Making Youths Happy News Consumers

Edgar Huang

Indiana University-Purdue University Indianapolis

Contact: Edgar Huang, Ph.D. Associate Professor New Media Program, School of Informatics Indiana University-Purdue University Indianapolis 535 W. Michigan Street, Suite IT 481 Indianapolis, IN 46202-3103 Email: <u>ehuang@iupui.edu</u> Office phone: (317) 278-4108 Office fax: (317) 278-7669

Edgar Huang (Ph.D., Indiana University, 1999) is an associate professor in the New Media Program under the School of Informatics, Indiana University–Purdue University Indianapolis. His articles on media convergence, rich media, copyright issues, online journalism, digital imaging, documentary photography, and the Internet and national development are seen in *Convergence, Journalism and Communication Monographs, Newspaper Research Journal, Visual Communication Quarterly, IT for Development*, etc.

Making Youths Happy News Consumers

Abstract:

Based on the uses and gratifications theory and the Delphi technique, this study did an in-depth investigation among 28 college and high school students on youths' rationales behind their news consumption behavior. The study concludes that, in years to come, the news industry needs to realize a true convergence online by providing to the younger generation an experience of consuming multimedia news that is customizable and relevant to them with an opportunity for participatory journalism.

Introduction and Literature Review

Newspapers have lost a tremendous number of readers, especially young readers, over decades (Bogart, 1982; Bogart, 1989; Cobb, 1986; Peiser, 1998; Robinson, 1978; Zerba, 2004). In fact, television and radio have followed the same losing pattern, according to a survey done by the Pew Research Center (2002). The decline in news readership has implications for mass media's role in creating an informed citizenry (Kohut, 1990; Mindich, 2005; Ward & Wackman, 1971). Based on uses and gratifications theory, this study examined how young people chose media and content to satisfy their own needs and why they have done so in the ways they do. Using the Delphi technique among 28 college and high school students, the study profiled young people's news consumption behavior in an attempt to find out why young audience consume or do not consume news and what can be done to make them happy news users.

Some studies show that young adults are still giving newspapers a chance and that newspapers are still the biggest recipients of ad dollars among major categories that include network TV (Schwartz, 2006; Shields, 2005). Numerous studies, however, have documented newspaper readership's declining trajectory that started in the 1940s. The decline has been more pronounced among younger readers as compared with those over the age of 35 (Robinson, 1980). Bogart (1989) found that from 1967 to 1987, the number of Americans over 18 who reported having read a newspaper "yesterday" declined from 76 to 65 percent, with the largest decline (20 percent) among young adults 18 to 24 years old. Kellermann's 1990 study replicated a 1965 Gallup question about how many young respondents between ages 18 and 35 had read a newspaper and watched television news the previous day. The study found that newspaper readership had dropped from 67 percent to 30 percent and TV news viewership had decreased from 52 percent to 41 percent. A Pew Research Center 2002 survey shows that Americans ages 25 and under who did not get news from newspaper, television or radio on the previous day more than doubled from 14 percent in 1994 to 37 percent in 2002. Confirming the findings in Bogart's 1989 study, the same Pew study also points out that young adults in their 20s have never been regular newspaper readers and that there is little evidence they will get into the habit. Media historian Mindich (2005) is concerned that young people are not engaged in the political process and are not seeking out information needed to make informed decisions.

Although there is plenty of evidence to suggest many young people loathe to read newspapers (Collins, 2004; Schlagheck, 1998), far less is known about why that is the case, as Armstrong and Collins (2006) pointed out. Most studies on readership have attempted to find a pattern of readership loss through number crunching, but few have

attempted to explore reasons for the decline. Many of the latter kind of studies were conducted before the Internet news industry became mainstream. Such studies found that the most common reasons nonreaders gave for not reading newspapers were: lack of time, use of another news medium, cost, lack of interest in the contents or decline in reading interest, too much effort needed, and changing life styles (Burgoon & Burgoon, 1980; Cobb-Walgren, 1990; Kellermann, 1990; Masullo, 1997; Poindexter, 1979; Raeymaeckers, 2002). The root of non-readership is a lack of motivation to seek information, as Masullo (1997) pointed out. Different studies have shown that perceived relevance of media content (Chaffee & Schleuder, 1986; Chan & Mastin, 1999; Gandy et al., 1987; Garramone, 1984; Kodrich, 1997; Neuman, 1990; Suominen, 1976), perceived credibility of a medium, a media company, and media content (Conway, 2001; Pew Research Center, 2000; Wanta & Hu, 1994), and the influence from parents' newspaper reading habits (Cobb, 1986; Peiser, 1998; Raeymaekers, 2002; Simon & Merrill, 1996; Stone & Wetherington, 1979; Zerba, 2004) are all positively correlated to a youth's motivation to seek news. Scholars and industry researchers argue that, if the newspaper industry does not reach these young people now, it will lose them as readers forever (Masullo, 1997; Cheever & Rimmer, 1999; Speckman, 206).

Numerous efforts, such as using color, loads of photos, glitzy layouts, and increased font size, establishing separate youth sections, and converting full-size newspapers to the tabloid size, had been made to boost news readership since the 1990s (Wilson & Igawa, 1991; Gladney, 1996; Hemlinger, 1997; Schlagheck, 1998;). However, studies have repeatedly shown that none of such major efforts of newspaper firms to reach out to the teen market appears to have ameliorated the readership problem (Kodrich, 1997; Picard and Brody, 1997; Schoenbach, 1999).

Since the late 1990s, media companies, including newspapers, have taken advantage of the Internet technology, which has converged all forms of mediated communications including video, audio, data, text, still photo, and graphic art (Tremayne, 1999; Wurtz, 2000) to reach audiences, especially young audiences, whom are usually hard to target by newspaper. In a widely reported landmark speech to the American Society of Newspaper Editors in Washington on 13 April 2005, Murdoch noted the potential and power of blogs and other user-generated content. Murdoch (2005) described a "revolution" in the way young people were accessing news: "They don't want to rely on the morning paper for their up-to-date information. Instead, they want their news on demand, when it works for them. They want control over their media, instead of being controlled by it." Today, Internet news is maturing as an industry after more than a decade of development. Since 2002, online newspapers had become the top choice for local news and information for Internet users in the United States (NAA, 2002), especially among the young people

who are between 18-34 years old (Burns, 2006a).

Schwartz (2005) found that among the incentives for visiting newspapers' sites was the increase in blogs, podcasts, and streaming video/audio. "These interactive features, combined with Internet users' thirst for up-to-date information, make newspaper Web sites an increasingly appealing choice for news," Gerry Davison, senior media analyst for Nielsen/NetRatings, said in a statement (ibid.). More than 15 million people have subscribed to at least one podcast (Anderson, 2005). Non-journalists are participating in the information system through numerous blogs housed under news sites and non-news sites, such as MySpace.com, Craigslist.com, and Flickr.com in a "blogsphere," which doubles every five months (Sifry, 2006). According to a study published by Pew Internet and American Life Project in May 2006, more than half of all teens have created content for the Internet, ranging from blogs to artwork (Smith, 2006). Tom McHale, an educator who teaches in Pennsylvania, says, "Anytime our students are spending this much time publishing material for anyone to see, I think it's important we pay attention" (ibid.). Rosenberry's 2006 study found that audience's three primary participatory methods—discussion forums, blogs, and story "talk back"—are making inroads into news companies' routine news presentations. This new model for news presentation, variously referred to as "citizen journalism," "participatory journalism" or "open-source journalism," is a beginning to make audience participation a fixture at so-called "mainstream media" news sites (Rosenberry, 2006).

Traditionally, young people could be depended upon to grow up, mature, and become newspaper readers (Bogart, 1989; Schlagheck, 1998). With the Internet news overshadowing the traditional media, the question has become whether young audiences will ever become routine hardcopy newspapers readers when they are older. Learning how young people think and access media content and why they access news or do not access news can best help predict a trend in media content development across media platforms. This study has examined how young people choose media and content to satisfy their own specific needs. The focus of the study is to help the news industry develop a system of news reporting that can attract, inform, and engage young people. This study is important because it provides guidance to the news industry's ongoing media convergence endeavor by detecting the younger generation's information needs.

Theoretical framework

This study is based on the uses and gratifications theory developed by Katz (1959), Klapper (1963) and Blumler (1974). Staying away from the linear, unidirectional sender–message–receiver communication model that attempts to reveal "media effects," the uses and gratifications theorists have joined a broader trend that is more concerned with why people use media and what they use them for (McQuail, 1983). In other words, the uses and gratifications theory shifts the media research focus from what the media do to people to what people do with the media (Klapper, 1963).

The theory posits that audience actively negotiates with media messages and treats media as sources of influence amid other sources; audience has many reasons for and many ways of using media (Blumler and Katz, 1974). The theory assumes that (a) audiences are active, (b) media use is goal-directed, (c) media use fulfills a wide range of gratifications, and (d) the gratifications audiences report can be due to media content, the practice of exposure in and of itself, or the social situation in which media-audience interaction takes place (ibid.). In a nutshell, uses and gratifications theory has three objectives: 1) to explain how individuals use mass communication to gratify their needs, 2) to discover underlying motives for individuals' media use, and 3) to identify the positive and the negative consequences of individual media use.

Media researchers have tested the uses and gratifications theory extensively over the last half century to study a wide array of media issues both in traditional and in digital media (Masullo, 1997). McQuail, Blumler & Brown (1972) built one of the typologies that would differentiate the reasons why people pick certain programs or media over others. They came up with four categories of reasons for their typology: surveillance, diversion, personal identity, and personal relationship. Surveillance is described as information about things that might affect people or help them accomplish something. Diversion is considered an emotional release or escape from routines. Personal identity pertains to self-understanding or value reinforcement, and personal relationship describes the use of media as social utility of information in conversation and as a substitution for companionship (ibid.). Later, Lin (1999) further dissect these categories into the following dimensions: relaxation, companionship, habit, passing time, entertainment, social interaction, information/surveillance, arousal, and escape, and claimed that most uses-and-gratifications studies explore media use motivations based on some or all of dimensions. One of the most famous studies based on this theory was the book *Television in the Lives of Our Children* written by Wilbur B. Schramm and Lyle J. Parker (1961). They tried to discover viewing behaviors—how these behaviors were affected by societal factors such as age, sex, intelligence, and economic status and what the effects were, such as emotional and

cognitive effects. Loges and Ball-Rokeach (1993) developed the media system dependency theory based on the idea of uses and gratifications. They argued that a connection exists between newspaper readers and their dependency on newspapers as a social and economic institution. Such a relationship guides people's media selection. Their study demonstrated that demographics alone do not explain who reads newspapers; research also must describe why people read and what they seek. Other researchers have looked at how people's needs influenced how people chose media sources and what benefits they received from those choices (Swanson, 1979). For instance, the same TV program may gratify different needs for different individuals. Different needs are associated with individual personalities, stages of maturation, backgrounds and social roles (Chandler, 1994). Developmental factors seem to be related to some motives for purposeful media usage. For example, Judith van Evra argues that young children may be particularly likely to watch TV in search of information and hence more susceptible to influence (Evra, 1990, p. 177, 179).

Since the theory is based on the concept of an active audience, it has been widely embraced by researchers of new media (Rubin, 1989). Historically, users have often gotten new motivations and gratifications from a new medium (Angleman, 2000). In the Internet era, users are even more actively engaged in online communication because of the built-in interactivity features (Ruggiero, 2000). In the early stage of each new mass medium, such as radio, television, and the Internet, uses and gratifications has always been adopted to provide insight (ibid.). Studies on VCR (Levy, 1980), videotex (Atwater et al., 1985), cable television (Heeter and Greenberg, 1985), remote control devices (Perse and Ferguson, 1993), and online TV broadcasting (Redmond, 1997) all took the uses and gratifications theory as their theoretical framework. The current study has followed this tradition in an attempt to explain and make the media industry better understand how and why young audience use or do not use certain media.

Based on the literature review and the theoretical framework, the general research question is how can the media industry make youths happy news consumers. This question is operationalized into the following specific research questions:

- 1. What is youths' news consumption profile like?
- 2. Why do youths consume news?
- 3. Why don't youths consume news?
- 4. How do youths use participatory media in their news consumption?

5. How can news industry best serve youths based on their needs?

Methodology

The study applied the Delphi technique, a forecasting methodology for generating expert opinion on any given subject (Allen, 1978), to find out the hows and whys of youth news consumption rationales so as to provide authoritative policymaking evidence to the media industry. Policymakers typically rely on experts' judgments to make decisions. The problem is that experts often disagree on issues. Heated arguments resulting from strong personalities, egos, hidden agendas, power, seniority, or vociferation in a face-to-face meeting sometimes end up with some compromised decision that probably none of the experts really support. In 1963, Dalkey and Helmer of the Rand Corporation in California first designed the method to eliminate interpersonal interactions as the controlling variables. The use of questionnaires as the sole means of communication among the experts renders a low-risk or threat-free environment. Opinions and judgments from the experts through the questionnaires are systematically collected, tabulated, and then returned in the form of feedback to the same experts. Any dubious answers in the initial rounds of interviews get explained in the later rounds of interviews. Throughout the whole process, the authors of the opinions are never identified. As a result, the focus of such communication is on real problem solving instead of who said what. Through multiple rounds of opinion exchanges via questionnaires, certain agreement or consensus instead of compromise on an issue gradually emerges. The primary objective of Delphi "is not to produce 'right' answers as much as it is to produce a communication climate most conductive for rational and objective thought" (ibid.). Consequently, opinion dominance, social desirability, individualistic thinking, anecdotal experiences, guesswork, and fuzzy conclusions can all be minimized.

As a methodology suitable, according to Olaf Helmer, the co-inventor of the Delphi technique, to any problem and subsequent policymaking requiring expert judgment as a necessary input, Delphi has been used in business, science, and government "to generate policy options, measure the impact of such options, and identify market conditions for industry" (ibid.). For some reason, Delphi technique has been rarely used in media studies. Dr. Sherri Ward Massey used it in her 1996 study, "Cyberjournalism: A look at the future of newspapers and print education," which is closely related to the topic of this study. In her study, Massey recruited 21 media professionals as experts in three rounds of surveys about the future of newspapers. In the Delphi technique, experts do not have to be professors, high-ranking officials, scientists, and so on; "the term 'expert' simply means someone who is familiar with the stated problem. This could mean students, teachers, educational administrators, and so on, if the subject were secondary education" (ibid.). Because youths were the most qualified people to answer the questions in this study, young people were recruited as the experts.

Youths in this study were operationalized as 15-to-30-year old males and females. Since the age range covered typical school ages, two research assistants helps recruit participants from three high schools and four universities in a U.S. Midwest metropolitan city either through school councilors or through friends. The sampling largely followed the demographic characteristics of the U.S. population in terms of age, gender, and race as estimated by the U.S. Census Bureau for 2005,ⁱ and such characteristics were evenly distributed to high schools and universities. Therefore, when the research assistants talked to a school councilor or a friend in a university, they requested for a specific number of male and female respondents in certain age groups based on a pre-designed respondent request chart.

The Delphi technique usually involves a panel of 10 to 30 experts. Since the Delphi technique does not require systematic random sampling, the convenient sampling method was used to recruit experts. In total, 28 high school students and university students with diversified media usage backgrounds were recruited via emails or phone calls after the respondents had been identified.ⁱⁱ Each participant was asked to sign a consent form, which primarily guaranteed his or her confidentiality. If a participant was under 18 years old, a parent signature was mandated. No student recruited was a journalism major though a few may talk like they were.

The Delphi technique in this study involved three rounds of in-depth interviews, which were conducted via email. A list of both close-ended and open-ended questions, based on the literature review, was sent along with the consent form in the first round of interviews.

After the analysis of the respondents' answers to the first round of questions, the respondents were asked to rank the priorities, significance and possibilities of the issues being investigated and to explain some of their answers in the second round of interviews. The questions for the second round were a mixture of close-ended and open-ended questions.

In the last round of interviews, students were shown the ranking results from the second round of answers and were asked to recommend solutions to the top news consumption problems that they had ranked. The questions were all open-ended.

During the interviews, any new technologies that young people used to do participatory journalism, such as blogging, podcast, and vodcast (video podcast), were identified. Any uses of mobile devices to access news were also documented.

Although all statistical measurements can be applied for deciding the general direction of opinions on an issue in a small convenient sample in a Delphi procedure,ⁱⁱⁱ statistics from such a small convenient sample can only provide an overall picture rather than a precise estimate of a pattern in a larger population. Therefore, this study applied descriptive statistics only when numbers are involved. The data, including the numerical data and textual data, were all tabulated in a Microsoft Excel sheet. Relative frequencies were calculated for the close-ended questions, which were mostly used in the first round of interviews. Such relative frequencies were derived not only for this report writing, but also for generating and justifying the interview questions for the later rounds of interviews. Textual analyses were done to the answers to the open-ended questions used in all three rounds of interviews to identify different themes and to find out what opinions dominated. The purpose of this qualitatively driven study is not to extend its external validity, but, by digging deep into the whys and hows regarding these young people's news consumption, to make the readers of this study contemplate how to make youths happy news consumers. Although the discussions and conclusions of this study are based on an American sample, they could be perused by the rest of the world, which has shared similar news readership problems over the decades.

Findings

Three rounds of interviews among 28 college and high school students were conducted in the spring of 2007. Findings are to be reported on the basis of the five research questions with mingled results from the three rounds of interviews.

What is youths' news consumption profile like?

Based on the relative frequencies of the answers the students gave to the questions regarding their media consumption habits, we can draw a sketch of youth media consumption. Even though the parents of a youth typically subscribe to a local newspaper (61%), the youth normally reads a local newspaper or school newspaper (71%) at school and occasionally at home (54%) once a week or less (61%). He^{iv} is most interested in reading sports (46%), world (43%), local (43%) and entertainment (34%) news. He reads long stories less than once a week (75%).

He reads them only if he is very interested in a topic (64%). He has a cable/satellite television (TV) service at his residence (93%) and watches TV programs on a daily basis (93%). He spends most time on watching entertainment programs (90%). He also likes to watch sports programs (65%), edutainment programs on Discovery, A&E, DIY History, etc. (60%), news (55%) and weather (47%). He has a broadband Internet connection at his residence (93%) and goes online on a daily basis to do schoolwork (68%), email (64%), be engaged in social networking (61%), get entertained (57%), and read news (48%). If he visits a news site, chances are it is CNN.com (43%), MSNBC.com (29%), a local newspaper Web site (25%), or Yahoo! News (14%). He rarely listens to radio (57%). When he listens to radio, he listens to music (21%) or news (21%). He gets news mostly from the Internet (82%) and then from television (54%), newspaper (7%) and radio (4%).

Why do youths consume news?

Twenty-five out of 28 respondents stated that it was important to stay on top of what is going on around them. Respondent #5 revealed a common theme in the respondents' answers when she said, "I try to keep up to date with current events because I feel as though I owe it to myself to be an informed citizen. It also benefits to have basic knowledge to refer to in conversations." Respondent #14 concurred:

Keeping up with current events is absolutely important. Burying your head in the sand pretending that things won't eventually affect you is not the solution. It's sad that a lot of people do just that. We need to be informed, know the issues and know what's happening so that we can intelligently deal with the world around us.

Most respondents read news because they trusted or largely trusted big news organizations, such as CNN, MSNBC, and *New York Times* (26), the major local newspaper and/or TV stations (23), and the news on the Internet produced by those major national and local news companies (22). Most (23) got news mainly from the news programs of those established news institutions rather than from talk shows or other alternatives. Most respondents did not trust the search engine sites, like Yahoo! News and Google News's news value judgment even though Yahoo! News and Google News used news from AP, Reuters, *New York Times*, local TV stations, local newspapers, and other equivalent sources.

Why don't youths consume news?

Five reasons were detected from their answers.

1. Time constraints. Twenty respondents complained that they were under big pressure from schoolwork and sometimes jobs. They also had other personal interests to pursue, such as sports, entertainment and socializing. As a result, their time for consuming news was limited. Respondent #7's remark typically expressed what many other respondents had to say:

As a college student, it is very, very difficult to find time to read news or watch news. The news to us is another form of education. When we spend 60+ hours a week studying and reading material for our classes, the last thing that we want to do is do more reading. It's not necessarily that we don't want to know what is going on or that we don't believe that it [news] is important; it's just that we are tired. After a hard day/week of classes, we don't want to do more work. We want to relax and give our minds a chance to relax. We just want to do something that doesn't require much brainpower or energy. We will probably find that we will go for other alternatives, such as taking a nap.

2. Trivial and sensationalized news content. Over half of these young people criticized the media for focusing on "gossip-type stories" such as repeatedly airing the stories regarding Anna Nicole Smith's death and the story covering Britney Spears shaving her head and going to rehab. They believed that more "newsworthy" stories such as the military hospital scandal should be pushed to the top. They regarded news content presented to them as being "boring," "not newsworthy," "trivial," "depressing," and "not affecting my life." Respondent #14 explained:

I'm a bit jaded with the mainstream press. I feel like we live in a culture of fear driven by the irresponsible media. Did we really need three days of nonstop news on the death of Anna Nicole Smith? I sure didn't. I'm sure something else of interest was happening somewhere, but the media liked to latch onto something and didn't know when to let go. They also love to sensationalize everything. It's all about the ratings now and not about delivering the actual news. That's why I seek out sites online that help me cut through all the crap and get right to the facts.

Respondent #8, a 16-year-old male high school student, felt depressed to notice that the media "almost never address positive or uplifting things." "For example," he said, "I just browsed the headlines of Yahoo! News and noticed that 6 of the 7 top stories involve drugs, violence, scandal, or poverty. It is such a high influx of these things that keep me uninterested."

3. Dated delivery approach. Many respondents called for short writings both in newspaper and on the Internet and for instant delivery on TV. Such desire is well expressed by Respondent #14:

I'm definitely interested in the news, but I need to have news items presented in a way that takes full advantage of the medium it's being delivered by and gets right to the point. I get aggravated when I see a local news anchor say something like, "This food at your grocery store could kill you in 10 seconds. We'll tell you what it is at the top of the next hour." Is there anything more annoying? Just tell me the information or I'm going to turn off your program and go Google it in 10 seconds. Local news broadcasts bore me to tears, but I think it's the lack of innovation in that format that creates my disinterest. I think the news is probably trustworthy, but their presentation feels like it hasn't changed since the 70's.

4. Less competitive newspaper format. It was obvious from the first round of interviews that most of the respondents were light or non-newspaper readers. These young people came up with the following top reasons for not reading newspaper or not reading much:

- A. I am more interested in other media formats. Most students got their news via the Internet and television.
- B. The newspaper format is dated. "It's too long and filled with too much stuff I could care less about. The Internet helps me strip away all the stuff I'm not interested in and get right to the important information" (Respondent #24). "Everything in the newspaper is at least a day old, and a newspaper story is much less interesting than a multimedia presentation online." (Respondent #19). Three students mentioned that they were almost always close to a computer at work or at school and that getting news online was much easier for them than getting it from a newspaper. Respondent #14's news consumption experience was shared by several other respondents. He said:

My number one media for accessing news is easily the Internet. I sit in front of a computer most of the day at work and usually have my web browser open in the background. When I need a quick break from something I'm working on, I'll pop over to my browser and see what's going on in the world. ... I think more and more people (including myself) are more likely to read free news online by the click of a mouse, rather than thumb through a dirty newspaper. Reading online is also environmentally friendly.

C. I have to pay to get a newspaper.

5. Negative parental influence. The respondents' answers show that, when children are involuntarily exposed to news watched/read by their parents, some children tend to pick up the habit of following up on news routinely. Respondent #2 said, "My mom and dad watch the news nightly and my mom reads the papers every day. I guess I am just used to being around news and keeping up with current events. They rub off on me." Unfortunately, such positive influence was far from being pervasive among the respondents' families. Three respondents said they did receive positive influence, five said somewhat, but most (20) said they received little or none. Even though more than half of the families (17) subscribed to a newspaper, many of these respondents were not encouraged to be newspaper readers. Interestingly, some respondents picked up the habit of reading newspapers at school either because their instructors required them to, as they stated, or because free local newspaper and/or school newspapers were available. Nevertheless, most respondents were either light or non-newspaper readers both at home and at school.

Excluding five students who were already very interested in news, most students (19) expressed that they would be more interested in news when they were older. Respondent #14, 30 years old, said, "...before getting online I really didn't have as much interest in the news as I do now that I'm older." Respondent #15 also said he would be more interested in news as he grew older "because if you own stock or land, crime and international affairs affect the value of your property." But will these young people be more interested in subscribing to a newspaper when they get older? More than half of the respondents (17) said no; most respondents (20) said that, in 10 years, they would access news primarily via the Internet with different digital devices. Almost everyone (26) believed that hardcopy newspapers would be around for some time but would be gone for good in the foreseeable future, as Respondent #14 argued:

As our parents get older and pass on, the number of readers for print newspaper will decrease. At some point in the near future the number of readers will dwindle down to a point where it's no longer profitable for a company to be in the print newspaper business.

How do youths use participatory media in their news consumption?

Based on the literature review, this study explored these young people's new media ownership, their involvement in contributing media content via new media, and their uses of new media for accessing news.

New media devices had a high saturation rate among these young people. Except for two students, all had a broadband Internet connection at their residences.^v Out of the 28 respondents, 26 had a cell phone, 22 had an iPod or another brand of MP3 player, 16 had a laptop, and six had a PDA. Yet, only three students claimed that they used a cell phone or an MP3 player to access news, and they did not do that on a routine basis. Some respondents generated content for other users to consume via blogging (10), podcast (7), and vodcast (3), but such practices were not popular, at least not yet, if it were to be a trend. RSS is a family of web feed formats used to publish frequently updated digital content, such as blogs, news feeds or podcasts. Only three out of 28 interviewees had used RSS feeds, and only one of the three used it on a routine basis. Why didn't the young people use new media devices to access news? In the reasons they ranked, high expense and inconvenience dominated over all other reasons (see Table 1).

Respondent #14 gave a compelling reason for not using new media devices to access news when he said, "I can get news on my cell phone, but I'm usually in front of a computer with Internet access or a laptop with wireless, so there's no reason to squint at a little screen." Respondent #24 believed that "news organizations need to better utilize cell phones, mp3 players, PDAs, etc., to broadcast news as right now these are inefficient and difficult to use." This sounded like a reasonable request, but how can the news industry solve the dilemma of these young people wishing to use new media devices to effectively access news when they fear high expenses for doing so? Respondent #13 believed that hope lied in the then upcoming iPhone service provided by Apple Inc.: "It combines cell phone, PDA, MP3 and personal computer all together. I feel I can just have an iPhone to do anything in this E-communication world." Respondent #12 hoped that the eBook technology developed by multiple companies could truly take off someday with video capability so that receiving news on-the-go at a low cost would be a dream come true.^{vi}

How can news industry best serve youths based on their needs?

In the second and third rounds of interviews, the respondents were asked to propose and explain their solutions to the problems in their news consumption they had detected in the first round of interview. The two major solutions the respondents proposed were relevancy and customizability. For them, these two solutions went hand in hand.

1. Relevancy. For these young people, news relevancy was not just content relevancy, as researchers had traditionally understood. What they requested was a triple-relevancy package.

A. Content relevancy. Quite several respondents mentioned that they did not feel that the news affected them. "I am most excited about things that directly have an effect on my life" (Respondent #3). A couple of respondents mentioned that news organizations should cover more stories related to their generation and carve out some space for a "teen" section. They were most interested in sports news, world news, local news, and true entertainment news. They were also very interested in news regarding new technology, human interest, and government. They suggested that the media cut the bombardment of fluff stories and celebrity gossips and that "the media really need to work more on promoting the good things in our world, not just all the tragedies and horrible things that happen," (Respondent #8 and several like-minded respondents).

B. Length relevancy. Either on hardcopy newspaper or on the Internet, both headlines and news stories should be short and to the point. These young people had little patience when reading news (see Table 2). Most of them usually skimmed headlines; if they were interested in a story, they would watch its accompanying photo(s) or video, and/or read the first couple of paragraphs in the story at most. Respondent #15 said: "My generation has really shaped its own way of how we approach the news. We're able to take more in at a quicker pace, but we're also easily bored if someone drags on too long."

C. Format relevancy. Twenty-one respondents claimed that the Internet had become their main source of information concerning current events. While television was popular among them primarily as an entertainment source, it remained a supplemental news source. Since many respondents did not earn money or did not earn much, they regarded it important to have free access to news on these two platforms. A local newspaper company was already providing students free newspapers at one university, but students said that newspaper companies should try to better serve them on the Internet since most of them did not read hardcopy newspapers. The respondents loved the facts that news on the Internet was quickly updated, easy to navigate, interactive, searchable, filterable, containing graphics and videos, providing much more extra information than newspapers for optional in-depth reading, handy for those who were near a computer often, enabling viewing from various digital devices, and allowing time-shifting. As for online news video, Respondent #24 expected to see better quality news videos. Respondent #13 added, "I prefer watching video rather than reading text and I believe on-line video will be much faster and easier to access in the future."

2. *Customizability*. Eight respondents mentioned that online users should be allowed to customize their preferences for news so that the news they liked to see could be fed to them either on a customizable news Web site

or social networking sites like MySpace, Facebook, and Yahoo360 so that they didn't have to spend time searching for such news. However, they also would like to be able to scan all the top stories to see if anything else would interest them. Respondent #24 recommended Pandora.com's music player model in which the player fitted to the listener based on the music he or she listened to. Respondent #13 hoped: "Maybe a news Web site will learn and calculate how many times I hit on specific news. The Web site will remember my interested news and then rearrange the front page with the kind of news that I enjoyed whenever I visit the site." In short, as Respondent #27 said, "I would like a personalized website that had all the news that I feel is relevant to me."

Discussions and Conclusions

This study has found that these young people possess the following characteristics.

Most of them do think it important to keep up with current events, trust established news institutions, and give newspapers a chance, as found out in some earlier studies (Schlagheck, 1998; Schwartz, 2006). Since they lead fast-paced lives juggling education, jobs, social networking, hobby exploration, entertainment, sports, news consumption and so on, most of them have chosen to put the need for news on a lower priority. Likewise, they use different media not just to access news, but, most of the time, to be engaged in their more highly prioritized activities. In other words, they use media to fulfill a wide range of gratification. That is why they are mostly light news readers or even non-readers. News consumption oftentimes serves as a temporary escape from their prioritized needs mentioned above. Therefore, these impatient young people need short stories, a concise writing style, and multimedia visual presentations to bring them instant satiation. They consume news primarily to monitor the world around them, identify their personal values for truth, and to have basic knowledge to refer to in conversations. They like to control what news to access and how to access it. For some, they do not just want to be passive news receivers; they also want to contribute content via participatory media, such as blogging and podcast. They are mostly not financially independent or stable; therefore, free access to news is important to them. Hand-held devices, such as PDAs, MP3 players, and cell phones, play an inconsequential role in these young people's news consumption because such consumption is regarded as expensive and inconvenient.

All these characteristics have determined why the youths have chosen Internet as the preferred news medium to satisfy their needs for surveillance, diversion, personal identity, and personal relationship (McQuail, Blumler & Brown, 1972). For these youths, the Internet means quick and frequent updates, easy navigation, handiness, an ever-

ready escape from work to news and other ways of relaxation, lean and mean content, rich media, easy time shifting, random accessibility, filterability for relevant news, customizability, rich in-depth reading opportunities, interactivity, opportunities for easy content contribution, accessibility through various devices, environmental friendliness, and finally, free access. For these youths who have grown in the digital era, accessing news online is becoming their native culture.

This study has confirmed the common causes to light or non-newspaper reading found in other studies (Burgoon & Burgoon, 1980; Cobb-Walgren, 1990; Kellermann, 1990; Masullo, 1997; Poindexter, 1979; Raeymaeckers, 2002), such as lack of time, use of another news medium, cost, and lack of interest in the content. It has also confirmed that parental influence plays a big role in younger generations' news consumption behavior (Cobb, 1986; Peiser, 1998; Raeymaekers, 2002; Simon & Merrill, 1996; Stone & Wetherington, 1979; Zerba, 2004). It seems that a ripple effect of non-newspaper reading through the parental generation who were born mostly in the 1950s and 1960s has taken effect and is ongoing. Most of these parents' little or lack of news consumption and their lack of encouragement for their children to follow news have projected profound influences on their children. The findings from this study support the conclusion in the Pew Research Center 2002 study that most young adults will never get into the habit of reading newspapers regularly. Newspaper, as a social entity, has largely lost its root among young people. Subscription-based news consumption is gradually becoming a mode of the past. News Web sites will have to be solely advertising-driven in order to attract young news consumers. Newspaper companies should not try to lure young people to hardcopy newspapers, but rather, should put most of their efforts on providing concise online news stories coupled with all the rich online features loved by these young people.^{vii}

Since the late 1990s, media convergence—the assimilation of media content for multiple media platforms to target different audiences—has begun to build up its momentum to the point that it has become a major trend in the news industry today (Huang, et al., 2006). Interest, especially among newspaper editors, in reaching a younger audience is an important reason for entering convergence partnerships (Criado & Kraeplin, 2003). Although the findings from this study suggest that the news industry, especially newspaper companies, has been on the right track in the last decade or so to pull resources together to disseminate news across media platforms to reach different reader/viewer/user groups, such convergence effort seems transitional. True convergence, based on the findings from this study, needs to be realized on the Internet. It is very likely that the "paper" part of newspaper will gradually become a nostalgic concept, and TV and radio will be assimilated into online news presentations.

Enriching rich media on news Web sites to truly converge TV and the Internet is the future for the younger generation. The heavy-text-oriented news presentation approach can expect to see its doomsday among the younger generation though text will still play an important role in news presentation. In the years to come, a true convergence will mean that the news industry provides the younger generation an experience of consuming high-quality multimedia news that is customizable and relevant to them all online through computers or other more convenient and less expensive hand-held devices with an opportunity for audience to be easily engaged in participatory journalism.

References

Allen, T. H. (1978). New methods in social science research: Policy sciences and futures research. New York: Praeger Publishers.

Anderson, D. (2005). The pod people. *Brandweek*, 46(42), 16-17.

- Angleman, S. (2000, December). Uses and gratifications and Internet profiles: A factor analysis. Is Internet use and travel to cyberspace reinforced by unrealized gratifications? Paper presented to the Western Science Social Association 2001 Conference, Reno, NV. Retrieved June 4, 2005, from http://www.jrily.com/LiteraryIllusions/InternetGratificationStudyIndex.html.
- Armstrong, C., & Collins, S. J. (2006). Reaching out: Newspaper credibility among younger readers. Paper presented to the 2006 Association of Education for Journalism and Mass Communication Annual Conference, San Francisco, CA.
- Atwater, T., Heeter, C., & Brown, N. (1985). Foreshadowing the electronic publishing age: First exposure to viewtron. *Journalism Quarterly*, 62(4), 807-815.
- Blethen, F. A. (2002, September 12). Concentration of media ownership is eroding our democracy. An opening address delivered at a public symposium, "The Independent Family Newspaper in America: Its Future and Relevance," at the University of Illinois at Urbana-Champaign, Sept. 8-10. Retrieved October 13, 2006, from http://www.iwantmedia.com/people/people19.html
- Blumler, J. G., & Katz, E. Ed. (1974). *The uses of mass communications: Current perspectives on gratifications research*. Beverly Hills: Sage Publications.

Bogart, L. (1982). The public's use and perception of newspapers. Public Opinion Quarterly, 48, 709-719.

- Bogart, L. (1989). *Press and public: Who reads what, when, where and why in American newspapers*. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Brooks, B. S., & Kropp, J. (1994, August). Persuading children to read: A test of electronic newspapers. Paper presented to the 1994 Association for Education in Journalism and Mass Communication Annual Conference, Atlanta, GA.
- Burgoon, J. K., & Burgoon, M. (1980). Predictors of newspaper readership. Journalism Quarterly, 57(4), 589-596.
- Burns, E. (2006a, April 4). Newspaper sites gain audience. Retrieved August 5, 2006, from http://www.clickz.com/stats/sectors/traffic_patterns/article.php/3596391
- Burns, E. (2006b, December 13). Three-quarters of U.S. Web users are in the fast lane. Retrieved February 2, 2007, from http://clickz.com/showPage.html?page=3624188
- Chaffee, S. H., & Schleuder, J. (1986). Measurement and effects of attention to media news. *Human Communication Research*, *13*(1), 76-107.
- Chan, A. P., & Mastin, T. (1999). Internet use and issue: Knowledge of the college-age population. Paper presented to the 1999 Association of Education for Journalism and Mass Communication Annual Conference, New Orleans, Louisiana. Retrieved April 1, 2006, from http://list.msu.edu/cgibin/wa?A2=ind9909B&L=AEJMC&P=R57450&I=-3&m=1221
- Chandler, D. (1994). Why do people watch television? Retrieved August 23, 2007, from http://www.aber.ac.uk/media/Documents/short/usegrat.html
- Cheever, N., & Rimmer, T. (1999). Are young people reading the newspaper? A 25-year cohort analysis. Paper presented to the 1999 Association of Education for Journalism and Mass Communication Annual Conference, New Orleans, Louisiana. Retrieved April 1, 2006, from http://list.msu.edu/cgibin/wa?A2=ind9909D&L=AEJMC&P=R5753&I=-3&m=1221

Cobb, C. J. (1986). Patterns of newspaper readership among teenagers. Communication Research, 14, 299-325.

- Cobb-Walgren, C.J. (1990). Why teenagers do not 'read all about it.' Journalism Quarterly. 67(2), 340-347.
- Collins, S. J. (Winter 2004). Predictors of campus newspaper readership. College Media Review, 24-29.
- Conway, M. (2001). Cybernewsers, deserters and includers. Paper presented to the 2001 Association of Education for Journalism and Mass Communication Annual Conference, Washington, DC. Retrieved April 1, 2006, from http://list.msu.edu/cgi-bin/wa?A2=ind0109A&L=AEJMC&P=R28993&I=-3&m=1798

Criado, C. A., & Kraeplin, C. (2003). The state of convergence journalism: United States media and university study. Paper presented to the 2003 Association for Education in Journalism and Mass Communication Annual Conference, Kansas City, MO.

- Gandy, O. H. Jr., Matabane, P. W., & Omachonu, J. O. (1987). Communication Research, 14(6), 644-663.
- Garramone, G. (1984). Audience motivation effects: More evidence. Communication Research, 11(1), 79-96.
- Gladney, G. A. (1996). How editors and readers rank and rate the importance of eighteen traditional standards of newspaper excellence. *Journalism & Mass Communication Quarterly*, 73(2), 319-331.
- Heeter, C., and B. Greenberg (1985). Cable and program choice. In J. Bryant and D. Zillmann (eds.), *Media effects: Advances in Theory and Research*, pp. 417-436. Hillsdale, N. J.: Lawrence Erlbaum.
- Hemlinger, M. A. (1997). Today's youth sections: Crossing the boundary of language and taste? Paper presented to the 1997 Association of Education for Journalism and Mass Communication Annual Conference, Chicago, IL. Retrieved April 1, 2006, from http://list.msu.edu/cgibin/wa?A2=ind9710A&L=AEJMC&P=R6525&I=-3&m=728
- Huang, E., Davison, K., Davis, T., Bettendorf, E., Shreve, S., & Nair, A. (2006). Bridging newsrooms and classrooms: Preparing the next generation of journalists for converged media. *Journalism and Communication Quarterly*. 8(3), 221-262.
- Katz, E. (1959). Mass communications research and the study of popular culture. *Studies in Public Communication*, 2, 1-6.
- Kellermann, D. (1990). *The age of indifference: A study of young Americans and how they view the news*. Washington, DC: Times Mirror Center for the People and The Press.
- Kirkpatrick, D. (2006). Does old media love the Web too much? Old media should stop obsessing over the Web, and maybe even stop loving it. Retrieved September 25, 2006, from

http://money.cnn.com/2006/04/06/technology/fastforward_fortune/index.htm

- Klapper, J. T. (1963). Mass communication research: An old road resurveyed. *Public Opinion Quarterly*, 27, 575-527.
- Kodrich, K. (1997). Reader-friendly journalism's lasting impact: A study of reporters and editors involved in Knight-Ridder's 25/43 Project. Paper presented to the 1997 Association of Education for Journalism and

Evra, J. V. (1990). Television and Child Development. Hillsdale, NJ: Lawrence Erlbaum.

Mass Communication Annual Conference, Chicago, IL. Retrieved April 1, 2006, from http://list.msu.edu/cgi-bin/wa?A2=ind9710A&L=AEJMC&P=R40151&I=-3&m=752

Kohut, A. (1990). The age of indifference. Study conducted for the Times Mirror Corp. and reported June 28, 1990, in *The Washington Post* (D2).

Levy, M. R. (1980). Home video recorders: A user survey. Journal of Communication 30(4), 23-25.

Lin, C. A. (1999). Online service adoption likelihood. Journal of Advertising Research, 39(2), 79-89.

- Loges, W.E., & Ball-Rokeach, S.J. (1993). Dependency relations and newspaper readership. *Journalism Quarterly*, 70(3), 602-614.
- Massey, S. W. (1996). Cyberjournalism: A look at the future of newspapers and print education. Paper presented to the 1996 Association of Education for Journalism and Mass Communication annual conference. Retrieved April 1, 2006, from http://list.msu.edu/cgi-bin/wa?A2=ind9612C&L=AEJMC&P=R13775&I=-3&m=401.
- Masullo, G. M. (1997). Newspaper nonreadership: A study of motivations. Paper presented to the 1997 Association of Education for Journalism and Mass Communication Annual Conference, Chicago, IL. Retrieved April 1, 2006, from http://list.msu.edu/cgi-bin/wa?A2=ind9710A&L=AEJMC&P=R40925&I=-3&m=752
- McNay, J. (2007). Getting started in photojournalism. Retrieved March 27, 2007, from https://www.nppa.org/professional_development/students/entering_the_job_market/index.html
- McQuail, D., Blumler J.G., & Brown, J.R., (1972). The television audience: A revised perspective, in D. McQuail (Ed), *Sociology of mass communications*. Middlesex, England: Penguin.
- McQuail, D. (1983). Mass Communication Theory (1st ed.). London: Sage.
- Mindich, D. T. Z. (2005). *Tuned out, why Americans under 40 don't follow the news*. New York: Oxford University Press.
- Murdoch, R. (2005). Speech to American Society of Newspaper Editors on 13 April 2005. Retrieved September 12, 2005, from http://www.newscorp.com/news/index.html
- NAA (2002, May 1). Online newspaper sites are top for news in US. Retrieved January 12, 2004, from http://www.nua.com/surveys/index.cgi?f=VS&art_id=905357910&rel=true

Neuman, W. R. (1990). The threshold of public attention. Public Opinion Quarterly, 54, 159-176.

Peiser, W. (1998). Sources of the decline in newspaper reading: Examining long-term changes by means of nonlinear trend decomposition. Paper presented to the 1998 Association of Education for Journalism and

Mass Communication Annual Conference, Baltimore, MD. Retrieved April 1, 2006, from http://list.msu.edu/cgi-bin/wa?A2=ind9812A&L=AEJMC&P=R34419&I=-3&m=996

- Perse, E. M., Ferguson, D. A. (1993). The impact of the newer television technologies on Television satisfaction. *Journalism Quarterly*, 70(4), 843-853.
- Pew Research Center, (2000). Internet sapping broadcast news audience. Retrieved October 16, 2006, from http://www.people-press.org/media00sec2.htm
- Pew Research Center (2002). Public's news habits little changed by September 11. Retrieved April 7, 2004, from http://people-press.org/reports/display.php3?ReportID=156
- Picard, R. G., & Brody, J. H. (1997). The Newspaper Publishing Industry. Boston: Allyn and Bacon, p. 126.
- Poindexter, P. (1979). Daily newspaper nonreaders: Why don't they read. Journalism Quarterly, 56(4), 764-770.
- Raeymaeckers, K. (2002). Research note: Young people and patterns of time consumption in relation to print media. *European Journal of Communication*, *17*(3), 369-383.

Redmond, J. W. (1997). Broadcasting World Wide Web sites: Public service or self service? Paper presented to the 1997 Association of Education for Journalism and Mass Communication Annual Conference, Chicago, Illinois. Retrieved November 19, 2007, from http://list.msu.edu/cgi-bin/wa?A2=ind9710A&L=AEJMC&P=R64572&I=-3

Robinson, J. P. (1978, September). Daily news habits of the American public. ANPA News Research Report, No. 15.

- Robinson, J.P. (1980). The changing reading habits of the American public. *Journal of Communication*, 30 (1), 141-152.
- Rosenberry, J. (2006). Participatory journalism opportunities on major newspapers' online sites. Paper presented to the 2006 Association of Education for Journalism and Mass Communication Annual Conference, San Francisco, CA.
- Rubin, A. M. (1994). Media uses and effects: A uses and gratification perspective. In J. Bryant and D. Zillmann (eds.), *Media effects: Advances in Theory and Research*, pp. 417-436. Hillsdale, N. J.: Lawrence Erlbaum.

Ruggiero, T. (2000). Uses and gratifications theory in the 21st Century. Mass Communication & Society, 3(1), 3-37.

Schlagheck, C. (Spring 1998). Newspapers reading choices by college students. *Newspaper Research Journal*, *19*(14), 74.

- Schoenbach, K. (1999). Does tabloidization really make newspapers successful? A summary of an explorative study. Paper presented to the 1999 Association of Education for Journalism and Mass Communication Annual Conference, New Orleans, Louisiana. Retrieved April 1, 2006, from http://list.msu.edu/cgi-bin/wa?A2=ind9910A&L=AEJMC&P=R81603&I=-3&m=1419
- Schwartz, M. (2005, December 12). Newspaper circulation woes offset by Internet gains; NAA says publishers should focus on audience reach rather than number of newspapers sold. *B to B*, *90*(16), 3.
- Schwartz, M. (2006, March 13). Mixed news: Study of news consumption habits underscores the challenges that face newspaper companies. *B to B*, *91*, 3.
- Shields, T. (2005, September 26). Not all bad news: web sites grow, but circ continues down. *Brandweek 46*(34), p. SR20(1).
- Sifry, D. (2006, February). State of the blogosphere, Part 1: On blogosphere growth. Retrieved December 12, 2006, from http://www.sifry.com/alerts/archives/000419.html
- Simon, J., & Merrill, B. D. (1996). Selecting their sources: Patterns of news media use among primary and secondary school students. Paper presented to the 1996 Association of Education for Journalism and Mass Communication Annual Conference. Retrieved April 1, 2006, from http://list.msu.edu/cgibin/wa?A2=ind9612C&L=AEJMC&P=R32141&I=-3&m=507

Smith, M. (2006, January). How do teens use the 'net'? Technology & Learning, 26(6), p7(1).

- Speckman, K. R. (2006). Coverage of youth issues in 2004 election: Television v. online. Paper presented to the 2006 Association of Education for Journalism and Mass Communication Annual Conference, San Francisco, CA.
- Stone, G. C., & Wetherington, R. V. (1979). Confirming the newspaper reading habit. *Journalism Quarterly*, 56, 554-561.
- Streisand, B., & Newman, R. J. (2005, Nov 14). The new media elites. U.S. News & World Report, 139, 54.
- Suominen, E. (1976). Who needs information and why. Journal of Communication, 26(4), 115-119.
- Swanson, D.L., (1979). Political communication research and the uses and gratifications model: A critique. *Communication Research*, 6(1), 37-53.
- Tremayne, M. (1999). Media convergence on the Internet. Paper presented to the 1999 Association of Education for Journalism and Mass Communication Annual Conference. Retrieved September 27, 2002, from

http://list.msu.edu/cgi-bin/wa?A2=ind9909B&L=aejmc&P=R63833

- Wanta, W., & Hu, Y. (1994). The effects of credibility on media-agenda-setting: A path analysis model. *Journalism Quarterly*, 71(1), 90-98.
- Ward, S., & Wackman, D. (1971). Family and media influences on adolescent consumer learning. American Behavioral Scientist, 14(3), 415-427.
- Wilson, J. G., & Igawa, I. (1991). Strategy No. 6: Target new and different readers. Presstime, 13(6), 72-73.
- Wurtz, J. (2000, April). PR content is king in era of media 'convergence.' *O'Dwyer's PR Services Report*. Retrieved September 27, 2002, from Lexis-Nexis Academic Universe database (General News).
- Zerba, A. (2004). Growing up with parents who read and watch the news: What is the effect on college students? Paper presented to the 2004 Association of Education for Journalism and Mass Communication Annual Conference, Toronto. Retrieved April 1, 2006, from http://list.msu.edu/cgibin/wa?A2=ind0411C&L=AEJMC&P=R152054&I=-3&m=2820
- Appendix 1:

Table 1: Reasons young people do not use hand-helds to access news

Reasons	Averages of Rankings
Too expensive	90%
Inconvenient	77.5%
Don't know how to use hand-helds to access news	45%
Not much content is prepared for hand-helds	42.5%
Not crazy about news anyway	35%

Table 2: Youths' patience in reading news online

News Reading Patience Levels	Frequency
I usually skim headlines.	22
If I am interested in a story, I will watch its accompanying photo or video,	17
And/or read the first couple of paragraphs in the story,	16

And read a bunch of short stories, or read part of every long story that I am interested in.	11
Actually, I tend to read more to finish or almost finish stories.	7
Every time, I read a long story or stories that I am interested in.	7

ⁱ See details of the census statistics at http://www.census.gov/popest/national/asrh/.

ⁱⁱ The breakdown of the participants roughly follows the proportions detailed in the U.S. census statistics mentioned above and is as follows: (1) 14 males and 14 females; (2) 18 Caucasians, 6 Blacks (over-sampled for better representation), 2 Asians, 1 Hispanic and 1 mixed race; (3) 7 high school students and 21 college students; (4) The oldest student was 30 years old while the youngest was 15. The average age was 21 years old.

ⁱⁱⁱ According to Allen (1978): "A brief note may be necessary on statistical techniques for analyzing the Delphi responses. If the responses constitute nominal data the appropriate statistical measurements are mode and frequency. If the data involve rankings or ordinal data then the appropriate statistics are median and percentile. If the data appear or are assumed to be interval then the statistical measurements are mean and standard deviation."

^{iv} For the sake of easy writing and easy reading, please be aware that all the he's used in this section refers to both he and she.

^v This study shows that the students had a much higher broadband connection rate than the national rate, which was 78 percent as of December 2006, according to Nielsen/NetRatings (Burns, 2006b).

^{vi} When this study was about to be completed, CNN.com reported that Zenzui cell phone, spun out of Microsoft research, was soon to be introduced to the market. It would help cell phone subscribers easily link to their favorite Web sites even on tiny mobile phone screens. See the news at

http://money.cnn.com/2007/03/27/technology/bc.zenzui.mobile.reut/index.htm?postversion=2007032706.

^{vii} *Naples Daily News* in Florida is now following a "Web first" philosophy meaning the staff puts the stories and photos on the Web first the moment they are finished and the Web acts as a "news service" for their print edition (McNay, 2007). *Naples Daily News* might be leading a new trend in the nation that is shifting to a Web-dominant news presentation that young people enjoy.