</tr>
<tr>
<td>Students are taught Web 2.0 tools (blogging, RSS feeds, social networking)</td>
<td>25</td>
</tr>
<tr>
<td>Students are offered partnerships with local media</td>
<td>22</td>
</tr>
<tr>
<td>Students are taught online media ethics</td>
<td>20</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
</tr>
<tr>
<td>Students are not prepared for media convergence</td>
<td>5</td>
</tr>
</tbody>
</table>

Reports the number of respondents, not percentage responding
Table 2: Student-run college media

Reports the number of respondents, not percentage responding
Table 3: Web 2.0 tools utilized in college journalism classrooms

<table>
<thead>
<tr>
<th>Tool</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>YouTube</td>
<td>10</td>
</tr>
<tr>
<td>Google Documents</td>
<td>4</td>
</tr>
<tr>
<td>Google Maps</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
</tr>
<tr>
<td>Flickr</td>
<td>2</td>
</tr>
<tr>
<td>Students do not utilize Web 2.0 tools</td>
<td>1</td>
</tr>
<tr>
<td>School Tube</td>
<td>1</td>
</tr>
<tr>
<td>Issuu</td>
<td>1</td>
</tr>
</tbody>
</table>

Reports the number of respondents, not percentage responding
Table 4: Essential skills that colleges believe student journalists must possess to be successful in today’s professional media

<table>
<thead>
<tr>
<th>Skill</th>
<th>Reports the number of respondents, not percentage responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to use digital technology</td>
<td></td>
</tr>
<tr>
<td>Multimedia storytelling</td>
<td></td>
</tr>
<tr>
<td>Shooting video</td>
<td></td>
</tr>
<tr>
<td>Shooting still photography</td>
<td></td>
</tr>
<tr>
<td>Editing photos</td>
<td></td>
</tr>
<tr>
<td>Editing audio</td>
<td></td>
</tr>
<tr>
<td>Producing video</td>
<td></td>
</tr>
<tr>
<td>Computer assisted reporting</td>
<td></td>
</tr>
<tr>
<td>Using web design tools</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>
Table 5: Software used by college journalism/publication classes

<table>
<thead>
<tr>
<th>Software</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Databases</td>
<td>25</td>
</tr>
<tr>
<td>Using Web 2.0 Adobe InDesign technologies</td>
<td>25</td>
</tr>
<tr>
<td>Adobe Illustrator</td>
<td>15</td>
</tr>
<tr>
<td>Satellite technology</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
</tr>
</tbody>
</table>

Reports the number of respondents, not percentage responding.
Table 6: Software used by college journalism publication classes

<table>
<thead>
<tr>
<th>Software</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photoshop</td>
<td>28</td>
</tr>
<tr>
<td>InDesign</td>
<td>28</td>
</tr>
<tr>
<td>Flash</td>
<td>26</td>
</tr>
<tr>
<td>Dreamweaver</td>
<td>20</td>
</tr>
<tr>
<td>Illustrator</td>
<td>13</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
</tbody>
</table>

Reports the number of respondents, not percentage responding.
Table 7: Student-run media offered at high schools
Table 8: Features that high school media website(s) contain

<table>
<thead>
<tr>
<th>Feature</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multimedia</td>
<td>40</td>
</tr>
<tr>
<td>Photo albums</td>
<td>35</td>
</tr>
<tr>
<td>Paid advertising</td>
<td>30</td>
</tr>
<tr>
<td>Blogging</td>
<td>25</td>
</tr>
<tr>
<td>Facebook/ Twitter feeds</td>
<td>10</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
</tr>
</tbody>
</table>

Reports the number of respondents, not percentage responding
Table 9: What is used to gather reader feedback about high school media website(s)

<table>
<thead>
<tr>
<th>Method</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback section on website</td>
<td>30</td>
</tr>
<tr>
<td>No Method</td>
<td>20</td>
</tr>
<tr>
<td>Email</td>
<td>17</td>
</tr>
<tr>
<td>Surveys</td>
<td>10</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
</tr>
</tbody>
</table>

Reports the number of respondents, not percentage responding
Table 10: The ways high school media attract people to their website(s)

<table>
<thead>
<tr>
<th>Method</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through social networking sites (Twitter, Facebook, etc.)</td>
<td>30</td>
</tr>
<tr>
<td>Posters</td>
<td>20</td>
</tr>
<tr>
<td>Email alerts</td>
<td>15</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
</tr>
<tr>
<td>No Method</td>
<td>0</td>
</tr>
<tr>
<td>Text alerts</td>
<td>5</td>
</tr>
<tr>
<td>Using Web 2.0 tools</td>
<td>5</td>
</tr>
</tbody>
</table>

Reports the number of respondents, not percentage responding
Table 11: How high schools prepare students for media convergence and digital world

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students are taught using a convergent curriculum</td>
<td>59%</td>
</tr>
<tr>
<td>Students are taught online media ethics</td>
<td>42%</td>
</tr>
<tr>
<td>Students are taught Web 2.0 tools</td>
<td>20%</td>
</tr>
<tr>
<td>Students are offered partnerships with local media</td>
<td>14%</td>
</tr>
<tr>
<td>Students are not prepared for media convergence</td>
<td>7%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
</tr>
</tbody>
</table>

Reports the number of respondents, not percentage responding
Table 12: Software that is used by high school journalism/production classes

Reports the number of respondents, not percentage responding
Table 13: Essential skills high school advisers believe students must possess to be successful when pursuing journalism in college

- Ability to use digital technology
- Multimedia storytelling
- Editing photos
- Shooting still photography
- Computer-assisted reporting
- Using web design tools
- Shooting video
- Producing video
- Editing audio
- All Other Responses
- I do not know

Reports the number of respondents, not percentage responding
Table 14: Web 2.0 tools that high school students utilize in the journalism classroom
Table 15: Social networking sites high school publication staffs use to post information

- We do not use social networking sites.
- Twitter
- Facebook
- Myspace
- Other
CHAPTER FIVE: CONCLUSION

The purpose of this study was to examine media convergence at the high school level and explain why some high school journalism advisers and college journalism programs believe that high school journalism classes should use technology currently used by professional publications. The intent of the research was to consider the following hypotheses:

H1: There is a relationship between the size of a journalism program and the variety of ways a program prepares students for the profession.

H2: Some universities focus not only on digital media, but also print media to provide students with a rounded journalism education.

H3: Some high schools and colleges are moving towards convergence so that students are prepared for media convergence and the digital world.

H4: Some high school and college students are being taught technology, software, and Web 2.0 tools used by today’s professional media.

H5: Even though journalism is a changing field, based on enrollment in journalism schools it is clear that many students are still interested in pursuing it as a career.

H6: High school students are being taught the skills and knowledge that colleges think those students should have.

With regard to H1, results from the survey was not able to show a relationship between the size of the program and how students are prepared for the journalism profession. Some high school journalism advisers responded that funding sometimes prevents programs from getting up-to-date technology to train students.

The surveys strongly confirmed H2. Respondents to the college survey stated that college journalism program instruction is behind the times if information is taught as a
single platform (i.e. only print), since no news outlet today is a single platform. The schools also reported that journalism education should include new media and multimedia along with traditional media. The broad gamut of skills allows students to be more flexible and better problem solvers. Even though it is important for students to learn technology skills, it is more important for them to have reporting skills, the ability to write, and solid ethics. This knowledge will provide a strong foundation in the ever-changing world of technology.

Of the 28 colleges that responded to the survey, 17 of the schools (61%) offer concentrations in both print and convergent journalism. Out of those 17 schools, four schools (23%) offers only a convergent curriculum focusing both print and online media. Eight of those schools (47%) teach print courses along with convergent types of classes, including electronic media, multimedia, or convergent courses. Nine schools (53%) offer print courses and electronic media or multimedia courses.

Of the 31 colleges that responded to the survey, almost all of the college offer both print and online newspapers. Ninety seven percent have a student-run print newspaper. Ninety percent of these schools also publish their newspaper online. The reasons that newspaper is not published exclusively online are that the students like the print version, and the print version is still very profitable.

Based on survey data, H3 is also strongly confirmed. The majority of the high schools and colleges are moving towards convergence. Of the 74 high schools that responded, 67% of high school students are taught using a convergent curriculum (print, web, and broadcast), and of the 31 colleges that responded 90% of college journalism students are taught using similar curriculum. Of the 30 colleges that responded, 73% believe that both high schools and colleges should move away from traditional media and move more
towards convergence. Of the 76 high school advisers that responded, 58% of high school advisers also believe that this change should occur. Of the 28 colleges responding, 17 schools (61%) currently have a convergent curriculum and others plan on moving towards convergence.

The areas of concentration in which most college students are enrolled include broadcast, print, electronic media and advertising. Colleges have recognized the importance of preparing students for convergence and digital journalism by revamping their areas of concentration. Some schools have added concentrations in convergence journalism, electronic media, and multimedia, while others have merged all their previous journalism related concentrations into one area.

Of the 74 high schools that responded 37% of schools are also taught Web 2.0 tools such as blogging, RSS feeds, and social networking. Of the 30 colleges that responded, 93% of the journalism students are taught Web 2.0 tools. Fifty eight percent of high school journalists and sixty eight percent of college students are taught online media ethics. To prepare students for media convergence and the digital world, several colleges (77%) and high schools (24%) have partnerships with the local media. High schools and colleges reported they are developing a convergence curriculum to meet the current changes in the industry since print, online, and video are a part of today’s media.

Of the 78 high schools that responded, 92% percent responded that they have not placed their publications exclusively online, however seventy one percent stated that they do publish their newspaper online. The main reason that the schools do not publish exclusively online is because their student population prefers the print product. Other limitations, such as class size and technology prevent these schools from publishing news exclusively online.
Of the 31 colleges that responded, 90% of the colleges said that they publish their newspaper online. One hundred percent of the colleges said that their newspaper is not placed exclusively online. The main reason for this is because students like the print version of the paper, and the print paper is still able to make money through advertising. Some responded that if the publication went totally online, the newspaper would not be able to generate enough funds to pay the reporters.

The study also strongly confirms H4. Of the 30 colleges that responded, 83% believe students should be taught how to use the technology that professionals use. Of the 79 high schools that responded, 98% believe students should be using this technology. However, it is more important for students to write well. Many high school journalism advisers agree with college journalism programs that high school journalism students should be taught the basic skills of writing, research, storytelling, interviewing and reporting. Nine percent of advisers also mentioned, due to the constantly changing technology, students need to be taught how to determine which medium best tells the story. However, technology does not change the need for students to know content. Students must be able to adapt and apply their core journalism knowledge. Most advisers deem it important for high school journalism programs to keep up with the changing times. Print, online, and video are all a part of today’s media.

Almost all the high school advisers surveyed agree that high school journalism classes should use the technology that is used by colleges and the professional media. Several commented that they consider it the job of high schools to prepare students with the skills they need to be successful in college journalism programs and the real world. Most believe that advisers should strive to provide students with the best instruction and equipment. However, six percent stated that the economy and the structure of the
educational system make this a challenge. Three percent of the advisers said its is
difficult for them to access the Web 2.0 tools that are available to teach students about
convergence due to district Internet filters.

H5 is questionable. Even though journalism is a changing field, students are still
interested in pursuing it as a career based on enrollment in journalism schools. Of the
schools responding to the survey, 9,852 students are enrolled as journalism majors.
However, in comparing these numbers with the total students enrolled at the colleges,
only two percent of those enrolled are journalism majors. The hypothesis is not
substantiated since the number of students enrolled in journalism as a major is small.

Finally, survey responses related to H6 strongly confirmed that high school students
are being taught the skills and knowledge to be prepared adequately for college
journalism programs. Out of the 35 responding colleges, 30 (86%) reported a need for
students to be familiar with current programs. The software currently used in collegiate
journalism classes include: InDesign (93%), Photoshop (93%), Flash (86%), and
Dreamweaver (69%). InDesign and Photoshop are most commonly used for page layouts
and design, while Flash and Dreamweaver are used for web pages and multimedia. These
technologies are currently being used, and it would seem that respondents believe that
students should use current programs. Of the 85 high schools that responded, 74 (87%)
are currently using these programs. High schools that responded are using Photoshop
(97%), InDesign (89%), Illustrator (49%), Flash (17%) and Dreamweaver (12%).

Of the 35 colleges that responded, 30 (86%) believe that students must possess certain
skills to be successful in today’s professional media. Colleges also believe that students
should have the core media skills of writing (20%), photography (87%), design (67%),
editing video (83%), editing photos (87%), and editing along with technological skills
(87%) to use the core skills effectively. Ninety seven percent of colleges believe that students should have the ability to use digital technology. Ninety seven percent of colleges also responded that students should have multimedia storytelling skills so that students can be successful in the changing media landscape. Of the 85 high schools that responded, 77 (90%) advisers said that there are skills students must possess to be successful in college. The majority (94%) of high school advisers reported that along with the technical skills, students should have basic reporting, interviewing, and storytelling skills. Eighty one percent of high schools responded that students should also have multimedia storytelling skills. High school advisers also believe that students should have the core skills of photography (79%), design (68%), editing audio (58%), and editing photos (81%).

Discussion

This study demonstrates the changes that are currently taking place in the media, and how these changes are being addressed at both the high school and college levels. Newspapers across the country are not on the verge of dying. Only about a half a dozen papers have gone out of business between 2009-2010, while others have been cut back by at least one day a week in the same time period (Project for Excellence in Journalism, 2010).

A study done by the Pew Research Center found that even the best media sites have a limited ability to produce content. Because of this, most media organizations are not focusing only online but also on producing print publications (Project for Excellence in Journalism, 2010). Since print newspapers are not on the verge of extinction, it is important for students to have skills to produce content for both print and online. The traditional media industry is changing through its struggles to reclaim readers from the
online competition. The media industry has moved to convergence to meet the demands of the consumers (Roschke, 2009, p. 62).

The research found that most advisers surveyed do not report that high schools should move completely away from print media. Respondents realize the importance of providing a strong journalism curriculum that teaches both traditional reporting and convergent skills to enable students to succeed at journalism schools and in the professional world. Eighteen percent of the colleges stated that it is not necessary for high school students to know all elements of media convergence (photography, videography, web, design), since students will be taught the essential skills to be successful in the profession in college.

Opportunities for future study

Based on the study, most journalism schools and high school advisers seem aware of the current changes in professional media, with most media schools moving to convergence. Due to the low response rate to both surveys, further research should be done to determine the trends of convergence at both high school and college levels. Additional research could be done to establish why some high schools have embraced the concepts of convergence while others have made no attempt to do so. Other research could also be done to determine the training of journalism advisers in convergence and their preparedness to educate students on the emerging skills.

Respondents to both surveys commented that it is important for students to have a foundation in journalistic principles and concepts before moving on to learning the technological elements of the profession. Further research could be done on whether high schools offer introductory courses that prepare students with the basic journalistic principles and concepts before they are allowed to move on to publication classes.
Additional research could also be done to determine what introductory courses colleges offer students to lay a journalistic foundation that will allow them to communicate effectively across various media platforms. Once it has been determined if colleges offer introductory journalism courses, then further research could be done to determine the content taught in the courses.

Some respondents to the high school survey commented that their administration and/or their school district are concerned about putting student information (i.e. names and photos) online, so those schools do not have online newspapers. Since the survey responses were anonymous, it could not be determined by the survey results where these schools are located that the administration and/or school district prohibited online newspapers. Further research could be done to determine the correlation between online newspapers and that state’s student press laws. Additional research could be done to determine whether those communities also have professional media that publish the photos of the students, along with their names, online. Once it has been determined that the professional press is allowed to publish photos and names of students, then further research could be done to determine why school districts allow this information to be published in the professional press and not the student media.

The high school survey showed that the amount of funding those schools received varied. Some schools journalism programs were self-supporting, while others received various amounts from either the school or the school district. Further research could be done to determine if and why there is a discrepancy between the size of the school and the amount of funding that the journalism program receives. For instance, do larger schools get more money for their journalism programs compared to that of a smaller
school? Other research could be done to determine the variation of instruction at the schools that receive funding compared to those that do not.

The college survey revealed that two percent of the students, based on the total number of students enrolled at the schools, were journalism majors. With the information collected, this percentage cannot be compared with the percentage of students in other major concentrations. Further research could be done to determine the number of journalism majors compared to that of other majors. Additional research could also be done by gathering the number of students that are declared journalism majors over a certain time period (i.e. five years), and determine whether or not there is an increased interest in journalism based on the students that have declared that major.

The suggested further research in these areas would help to determine the trends of convergence at both high school and college levels. This additional research could establish what courses are taught at both the high school and college levels, and explain if there is a correlation between online newspapers and that state’s student press laws. The research could also determine if and why there is a discrepancy between the size of the school and the amount of funding that the journalism program receives, and verify the number of journalism majors compared to that of other majors.
APPENDIX A

COLLEGE SURVEY QUESTIONS

1. I certify that I am older than eighteen years of age and am voluntarily participating in this survey.
   Yes
   No

2. I give my permission to use in publications and studies my responses to the survey; I understand that my responses will be kept anonymous.
   Yes
   No

Journalistic opportunities at the collegiate level
This survey is to help identify what skills high school students need to know in order to be successful in journalism programs in college, and how colleges are preparing students for careers in the professional media.

1. In which region of the country is the school located?

2. What is the size of the community that the school is located?

3. How many undergraduate students were enrolled in your school in Fall 2010?

4. How many of the students were journalism majors?

5. Please list the areas of concentration offered for a journalism major, and the enrollment in each (if available):
   Example- Photojournalism ........................................................ 15

6. Please select the student-run college media offered at your school. Please mark all that apply.
   Newspaper
   Yearbook
   Magazine
   Radio
   Television
   Online media
   Public relations
   Specialty publications
   Advertising marketing
   Other:
   Please specify

This section of the survey is about yearbooks

1. Does your school currently publish a print version of a yearbook?
   Yes
   No
2. If your school currently publishes a yearbook, does the school plan to continue to do so?  
   Yes  
   No  
   Please explain why.

3. Did your school ever have a print version of a yearbook?  
   Yes  
   No

4. Does your school have an online version of its yearbook?  
   No  
   Yes  
   Please explain why.

5. If your school does not publish either a print or an electronic version of a yearbook, please explain why.

6. Does your school currently publish both a print and electronic version of the yearbook?  
   No  
   Yes  
   Please explain why.

This section of the survey is about school newspapers

1. Does your school have a print newspaper?  
   No  
   Yes  
   If yes, how often is it published?

2. Is your school newspaper published online?  
   Yes  
   No

3. Has your school placed its newspaper exclusively online?  
   Yes  
   No  
   Please explain why.

This section is about media convergence
Convergence is combining content across media platforms (print, online, broadcast) and possibly working with multiple media industries.

1 How does your school prepare students for media convergence and the digital world?  
Please mark all that apply.  
   Students are not prepared for media convergence  
   Students are taught using a convergent curriculum (print, web, and broadcast)  
   Students are taught Web 2.0 tools (blogging, RSS feeds, social networking)  
   Students are taught online media ethics  
   Students are offered partnerships with local media
Other:
Please specify.

2. In your opinion, should high schools and colleges move away from traditional media and move more towards convergence?
   - No
   - Yes
   - Don't know; no opinion
   Please explain your answer.

3. In your opinion, should high school journalism classes use technology currently used by professional publications?
   - No
   - Yes
   Please explain.

This section is about essential skills journalism students need

1. In your opinion, what skills and abilities pertaining to digital media do you expect high school students to obtain in order to prepare them for your program and the profession?

2. Please mark the essential skills that, in your opinion, journalism students must possess to be successful in today's professional media (please mark all that apply).
   - Producing video
   - Editing audio
   - Editing photos
   - Using web design tools
   - Shooting video
   - Shooting still photography
   - Ability to use digital technology
   - Computer assisted reporting
   - Multimedia storytelling
   - Other:
   Please specify.

3. Please mark the technology that, in your opinion, journalism students must be able to use in order to be successful in today's professional media (please mark all that apply).
   - Online databases
   - Satellite technology
   - Digital camera
   - Using Web 2.0 technologies
   - Adobe Illustrator
   - Adobe InDesign
   - Adobe Photoshop
   - Web design software
   - Other:
   Please specify.

4. Which of the following software is used in your journalism/publication classes? Please mark all that apply.
   - InDesign
   - Photoshop
Illustrator
Flash
Dreamweaver
Other:

Please specify.

5. **Which of the following Web 2.0 tools do your students utilize in the journalism classroom? Please mark all that apply.**

- Students do not utilize Web 2.0 tools
- Google Documents
- Google Maps
- YouTube
- School Tube
- Flickr
- Issuu
- Other:

Please specify.
APPENDIX B

HIGH SCHOOL SURVEY QUESTIONS

1. I certify that I am older than eighteen years of age and am voluntarily participating in this survey
   Yes
   No

2. I give my permission to use in publications and studies my responses to the survey; I understand that my responses will be kept anonymous.
   Yes
   No

Journalistic skills taught in high school
This survey will provide information about what skills high school students need to be successful in college journalism programs and in the professional media. Your participation will provide information about how high schools are preparing students for a future in journalism.

3. In which region of the country is the school located?

4. What is the approximate size of the community, which the school is located?

5. How many students were enrolled in 2009-2010 school year?

6. Please list the journalism classes offered at your school and the enrollment in each.
   Example: Introduction to Journalism.................................63

7. Which of the following student-run media is offered at your school?
   Please mark all that apply.
   Newspaper
   Yearbook
   Magazine
   Radio
   Television
   Online Media
   Public Relations
   Advertising Marketing
   Other
   Please specify.

This section is about online media

8. Does your school have a print newspaper?
   Yes
   No
   How often is it published?
9. If so, does the school plan to continue to do so?
   Yes
   No
   Please explain why.

10. Does your school financially support your print newspaper?
    Yes
    No
    Please specify why (if known).

11. Is your school newspaper published online?
    Yes
    No

12. Has your school placed its newspaper exclusively online?
    Yes
    No
    Please explain why

13. Which of the following did you use to create your website(s)?
    Please mark all that apply.
    www.schoolnewspapersonline.com
    highschooljournlism.org
    www.NewsPortalSite.com
    Other
    Please specify.

14. Which of the following features does your website(s) contain?
    Please mark all that apply.
    Photo albums
    Multimedia
    Blogging
    Paid advertising
    Facebook/ Twitter feeds
    Other
    Please specify.

15. Which of the following is used to gather reader feedback about the website(s)?
    Please mark all that apply.
    No Method
    Surveys
    Email
    Feedback section on website
    Other:
    Please specify.
16. Which of the following are ways you attract people to your website(s)?
   Please mark all that apply.
   - No Method
   - Text alerts
   - Email alerts
   - Posters
   - Using Web 2.0 tools
   - Through social networking sites (Twitter, Facebook, etc.)
   - Other:

   Please specify.

17. If you use Web 2.0 tools to attract people to your site(s), please list the tools used.
   Example: Google Documents, Photobucket

18. Do you monitor your online traffic?
   - No
   - Yes

   Please specify how. If no, please specify why.

19. If you monitor your online traffic, what is the average number of visits in a month?

20. Have readers been receptive to the online media?
   - Yes
   - No

   Please explain your answer

21. Does your school financially support your website(s)?
   - Yes
   - No

   If no, please specify why (if known).

This section is about media convergence
Convergence is combining content across media platforms (print, online, broadcast) and possibly working with multiple media industries.

22. How does your school prepare students for media convergence and the digital world?
   Please mark all that apply.
   - Students are not prepared for media convergence
   - Students are taught using a convergent curriculum (print, web, and broadcast)
   - Students are taught Web 2.0 tools (blogging, RSS feeds, social networking)
   - Students are taught online media ethics
   - Students are offered partnerships with local media
   - Other:

   Please specify.

23. Which of the following software is used in your journalism/publication classes?
   Please mark all that apply.
   - InDesign
   - Photoshop
   - Illustrator
24. **In your opinion, which of the following are essential skills journalism students must possess to be successful when pursuing journalism in college?**
   Please mark all that apply.

   I do not know
   Producing video
   Editing audio
   Editing photos
   Using web design tools
   Shooting video
   Shooting still photography
   Ability to use digital technology
   Computer assisted reporting
   Multimedia storytelling
   Other:

   Please specify.

25. **Which of the following Web 2.0 tools do your students utilize in the journalism classroom?**
   Please mark all that apply.

   Students do not utilize Web 2.0 tools
   Google Documents
   Google Maps
   YouTube
   School Tube
   Flickr
   Issuu
   Other:

   Please specify.

26. **Which of the following social networking sites does your staff use to post information such as scores, news updates, and promotions for the publication?**
   Please mark all that apply.

   We do not use social networking sites.
   Twitter
   Facebook
   Myspace
   Other

   Please specify.

27. **If your staff uses a social networking site(s), please specify how it is used.**
28. In your opinion, should high schools and colleges move away from traditional media and move more towards convergence?

No
Yes
Don't know; no opinion

Please explain your answer.

29. In your opinion, should high school journalism classes use technology currently used by colleges and the professional media?

No
Yes
Don't know; no opinion

Please explain your answer.
REFERENCES


