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Uses of college radio station web sites : an exploratory study

Steven Robert McClung

To the Graduate Council:

I am submitting herewith a dissertation written by Steven Robert McClung entitled "Uses of college radio station web sites : an exploratory study." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Communication.

Benjamin Bates, Major Professor

We have read this dissertation and recommend its acceptance:

Jeff Wilkinson, Barbara Moore

Accepted for the Council:

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Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

To the Graduate Council:

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Uses of College Radio Station Web Sites: An Exploratory Study.

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Steven Robert McClung
August, 1999

DEDICATION

To Barbara "Bobbie" McClung.

April 4, 1942 - August 15, 1997.

Mom, I miss you more than anyone could ever know.

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I love you all.

ABSTRACT

This study is a baseline investigation into the uses of college radio station web sites. The study was conducted via on-line survey with college radio stations around the United States. The survey was constructed following the uses and gratifications approach. The findings reveal that users who surf college radio sites want the sites to have audio streaming so they can hear the broadcast signal over the Internet. Users also include entertainment and music as reasons to visit the sites. The main reason people use these sites is to check on the music. Patrons also value being able to download music clips to sample the artists being played on the air. College radio has long been known for its relationship to the music the stations play. College radio stations have been known to develop music scenes around the artists and bands the stations play. Apparently people who use the Internet sites of the stations also want to keep this sort of relationship to the music and artists.

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CHAPTER ONE

Introduction

"The college radio station has always been looked upon with contempt by commercial broadcasters. Many think of a college radio station as a place where 'kids play at being broadcasters.' In isolated instances this might be an honest estimate but it is definitely not an accurate evaluation of all radio stations operated by colleges and universities."
(Brant, 1981)

The Internet

"Scholars who study the development of new media systems (McLuhan, 1964; Innis, 1964) contend that it is the newer forms and structures of emerging media that likely have the largest effect as they shape how the media are used, thus their social impact. Further, such influences are said to strengthen as the newer media become the dominant disseminators of information," (Bates and King, 1995). The rush to get on the information super highway is astounding near the close of the millenium. The estimated number of World Wide Web users in the world as of June 1999, is 179 million and the estimated number of web users in the U.S. and Canada is 102 million (Nua, 1999). The

burgeoning new medium is continuing a growth rate that will surely make it one of the more frequently used media heading into the year 2000. But as people and businesses make the move to the World Wide Web, many are still uncertain of what the medium is actually good at achieving.

While Internet use continues to grow, scholarly research on the medium is playing catch-up. Morris and Ogan (1996) suggest mass communications researchers may have overlooked the Internet as a research item because the medium was "developed by hobbyists, students and academics" and did not fit the traditional ideas of mass media that were locked into models of print and broadcast media. There is also the argument that the Internet is not a mass medium. Some scholars (Jones, 1995; Strate, Jacobson and Gibson, 1996), especially those who pioneered many of the first computer user studies, claim the medium was computer mediated communication (CMC), suggesting interpersonal communication, and was relegated to other fields (Morris and Ogan, 1996, p. 40).

It could be that researchers have been slow to examine traditional media's adoption of the Internet because of the cyclical pattern of new-media infusion into society. Arguably, one can look at newspapers' attempts to eliminate news from radio and broadcast television's attempt to limit the growth of cable (Bates and King, 1995, p. 2) and conclude, "Here we go again." However, the World Wide Web is different in that traditional media are tending to adopt this new technology and using it in different ways, not trying to eliminate it.

Some media use the World Wide Web as a promotional tool that simply enhances a current information delivery system. CNN was one of the first news networks to discover the usefulness of their Internet site during the O.J. Simpson trial, "Even though CNN's primary business is providing news on cable television, the Internet is opening a new avenue for information distribution," (Berniker, 1995d). Businesses, some of which are traditional media like the cable outlet Home Shopping Network, are using the Internet as a place to do commerce and buying over the Internet has now become one of the primary functions of many World Wide Web sites. In the eighth Graphic, Visualization, & Usability (GVU) Center's survey of Internet Users, the most cited reason for using the web for personal shopping was convenience (65%) followed by availability of vendor information (60%), no pressure from sales people (55%) and saving time (53%), (Pitkow, 1997). Still, some businesses see the Internet as a good promotional tool for a way to stay connected to their communities and a tool for collecting user feedback (Bates and King, 1995).

Media use of the Internet

Traditional media have been using the Internet for several years now, but why they have been constructing their sites is still evolving. A Freedom Forum (1996) report suggests that media are attempting to market their news products and communicate with their audiences through their web sites. Still, others contend that the media are attempting to use the Internet to catch the viewers who are turning off the tube in greater numbers (Christian Science Monitor, 1996).

Radio stations have set up web sites since the mid-1990's. These sites have been used as a promotional tool of the broadcast operation, although some stations are beginning to use the pages for additional purposes. Some stations have used their sites for audience feedback on music (Atwood, 1995), while other stations are actually marketing the content on their web sites and using advertisers and promotions to make money from the station World Wide Web page (Wilke, 1997). Currently the big debate among radio stations is whether to stream the broadcast signal over the web (Ritchel, 1998). Technology allows the station to send its broadcast signal through the Internet stream to anyone in the world. But the debate remains as to what, if any, advantages this gives the station. Research is beginning to uncover what these media companies are attempting to achieve with their Internet sites, but little is being done concerning what *audiences* want from these sites.

Early research concerning the use of local television station web sites indicates people use the sites to find information, to gain access to other sites, and for entertainment (King, 1998). Research concerning audience uses of web sites of classic rock stations suggests that people use the sites for gaining information about the station, aesthetics and interactivity (Murphy, 1998). The way the media and audiences are using the World Wide Web is still being investigated. It may be early in the Internet diffusion process, but research is starting to suggest that these sites are being used because of their informational content as well as the capacity for audiences to interact with the station personnel and with the actual web page content.

Student-Run College Radio

Student-run college radio is one of the oldest electronic media in the United States (Brant, 1981). Ironically it is a medium largely ignored by researchers, both commercial and scholarly. Many of the first radio stations in the United States were experimental outlets at engineering departments in the nations' colleges and universities. The "experimental" reputation of college radio still exists today, although most of the experimentation takes place on the programming side of the operation. College stations are notorious for playing weird music or music considered to be "left of center," (Esparza, 1999). Contributing to the enigmatic nature of college radio is the fact that ratings are not calculated by the commercial ratings services for college radio outlets (Sauls, 1997). In reality, from a market perspective, we know little about college radio or its audiences even though college radio dominates the non-commercial channels with more than 800 educational institutions holding licenses (Adams & Massey, 1995).

Pesha (1997) notes that the college radio station is seen as a "training ground" for students who want to enter the broadcast industry, and it seems this would be a good working model if the college radio lab were in a curricular vacuum. However, it is not. College radio stations are the sole laboratory on campus that are subject to use, scrutiny and criticism by anyone with a radio (McClung & Wilkinson, 1997a). That includes audiences, record labels, musicians, staff, faculty and administration. College radio stations have a network of constituents that are inter-connected with this laboratory including record companies, musicians and local businesses that may financially help support the operation.

These factors have college radio in a very unique situation. What also makes the college radio station unique is that it very likely may be the only laboratory on campus without a hands-on faculty advisor. In many cases, the role of college radio station advisor is not taken seriously or even neglected. In fact, research suggests that the advising position may even counter-productive for the faculty (Nadler,1997). Additionally, many college stations are sponsored by the university student government association and have no professional advisor or direct supervision at all.

Given the situation where college radio stations are operating as under-advised facilities, it may seem that it would be difficult for these stations to expand to the World Wide Web. That doesn't seem to be the case, as college radio is developing a strong Internet presence. Ironically, college radio stations may have an inherent advantage over commercial broadcasters on the Internet front, for in many cases the computer "space" to put up the sites is free to college radio stations (Jackson & McClung, 1998). These stations are located on college campuses where the Internet has been in place for years and access is provided free to the station by the university. Commercial broadcasters either have to buy the server space, or trade it out with a service provider. Arguably, the economic barrier that confronts commercial stations from moving onto the information superhighway may not be an obstacle for college radio stations.

Though most colleges and universities provide space for student-run college radio stations to erect web sites, the colleges apparently do not provide guidelines dictating content. College radio station web pages have a large array of content and technical capabilities ranging from a single main page with a couple of hyper-links to a multi-level

site with audio streaming and many interactive features. The content of these pages is like the content the college radio stations broadcast -- it varies widely. Many college radio station web sites are constructed with station promotion in mind and feature pages that introduce the user to the staff and allow the patron to contact the staff and announcers through e-mail. Some college radio station web sites are elaborate technologically featuring audio streaming allowing the user to hear the over-the-air broadcast through the Internet. Other sites use programs like the WebRing that links users to other related sites and even other college radio pages. Conversely some college radio station sites are rather plain with just text and relatively few interactive features. There is no uniform college radio station web page. These pages are all unique and use a range of content and Internet technology.

College radio has a history of advantages, but mostly disadvantages, when measuring up to commercial, over-the-air radio. A new frontier is developing on the Internet however, and the playing field may be more even when compared to the broadcast signal. It is important then, to examine where college radio is concerning the new medium and what uses audiences have for these sites.

The Research Focus Areas

This study will examine the uses people have for college radio station web sites. In order to look at this area, research questions and hypotheses have been developed to help guide the study in three broad areas: who uses the medium, what are the uses of college radio station web sites, and what do people value in college radio station web

sites. The methodology will be an on-line survey of college radio station World Wide Web homepages.

The Research Questions

R1 – Who uses student-run college radio station web sites?

Because college radio stations are not measured by ratings companies there is little demographic evidence to show who listens to student-run college radio. Ratings services do not include public or non-commercial stations in their surveys, including student-run college radio. Generally, college radio listeners are young, especially for college stations that program a rock-based alternative format. Research indicates that more high schoolers actually listen to alternative than college students, (Zimmerman, 1989). Additional evidence also suggests that 14 to 15 year old teenagers demonstrate the highest level of interactive radio listening as well as the highest use of radio in social settings (Carroll, et al, 1993). Finally, we know that college radio stations, because of their music, can develop local music club scenes or social cliques revolving around the operation and music played on the radio station. These scenes are comprised of primarily young people, many of whom may also work at the station(s), or even in the music industry (Lee, 1995). All of these factors seem to indicate a rather young audience for college radio. However, as stated previously, it is difficult to definitively say who actually listens to college radio since the medium is not included in commercial ratings data.

The demographic profile of Internet users in general is somewhat more

developed, but by many standards remains somewhat elusive and is changing as the medium grows. Since early 1994, the GVU center for Internet User Surveys has conducted ten extensive surveys to determine who is using the Internet. The eighth study suggests demographic findings that are very different from the initial Internet user surveys, including the fact that women are starting to go online more and more.

> "Among the top findings this time around, the gender ratio continues to move close and closer to par, with 40% of the US respondents reporting being female (compared to 5% back in January 1994). Privacy now overshadows censorship as the number one most important issue facing the Internet, maybe in response to the tremendous amount of media coverage privacy issues have received in the past several months. Electronic commerce is taking off both in terms of the number of users shopping as well as the total amount people are spending via Internet based transactions. Just the same, security remains the number one reason Web users report for not purchasing over the Web. Supporting the notion that the Web has become an important tool to access information, 84% of the users report that they consider access to the Web indispensable, nearly the same percentage as those who feel email is indispensable. That a technology could become so vital in such a short period is truly an awesome statement of the impact of the Web on our society." (http://www.cc.gatech.edu/gvu/user_surveys/survey-1997-10/#exec) (Pitkow, 1997)

People using the web also seem to be more affluent, according to Nielsen Research. The Nielsen Home Technology report suggests that households with Internet access earn more than $50,000 a year and consist generally of college educated professionals and managers (Nielsen Media Research, 1996). However, the demographic of the Internet user seems to be shifting. Younger people are heading to the World Wide Web faster than any other demographic group in the United States, and in larger numbers (Nielsen Media Research, 1998).

Additionally, research suggests young people, including those who fit the college radio demographic profile, are also spending more time on the World Wide Web.

> "The number of teenagers online has doubled over the past two years from 43 percent in 1996 to nearly 65 percent today, say market research firm Simmons. Their research studied those aged 12-19 and found that "word of mouth" accounted for a quarter of web site referrals, TV ads for 19 percent while online browsing accounted for 17 percent. "Simmons Teen Age Research Study" shows the Net effected two favourite teen passtimes. Half a million teenage boys say they are losing sleep to the Internet and a further 1.8 million are watching less TV. Girls, on the other hand are finding the Internet an aid for study, 2.4 million said it increased their desire to learn. Another 1.5 million said they were drawn by the social possibilities on the Net."
>
> (http://www.nua.ie/surveys/) (NUA Internet Surveys,1997)

Given these demographic profiles for college radio and the Internet in general, it seems important to answer the question of who is using college radio web sites. This study seeks to find the answer to this question because it will help us better understand the constituents of college radio web sites, the online audience.

R2 - What are the uses of student-run college radio station web sites?

While there is some evidence to indicate uses of particular media web sites such as local television and classic rock, there is no research that focuses particularly on college radio station web pages. From a broader theoretical perspective, Uses and Gratifications research focuses on the reasons why people use certain media (Herzog, 1940; Mendelsohn, 1964) and those reasons are many. There is evidence suggesting radio serves as a companion for many people (Tramer and Jeffres, 1983). Six factors for television use among children and adolescents have been identified: learning, passing time, companionship, escapism and relaxation (Rubin, 1979). Plummer (1971) reported that the number one reward conveyed by television commercials was "entertainment or stimulation." Existing research suggests when we engage in the use of a particular media there is a reason for doing so.

Recent research concerning the uses of World Wide Web sites indicates that the number one reason people liked television network web sites was because they are "clever and entertaining," (Eighmey and McCord, 1998, p. 191). It is difficult to conceive of the World Wide Web as being any sort of "portable companion" as radio has been identified as a use by teens. While laptop computers are easily portable, the Internet can't be accessed from a playground or street curb. However, there are other uses people have for the Internet. Early studies by Rafaeli (1986) indicated that computer bulletin board users reported recreation, entertainment, and diversion the primary motivation for use, followed by learning what others think and controversial content and communication with people who matter to me and the community.

An early pilot study of commercial web sites indicated that "user benefits of commercial web sites are similar to those reported in previous uses and gratifications studies of media programming and the viewer rewards associated with television commercials. Newly found benefits involve the interactive capabilities of the web. These researchers also found web site users are attracted to information that adds value in both form and substance, and that the information must reach users in a time period commensurate with the perceived value of the information," (Eighmey and McCord, cited in Eighmey, 1997, p. 62).

Interactivity, when referring to the Internet, is a constantly evolving concept. There have been attempts to re-define interactivity (Ha and James, 1998) as "the extent to which the communicator and audience respond to each other's communication need," (p. 457). Eighmey and McCord (1998) define interactivity as the interaction with the actual

web page, "the dimensions of a continuing relationship between a user and a commercial web site," (p.65). New technology, software, and Internet language such as Java and CGI change the definition of interactivity daily. CU-CMe technology actually allows a user to interact visually with a person on the other end of an Internet connection, in other words you can see the person as you're talking to them. Virtual tours allow us to interact with web pages to visit specific places in a museum or even radio station. The term interactivity now is blurred; are we talking about interactivity with people at the other end or interactivity with the page itself? Murphy (1998) defines interactivity as "the opportunity to communicate via phone, fax and postal mail with the station personnel and personalities," (p. 88). On the Internet this is typically done by e-mail. Murphy seems to suggest interactivity is being able to contact the *people* represented on the web page, whether that representation be a photo image of the person that links to his or her e-mail account, or a strictly text-based link from which the user is able to contact the person from the station. For the purposes of this study all of these definitions will be acknowledged and used as components of uses and gratifications research.

College radio web sites, like their over-the-air counterparts at this time, are non-commercial. This study will hypothesize that even though the pages of college radio station web sites are non-commercial, many of the same factors that make commercial web pages useful to patrons will also make these pages useful to college radio web site users.

R3 - What do audiences value in student-run college radio station web sites?

Dervin (1989) suggests exposure to mass communication results from persons seeking valued consequences that they associate with particular messages or media. In other words, Expectancy Value theory states a person has a preconceived notion that a particular medium or message will best satisfy his need, (Hunter, 1997). Schramm (1954) also states people determine the media they will use based on the level of reward they expect to receive relative to the effort they have to make in order to receive the reward. Theoretically, it is established that people use media to receive a reward; they *value* the medium for its expected reward.

Using the Katz, Blumler, and Gurevitch process model (McQuail & Windahl, 1993; Katz Blumler, & Gurevitch, 1974) uses of media are broken down into five specific categories. In other words, this particular model states that social and psychological origins of needs leads to motivations which lead to the expectations of rewards which causes the individual to select sources that will provide satisfaction (Hunter, 1997, p. 2). Those five needs, Cognitive, Affective, Personal Integrative, Social Integrative, and Escapist, according to the model, apply to all media users, and supposedly to all media. Presumably then, it is established that people value the media and content they use to fulfill certain needs, whatever those needs may be.

Murphy (1998) notes anecdotally, that many users of classic rock radio station web sites said they used the site to feel "like they were home again" (p. 166) when they were not in the listening area. Some college radio station advisors have noted that many alumni access their college radio web sites to feel closer to the university. These reasons

fall into the social integrative use for media as presented by Peled and Katz (1974). The social integrative are needs to strengthen contact with family, friends and the world. In the case of college radio stations it may be that people use the pages to strengthen contact with the college or university that was once a big part of their lives. This research question will try to determine, empirically, what Murphy and others have noted anecdotally.

Importance of the Study

The emergence of the World Wide Web has made our world smaller and the "Global Village" the Canadian visionary Marshall McLuhan (1964) posited is near. It is true that Internet is a global medium, and that anyone with a computer and a modem can access information or entertainment from nearly anyplace in the world. With this in mind, we should realize that World Wide Web pages are the "Ambassadors" or Internet representatives of businesses, people and institutions that choose to develop a global web presence.

For colleges and universities that fund, maintain, and teach broadcasting courses, it is important to understand why people are using the college radio station web sites developed by the students at these institutions. These sites are in essence an extension of the university mission on the World Wide Web. These pages reflect the college or university, students, faculty, and possibly the level of commitment to education the universities are providing to the programs that sponsor radio stations, and accompanying web sites.

The empowering technology of the Internet may also help these users stay in touch with the university and surely provides the user some association with the college. This factor may help college radio from a funding standpoint because if alumni, current students, or potential students perceive the college radio web site to be important, the site also becomes a recruiting tool, alumni support tool, or a learning tool. These are all activities that colleges and universities are involved in and value.

If it is found that people are using these pages as an alumni contact or to feel closer to the university, college radio stations could make the argument that more university support is needed for the pages because of the important and valuable function they perform. If this is the case, the social integrative function of these sites plays an important role in keeping people connected with the university, people who could very well be donors to the college.

It is also important to understand why people use college radio station web sites from another perspective; that is, as a burgeoning new media. College radio has long been known as an experimental medium. The technology on the World Wide Web changes every day, and college radio station web sites may be using technology that other media, especially commercial broadcast media, cannot afford, both financially and experimentally, to take risks on. In other words, college radio web sites may be the "testing ground" for experimental technology that could be valuable to broadcasters in a commercial sense. Such technology could be the "WebRing" program that college radio stations are starting to use. If commercial broadcasters can harness the technology and

make a profit from it, then college radio station web sites are an important laboratory for Internet technology that is useful to commercial broadcasters in the Web.

College radio station web sites could be an important tool for the music industry. The music industry has long depended on college radio to air experimental and new music. These web pages may be a new outlet for artists and the record companies. With the ability to easily download files from the college sites, users could have a new way to sample music-on-demand, and subsequently provide feedback to the station about the music. This could be an avenue to expose new and unheard of artists, literally, to the entire world, which has value to the record companies and artists.

Finally, it should be remembered that these sites are important because they very well could be considered the training ground for future radio station web site designers. College radio is seen as a training ground for future broadcasters, the students who design these sites may be starting careers in broadcast web site design. This industry is booming currently and there will be a need in the future for people to design and maintain these sites. College radio may be considered the training ground for this part of the broadcasting industry.

Summary

The diffusion curve is in an upward swing for the World Wide Web. More and more businesses and individuals are making a presence on the Internet. The media have been quick to adopt the World Wide Web and set up sites that are intended to achieve a number of goals including promotion, entertainment and sales. Many media outlets see

their web pages as a promotional tool to provide an alternative information stream. Other media outlets use the Internet to make people feel closer to station personnel and to their communities.

College radio is an understudied area of mass communications often seen as a training ground where students play at radio, and has a reputation for being experimental. The medium may have a larger impact on its audience(s) than anyone knows. With the advent of the World Wide Web, college radio may be entering a new era, one that does not have the technological drawbacks plaguing the broadcast medium heretofore. What college radio is doing with these pages has not been researched. More importantly, how audiences are using the pages is also unknown. This study seeks to find answers to this and other questions in order to be able to better understand one of mass media's more prevalent, but often ignored outlet.

CHAPTER TWO

Literature Review

Technology, the Media and Change

The importance of studying college radio station web sites and the emerging technology of the Internet is justified by the history of continual change in mass media. In a way, the change in American mass media has been about the technologies that keep evolving. Those technologies, in turn, change and evolve the way Americans use the media and change what media we use. The purpose here is to look back at the changes in the technology that have helped it evolved to the point it is today and to try to gain some perspective on the latest technology that is changing the way we use the media -- The Internet.

One element that has been constant in American Mass Media is change. Changes in the media altered both the way we lived and the role of existing media as a new medium was introduced. Changes in technology allowed us to buy newspapers for a penny and let us to take our radios with us anywhere we went, as the transistor made radio portable. Historically, each time a new medium has been introduced, the existing media have fought to hold on to audiences and advertising dollars that the new medium

was targeting. Throughout our history technology has been a catalyst in the change of American media (Poole, 1983). The printing press is widely considered the first mass medium and after Gutenberg's invention took hold and newspapers and magazines filled the landscape, the electronic telegraph arrived on the scene. After that, movies, radio and television were developed and embraced by the public. With each new technological innovation, with each new *medium,* our lives were impacted as was the role of each older medium. Each technological innovation in the media brought the world to us more quickly, vividly and graphically.

"Technology, the magic key that has unlocked so many doors in the twentieth century, is what has made the 'mass' part of the media possible," (Pember, 1983). The technology that made the mass media possible impacted the way Americans viewed the world and sometimes the way we responded to the media. The press was said to be responsible for helping to sustain the spirit of the American people during the Revolution by reaching larger and larger numbers of the people in the colonies with information about the war. But it was this same press that was said to have propelled American journalism into the *dark ages* of the 1790's with partisan and bitter content, again, reaching more people than ever before (Pember, 1983, p. 23). Even in the formative years of the nation, the media and technology were able to shape the opinions of the public by reaching masses of people.

Technology had also made the production of newspapers inexpensive. In the 1830's a trend, spearheaded by the *New York Sun,* made papers more mass oriented and they were sold on the streets for only a penny a copy (Crowley and Heyer, 1991). These

penny papers sold thousands and eventually millions of copies. By the turn of the century some mass oriented newspapers had circulations of over a million. The advancements in technology enabled content to be printed faster and cheaper than ever before. All of these factors helped to create a habit of mass media consumption that would help broadcasting get off the ground and profit early in the next century (Head & Sterling, 1982).

Alongside the mass distribution of the printed word of newspapers and magazines, the beginnings of "electronic" media began to develop. The phonograph was patented in 1878, and by 1919 some two hundred manufacturers were churning out more than two million phonographs per year. While the phonograph was making its way into American culture, the movies were also becoming more and more a part of our lives. "The movies created a mass audience for information and entertainment (newsreels were an important part movie theater presentations before television phased them out)," (Head & Sterling, 1982, p. 101). By the late 1920's movies with sound began to appear in theaters, the precursor to what was to come later – television.

Other forms of electronic communication were also being developed during 1880's. Wire communication had been developed and widely used in America by the 1860's and had been developed in Britian in the 1820's. By the 1880's, American Telephone and Telegraph had set up the "Bell System" and telephone use was starting to take hold.

It was, however, the advent of radio that forever changed the way we used media and instantaneously got our information and entertainment. Originally radio was

intended to serve as a communications device from land to sea. While there were transatlantic wires set up for electronic communication, the wires were useless to ships, both commercial and military. Near the turn of the century British and American warships were equipped with radios. The wireless came into its own on April 14, 1912 when the Titanic sunk. The Captain ordered the wireless operator to send out a distress call after the ship struck an iceberg. "Within a few minutes the airwaves were rippling with signals as over a dozen ships became aware of the disaster," (Kern, 1991, p. 186). An editorial in the *London Times* two days later expanded on the range of experience made possible by the wireless (Kern, 1991, p. 187).

Near the end of the 1910's radio began to integrate itself into American culture. The medium was very different from what it is today. Stations were sometimes on the air for only a few hours a day. There were initially no commercials because at this point no one had figured out that a profit could be made from radio. Technologically, the medium was chaotic. Often there were several operators on the same frequency and cross-modulation made the airwaves sound like a jumbled mess. The disarray that was radio needed to be cleaned up.

Some stations like KDKA, Pittsburgh were eventually garnering an audience by the early 1920's (Douglas, 1991); for smaller operators, getting on the air and staying there was nearly impossible. In 1922 WEAF, New York began to sell advertisements (Crowley and Heyer, 1991, p. 182). The growth of radio was monitored closely by the newspaper industry. Seen as a threat to the market share of the newspaper readers, radio had the potential to take away profits from the newspaper industry. The new medium

was going to change the media landscape and newspapers were facing the loss of audience and advertisers. But radio still had problems to solve before becoming profitable.

Congress passed the Radio Act of 1927, which provided a temporary Federal Radio Commission. After two years in existence the FRC became a permanent body and began to sort out the technological chaos that was American radio. A few years later the FRC became the Federal Communications Commission, which was intended to govern all things electronic, not just radio (Head, Sterling, Schofield, Spann and McGregor, 1998).

In 1929 the stock market crashed setting off a nationwide depression. About a third of American workers were unemployed and many peoples' day-to-day lives were miserable. For millions of people across the country, it was radio to the rescue. "In this time of great trial, radio entertainment came as a godsend, the one widely available distraction from the grim realities of the daily struggle to survive," (Head & Sterling, 1982, p. 143). From this point on, radio became a permanent fixture in the lives of nearly all Americans and continues to be a cornerstone of our media use today. By the end of the 1930's about three-quarters of American homes had radios and the number of radio stations was on the increase too. The audience had grown, but other factors led to the rise of radio not just the newness of the medium and the instantaneous entertainment radio provided.

The impact of radio on American culture was well documented during the formative days of the medium. Networks began to invest more money into

programming, and they began to make more and more money. As the networks began to grow, so did the audiences. The networks spent a lot of time and money working on news and drama programming for entertaining audiences. The power of this programming was never more evident than on Halloween 1938, when Orson Welles broadcast the radio play, "The War of the Worlds," a production of *The Mercury Theatre*. The spoof about a Martian invasion of Earth caused many people to flee their homes in panic, even though the program was labeled as a Halloween joke from the outset (Czitrom, 1982). During World War II radio brought Americans live reports from the battle scenes. That war was brought into living rooms by reporters whom Americans grew to know, depend on and trust. Radio had become Americas link to the world – it made the world a smaller place.

In the late 1950's radio was about to undergo another change both technologically and in programming. Television had appeared on the media scene before the beginning of the decade and while many feared the death of radio, the medium changed and survived maintaining both audiences and advertisers. The dramas and variety shows that were broadcast every evening on the radio had now moved to television. Radio continued on, but like magazines and newspapers before it, change was at hand. With the days of expensive programming gone, radio turned to music and news (DeFleur and Dennis, 1985, p. 69). The cheaper programming worked, and radio found a new niche – recorded music and an audience that was large enough to continue to attract advertisers.

Technologically, radio also underwent a transformation as well. In 1957, the transistor arrived on the scene to help save the medium. Originally produced by Bell

Laboratories in 1948, the transistor took more than a decade to develop. But the advent of the transistor would change the way we used radio forever. The transistor made radio *portable*. By 1957 Sony began marketing "pocket radios" making radio the one electronic medium you could take with you, relegating the television to the big piece of furniture that was in the middle of the living room (Tedeschi, 1999).

After the Second World War, the other electronic medium that had been in development for several years made its debut to the public. Television in its infancy was crude and not very easy to watch because most sets had very small screens, but with technological improvements, TV began to dominate the electronic media industry by the 1950's (Crowley and Heyer, 1991, p. 215). The networks which had sunk so much money into radio programming were now shifting their resources to television. As television continued to grow, media companies started to invest not only in programming, but the broadcast properties themselves. Large companies began to combine their resources to buy media properties.

Eventually television became the dominant medium in America, and became one of the most profitable also. However change continued. While radio began to grow again broadcast television had a new competitor on the scene– cable television. Originally, cable was intended to bring over-the-air signals to people in mountainous terrain, but large cities were developing their own man-made terrain that made signals difficult to receive. Skyscrapers often made over-the-air signals difficult to receive. Cable eventually made its way to urban areas as well as rural.

The growth of cable in urban areas was fought by broadcasters because of the fear of losing both advertising dollars and audience to the new medium, but the time had come to put aside the old cliché that the broadcast spectrum was a scarce resource (Poole, 1983, p. 151). Any resource is limited, but Cable TV seemed to both expand the limited resource of the broadcast spectrum and take away the audience of traditional over the air broadcasters at the same time. With several favorable rulings from FCC in the early 1970's, cable television began to grow. By the 1980's with the help of coaxial cable and specialized "networks" like CNN and ESPN audiences with cable could receive more than 50 channels with the number of cable programmers growing every day.

The technological evolution of the electronic media was moving fast. Cable helped television audiences grow by providing more content and, like radio, television audiences began to splinter and fragment with the availability of more targeted programming. Video cassette recorders (VCR'S) became available providing a new outlet for the movie industry (atvnetwork, 1999). Target marketing made radio a very diverse medium with programming to fit a variety of audience demographics. While cable programmers and owners were trying push cable to the forefront of electronic media, the industry took a stab at making cable television interactive. Television had long been known as a passive medium people just watched in the living room. The interactive cable venture Qube system was given a test run in Columbus, Ohio in 1977.

Warner Cable tested the system in Columbus because the demographics of that city closely resembled the nation at large (Head & Sterling, 1982, p. 306). While normal cable at this time offered over-the-air signals and a few cable network programmers, the

Qube system was different. The Qube system consisted of three tiers of services, one allowed users to "talk back" to their television sets (Madison Avenue, Jan. 1981). Ten locally based channels were interactive and users could attend electronic town meetings and view special events that were not broadcast over the air.

The Qube system failed due to a variety of problems. In the three years of its existence, it never made money. Subscribers decreased sharply after the first two years; a lot of those people simply didn't pay their bills. The interactive feature wore thin with many subscribers and eventually they made little use of the touch-buttons that were unique to the cable system (Head and Sterling, 1982, p. 307). The Qube system was also expensive; to subscribe to all three tiers of the system could cost subscribers more than $50.00 a month, a figure that in 1977 would amount to most families entire monthly recreation budget. However the Qube system did lay the groundwork for future cable growth. "While many households subscribed to Qube, actual use of its programming was generally low, with a few exceptions. Some game-format programs drew moderate viewership and strong interactive participation. Qube also demonstrated that, if the cost of promoting and processing pay-per-view orders were reduced, then pay-per-view programming was potentially viable. And, Qube introduced a number of interactive formats that have since evolved and been adopted as components in cable and broadcast programming," (Carey, 1994 p. 4).

The failure of the Qube system was noted but the continued growth of cable in general was healthy. The media in America were at an evolutionary point where each medium began to fill a certain more targeted niche. Radio had become a personal

medium with stations purposely targeting narrower demographics as magazines had done before it, and with the growth of cable, television was beginning to do. Then in the late 1980's, came the latest new medium - The Internet.

While established media were slow to recognize the Internet because it was not initially commercial in nature, with time and technological advancements the Internet began to attract more and more users - and advertisers. However, unlike many new media before the Internet, older media did not as actively fight the introduction and growth of the Internet. Old media seemed to adopt the Internet - a break in tradition.

The Internet

The Internet began as a project called ARPANET which was sponsored by the United States Department of Defense Advanced Research Projects Agency. The department of defense was interested in building a communications system that could withstand "adverse conditions". The original idea was to build a connection of computers that could withstand a nuclear war (Hahn, 1996; Internet Histories, 1999). The project was started in 1968, and evolved into what we now call the Internet. By the mid-1970's the project was expanded because a single network simply wasn't going to meet the needs of everyone using it. Researchers thought it would be better to develop a system that could connect many smaller networks into a large system. The Internet today, is actually a large collection of tens of thousands of computer networks spanning the globe (Hahn, 1996, p. 3).

Confined to mostly government and academic use for more than a decade, the Internet grew slowly. Also slowing growth of the medium was the difficulty in using the Internet. Text-based programs began to improve the user-friendliness of the Internet. The Gopher system, developed at The University of Minnesota and named for the schools mascot, allowed users to "click" on a text link and that would take the user to the information being sought. Other programs like VERONICA, developed at the University of Nevada, helped ease the use of the Internet in its early stages, but during this period, the Internet looked nothing like it does today.

As the ease of use of the Internet improved, the number of people using the medium began to slowly climb. In 1989, a breakthrough in technology changed the Internet. A new protocol, based on hyper-text -- a system of embedding links in text that connected to other text, was developed by CERN, the European Laboratory for particle Physics. This protocol eventually became the World Wide Web in 1991 (Zakon, 1998).

In 1993 another breakthrough development in the new protocol for the World Wide Web forever changed the medium. Marc Anderssen and his team at the National Center for Computing Applications (NCSA) developed a tool for navigation that would make the Internet easier to use than ever before -- the Mosaic Browser (Howe, 1998). The Mosaic browser was a graphical browser as opposed to the text-based programs that made the Internet before the early 1990's. The Mosaic allowed users to view graphic images and pictures more easily, and the browser along with the new protocol made navigation through the Internet easier than ever.

In the early 1990's the Internet was starting to take its present form, but at this time the medium was still limited in terms of users. But that was about to change drastically and by the mid-1990's, the newest electronic medium was about to become the newest electronic *mass* medium (Morris and Ogan, 1996). "Since the Internet was initially funded by the government, it was originally limited to research, education and government uses. Commercial uses were prohibited unless they directly served the uses of the goals of research and education. This policy continued until the early 1990's when independent commercial networks began to grow" (Howe, 1998, p. 4).

With the ability to route traffic across the growing independent commercial sites without crossing the government-sponsored backbone of the Internet, more and more commercial users jumped on board. "All pretenses of limitations on commercial use disappeared in May, 1995 when the National Science Foundation ended its sponsorship of the Internet backbone, and all traffic relied on commercial networks," (Howe, 1998, p. 5). From this point, the Internet began to take the shape it currently resembles. AOL, Prodigy and CompuServe all became bigger players in the Internet game, and the explosion began.

People use the Internet more than ever today. The GVU's tenth survey says that nearly 36 percent of Web users will get on the Internet at least nine times a day (Pitkow, 1999). It doesn't look like the growth of the Internet is slowing down any time soon either. More and more people are getting on-line, and Internet stocks are some of the fastest growing on Wall Street in 1999. The diffusion curve is certainly in an upward swing for the Internet as the new millenium approaches.

Commercial Broadcasters on the Internet

Local television broadcasters began to appear on the World Wide Web as soon as 1995 (Bates and King, 1996) and the following year that number had grown to between 360 (Rosales and Pitts, 1996) and 416 (Bates, B., Chambers, T., Emery, M., Jones, M., McClung, S. & Park, J., 1996) local stations with web sites. Early on, when Internet audiences were smaller, broadcasters saw the Internet as a way to bring people "closer" to the stations. Now, there are many more people to bring closer to the station(s). The estimated number of total web pages, as of April 1998, is 320 million and the estimated number of web users in the U.S. is 57,037,000 (Treese, 1998). Broadcasters want to get in on the audience potential that the Internet may hold, and they have been working at it for several years now.

One of the first television stations to devote time and resources to the Internet was WCCO-4 in Minneapolis, MN (Berniker, 1994). This station went online in summer of 1994, with the idea that a web site could bring its over the air audience closer to the stations. Users were able to download news scripts and leave messages for anchors and reporters. "Television stations need to realize that they no longer have a monopoly on providing over the air information. The battleground for the future will be who is going to be the local news provider," said the WCCO director of engineering and operations (Berniker, 1994, p. 27).

Soon after the jump by local stations to the Internet, the television networks began to get on board, in large part, for the same reasons. The networks also began to see value in having a web site, as CNN reported getting more than 3800 hits a minute during the

O.J. Simpson trial (Jessell, 1995). But some networks began to eye profit potential. In February of 1995, CBS jumped on the information superhighway.

> "CBS Eye on the Net is an Internet site that offers information about entertainment, news, and sports programming, and is a sales and marketing tool for the broadcast network. 'It's important that all broadcasters become familiar and conversant with all the new technologies,' says George Schweitzer, executive vice president of marketing and communications for CBS. 'We've had tremendous interest from our advertisers,' Schweitzer says, adding that many top advertisers that buy time on the TV network increasingly are becoming interested in tie-ins with Prodigy and the Internet." (Berniker, 1995c, p. 29)

For the first time broadcasters were apparently looking to the Internet for profit, as well as a service to the new audience, and CBS wanted to bring the local affiliates along for the ride. "The creation of the Internet sites for our stations is an extension of our network-affiliate relationship," said George Schweitzer (Berniker, 1995b, p. 28). The network gave the affiliates an option of the "level" of service to provide its audiences. The first tier provided the local affiliates with a basic homepage for $5,000. A more sophisticated page would cost the affiliate $10,000 and the highest level offered by the network, which was labeled a "well developed site," cost the local station $15,000 (Berniker, 1995b, p. 28).

Later that year NBC got into the information superhighway and upped the stakes in terms of providing information to its affiliates. In October 1995, NBC offered its affiliates a multi-media web site (Berniker, 1995d). The network developed a way to deliver audio, video, still pictures and text over the World Wide Web. The first "Desktop Video" sites offered subscribers business video news feeds. "It means that a local

affiliate - after its evening newscast - can post either [its] entire newscast or produced segments on the web to be pulled up on demand," says Mike Wheeler, president of NBC Desktop Video, adding that station will be able to make money through subscriptions and by selling advertising over the Internet (Berniker, 1995d, p. 72).

PBS was also getting into the act. In July, 1995, The Public Broadcasting System created a new division, the Internet Publishing Group, to help member stations set up homepages and develop content (Berniker, 1995b). Again, the non-profit network established goals for the new medium and profit was one of them. "PBS's strategy is to combine national and local content through the Internet; it plans to provide educational resources and interactive events online and to sell merchandise and products" (Berniker, 1995b, p. 25).

Warner Brothers took online assistance even further, once again looking to cash in on the growing number of broadcasters seeking to serve their new Internet audiences. City-Web was developed by the media giant as a way of offering television stations a syndicated co-op venture for television stations. The new venture offered local stations a new avenue for national and local advertising space (Dupree, 1997). Basically the site is a template and Warner Brothers provides a great deal of the content, while it is up to the local affiliates to fill in the gaps. The City Web project is patterned after Virtual City and AOL's Digital City. Some broadcasters have signed on with the Warner Brothers project; others, objecting to the financial arrangements, have chosen to work with other syndicators or develop their sites locally (Shaw, 1997).

Despite the technological advances and the syndication packages available on the market, many television stations, as well as other broadcast outlets and information businesses, were and are still struggling with how to best use the Internet and the World Wide Web to their advantage (Jensen, 1996). With little audience research initially available, stations were left to their own devices concerning content for their web sites and were also left wondering if they were correct in their assumptions of what *audiences* wanted and also what clients would buy or support.

About the same time as television station sites began to appear on the web, so did radio stations. The years of 1994 and 1995 saw the advent of the early adopter radio stations. During this time, radio stations were free to experiment with on-line content. One of the first serious attempts to actually try to understand radio station web site audiences was underway in Houston, Texas. KHMX-FM was one of the first stations to conduct on-line research with its web audience (Atwood, 1995).

The KHMX staff had observed that most station web sites offered information about its staff and members. The KHMX team decided to break into new territory and began conducting on-line music testing on their site (Atwood, 1995). The station looked at the testing as a positive, but noted that the survey was never intended to replace their usual method of random sample call-out research. According to research director Martha Connely, the launching of the site was inexpensive. The station relied on a trade-out with local advertisers and a local site development company to get the site up and running and maintained.

In this phase of web-adoption by radio stations, organizations were expanding the uses of their sites and for the first time using the World Wide Web site as a tool to conduct *some* audience research. However, many stations were not doing much more with their sites from an audience research standpoint, or, and maybe most importantly from an economic standpoint. Some television stations began to find that *information* was valuable and that people were willing to spend time on the sites to find out information about their hometowns, like guides to beaches, festivals, theatres, museums and bars (Miles, 1996). Some stations were starting to notice that hyperlinks that allowed users to hop from one station web site advertiser to another was a tool that was a great benefit to the advertisers (Miles, 1996, p. S17).

However, there were stations beginning to make money on their sites. One of the first stations in the country to report making money was WNNX, Atlanta. In 1997, the Alternative rocker reported that it made $3 million off the stations' World Wide Web site alone. Again, this station teamed up with a local Internet provider to promote start-up software and the station received a commission for the product it moved. The station also was able to make money off of banner advertisements and teamed up with large corporations like America Online and Anheuser-Bush for special web-promotions (Wilke, 1997). Interestingly, one of the first stations in America that reported making profit from their web site is an Alternative rock station. The commercial Alternative rock format has its roots directly in college radio. Many of the artists on commercial alternative stations also get heavy airplay on college radio. Arguably there is some audience crossover between the two formats.

At the close of the decade stations are still struggling with issues concerning their Internet presence. One thing is clear: there is an advantage in having a web site. The struggle now seems to be what to offer audiences on the pages. The 1999 Arbitron survey of radio station Internet sites provides at least an indication of what the growing number of people want from commercial radio station sites.

> "Most radio station Web site visitors return and exhibit an interest in a variety of Web site activities and information. Seventy-one percent of those who have visited a radio station Web site say they have returned to it at least once. Listeners express a strong degree of interest in a number of different items on radio station Web sites: information on community events (63%), concert information (62%), titles and artists of songs being played by the station (51%), seeing an advertiser's products (50%), actually listening to the radio station (47%) and being able to buy products and services (47%). Next 45% say they would like to use a radio station web site to enter a contest, to print out coupons from advertisers (41%), to access the programming schedule (41%) and to vote on songs (39%)."
>
> One of the key findings of this research is that while most radio station web sites contain simple data like programming schedules and some top-line information, radio stations an do a far better job providing a more interactive and compelling content experience for listeners. It is clear that what radio stations currently provide on their Web sites is simply the tip of the iceberg in terms of the experience that listeners desire.
>
> (http://www.arbitron.com/studies/20nmw.htm)(Arbitron, 1999)

Some commercial radio stations are reluctant to provide audio streaming, sending the over-the-air signal through the Internet, because of several issues (Ritchell, 1998). While audio streaming seems advantageous to some radio stations, others are balking because there is no way to measure who is listening to the signal. "More than 4300 radio stations that have web sites have thus far opted not to stream audio. Those that abstain, like WSOC, say there are good reasons -- namely, that streaming audio over the Internet can be expensive, audiences are typically tiny, and it is tough to prove the size of an Internet audience to advertisers," (p.1).

Other stations are leading the charge onto the Internet, noting the benefits of streaming audio like WIYY, Baltimore program director Rick Strauss, "We definitely get feedback from people who say they're real glad they can listen on the computer now because at work they're in a building where they can't get it," (Podell, 1998). As the technology allows streaming to be done more easily and inexpensively more stations may be opting to put their signals on the web. However, one of the biggest considerations for commercial broadcasters is money. In 1999 there are still many monetary issues that are unclear concerning web-casting. BMI and ASCAP are undecided as to whether to charge stations for music programming that is streamed over the web and of course, there is no truly accurate method for measuring audiences on the web.

Broadcasters' use of the Internet is currently in an evolving stage. What is clear and certain at this point is that many commercial broadcasters have adopted the Internet. What these broadcasters, both television and radio, will do with this medium is still undecided. Surely advancements in technology will make webcasting and other broadcast-like activities easier for the stations. Whether the broadcasters choose to actually use the technological advancements on their Internet sites, remains to be seen.

Some sites have been set up specifically for web-casting. In other words these sites are streaming music and content with no over-the-air broadcast facility (Broadcast.com, 1999). There are a variety of these sites that are targeting specific demographic audiences with programming. There is no evidence yet to determine whether these radio-like sites are making money but the proliferation of these sites continues.

Student-Run College Radio

Student-run college radio has long been seen as the "training ground" for those students who want to establish careers in the broadcasting industry (Brant, 1981, Thompsen, 1992, Pesha, 1997). Part of the training many students receive is being placed into positions of responsibility at these stations. Others gain valuable experience in learning to work with technology. Some opt to learn the specifics of programming and music; others learn to sell underwritten sponsorships for the station. In many ways student-run college radio resembles commercial broadcasting, but there are clear differences in areas such as profits and continuity.

Most, if not all, of these positions in college radio are voluntary (McCluskey, 1998) and the reward for giving time to these positions is the experience gained. For music directors, a highly sought after position at these stations, the job is especially "real world" (McClung & Wilkinson, 1997a) as the music director is required to work with record companies that invest thousands of dollars into college radio stations by sending the outlets free promotional music and other items. Other students learn the skill of sales as some actually "hit the street with a presentation folder after training, which includes emphasis of the appropriateness of dress and Business English" (Pesha, 1997, p. 3). Many are trained to do on-air work, such as announcing, audio production, and sports. Still a few others learn the technical side of college radio, choosing to work with the station engineers.

College radio by its nature is different from commercial radio both technologically and in mission. However, as noted previously, college radio stations are

plentiful on the dial with more than eight hundred educational institutions holding licenses (Adams and Massey, 1995). Not all of these non-commercial outlets are student-run organizations. Many are National Public Radio affiliates that hire professional staffs. Additionally college radio stations can differ greatly from a technical standpoint compared to commercial radio. Some college radio stations are carrier-current operations that never really "broadcast" outside of the building where the studios are located. There are many "Cable FM" college outlets that simply use the local cable company to transmit their signal. Many college radio stations are "underpowered" when compared to commercial broadcasters and only broadcast with a few hundred watts or less.

The college radio playing field has never really been equal to its commercial counterparts, and that difference is by design, both technologically and from a programming standpoint. The FCC has made different rules for college radio stations that has allowed the medium to operate under less stringent guidelines than commercial radio stations. Originally, many college radio stations were 10 watt or less facilities, with operating schedules that were sporadic and lacked consistency. In the early 1980's, the Federal Communications Commission began to make these facilities boost power "in an attempt to make these low power stations more accountable for their operation and to bring them in line with regulations imposed on other FM stations" (Brant, 1981, p. 26).

More recently the FCC has made changes in minimum hours of operation. "All noncommercial educational FM stations are required operate at least 36 hours per week, consisting of at least five hours of operation per day on at least six days of the week" (Rules Service Company, 1994-95, Part 73.561.). The rule also addresses weekends and

traditional vacation times of the official school calendar. The consequence of not adhering to this more "professional schedule" is perhaps a frequency-sharing situation in which an outside community group is allowed to operate (and program) the station, when the college or university normally could not. This is known as a time arrangement (Sauls, 1998b) and potentially could be counter productive to the goals and mission of the university.

Student-run college radio is also different than commercial radio from a programming standpoint (Brant, 1981; Sauls, 1995). Many student-run college radio stations choose to provide their communities with programming that is not available anywhere else in their own particular market. Often this programming is very different from commercial stations. This uniqueness may often lead the radio station staff and audiences to form a sort of "subculture," a following that defines the goals and mission of the station. A factor that helps create this unique college radio "subculture" or "scene" (Straw, 1991) is the relationship with the musicians as well as the small, independent labels that these musicians use to get their product on the air. Often these independent labels are two or three people operations. Many never make a profit, but most have a relationship with college radio that only strengthens the college radio subculture. One particular case was WAXTRAX! records, started in Chicago by a record store owner. Lee (1995) noted that in order for these independent labels to compete against the majors, the perpetuation of the "college subculture" is important. "The goal for the independent label is to make the company name synonymous with a music style, a sound, or a set of artists. Most often, small labels accomplish this by concentrating on a particular style or

genre of music. Several independent labels have attempted to use the records they released as ways of both defining the particular genre and building an identification between music fans, and the music, artists, and the record label itself" (Lee, 1995, p. 50).

An additional factor that makes college radio uniquely different from commercial radio is that a certain sector of the audience actually depends on the medium for career enhancement. It is well established that students are there to build skills that will lead to jobs in the future, but local musicians also depend on college radio. These struggling musicians look to college radio airplay early in their careers to help gain the exposure needed for mass acceptance, and the move to the commercial airwaves (McClung & Wilkinson, 1997b).

Many of the artists and musicians that get airplay on commercial alternative stations grew up on college radio stations. The alternative format, which was once the exclusive domain of college radio, has now gone mainstream. The effect on college radio has been to dig deeper in the search for artists to air. Local artists now get more exposure through college radio and small record companies again, inundate college radio stations with their up and coming acts. With the rise of the alternative format from the non-commercial airwaves to the pop charts college radio has once again been given the job of working with young, obscure, struggling acts.

It is apparent that college radio is different from commercial radio in several different areas. Technologically, the medium has an inherent disadvantage in that many of the stations are low wattage outlets that cannot reach the audience potential of commercial broadcasters. The FCC has made moves to attempt to close the gap some.

The commission has required many of these stations to boost power from ten watts up to several hundred in an attempt to ensure potential for a larger audience. Additionally, these stations have been threatened with a time sharing scheme that would cause many of the stations to actually lose complete control of their frequencies. Many student-run college stations have responded with computerized automation allowing the stations to stay on the air 24 hours a day, all year long. Automation also allows these stations uniformity of programming, and avoids the threat of outside organizations operating on their frequency. College radio also suffers from one other disadvantage that is not so prevalent in commercial radio and that is staff turnover. At best, college stations can plan to keep a certain student-staff member for four years. After all, these are students, and presumably are there to graduate and find jobs.

Despite all of these differences from commercial radio, there is one area that college radio has found equal footing from a delivery standpoint, and that is on the World Wide Web. College radio stations have been putting up Web sites for several years now, just the same as commercial broadcasters. In fact, on the World Wide Web, college stations may even have had an advantage because the server space to construct the web sites, in many cases, is free (Jackson & McClung, 1998) to the college station. Colleges and universities have been working with the Internet for many educational purposes, and development of their radio station web sites was just part of that mission. Currently, at least 197 American colleges and universities have web sites for their radio stations (MIT, 1998) and that number is growing. Apparently these institutions, for whatever reason, are finding value in the horizontal integration of Internet sites with their broadcast outlets.

Despite these disadvantages there is at least one area that college radio has a more equal footing with its commercial counterpart, at least in terms of technological power, and ability to deliver a product, and that is the World Wide Web.

Commercial broadcasters began appearing on the Internet around 1994, and since there has been a rush to get there ever since. However, many of these stations admittedly are just testing the waters, attempting to determine what makes a valuable site, how to best reach an audience, and lastly how to make a profit. While research has been conducted concerning what content broadcasters are supplying their audiences on these web sites (Bates and King, 1995; Bates, B., Chambers, T., Emery, M., Jones, M., McClung, S. & Park, J., 1996; Rosales, R. and Pitts, G. 1997) little has been conducted concerning what audiences want.

Theoretical Constructs

The Uses and Gratifications Approach

The genesis of mass media research can be traced to the beginning of this century and the study was concerned primarily with the political influence of the mass press and later the electronic media, over its audiences. The research conducted during this period, mainly by sociologists, attempted to determine what power the media had over people. These researchers were particularly concerned by those people who may have intended to use the powerful media for potentially sinister outcomes, in other words, for propaganda. This research was considered particularly important just before the onslaught of World War II. The "magic bullet" theory was one of the first communication theories posited in

this period. Herbert Blumler (1939) was one of the first researchers to label the audience as "mass" which he noted was different from the previous terms associated with audiences, such as group and crowd (McQuail, 1994). This line of research was later to become known as the large effects period of mass communication research.

Yet seemingly alongside this large effects research another line of inquiry began to develop. This research didn't deal with effects of mass media rather it concerned itself with what people did with the media. Again, sociologist Paul Lazarsfeld was one of the pioneers in this strain of research. Much of his work was inquiry into market research for radio. By examining the media from this alternative viewpoint, Lazarsfeld (1940), along with Frank Stanton were actually laying the groundwork for what would become the "uses and gratifications" approach. However, it would be years before the research paradigm would genuinely turn from audience effects to audience uses.

Basic assumptions of the uses and gratifications approach state that an active audience uses the media to meet certain needs of the individual. "The uses and gratifications approach has been centrally concerned with the choice, reception and manner of response of the media audience. A key assumption is that the audience member makes a conscious and motivated among channels and content on offer. Another basic tenet (more or less shared with reception research) is that the meaning of media experiencecan be learned only from people themselves. It is essentially subjective and interactive" (McQuail, 1994, p. 318).

While researchers continued to study mostly mass media effects, there were a few researchers in the 1940's that looked at how audiences used the media. Based mainly on

psychological constructs, these studies were contributing to the groundwork that would become the uses and gratifications approach. Cantril (1942) found sets of appeals to audiences in radio quiz programs and each set had unique audience gratifications. Herzog (1944) found that people who listened to daily serials (soap operas) found a number of gratifications in the programs including wishful thinking, emotional release, and even advice on appropriate behavior. Berelson (1949) conducted research with readers of a newspaper, which had ceased publication due to a worker strike, and found both "rational and non-rational" uses like providing information and providing social contacts. As the 1940's closed work was still being done in the area of uses and gratifications research. While this area was not the dominant research area of the period, some work persisted. The foundation that was laid in this decade would serve as a springboard for research in the next two decades.

The time between the late1940's and the early 1960's has been dubbed the "second phase" of uses studies by Blumler and Katz (1974). According to these scholars this period was the adolescence for the operationalization of social and psychological variables that contributed to media use. Many of the studies previous to this period came under criticism because of the weakness of the audience-defined listings of gratifications. This phase marked a movement toward more generalizable typologies. At the end of the 1940's Lasswell (1948) developed a four-function typology for media use. He posited that audience used the media for a surveillance function, i.e., to gather information about what was going in the world. The second typology was correlation, to compare lifestyle and behaviors with those around the media user. The third typology was socialization.

This typology is the interaction with others to provide meaning. Finally, Lasswell named entertainment as the fourth typology of media use. This is the use of media for escape from the daily monotony. Later Schramm (1949) conducted research that suggested a difference between immediate and deferred gratifications and between information and entertainment.

As the decade of the 1950's approached it became evident that the body of work done in the area of uses research was growing, but not fully developed. Much of the research lacked direction and rigor. But what did occur during the 1950's and 1960's was a better development of typologies and a generally more rigorous approach to the research area. The groundwork for a third phase was laid.

The late 1960's and 1970's was a said to be the era of maturity in uses and gratifications research. The core of this era was marked by attempts to use gratifications data to provide explanations of such facets of the communications process with which audience motives and expectations may be connected (Blumler & Katz, 1974, p. 13). Additionally there was an attempt to move the uses and gratifications approach beyond just a work that "virtually disclaims any theoretical pretensions or methodological commitment" (Blumler & Katz, 1974, p. 21). Five important elements were singled out by Katz, Blumler, and Gurevitch:

1. The audience is conceived as active, that is, an important part of the media is assumed to be goal directed.
2. In the mass communication process much initiative in linking need gratification and media choice lies in the audience member.

3. The media compete with other sources of need satisfaction
4. Methodologically, the data are supplied by individual audience members themselves.
5. Value judgments about the cultural significance of mass communications should be suspended while audience orientations are explored on their own terms.

(Blumler and Katz, 1974, pp. 21-22)

With unified, improved concepts and attempts at constructing explanatory models (Rosengren, 1974), the studies in this phase moved the research to a generally higher level of abstraction - uses and gratifications was approaching a more theoretical stature. The period was marked by one of the first studies to indicate that different media provide different gratifications for users. Through the use of factor analysis, Katz, Gurevitch and Haas, (1974) found that different needs are indeed served by separate media. Newspapers served to help audience members with "self confidence" and "self regulation." Movies, television and books contributed to "enjoying oneself" and books showed a tendency to serve in audience members "knowing oneself." Despite the findings of the study, it was also revealed that non-media sources like work, friends, lectures and holidays were said to be more gratifying than the media. The factor analysis that was used in this study was a landmark methodological turning for uses and gratifications research.

Another contribution to this body of research was conducted during the Israeli war of 1973. Peled and Katz (1974) used the opportunity to examine how people use media in a time of national emergency. This study determined that audiences can be extremely active with media use, "People eagerly awaited the explanations of leaders.

They sought relief from anxiety in the media and in conversation. They used the media to participate in the national grief when the time came for mourning," (Peled and Katz, 1974, p. 65). This study revealed that television played a part in *social integration* that would boost a sense of pride in state and army (Peled and Katz, 1974, p. 64). Radio was said to be the most helpful media source, with both television and newspaper also being used as sources of information and interpretation.

Another important addition to this phase of uses and gratifications research was a study of television viewing by British children. Greenberg (1974) found six factors (arousal, companionship, forget, habit, learning, and relaxation) that accounted for variations in television viewing. Other studies were important to this phase of work. McLeod and Becker (1974) did work on testing the validity of gratification measures. Generally the third phase of uses and gratifications research can be identified as the period when methodological and conceptual development occurred, which in turn moved the approach closer to theory building. With more precisely defined typologies and more uniform methodological procedures, the body of research was beginning to solidify. In a field where scholars were working on large effects, there now seemed to be another angle from which to look at the media.

The fourth "phase" of the growth of uses and gratifications research is marked by a movement toward a more theoretical approach to the body of work. This period has been called both a genuinely new phase in uses and gratifications research (Palmgreen, 1984) and merely an extension of the third phase (Blumler and Katz, 1974). Whatever the label, it is this phase of research that directly confronted some of the criticisms of the

approach heretofore - namely the criticism that uses and gratifications was atheoretical (Elliot, 1974), in spite of the methodological refinement the approach had been working toward, and to some degree achieving.

This phase of research seemed to focus on the "active audience" articulation of the uses and gratifications work. One of the assumptions that is central to the fourth phase, and which is essential to gratifications theory, is the idea that the media offer rewards which can be expected (thus predicted) by members of the audience, on the basis of past use and experience with the media. These rewards can be considered as psychological effects which are valued by individuals (McQuail and Windahl, 1993). This is the premise of the expectancy-value approach to media gratifications. Rayburn and Palmgreen (1984) differentiated these two approaches in a feedback model.

> "In general, the model expresses the proposition that media use is accounted for by a combination of benefits offered by the medium and the differential valuation of these perceived benefits. This helps to take care of the fact that media use is shaped by avoidance as well as positive choice, and by the varying degrees of positive gratifications which are expected."
>
> (McQuail and Windahl, 1993, p. 137)

Wenner (1982) was one of the first scholars to examine the operational differences between gratifications sought and gratifications obtained in a study that attempted to predict dependency on the evening news and the CBS weekly (at that time) news magazine 60 Minutes. This study is important because it seemed to suggest that the differences between the two categories of gratifications had some explanatory power in program evaluation (or experience). In this case, Wenner found high correlations for gratifications sought and gratifications obtained for network news, but the correlations

between the two were lower for 60 Minutes. This finding seemed to indicate that the weekly news magazine delivered a different kind experience than what viewers expected from "regular" TV news programs.

During this fourth phase gratification measures grew to be more uniform, and scholars began to examine the relationship between gratifications and media content (Katz, Gurevitch and Haas, 1974). One of the groundbreaking methodological procedures utilized during this period was conducted by Lometti, Reeves and Bybee (1977) who, with cluster and factor analysis, indicated that audiences did not differentiate choices based on content or channel attributes alone. Examining medium and program specific uses in television, Bantz (1982) came to nearly the same conclusions noting that respondents don't easily make the differentiations that researchers may expect of them.

This period was dominated by uses and gratifications research with the medium of television. Although research was being conducted with other media (Towers, 1987; Payne, Severn and Dozier, 1988) the dominant medium being researched from the uses and gratifications approach was T.V.

Although the research on television seemed to lead the study in the field at this time, uses and gratifications for the medium of television were more difficult for researchers to define or explain because of the diversity of the medium content. Again much of the work during this period centered around the active audience, content choice and medium attributes (Greenberg, 1974). A series of studies were conducted by Rubin (1981, 1983) and Rubin and Rubin (1982) that were important in the formation of the survey questionnaire in this study. This is where the diversity of programming in

television and gratifications began to be explained. Rubin (1981) found positive correlations between sports programming and needs for arousal and adventure, while passing time was positively correlated with comedy programming and negatively correlated with news and talk programming. An analysis of the Rubin studies (Rubin, 1984, Rubin and Perse, 1987), building on earlier studies (Jeffres, 1978, Hawkins and Pingree, 1981) found distinct differences in ritualized viewing and instrumental viewing.

Several of the uses and gratifications studies of this era focused on television news. McDonald (1990) found two factors, surveillance, or the ability to monitor the environment of the user, and communicatory utility (seeking information to use in social interaction), contribute to variance in television news watching. The surveillance need was also found in college students' use of the news media (Vincent and Basil, 1997), though students with high entertainment needs were more likely to use television than print for news.

Despite the later trend to examine television, radio use has a long history of examination from the uses and gratifications approach. Early radio studies looked at the appeals of radio quiz programs for listeners each with their own set of gratifications (Cantril, 1942). Herzog, (1944) learned that people who listen to daily radio serials used the programs for wishful thinking, emotional release and advice on appropriate behavior in some social situations. Mendelsohn (1964) examined listeners in a New York City YMCA to find out what uses they had for radio. That study revealed four major reasons, including news and information, mood accompaniment, companionship and release from psychological tension and pressure (p. 264). Radio was found to be the most helpful

source in gathering information in the time of the Israeli national crisis (Peled and Katz, 1974). Dominick (1974) found that younger people, mostly teenagers, use radio as a portable companion. While television has dominated the research from the uses and gratifications approach recently, radio has served as a foundation in this method of inquiry with many of these studies laying the groundwork for television and even Internet use.

As the 1990's close, research from the uses and gratifications approach concerning the Internet is starting to appear in the literature. Uses of television station web site and classic rock radio station web site users (King, 1998, Murphy, 1998) indicates a variety of gratifications including escape, entertainment, and interactivity. Kaye (1998) found that many of the same needs as articulated in the Rubin studies (entertainment, social interaction, passing time, escape, and information), along with web site preference were motivations for using the World Wide Web. This study also revealed that about one-fourth of all respondents in the study report that they are spending less time with traditional media like television, radio, newspaper and magazines, since discovering the web.

The use factors in this research are derived mostly from the Rubin (1983) television use study. That research found that there were two basic television user types: those who used television for consumption and entertainment and those who used television content for nonescapist, information seeking (p. 37). That study revealed a series of motivation sets including relaxation, companionship, habit, pass time, entertainment, social integration, information arousal and escape (p. 41). These sets are

typical of television use and many of the uses were found in previous uses and gratifications studies involving the Internet (Eighmey and McCord, 1998; Eighmey, 1997 Kaye, 1998; King, 1998; and Murphy, 1998). None of these studies examined college radio station web sites; however, Murphy (1998) and King (1998) did look at broadcasting web sites and Kaye makes the parallel between being a "Couch Potato" a term associated with television watching and a "Web Potato" (p. 21).

Even though none of these studies worked specifically with college radio station web pages, inquiry into the uses of the Internet, television and in some cases broadcasting World Wide Web sites does provide a useful framework for uses sets from which to utilize in this study. The adaptation of the Rubin (1983) questions in this study is explained in more detail in the methodology section. The researcher, however, does want to note the origin of the questions used in this research in the literature review phase of the study to provide the appropriate background for this particular research.

Summary

It is clear that new media effect the growth and survival of existing media. Historically there has been a tendency for established media to fight the growth of new media out of fear of losing both audience and revenue. This pattern is well established in the United States where advertising and garnering the largest possible audience is key to the survival of any medium. However, the Internet seems to be a notable exception to this historical pattern. It may be due to the origins of the Internet and the fact that was

never intended to be a commercial medium from its inception. The existing media seem to be adopting the Internet and using it to expand their audience and revenue bases.

College radio is one of the oldest electronic media in this country and has long been known for its experimental nature both technologically and in programming. While student-run college radio stations are plenty in number, there is little evidence to ascertain who uses the medium except for the people who operate the stations, the students on the college campus and those who involve themselves in a music scene that may or may not be associated with the station. Often seen as a training ground for those who want to break into commercial radio, college radio is usually technologically (in wattage) smaller than commercial stations but the staffs of these student-run stations can be very large and younger than commercial operations. The one area where college radio is not technologically inhibited is the World Wide Web. In fact, college radio may have an advantage over commercial radio in this aspect because the space to operate a Web page is often provided free to the station by the host institution and many college radio stations have developed an Internet presence and are garnering an audience.

Uses and gratifications research has developed through the years and has become more theoretical and systematic. Initially the approach was criticized for being atheoretical, but with more unified typologies and statistical elegance, the approach has become an accepted method for determining what uses people have for the media. Many of the assumptions of the uses and gratifications approach conceptually fit well with the Internet. The assumption of an active audience works well with the interactive nature of

the Internet. The typologies developed for uses of television also adapt well to the world Wide Web.

The rise of the Internet may well bring a new era in uses and gratifications research. Two especially productive periods of this work, the early 1970's and again with the Rubin studies in the 1980's, may very well be eclipsed with the rise of Internet use and gratifications scientific inquiry. Scholars are already calling for uses and gratifications studies to be conducted for Internet sites (Morris and Ogan, 1996; Newhagen and Rafaeli, 1998). A new phase of uses and gratifications research may well be at hand and the medium is the World Wide Web.

CHAPTER THREE

Methodology

On-line user research is a new addition to scholarly literature. Very little research exists concerning what users want from media web sites or how they are using the sites. Most of the questions asked in this study are grounded in traditional uses and gratifications approach to media use. Other questions, mainly demographic in nature, have been adapted from the Graphic, Visualization, & Usability Center's (GVU) Surveys. The GVU has been conducting online surveys concerning Internet usage since 1994. In total, GVU has conducted ten surveys, with the last completed in December 1998. The survey used for this study is based in part on the GVU surveys, and surveys used by other researchers in the surveying of classic rock web site users and television web site users (King, 1998; Murphy, 1998).

In an effort to understand the nature of this new medium a new set of questions will appear on this survey that will try to answer questions concerning the social integrative needs as postulated by Peled and Katz (1974). Also, there is a set of questions that deal with the technology of the Internet. This set of questions are an attempt to ascertain what users value from the web site in terms of interactive programs that are

unique to the Internet. These questions focus on the types of exclusive software packages that are found on the World Wide Web, such as audio streaming and WebRing programs.

This online survey is intended to answer the following research questions and hypotheses:

R1 – Who uses college radio station web sites?

R2 - What are the uses of college radio station web sites?

The Hypotheses:

H1 – A significant positive correlation exists between use of college radio web sites for entertainment and time spent on the site.

H2 – A significant positive correlation exists between use of the college radio web sites for information and time spent on the site.

R3 - What do audiences value in college radio station web sites?

These research questions are based on other exploratory research conducted on media web pages (King, 1998; Murphy, 1998) and older uses and gratifications studies (Rubin, 1981; Rubin, 1983). The hypotheses are based on traditional uses and gratifications research with the uses of information and entertainment being two of the most prominent recurring uses for radio in the literature. The final research question is based on exploratory content analysis research on television web sites (Bates and King, 1995; Bates et. al, 1996).

Electronic Survey Program

The survey was conducted by the S-Ware WWW Survey Assistant (Schmidt, 1998). This is an electronic program that creates the HTML coding and CGI scripting to allow the user to actually take the survey on-line. This program collects the survey data and sends it back to a single site where the electronic data easily downloads into a Microsoft "Excel" program. The data are then cleaned and loaded to an SPSS file for analysis.

There was one problematic area with the construction of the survey and this was an area that dealt with the HTML code used to build the survey. Many of the demographic questions were designed with a pull down menu. The survey asked the question and below the question was a window that instructed the user to choose one of the following answers. At that point the user clicked on the menu and a choice of answers would appear. In addition to the answers provided in response to the question, some people taking the survey clicked on the instructions or the "choose one of the following" icon. Unfortunately, the Survey-Assistant counted the directions as an answer to the actual question. Those who did choose the directions were noted in the statistics as "invalid answer." Each table has some invalid answer responses. This flaw in the HTML program is the origin of the invalid responses counted in the data sets.

Stations Participating in the Survey

In order to obtain a population of college radio stations with web sites, a set of lists was gathered from World Wide Web sites that compiled stations with web pages and

stations were contacted via listserv. Four listservs were used to contact college radio stations and advisors for participation in the study. The Broadcast Education Association, a group of academics and professionals for the betterment of broadcasting education, main listerserv was used, along with the B.E.A. Media Advisor listserv to contact stations. In addition to these, The National Association of College Broadcasters listserv was used to contact station advisors and webmasters for participation. It is important to note that shortly after using the NACB listserv to contact stations, the organization as a unit fell into disarray and disorganization. Many colleges and universities that had participated in the NACB dropped out after there were resignations from the NACB front office, and station defections from the organization. Still, some stations agreed to be part of the survey, despite the impending collapse of the NACB at that time. The final listserv used to contact stations was the College Radio-Listserv (college-radio@list.pitt.edu), a student run organization founded at the University of Pittsburgh. This listserv generally focuses on issues that the student managers and staff of college stations face. Many of the topics are music related and it generally seems that college radio station advisors are not active in the discussions on this listserv.

The second strategy implemented to contact stations was the use of two on-line directories. These directories are on-line lists of radio stations that have web sites. The first site used was "X-Cast" (http://www.inch.com/~jbarker/xcast/) This directory is exclusively college/non profit radio stations that also have an Internet presence. The second list was obtained from The Massachusetts Institute of Technology site (http://wmbr.mit.edu/stations/list.html). This particular site is a directory of radio stations with

web sites regardless of format. For the purposes of this study, only one portion of the M.I.T. directory was used, the college radio/non-commercial section.

Between these two directories a list was compiled of stations from both of the directory sites. Many of the stations on the composite on-line list were not student-run organizations, and were dropped from the list used in this study. Excluded stations included National Public Radio affiliates that were located on college campuses, but run by professional staffs. Community-run stations were also dropped from the final composite on-line list. While these stations represented many outlets on the list, they did not meet the complete profile of a student-run organization. High school stations were also dropped from the final composite on-line list, as the study seeks to focus on college radio stations.

Invitations were sent out via e-mail on the four listservs and 185 stations were contacted individually from the composite on-line list. The stations were sent an invitation letter over a two-week period from July 13 to July 27. The invitation letter was sent to the station manager when that electronic e-mail address was available on the radio station web site. In the absence of a station manager address, the correspondence was sent to either the webmaster, who is responsible for the maintenance of the web page or the site contact address, which is the general contact for the organization. All e-mail correspondence on the listservs was addressed to the station manager or station advisor.

The invitation letter that was sent to stations via the four listservs and from individual invitation is as follows:

Dear Station Advisor,

My name is Steven McClung and I am a doctoral candidate at the University of Tennessee. I am working on my dissertation, Uses of College Radio Station Web Sites: An Exploratory Study. I intend to look at the reasons people use student-run college radio station web sites, and hopefully will uncover uses that can help make this medium stronger and more useful as this emerging audience develops. I am asking for your college radio stations participation in the study. All you will be required to do is put an icon on the main page of your web site; this icon will lead users to the survey. I will provide the HTML code, so it is a simple matter of cut and paste. This method has been used by other researchers here at Tennessee with positive results. The survey is set to begin on September 9, and run through October, 21. In exchange for your participation, I can provide some data given by users of your web site (all of the responses that do not in any way jeopardize the users confidentiality/anonymity). So far, about 25 stations from around the country have agreed to participate in the study. A list of those stations can be found at:

http://web.utk.edu/~smcclung/stations.html

I look forward to hearing from you and look forward to your participation in this important study. If you have any questions, please contact me at smcclung@utk.edu.

Thank you,
Steven.

An effort was made by the researcher to include a diversity of stations with web sites including geographical location, institution size, market size and institutional mission. In other words, the stations that were contacted represented stations located in all areas of the country, both large and small colleges including private institutions and public, land-grant schools. Additionally, an effort was made to contact stations in large and small media markets. Ultimately the researcher had no control over what stations decided to participate, but for the sake of "representativeness" institutions from all of the above categories were invited to participate in the study.

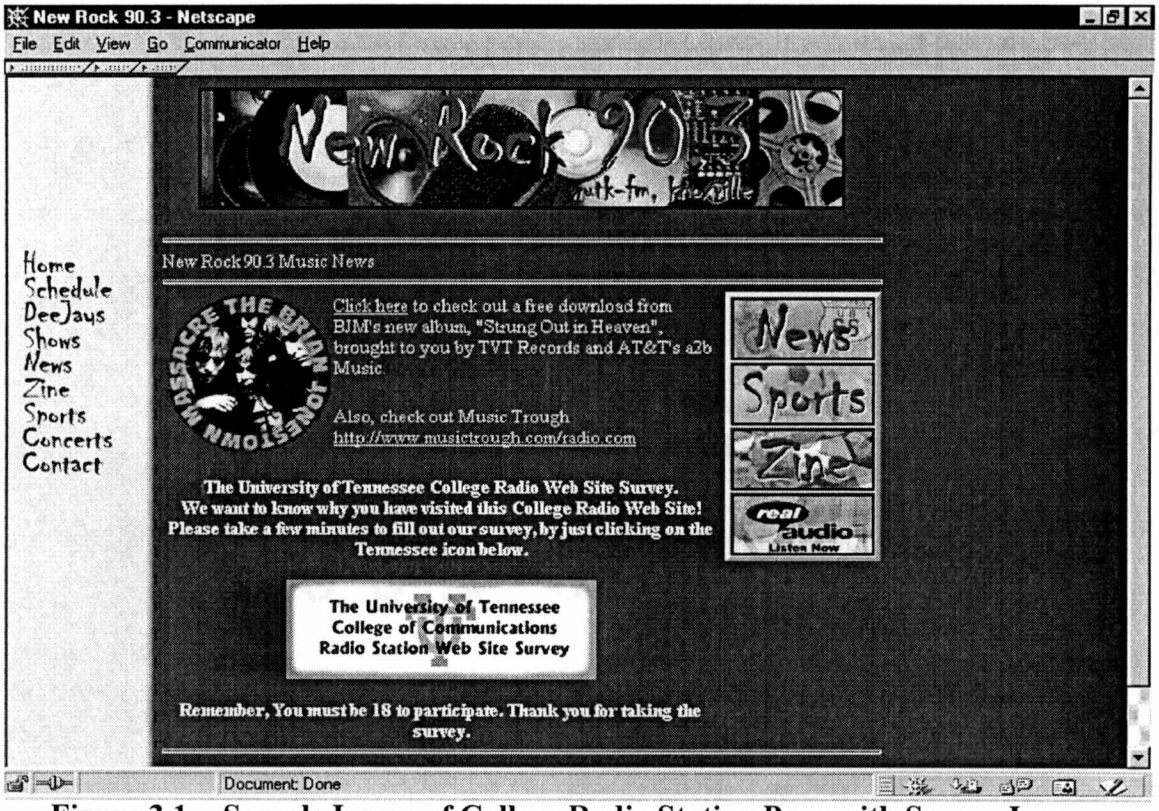

Figure 3.1 - Sample Image of College Radio Station Page with Survey Icon.

College stations were asked to put an HTML code on their homepages (See Figure 3.1). The code was a banner that asks users to take the survey. When the patron clicked on the survey icon at the college radio site, the user was sent to a consent page where they were required to verify that they were at least 18 years of age. This consent form (See Figure 3.2) was required by the University of Tennessee, Knoxville Office of Research as part of their human subjects compliance code. The consent page is a safeguard to try to ensure no minors participate in the survey, which would be a violation of the University of Tennessee Office of Research guidelines. While at the consent page, the user had the option of taking the survey or going back to the college radio station web site.

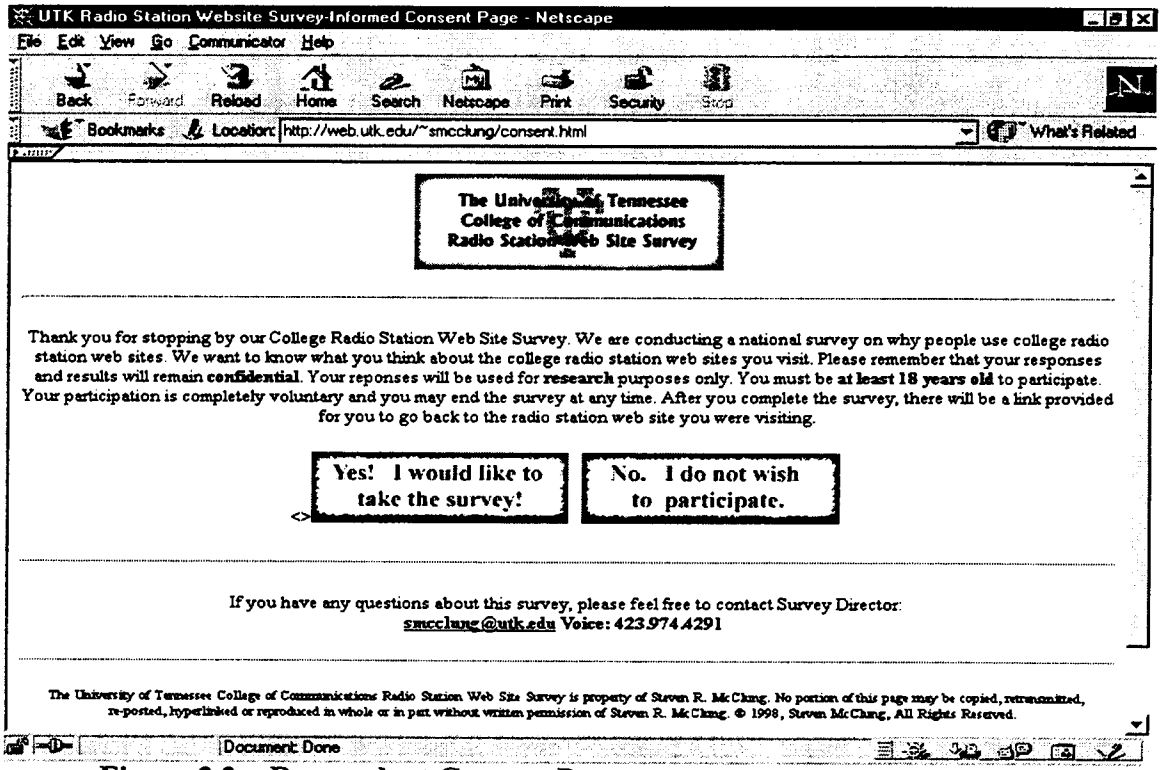

Figure 3.2 – Respondent Consent Page.

A six week period was taken between the July 27, 1998 and the start of the data collection period, September 9, 1998, to organize the stations and correspond with the managers and webmasters the details of the study. In the six week period between July 27, and September 9, the researcher corresponded with the station personnel to answer questions about the survey and to explain the survey procedure to the stations that chose to participate in the study.

The beginning of the data collection period of September 9, was chosen by the researcher for several strategic reasons. First, this period is after the Labor Day holiday, which fell on September 7, 1998. This holiday traditionally marks the return of the school semester for many colleges and universities around the country. This date also

allows for those colleges on the quarter system to have ample time to participate in the survey. Many colleges on the quarter system start classes later in the calendar year than those on a semester system. Second, September 9 was chosen to allow the stations enough time to consider participation after "updates" were made to the site for the beginning of the new year. In other words, the date gave many of the colleges the chance to update their sites for the new semester, and then add the survey icon to the updated site, rather than leave the icon on a site that was not going to be used. Finally, this date was chosen because of what was perceived to be a high traffic time for college radio station web sites because of the return of students to campus after the summer break.

In all 41 stations originally agreed to participate in the College Radio Web Site Survey (Table 3.1). However, some stations were unable to fulfill that obligation and the final list of stations dropped to 26. Those 26 stations were the initial participants in the study. However during the six-week period from September 9, to October 21, three stations joined the data collection process in progress. These stations either had difficulty placing the HTML code on their respective sites or had difficulty in getting clearance from university administration to participate in the study. In one case a station joined the data collection period late because the server at the university crashed, and the site was temporarily inoperable (Stephen F. Austin University).

One station web site was not actually a college run facility. "V-Rock" in Streetsboro, Ohio was actually run by the county school system. The station was staffed with high school students and was allowed to participate in the study after examining the profile of the station, the mission of the station and after a consultation with the advisor

Table 3.1 - Participating Stations/Colleges.

College/Station	Market	Arbitron Market
University of Evansville	Evansville, IN	
Marshall University	Huntington, WV	139
Streetsboro Schools	Streetsboro, OH	
Clemson University	Clemson, SC	
University of Kansas	Lawrence, KS	
University of Minnesota	Minneapolis/St. Paul, MN	14
Doane College	Crete/Lincoln, NE	
Oklahoma Christian University	Oklahoma City, OK	53
Wisconsin-Stevens Point	Stevens Point, WI	159
John Carroll University	Cleveland, OH	23
Tulane University	New Orleans, LA	39
University of Vermont	Burlington, VT	
Illinois Wesleyan University	Bloomington, IL	228
University of Tennessee	Knoxville, TN	68
West Chester University	West Chester, PA	
Northwestern Oklahoma State University	Alva, OK	
Stephen F. Austin University	Nacogdoches, TX	
Ithaca College (2 stations)	Ithaca, NY	
University of Hartford	Hartford, CT	
Saint Cloud State University	St. Cloud, MN	
University of Maryland	College Park, MD	
Northeast Louisana University	Monroe, LA	
University of Northern Colorado	Greeley, Co	
Bucknell University	Lewisburg, PA	
University of North Alabama	Shoals, AL	
Fairleigh Dickinson, University	Teaneck, NJ	
George Mason University	Washington, DC	

of the station. The V-Rock site accounted for only 18 of the 568 completed surveys. For the six-week period a total of 26 stations posted the survey icon for various amounts of time. However, for the duration of that period, 24 stations were full-time participants in the study. In an attempt to allow stations that were not able to participate for the full six weeks, stations were given the option of keeping the survey icon on the main page of the radio station for a month after the data collection period officially ended. Stations were not required to participate in this post-data collection period. Seven stations opted to participate in this later data collection period, but length of participation was not tracked by the researcher. However data did continue to be collected, although at a much slower pace than in the official data collection period. In all, 41 additional completed surveys were collected as a result of extending the data collection period.

Self -Selecting Sample

Scholars and researchers are beginning to better understand users of the Internet, and how many users are actually online. However, there is no "central" user bank and there is no way to reach every user, especially the narrow target population of those who visit college radio station web sites. The goal of this study is to determine why people use college radio station pages. Since there is no need to generalize to web users at large, there is no need for a random sample or the use of inferential statistics in this study. A random survey would be unreasonable and economically unfeasible, and would probably do little to help understand why users of college radio web sites spend time on the sites.

A self-selecting sample will be used in this study. There is, of course, a bias inherent in self-selecting samples, because the results collected here cannot be generalized to the total population of Internet users. However, as stated before, that is not the goal of this research. This study is targeting people who use college radio station sites. It should also be pointed out that the self-selecting bias in this study is similar to the widely used method of the mail survey, where "respondents can easily refuse or fail to respond" (Alreck & Settle, 1985). "Self-selection occurs when the entities in the sample are given a choice to participate. If a set of members in the sample decides not to participate, it reduces the ability of the results to generalize to the entire population. This decrease in the confidence of the survey occurs since the group of that decided not to participate may differ in some manner from the group that participated,"(Pitkow, 1998, p. 17).

Despite this bias, the GVU has successfully used this methodology for all ten surveys conducted to survey Internet users and as explained before this method is the most appropriate and reasonable for reaching a narrow target population like college radio web site users.

> "The Internet presents a unique problem for surveying. At the heart of the issue is the methodology used to collect responses from individual users. Since there is no central registry of all Internet users, completing a census, where an attempt is made to contact every user of the Internet, is neither practical nor feasible financially. As such, Internet surveys attempt to answer questions about all users by selecting a subset of users to participate in the survey. This process of determining a set of users is called sampling, since only a sample of all possible users is selected."
> (http://www.gvu.gatech.edu/user_surveys/survey-1997-10/#methodology, p. 4)
> (Pitkow, 1997)

It is important to recognize the limitations to the self-selection sampling process. First, self-selection is a non-random procedure and arguably may not be generalizable to the entire population of Internet users or college radio station web site users. It is understood that the self- selection process has these limitations. However, the methodology employed here will at least ensure that the target audience of online users of college radio station sites will be reached, because the user will actually have to access the a college radio station web page before engaging in the survey process. On-line surveying is in its infancy, but currently this is the most economic, reasonable and efficient methodology available to reach the audience desired for this study.

There is also the issue of truthfulness in on-line surveying (Sellers, 1999). On problematic area in Internet inquiry is the ease of deceit by survey respondents and those who create Internet content. "Media systems provide what scholars call 'transmission of culture' and 'surveillance of the environment.' The value of information, both individual and societal, depends on its neutrality. Simply put, accurate, honest information is needed to make good decisions,"(Sellers, 1999, p. 1). In the environment sometimes referred to as the "wild, wild, Web," honesty is an issue and is an issue in this, or any, on-line survey since at this point in Internet surveying, accuracy and honesty are not easily checked.

This issue has been dealt with by actually using college radio station web sites as the origination point for the survey response. In other words, by placing the survey icon on the actual college radio Internet site, there is some reasonable assumption that the person completing the survey was actually using the site. Secondly, in the questions

asked pertaining to sensitive or personal information, the respondent is given the option of not answering the question. "I'd rather not say" is an option given to the respondents to try to prevent having the respondent giving a false answer in order to avoid embarrassment. These strategies may not completely deter a survey respondent from lying about information; however, this can be seen as a reasonable measure to try to prevent any deceitful or misleading answers that may be checked by those who are being surveyed.

Survey Design and Construction

The survey is grounded in the uses and gratifications research that has been conducted concerning media for many years, primarily research conducted in television uses (Rubin, 1981, 1983). The survey used in this study is also based on and adapted from several previous online surveys (Pitkow, 1998; King, 1998; Murphy, 1998). In addition to the five television viewing motivations identified by Rubin (1983), of information, entertainment, companionship, escape and passing time, this study also seeks to examine uses identified as the area of personal integrative functions (Peled and Katz, 1974). This survey also used demographic questions taken from the GVU on-line survey (Pitkow, 1998). In order to develop a better understanding of what users wanted specifically from college radio stations web sites, two focus groups were also conducted to help ascertain questions that may have been useful to the survey.

The basic uses and gratifications questions used by Rubin are used in this study to determine why people use college radio station web sites. These questions are expected

to factor in the five areas of entertainment, social interaction, passing time, escape and information. While web sites are not television, there are similarities between the two that have led researchers to investigate web site use based on television uses and gratifications research (Kaye, 1998; Morris and Ogan, 1996; Newhagen & Rafaeli, 1998). "Watching television can be a solitary or social activity. Escapism including getting away from family and friends, and social interaction have both been identified as motivations for watching television," (Kaye, 1998, p. 27). And while patrons normally use computers as a single user, that, as Kaye notes, (p. 27) may be changing with the introduction of Web TV and other programs that make computer use a more social activity.

The majority of the questions in the survey used in this study reflect the work of Rubin and the uses and gratifications work done with television research. However, as noted, although there are similarities between the World Wide Web and television, they are not the same medium. The questions in this survey were modified to suit the study being conducted for college radio station web sites. For this study, the words "college radio station web site," "web site," "page," or "WWW site" were used instead of the word "television," which was used in the original studies.

The social integrative needs (Peled and Katz, 1974) are needs to strengthen contact with family, friends and the world. In the case of college radio stations it may be that people use these pages to strengthen contact with the college or university that was once an integral part of their lives. These questions appear in the survey as inquiry into

whether the college radio station web sites help in any way to strengthen the users ties to the university or make the patron feel like he or she is back on the college campus.

This need was explored in this study, based on evidence that was anecdotally provided in the previous studies. Murphy (1998) identified many users who visited radio station web sites because they wanted to "feel like they were back at home" (p. 166). This set of questions was intended to determine if that need existed.

The questions shown in Table 3.2 are questions based on previous uses and gratifications research. This portion of the survey is constructed on a seven point-Likert-type scale that asks the respondent to what degree he or she agrees or disagrees with the question asked.

Care was taken in construction of this portion of the survey to ensure the responses resembled interval level options for the respondents. In other words, no value other than the polar ends of the scales was attached to the respondent options. Some scientists question the validity of using this type of data as interval level. However, this type of measurement has historically been employed in uses and gratifications research (Katz, et al., 1974; Rubin, 1983). Since this battery of questions in particular is based on previous uses and gratifications research, it is assumed to be appropriate to use the Likert-type scale in this study as an interval level measure. The particular use of the polar-labeled question construction assumes the level of user response measures are equal intervals.

Table 3.2 - Converted questions for World Wide Web Use.

I visit college radio station web sites because...
1. I can find concert information
2. I can find information about the music
3. I can get information about campus
7. The site is exciting
8. The site is imaginative
9. I can e-mail the announcers
10. I can chat with other listeners
11. I can communicate with people at the station
12. I can request songs
13. I can sign up for contests
I enjoy visiting radio station web sites because...
17. I can get free stuff from the station
18. I can download pictures
19. I can download text files
20. I like the color scheme
21. The words are easy to read
22. It is easy to navigate (surf) through
24. It has links to other sites I like
Visiting a college radio station web site makes me feel.... (Social Integrative Function)
29. It reminds me of being at college
30. It strengthens my ties to the school
31. It makes me feel closer to campus
32. Like I am strengthening my contact with the school

Clearly the majority of the questions on the survey are uses and gratifications type inquiry. Historically factor analysis has been standard statistical procedure in this approach (Greenberg, 1974, Rubin, 1983), and it is assumed that the procedure is proper in this study. However, factor analysis has come under criticism (Dobos and Dimminick, 1988), suggesting that there is the possibility of "over-factoring" some items as an artifact of many statistical software packages. While this possibility is noted, it is also assumed that the procedure of factor analysis is common practice in uses and gratifications research and is appropriate here.

Many of the questions used in the study are demographic in nature. In order to try to ascertain who is using college radio station web sites, this series of questions was taken from the survey. The majority of questions used in this section of the study are oriented in the GVU eighth survey. This series of questions is an attempt to ascertain a demographic profile of the college radio station web site user and an attempt to determine the type of technology the college radio station web site visitor uses when accessing the sites.

In addition to the series of questions adapted from the GVU, uses and gratifications research and the social integrative needs, there are questions that are unique to this survey. These questions were developed from feedback taken from a focus group and a pre-test of the survey conducted by the researcher. The focus group conducted by the researcher with twelve college students in the summer of 1998, revealed that many potential users may not understand the technical language that is typically inherent to the Internet. This focus group specifically aimed to correct the problems survey takers would

have in understanding the jargon that appeared on an initial draft of the survey. For instance, the focus group revealed that some users did not understand the term "audio streaming," which is the process by which broadcasters sent their over-the-air signal across the Internet.

This problem was solved by using the term "web radio" which was suggested by one of the participants in the focus group. Several terms used in the final survey were determined or adopted by information provided by participants of this focus group. "Webring" was a term that was new to most of the participants of the survey focus group. This term was supplemented by the words "a site that links you to similar sites" on the final survey. This focus group helped the researcher determine what made several jargonistic questions more understandable to the survey user. Generally, these questions developed or modified by the focus group were those questions that were Internet-specific, and not those adapted from the uses and gratifications research.

Finally, a survey pre-test was also used to help understand how users or the survey would understand the questions on the on-line survey. The pre-test was conducted by the researcher using six subjects in a laboratory setting. The subjects used the actual survey that was on-line and hyper-linked to the data storage base. In essence it was a "live run" test which the subjects were participating. The pre-test revealed a critical flaw in the survey and that was web site or host identification. Broadcasters go to great lengths to assist listeners in identifying their stations. Call letters or a station moniker such as "99X" or "WXXX" are repeated as often as possible over the air enabling listeners to identify the station. Typically, the call letters or station slogan is coupled

with the station frequency to further assist the listener in identifying the station. Historically the repeated announcing of the call letters and frequency by radio stations is aimed at those who fill out ratings diaries.

At this stage of the Internet evolution there is no standardly utilized method of measuring users or listeners of radio station web sites, although that technology exists, it has yet to be employed by Arbitron, the company that traditionally measures radio audiences (Ritchell, 1998). Two factors may have caused these page designers to downplay or ignore the importance of call letters on the page as an identifier; the lack of audience measuring technology on the Internet and a segment of the media (college radio) that historically has never been required to cater to audiences with ratings diaries. The pre-test revealed that some users were having difficulty finding or identifying the call letters of the station on the web site. To avoid confusion on the part of the user, a question was also developed to help identify the host of the web site. The question "What college or university web site led you to this survey" was added to the battery of questions in case the user had difficulty identifying the host of the site. By identifying the host of the site as well as the station call letters, there is an added insurance that during statistical manipulation the researcher will have correctly identified the institution participating in the study.

Response Rate

In exploratory research such as this and any survey based research, it is important to calculate the response rate of those who were asked to participate in the survey. While

the technology available to the researcher at the time of the study was not capable of exactly measuring those who were asked to take the survey the researcher was able to get a general indication of the response rate in this study.

Tracking the respondents was not problematic because the S-Ware WWW Survey Assistant tracked the number of completed surveys and kicked out any duplicate responses. Tracking those who did not choose to participate, or were not eligible because of age restrictions was more difficult however. In order to take the survey, respondents were required to click on an icon at the "consent page." If the user declined to take the survey, another icon on the consent page was clicked that led the user back to a list of participating stations to allow him to return to the college radio station site that led him to the consent page. In order to get an indication of the number of participants that either took the survey or declined a digital counter was placed on the consent page. The problematic area with this digital counter is that it is not capable of counting duplicate users. In other words a single user could access the consent page multiple times, and each access would still appear as a unique "hit" (or user) to the consent page. While this counter is not capable of counting re-appearing users, it does give us a rough indication of how many users considered taking the survey, whether the user actually did or not.

Summary

The purpose of this inquiry is to determine the uses and benefits of college radio station web sites. In order to obtain a sample of college radio station web site users, a self selecting sample was used. Although there are problematic issues associated with

this sampling procedure such as randomness, and truthfulness of on-line users (Sellers, 1999), this procedure is the best and most reasonable for the reaching those people who use college radio station Internet pages.

The success of the GVU Internet user surveys and other on-line inquiry indicate that this methodology can be a successful way to reach on-line users of a specific type of World Wide Web site. The methodology described here and utilized in this study is therefore seen as an appropriate tool for determining what uses audiences have for college radio station web sites.

CHAPTER FOUR

Results

Introduction

The purpose of this study is to explore the uses of college radio station web sites. The data collected and presented here is intended to be an exploratory baseline or starting point in uses and gratifications research with college radio station web pages. While much of the data collected in this study is descriptive in nature, it does provide a foundation for further research in the area of college radio and the uses of these Internet sites.

Caution should be exercised when examining the data because, just like the television uses studies of the late 1970's and early 1980's, one cannot simply examine the uses and gratifications of the web. The World Wide Web is not a single entity with uniform content. Like individual television programs that are unique, the content of each individual web site is unique. As Wenner (1982) found, there is a difference in audience uses between a television newscast and a television news magazine (60 Minutes) even though the two are seemingly closely related in content. What may be uses for college

radio Internet sites may not be the same as a sports oriented site or even a commercial radio web site. College radio sites have unique content and the uses for these sites are most likely unique to college radio World Wide Web sites.

Understanding that the uses of these sites are probably unique to college radio sites alone, it is important to ask exploratory questions to build a foundation for further research into both college radio and commercial broadcasting web sites.

The Numbers

In order to reach the desired population of college radio station web site users, college radio stations with web pages were contacted and asked to participate in the study. Stations were contacted through listservs and individually by e-mail. Stations were asked to put a survey icon on the main page of their web sites. The icon was a hyper-link to a consent page where the patron was allowed to make a decision whether to take the survey.

Twenty-six stations agreed to participate in the study for a period of six weeks during the fall semester of 1998. The survey icon remained on the main pages of these sites for the six-week survey period. A supplemental survey data collection was also held after the initial data collection period to allow stations that were not able to participate in the full initial collection period. In the supplemental period, 41 additional surveys were collected.

This method is a self-selecting sample, which has the limitation of not being generalizable. It is true that the results of this research are not generalizable to all

Internet users, however, that is not the goal of this research. The most appropriate method for finding out what patrons of college radio station web sites use them for is a self-selecting sample. By utilizing this method, the people who actually use college radio station web sites make up the sample.

A total of 568 completed surveys were collected. This was the final number from both the initial and supplemental data collection periods. Given the narrow target audience of college radio, the researcher was satisfied with the number of respondents. Although the data collection period was extended for a month, only 41 additional surveys were collected during this period. Stations also had the option of continuing or ceasing to be part of the survey during the extended data collection period. Most stations declined to take part in the supplemental collection period.

One station site, KUOM at the University of Minnesota, accounted for at least 127 of the completed surveys. There could be several explanations for the high number of completed surveys from this one particular radio station page. Possible explanations include the page being hosted by a large university that may have a larger pool of listeners (students) simply because of the size of the institution. Secondly, part of the reason could be that this university is also located in a large metropolitan market (Arbitron market number 14), and would also have more potential users simply because of the market size.

The most likely explanation the for the World Wide Web page of KUOM accounting for nearly a quarter of all completed surveys in this study is that this particular station is an AM outlet that is required to sign off the air between dusk and dawn. When

this station signs off the over the air broadcast, it continues to operate by webcasting. In other words, the station operated over-the-air during daylight hours, and at night, the listeners were directed to the World Wide Web to hear the station being streamed through the Internet. This reason seems to be the most reasonable in explaining the high number of users that completed surveys from this site. Of course, it could have been a combination of all three factors that accounted for the high number of surveys from KUOM.

Response Rate

In an attempt to gather data that would determine a response rate, a counter was placed on the consent page where the user agreed or disagreed to take the survey. While this is not an exact count of how many either decided "yes" or "no," due to the user's ability to leave the page without clicking on either box, it does give an indication of how many people actually were faced with the decision of whether to take the survey.

The figures here may also be inflated somewhat because users that were under the age of eighteen were asked not to take the survey. According to the University of Tennessee Human Subjects guidelines persons under 18 are prohibited from taking the survey. While there was no way to actually prevent users under the age of 18 from taking the survey, they were at least discouraged from participating. Had this not been an issue in this research, the response rate may have been different.

The counter on the page indicated that 1705 people hit the page during the initial data collection period. During the initial data collection period, 527 surveys were

completed. This suggests a response rate of about 32 percent (32.35 %). While this is not an exact response rate for the reasons described above, it does provide a response rate that compares favorably with many mail survey response rates (Singletary, 1994).

R1 – Who uses college radio station web sites?

This research question is a broad-based inquiry into the users of college radio web sites and largely demographic in nature. Many of the survey questions are taken from the GVU eighth, ninth and tenth surveys and are traditional survey-type demographic questions.

Gender

The gender breakdown for the users of college radio web sites was very clear. Seventy-five percent of the users were male, leaving 25 percent female users (Table 4.1). The data suggest that this is, at least currently, a clearly male dominated medium. To compare, this reflects research indicating that 75.8 percent of the people who use Classic Rock radio station web sites are male (Murphy, 1998). It also generally compares favorably to the tenth GVU survey results indicating that 66.4 percent of the users of the World Wide Web are male (Pitkow, 1999). This data also generally reflects the user profile of the Alternative format, which is skewed toward young males and is generally considered to be a derivative of the college radio format (Greene, 1989; Arbitron, 1999; Sauls, 1998b).

Table 4.1 - Gender.

Gender	Frequency	College Radio Web Sites	10th GVU Survey#	Classic Rock Web Sites*
Male	426	75.0%	66.4%	75.8%
Female	142	25.0%	33.6%	24.2%
Total	568	100%	100%	100%

#(Pitkow, 1999) *(Murphy, 1998)

The data is consistent with the general profile of the Internet user at this stage of its development. The fact that the male-female ratio of college radio web site users is nearly identical to those of Classic Rock sites is not surprising. Both are rock-based formats and historically attract male listeners. The difference between Classic-Rock listeners and College Radio listeners may not be in gender, but rather in age.

Age

As indicated previously, there is not much evidence to prove that college radio listeners fit into any particular age category. Most anecdotal evidence suggests a rather young audience. It would seem likely users of college are also younger given the orientation of the staff, music, and musicians which are primarily developing, young artists.

As indicated in Table 4.2 it does appear that the users of college radio web sites are in a young demographic range. In fact the lowest range in the entire age category (18-25 years) accounts for half of all of the survey respondents. This age range is consistent with the typical college age student or recent graduate. While the age range of

Table 4.2 - Age.

Age	Frequency	College Radio Web Sites	10th GVU Survey#	Classic Rock Web Sites*
Invalid response	2	.4	1-16 = 1%	
18 - 25	284	50.0%	16-25 = 17.5%	18-24 = 28%
26 - 34	147	25.9%	26-35 = 29.7%	25-34 = 40.5%
35-40	111	19.5%	36-45 = 23.6%	35-44 = 23.2%
41- 50	0	0%	46- 50 = 9.9%	45-54 = 5.6%
51 or higher	20	3.5%	51+ = 8.9%	55+ = .9%
Rather not say	4	.7%	1.7%	1.8%
Total	568	100%	100%	100%

#(Pitkow, 1999) *(Murphy, 1998)

the college web site user does skew young, that still leaves about half of the users of these sites older than 25 years.

The age range of 26 - 40 also accounts for nearly half of the users surveyed (45.4%, n=258) which indicates that nearly all of the users asked in this survey are under forty years old. Interestingly, no one in this survey fell in the age category of 41-50, and the range isn't even represented in the data printout. Only 3.5 percent of the respondents fell into the age category of 51 years or older. The results here are not very surprising. Most evidence (Thompsen, 1992) indicates that college radio listeners are younger people who are largely of the traditional college and high school student age. That seems to be consistent with the users of college radio station sites.

These data are different from those who use Classic Rock (Murphy, 1998) radio sites in that most Classic Rock site users are in the age range of 25-44 years (63.7%, n=1115). Based on the evidence presented here, the age range of a radio station web site user seems to generally provide a consistent profile of the user of the actual radio station. In other words it appears the users of the sites actually may be listeners of the station.

Race

There is little evidence to indicate the racial breakdown of college radio listeners. However the latest GVU statistics indicate that web users are predominately white (Pitkow, 1999). According to the tenth GVU survey, 87.2 percent of all web users are caucasian and the second largest racial category is Asian at 2.9 percent. At this point in the development of the World Wide Web users are mostly white. The racial breakdown of general American Internet users is also consistent with the racial breakdown of Classic Rock radio station web site users. Murphy (1998) indicates the users of Classic Rock radio sites are also predominately white, making up 87.6 percent of all patrons. Given the racial breakdown of these two groups it is probable that the racial breakdown of college radio station web site users will be consistent with them.

The data indicate that the users of college radio web sites are mostly white which is consistent with the profile of a Classic Rock radio site users and the overall racial breakdown of the Internet user (Table 4.3). Generally, these racial breakdown figures do compare favorably with the GVU tenth survey statistics on race. For instance, the

Table 4.3 - Race.

Race	Frequency	College Radio Web Sites	10th GVU Survey#	Classic Rock Web Sites*
Invalid response	9	1.6		-
White	483	85.0%	88.1%	87.6%
Black	7	1.2%	2.3%	0.6%
Hispanic	3	.5%	.4%	2.1%
Asian	2	.4%	2.1%	0.6%
Native American	4	.7%	.3%	1.7%
Multi-Racial	11	1.9%	1.6%	1.5%
Other	5	.9%	1.4%	1.5%
Rather not say	44	7.7%	2.5%	4.5%
Total	568	100%	100%	100%

#(Pitkow, 1999) *(Murphy, 1998)

percentage of African Americans in the latest GVU survey is 1.9 percent, here the data indicate that 1.2 percent of college web site users are Black. Multi-Racial users of the Internet and college radio sites are also similar at 1.6 percent and 1.9 percent respectively. The only racial category that seems to be of any difference when compared to the latest GVU figures is Asian users. Asians are under-represented in this survey, making up less than a half of percent of college radio web site users and almost three percent of World Wide Web users in general.

Educational Attainment

Logic dictates, and common sense would suggest, that a survey of college radio station web sites would at least have some users that are in college or have some college education. However, there is also evidence to suggest that many listeners of alternative music are high schoolers. Juxtapose that audience with the web audience that tends to be better educated and it makes for an interesting clash of user profiles. Most Internet users have at least some college education, a college degree or a Masters degree. The people who fall into these three ranges account for 80.6 percent of web users according to the tenth GVU survey (Pitkow, 1999). Classic-Rock web site users differ from college radio web site users in educational attainment. There are more users of Classic Rock web sites that have attained just a high school education when compared to users of college radio sites. Almost one fifth (19.5 % n=342) of Classic Rock radio station web sites users do not have any college education. However 71.3 percent of Classic Rock World Wide Web page users have some college or a college degree (Murphy, 1998).

Table 4.4 indicates that about 70 percent (67.9% n=386) of the respondents in this survey have either some college, which may indicate they are currently enrolled, or a college degree. Interestingly, the group that uses college radio web sites seems to be a rather well educated segment of users. Only 13 percent of the total number of surveyed users only completed only grammar school or high school. Conversely, 14.5 percent of the users in this survey held either a Masters degree, Doctoral degree or a professional degree.

Table 4.4 - Education.

Education Level	Frequency	College Radio Web Sites	10th GVU Survey#	Classic Rock Web Sites*
Invalid response	11	1.9%	-	-
Grammar Sch.	3	0.5%	1.3%	1.1%
High School	60	10.6%	6.9%	18.4%
Vo-Tech	18	3.2%	3.1%	7.9%
Some College	200	35.2%	28.5%	37.7%
College Grad.	186	32.7%	33.9%	25.7%
Masters Deg.	50	8.8%	18.2%	4.3%
Doctoral Deg.	10	1.8%	3.8%	1.0%
Professional Deg.	22	3.9%	3.4%	1.2%
Other	5	0.9%	1.0%	1.0%
Rather not say	3	0.5%	-	1.8%
Total	568	100%	100%	100%

#(Pitkow, 1999) *(Murphy, 1998)

The results of this question indicate that the people who use college radio web sites are generally educated people. The data are not surprising here, because it is somewhat expected that users of college radio web sites would either be in college or have a college degree.

Income Level

Generally the income level of World Wide Web users is high. About 70 percent of the users in the GVU's tenth survey have a household income of $30,000.00 or higher and more than 12 percent of web users income is more than $100,000.00 (Pitkow, 1999). The figures for American Internet users also reflects the overall data in the tenth GVU survey, as about one-fifth of Americans (21.4%, n=911) that use the web have a household income between $50,000.00 and $74,000.00. The data collected here indicates that almost one-fifth of college radio web site users have a household income of between $50,000.00 and $100,000.00+ suggesting the profile of a college radio station site user is consistent with the overall profile of the American Internet user.

Income level is often a question that people tend to not want to answer. Almost one-fifth of the respondents (17.3%, n=870) in the GVU tenth survey declined to respond to the question and 20.1 percent of those asked in the Murphy (1998) study did not reveal their income level (Table 4.5). College age students generally do not have a lot of *personal* income but the question asked in this study was *household* income.

The results here indicate that income level of college radio web site users is generally spread out through each range. These results differ from the GVU results in that there is not really any skew to the overall figures. In other words, the income level of the general Internet user seems to be rather high. The income level for college radio page users shows a more consistent representation for each income category. The most disappointing result here is that the category most checked was "I'd rather not say." This

Table 4.5 - Income Level.

Income Level	Frequency	College Radio Web Sites	10th GVU Survey#	Classic Rock Web Sites*
Invalid response	24	4.2%	-	-
Less than $10K	84	14.8%	2.7%	7.1%
$10,000-$19,999	37	6.5%	4.8%	6.3%
$20,000-$29,999	61	10.7%	7.3%	9.4%
$30,000-$39,999	60	10.6%	11.5%	12.7%
$40,000-$49,999	50	8.8%	11.2%	11.2%
$50,000-$74,999	90	15.8%	21.0%	20.0%
$75,000-$99,999	28	4.9%	11.8%	7.8%
$100,000 +	39	6.9%	12.4%	5.0%
Rather not say	95	16.7%	17.3%	20.1%
Total	568	100%	100%	100%

#(Pitkow, 1999) *(Murphy, 1998)

could be due to the general concern for privacy on the web and in survey research in general.

The relationship between the three preceding demographic categories is important to note because at this stage of the evolution of the Internet, the user profile of college radio station web pages closely resembles that of the Internet user in general. The users of college radio station sites are generally male, well educated (some college or more) and are generally fairly well off financially. At this stage of the growth of the Internet it

is not surprising that these data should be somewhat consistent, and the profile of the college radio station web site user may be a reflection of the Internet user in general.

Marital Status

According to the GVU tenth survey (Pitkow, 1999) almost half (47.6%, n=2389) of the users of the World Wide Web are married. Users of Classic-Rock radio web pages closely resemble this status also with 45 percent of those users being married. The second largest category in both studies is users who are single.

Table 4.6 - Marital Status.

Marital Status	Frequency	College Radio Web Sites	10th GVU Survey#	Classic Rock Web Sites*
Invalid response	9	1.6%	-	-
Married	151	26.6%	47.6%	45.0%
Single	335	59.0%	31.8%	39.7%
Divorced	21	3.7%	7.8%	6.7%
Separated	3	0.5%	1.5%	1.2%
Widowed	2	0.4%	1.0%	0.2%
Living with another	27	4.8%	8.4%	5.5%
Rather not say	20	3.5%	1.9%	1.7%
Total	568	100%	100%	100%

#(Pitkow, 1999) *(Murphy, 1998)

Since most users of college radio web sites fall in the age range of 18-25, it is not surprising that the most users in this study would be single (Table 4.6). Again, this will be a demographic clash of users when comparing college radio station page users to Classic Rock radio station site patrons. The profile of the user in this study differs from the marital status of the Classic Rock radio web site users. Nearly half of all Classic Rock radio station web sites are married (45%) while nearly two-thirds (60%) of users of college radio station web sites are single.

Summary

The users of college radio station web sites are predominately young, white males. While the demographics of the Internet user are changing, most users are white males at this point and this survey reflects the overall user profile. The few demographic differences between the general Internet user and college radio station web set users is that college radio station page users tend to be younger, single, and their income level may not be as high when compared to the average Internet user. College radio web site users also tend to be younger and they are less likely to be married when compared to Classic Rock page users. These results are not surprising because of the core audience of college radio stations in general.

R2 - What are the uses of college radio station web sites?

This question is the crux of this research project. Borrowing from the uses and gratifications literature, the first thirty-two questions on the survey were constructed to

assist in answering research question number two. Given that the first third of the on-line questions were designed and adapted to find out the uses of college radio station web sites, this study will deal with this battery of questions first in attempting to answer research question two.

The first questions that will be answered here are the question indices that explained 66 percent of the variance in the factor analysis. Each index is comprised of at least three questions from the survey that attempted to determine why people use college radio station web sites. Although these indices factor together explaining two-thirds of the variance, a factor analysis does not answer the question of how important are these indices and questions to the users. That question has to be answered by examining the mean of each individual question, and the indices as a whole. Answering research question number two will require an examination of both the factor analysis indices and the individual questions.

Factor Analysis

The factor analysis of the uses and gratifications questions used in this survey was implemented in order to determine what questions were indicative of underlying needs that these sites were satisfying. It was also important to use a factor analysis in this study to determine if the research was actually asking the questions the researcher wanted to know concerning the uses of these sites. Among the dimensions of uses like entertainment, information and escape, it was important to establish that the social integrative function of media was being asked. As noted previously, one of the purposes

of this study was to determine if these sites actually reminded the users of their time at a particular college or university. This dimension was seen as important for the funding issue it could present for these pages. If social integration is determined to be an important use for the patrons of these pages, college radio stations may make the argument that additional support is needed for this new medium (Table 4.7).

Secondly, this research wanted to determine if there was a distinction in the term *interactivity* to users. One definition was interaction with the people at the station (Murphy, 1998) and the other was interaction with the actual page (Eighmey, 1997). A factor analysis would help in making sure the questions asked made that distinction by separating the questions that comprise these two individual but similar factors. Finally, the researcher wanted to determine if the other traditional factors of uses and gratifications were would also apply to college radio station web site use. The questions were attempting to ask the users whether they were using the sites for things like entertainment, information and escape. A factor analysis of the questions would enable the research to determine if the questions asked in the survey could reveal underlying factors guiding college radio station web site use.

Many of the traditional use factors are common throughout the uses and gratifications literature. The use factors expected to be found in this study are similar to those uses found in the Rubin (1981, 1983) studies of television uses. Factor dimensions in that study include passing time, escape, information, arousal, habit, companionship and social interaction.

Table 4.7 - Uses and Gratifications Labels.

Questions Concerning Television Use (Rubin, 1983, p. 41).

RELAXATION
1. Because it relaxes me.
2. Because it allows me to unwind
3. Because it's a pleasant rest

COMPANIONSHIP
1. So I won't have to be alone
2. When there's no one else to talk to or be with
3. Because it makes me feel less lonely

ENTERTAINMENT
1. Because it entertains me
2. Because it's enjoyable
3. Because it amuses me

INFORMATION
1. Because it helps me learn things about myself and others
2. So I can learn to do things which I haven't done before
3. So I could learn about what could happen to me

ESCAPE
1. So I can forget about school or other things
2. So I can get away from the family or others
3. So I can get away from what I'm doing

Questions Concerning Classic Rock Web site Use (Murphy, 1998)

FEELS GOOD TO KNOW THE STATION/COMPANIONSHIP
1. It makes me feel like I know the radio station
2. It makes me feel good about the station
3. They have information about the people who work at the station
4. They always give me a reason to visit the site.

DOWNLOADING
1. I can download audio clips from them
2. I can download video clips from them
3. I can download pictures from them

Table 4.7 (contd.) - Uses and Gratifications Labels.

INTERACTION (WITH PEOPLE AT THE STATION) 1. I can send the deejays e-mail 2. I can request songs 3. I can voice my opinion to the radio station 4. I can sign up to win contests.
Questions Concerning Web Site Use (Eighmey, 1997) INTERACTION WITH THE PAGE (NAVIGATION) 1. The text in this web site was well written 2. The pages of this web site made good use of color 3. This web site had an innovative feel to it 4. I enjoyed exploring the feature of this web site 5. The web site was too complex. I wasn't sure what was going on. 6. It took too much effort for me to figure out this web site.

Table(s) 4.7 feature the original questions from the various uses and gratifications research that were the basis of the questions used in this study. Many of the questions were changed to adapt to college radio web pages, but the original theme of each set of questions remained intact even though they were adapted for this medium.

Two factor analyses were run on questions 1 through 32 of the survey. The first did not limit the number of factors that could come up (Table 4.8). In other words there was no limit to the number of factors the statistical package would determine. The first factor analysis indicated that seven factors were explaining about seventy percent of the variance. This analysis determined that more than a third of the variance was explained by one factor, Interaction with the staff/people at the station (Table 4.9).

The total variance explained here indicates that there were two repeat categories explaining variance (interaction with people and interaction with the staff) which is suggestive of over-factoring, a criticism of the SPSS computer program (Dobos and Dimmick, 1988). Although these repeat factors (items 6 and 7) had Eigen values of more than one, which is the generally accepted level for factor consideration, the factors did very little in contributing to total variance explained and some of the question cross-loaded with other factor categories. The two factors explained only 3.6 and 3.5 percent of the variance respectively. Given the low levels of variance explained by these two factors, the researcher thought it important to execute another factor analysis limiting the number of factors available to six. Limiting the potential factors may help prevent over-factoring by the computer program (Table 4.10).

Table 4.8 - Factor Loadings with Seven Factors.

	FACTOR	FACTOR	FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
Question	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Q17	.678			.209			
Q13	.645						.339
Q19	.637	.222				.250	
Q18	.628					.223	
Q1	.495		.204		.267		
Q3	.493	.219					
Q10	.488						.455
Q24	.467		.228		.217	.319	
Q2	.433		.241		.299		
Q25	.343		.257		.339	.277	
Q30		.910					
Q31		.895					
Q32		.877					
Q29		.674					
Q4	.343	.469					
Q7			.834				
Q8		.203	.743			.206	
Q6			.736	.284	.233		
Q15				.824			
Q14				.794			
Q16			.234	.667			
Q5			.381	.408			
Q27		.232	.252	.215	.758	.208	
Q26		.267			.747		
Q28	.215	.322			.578		
Q21	.335			.213		.730	
Q20	.380					.668	
Q22	.299		.216	.203	.228	.628	
Q23	.284		.348		.365	.378	
Q11	.237		.201				.778
Q9	.284						.733
Q12	.456						.474

Extraction Method: Maximum Likelihood.
Rotation method: Varimax with Kaiser Normalization

Table 4.9 - Total Variance Explained (seven factors).

Component	Total (Eigen Values)	Percent of Variance	Cumulative Percent
1. Interaction with People (staff)	11.754	36.731	36.731
2. Social Integration	2.886	8.958	45.688
3. Interaction with Page	2.138	6.682	52.371
4. Escape	1.908	5.963	58.334
5. Companionship	1.491	4.659	62.993
6. Interaction with Page	1.154	3.605	66.598
7. Interaction with People	1.125	3.515	70.113

Extraction Method: Maximum Likelihood.
Rotation method: Varimax with Kaiser Normalization

The factor analysis limiting the potential factors to six seems to give a better overall explanation of the variance in these indices of questions. It appears that some over-factoring may have taken place with the initial execution of the factor analysis. As suggested in Table 4.10, there are fewer questions in the limited (six) factor analysis with cross loadings. While the researcher thought it important to run a factor analysis under both conditions, it appears that the second execution of the factor analysis limiting the indices to six is the better analysis of the battery of questions and will be subsequently used in this study (Table 4.11).

Table 4.10 - Factor Loadings Limited to Six Factors.

	FACTOR	FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
Question	**1**	**2**	**3**	**4**	**5**	**6**
Q13	.704		.223			
Q12	.676					
Q10	.664					
Q9	.655					
Q11	.638			.246		
Q17	.559		.303		.210	
Q19	.451	.226	.448			
Q18	.444		.419			
Q3	.421	.223	.320			
Q1	.391		.328			.237
Q2	.383		.312	.217		.266
Q30		.909				
Q31		.859				
Q32		.867				
Q29		.674				
Q4	.366	.471				
Q20	.258		.736		.200	
Q21	.266		.734		.240	
Q22	.245		.663		.208	
Q23			.488	.320		.330
Q24	.355		.478			
Q25	.249		.416	.250		.303
Q7			.216	.826		
Q6				.744	.271	.229
Q8	.228	.202	.274	.739		
Q15					.828	
Q14					.739	
Q16				.232	.666	
Q5				.387	.400	
Q27		.228	.273	.250	.208	.751
Q26		.264				.741
Q28	.251	.320	.244			.570

Extraction Method: Maximum Likelihood.
Rotation method: Varimax with Kaiser Normalization

Table 4.11 - Total Variance Explained (six factors).

Component	Total (Eigen Values)	Percent of Variance	Cumulative Percent
1. Interaction with station	11.745	36.731	36.731
2. Social Intergration	2.866	8.958	45.688
3. Interaction with the page	2.138	6.682	52.371
4. Entertainment	1.908	5.963	58.334
5. Escape	1.491	4.659	62.993
6. Companionship	1.154	3.605	66.598

Extraction Method: Maximum Likelihood.
Rotation method: Varimax with Kaiser Normalization

Factor One: Interaction with the Staff/People

Factor index one consists of five questions (9, 10, 11, 12 and 13) and is the series of questions that ask about interaction with the people at the station and other listeners. This factor explains 36.731 percent of the variance as determined by the factor analysis. The five questions that comprise this index are questions 9 through 13 (Figure 4.1).

This series of questions deal with the users ability to interact with the people at the station, other listeners, and the people who program the station or are in charge of contests. In other word this interactive index reflects how users communicate with *people* who are involved with the station. This was one of the interaction variables this researcher was examining to help explain some of the uses of college radio web sites. While the index did help explain the most variance in the factor analysis, it appears that this index is not too terribly important to the users of the pages.

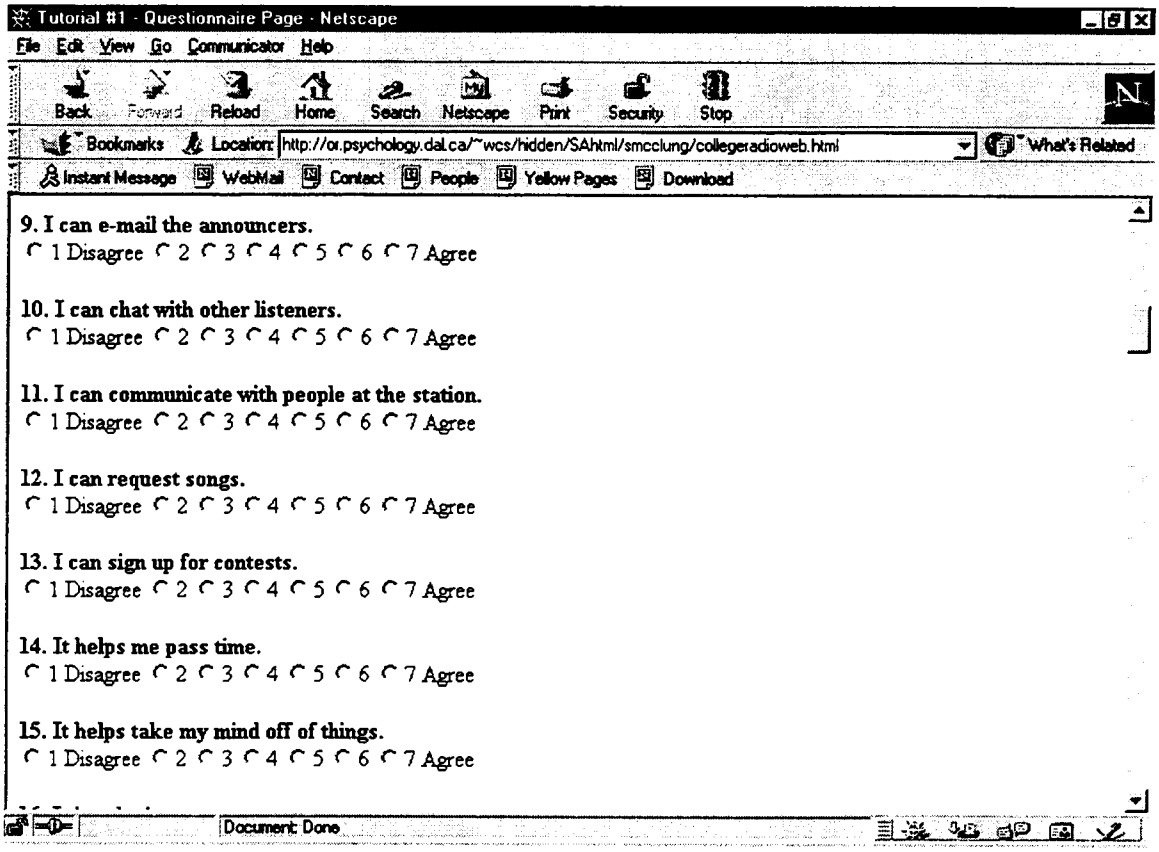

Figure 4.1 – Factor One Questions.

Table 4.12 - Factor One: Interaction with the Station People/Staff.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Q9	568	1.00	7.00	3.8750	2.2318
Q10	568	1.00	7.00	2.4683	1.8476
Q11	568	1.00	7.00	3.9718	2.2418
Q12	568	1.00	7.00	3.7324	2.3902
Q13	568	1.00	7.00	3.1761	2.2216
Valid N (listwise)	568				

Alpha Level = .8548, N of Items = 5.

The means of these questions range from 2.4 to 3.9 on a scale of seven (Table 4.12). While the evidence suggests that question 10, chatting with other listeners, does not seem to be important to the users, the other means seem to gather around the 3.8 area, which is still below the center of the scale. This may be interpreted to indicate that while interacting with other people at the station is indeed a use of the college radio sites, it just may not be particularly important for these users.

These results compare favorably to the interaction means of Classic Rock radio site users, with the means of the questions in that study for the interaction index also gathering around the middle of the scale (3 on a 5 point scale) (Murphy, 1998).

Factor Two: Social Integration.

Social Integration is the need to feel close to home or those people or entities that people may have allegiances toward. The Social Integrative function was a clear use of media use in the Peled and Katz (1974) study of Israelis use of media in time of national emergency. This study revealed that television played a part in social integration that boosted a sense of pride in their state and army (p. 64). Murphy (1998) noticed that many users of Classic Rock radio station web sites remarked that they used the site to stay close to home, or catch up on what's going on back home. However, Murphy did not test for this use in that particular study.

This study attempted to determine if there was a social integrative function for users of college radio web sites. The factor analysis revealed a clustering of questions that were adapted from Rubin, indicating that the social integrative function index was

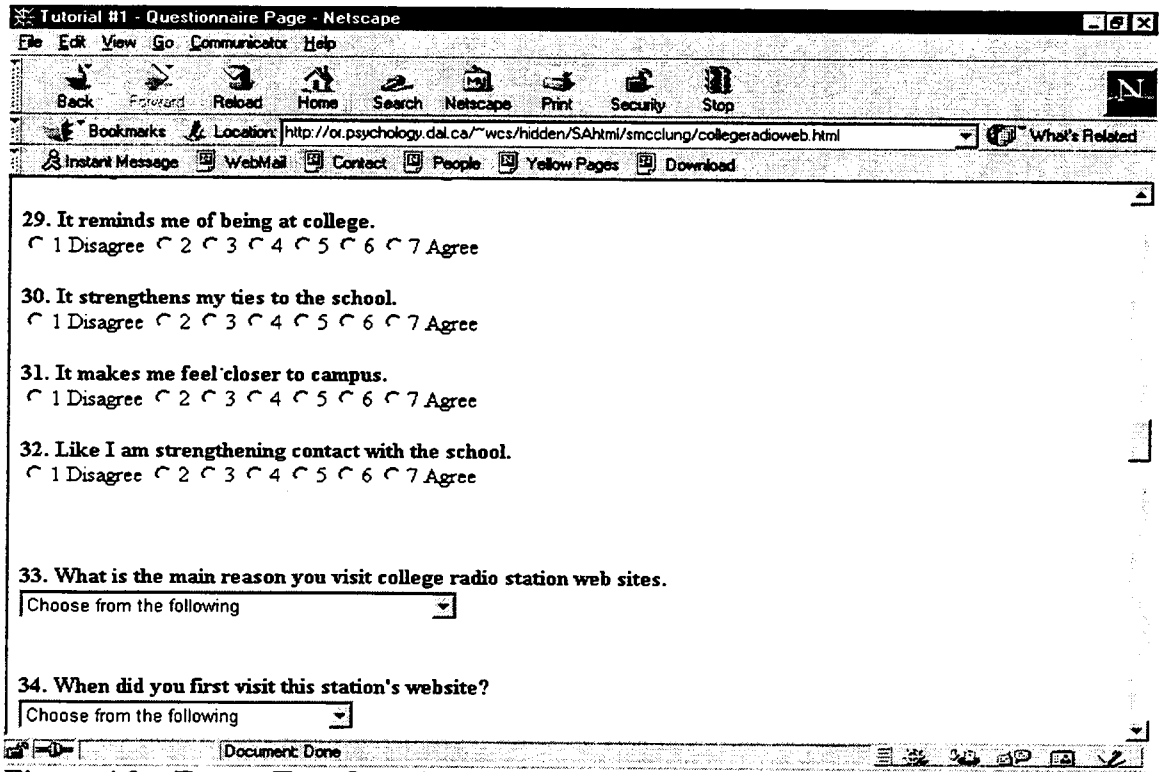

Figure 4.2 – Factor Two Questions.

explaining part of the variance (8.958 percent). Questions 29- 32 comprise the social integrative function index (Figure 4.2).

It is important to determine if college radio station web sites perform the social integration function because of the funding opportunity it could present for college radio stations. If people are using these sites to feel closer to the college or university, the radio stations may be able to make a case for more funding from the university to help upgrade the sites to help keep alumni closer to the school.

The mean response in each question gathers around the center of the scale (4) and, like the interaction (people) index, indicating that the social integrative function is apparently a use of these sites (Table 4.13). This may not be, however, an extremely

Table 4.13 – Factor Two: Social Integration.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Q29	568	1.00	7.00	4.2359	2.2780
Q30	568	1.00	7.00	3.8451	2.2919
Q31	568	1.00	7.00	3.8345	2.2842
Q32	568	1.00	7.00	3.6725	2.2424
Valid N (listwise)	568				

Alpha Level = .9302, N of Items = 4.

important use to the site patrons. Users do indicate that college radio web sites remind them somewhat of being at college, as asked in question 29 (mean = 4.23, N=568), but for the other questions the means gathered just below the center of the scale. Again, the social integrative function is apparently a reason people use college radio station web sites, but not a particularly important reason, according to these results.

Factor Three: Interaction with the Page.

This factor is unique to the Internet and new in uses and gratifications research. This factor deals with the users ability to navigate through the site, which is commonly called surfing, and how aesthetically pleasing the site is to the user. Issues such as color scheme, ease of use, ability to read text, and site construction are all part of what makes Internet page design an important facet of this medium.

The ease of navigating a site and making a site visually appealing are important factors in making a site successful, especially commercially oriented sites (Eighmy, 1997). It is also a factor that makes this medium different from other electronic media; the user, to some degree, is more involved and empowered on the Internet. Sites that

accommodate ease of use are usually preferable to patrons, especially those who are novices to the web.

Three questions made up this factor and explained 6.682 percent of the total variance; questions 20, 21 and 22 (Figure 4.3). These questions all deal with the look and navigability of the page. As explained earlier, this is a unique facet of this medium. The Internet is by nature user interactive and requires that most users work with a mouse or a keyboard to use the medium. Frequently patrons have to use both tools to navigate the web.

These three questions also point out that, apparently, interaction with the page identifies a factor of college radio station sites, but again, not that important overall. Question 22, "surfing through the site," has a mean above the center of the scale which suggests that people do like to navigate through these sites. However, the other questions have mean below the center of the Likert scale on the survey (Table 4.14).

College radio sites are made to help the overall operation or promotion of the station and while the sites can be entertaining and informative, these results may suggest that apparently they may not be designed to be "fun" for the users to navigate through. With novice web site designers creating these sites, navigational ease may be an issue for the users of these pages. Lack of experience on the part of the students who make these sites may contribute difficulty in page interaction.

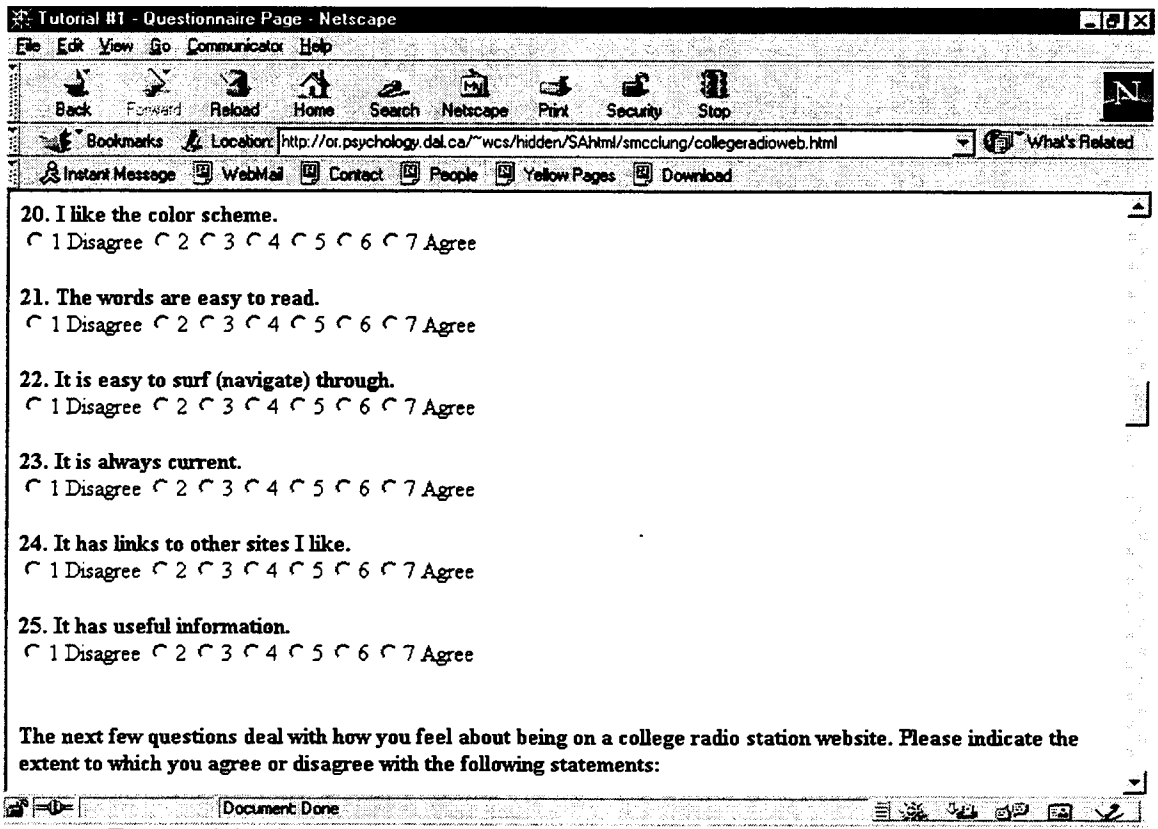

Figure 4.3 – Factor Three Questions.

Table 4.14 - Factor Three: Interaction with the Page.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Q20	568	1.00	7.00	3.0475	2.0769
Q21	568	1.00	7.00	3.4736	2.2029
Q22	568	1.00	7.00	4.2729	2.1359
Valid N (listwise)	568				

Alpha Level = .8758, N of Items = 3.

Factor Four: Entertainment.

Factor four, entertainment, is one of the traditional uses of media and has appeared in much of the Internet research as a use of this medium as well as appearing as a common use for television and radio. Many Internet sites are purposely designed solely for the entertainment of the user. Sites that pertain to music and sites that are homes for rock artists are primarily built for the entertainment of the fans.

Entertainment has been identified as a use for Classic Rock radio sites and many of the sites have music clips and tour information for the artists that receive airplay on their stations. Considering that college radio is a very music oriented medium, it seems logical that the web sites of these stations would be entertaining, especially for the core fans of the artists that typically appear on the college radio charts.

The entertainment factor overall accounts for 5.963 percent of the total variance explained. Three questions (6,7 and 8) make up the entertainment factor (Figure 4.4).

Of all of the previous factors examined to this point, entertainment seems to be the one that patrons clearly indicate as an important use for college radio sites. Each question mean is above the center of the scale (at 4 on a seven scale) and question six (mean = 5.1317, N = 568) asking if the site is entertaining has the highest mean of the three questions in the index (Table 4.15).

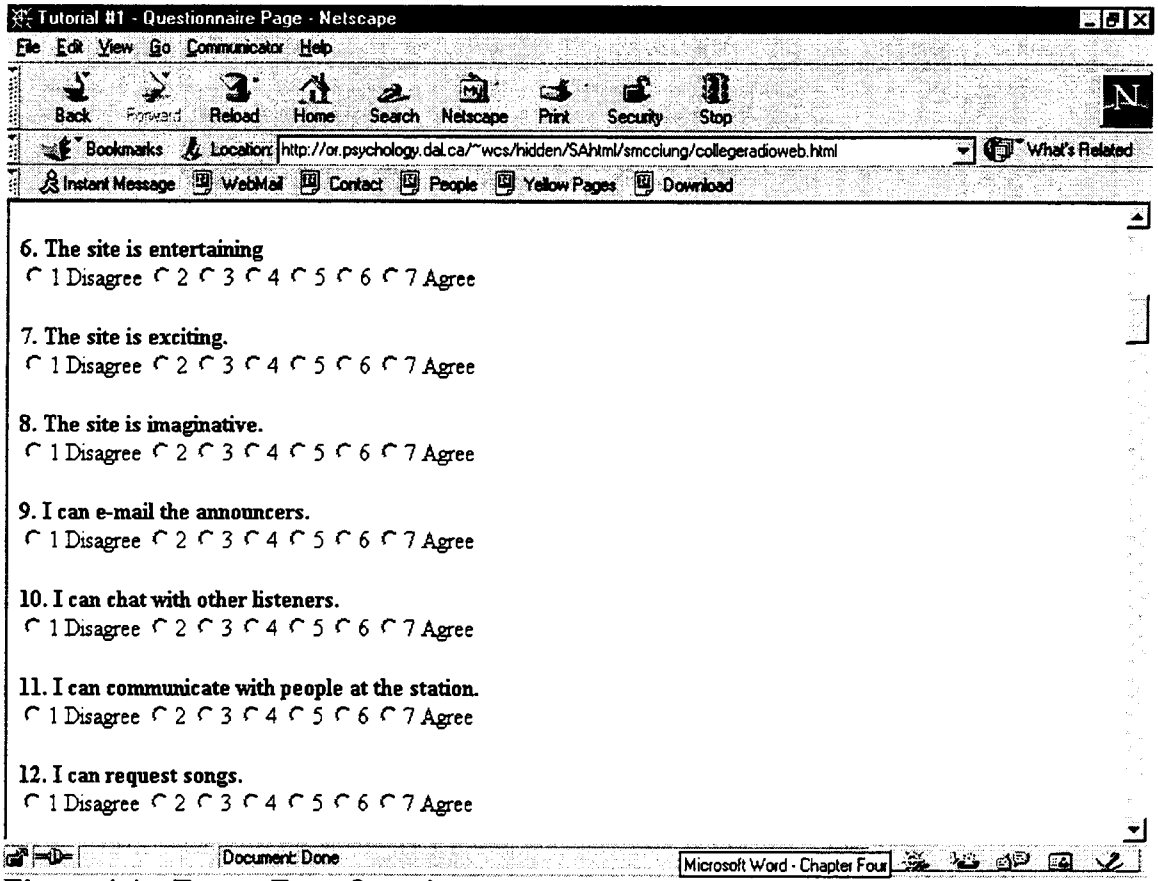

Figure 4.4 – Factor Four Questions.

Table 4.15 - Factor Four: Entertainment.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Q6	568	1.00	7.00	5.1373	1.7565
Q7	568	1.00	7.00	4.4754	1.7516
Q8	568	1.00	7.00	4.6162	1.8230
Valid N (listwise	568				

Alpha Level = .9068, N of Items = 3.

It is no surprise that entertainment is a valued use of college radio station web sites. Based on the core audiences' appreciation of the music and the artists that are listened to and submit music to college radio stations, this results seems to fit with the overall nature of the medium. College radio is about music, fun and experimentation, the results gathered here generally confirm the perception that college radio and their accompanying web sites are used by their audiences for entertainment.

Factor Five: Escape/Pass Time (Surfing).

Escape/Passing Time has long been a use of the media. During the Great Depression, people used radio to escape from the dismal surroundings of their daily life. People have used books, soap operas, serials and other programming content to "get away for a while." One of the prominent activities associated with World Wide Web use is "surfing the net" which is slang for exploring the Internet without a specific purpose or destination. Surfing is often a way to pass time or escape with the medium of the Internet. The term "surfing" originates from a book published by Jean Armor Polly, a noted Internet expert, and has become part of the Internet culture. The term is generally accepted today as meaning browsing through the Internet (Hahn, 1996, p. 180).

Surfing can take place throughout the entire Internet, or the activity can take place on one particular site. Most Internet sites are set up as a hierarchy that starts with a main page and continues through sub-levels with each level dealing with a different subject and having unique content. College radio station web sites usually have a main page that introduces the station. Then the site may have sub-levels that deal with many different

subjects like introducing the station staff, listing the music the station is currently playing, providing samples of the music through downloadable audio files and names and dates of local shows that might be of interest to the audience.

People who use the web can, and often do, spend a lot of time browsing simply for the activity of browsing, escaping from work, pressures on the job, family or whatever. Escape activity is an activity that is an inherent part and use of the Internet. People have been known to surf just for the sake of surfing. Three questions (14, 15 and 16) make up factor number five, the Escape index. This particular factor explains 4.659 percent of the total variance (Figure 4.5).

While the findings suggest that escape is not quite as an important use to college radio web site users as entertainment, the data indicate that escape is a use for these sites. The means of two questions are above the center of the 1-7 scale, with questions 14 and 16 in the index having a mean above four. These data suggest that escape activity is a use of these sites, and one may conclude that "surfing" these sites is quite a common occurrence for users who drop by college radio station web pages (Table 4.16).

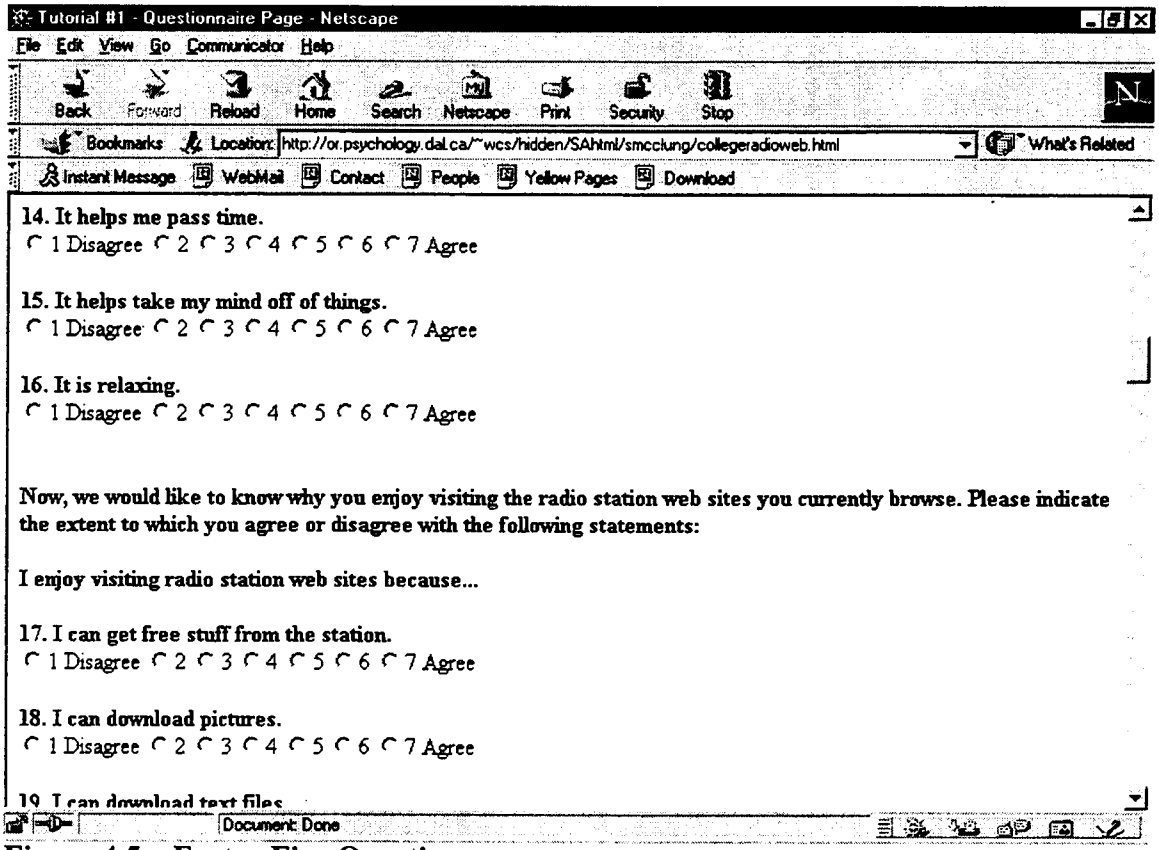

Figure 4.5 – Factor Five Questions.

Table 4.16 - Factor Five: Escape.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Q14	568	1.00	7.00	4.3063	2.2422
Q15	568	1.00	7.00	3.8521	2.2645
Q16	568	1.00	7.00	4.4032	2.1143
Valid N (listwise)	568				

Alpha Level = .8610, N of Items = 3.

Factor Six: Companionship

Radio has been established as a companion (portable friend) for teen users (Dominick, 1974) and evidence suggests that talk radio also serves as a companion and forum for listeners (Tramer and Jeffres, 1983). Research also indicates that one of the meanings people have for radio is that of a companion (Troldahl and Skolnick, 1967). Radio in particular has a history as serving as a companion. However, King (1997) reports that people do not use television web sites for companionship. The reason that radio and the Internet differ in the companionship factor could quite possibly be the "portability" aspect of each medium. As of 1999, the Internet is not very portable, people cannot take it with them as they can radio and to some extent television.

College radio caters to a young audience. This could be indicative of the audience that uses radio as a portable companion. However that does not necessarily mean that the core audience of college radio uses the station web sites for the same reason. Questions 26, 27 and 28 made up factor six (Figure 4.6).

The data suggest that companionship may be an important use of college radio station web sites. Questions 26 and 27 (Table 4.17) have two of the highest means of nearly any questions in the six indices that explain two thirds of the total variance. These results are consistent with the research that indicates younger people use radio as a companion. Because the college radios audience and the college radio web site audience is younger, it could be that the companionship factor is an important media use for this age group. Certainly the data indicate that the web audience does use these pages in part for some sort of companionship.

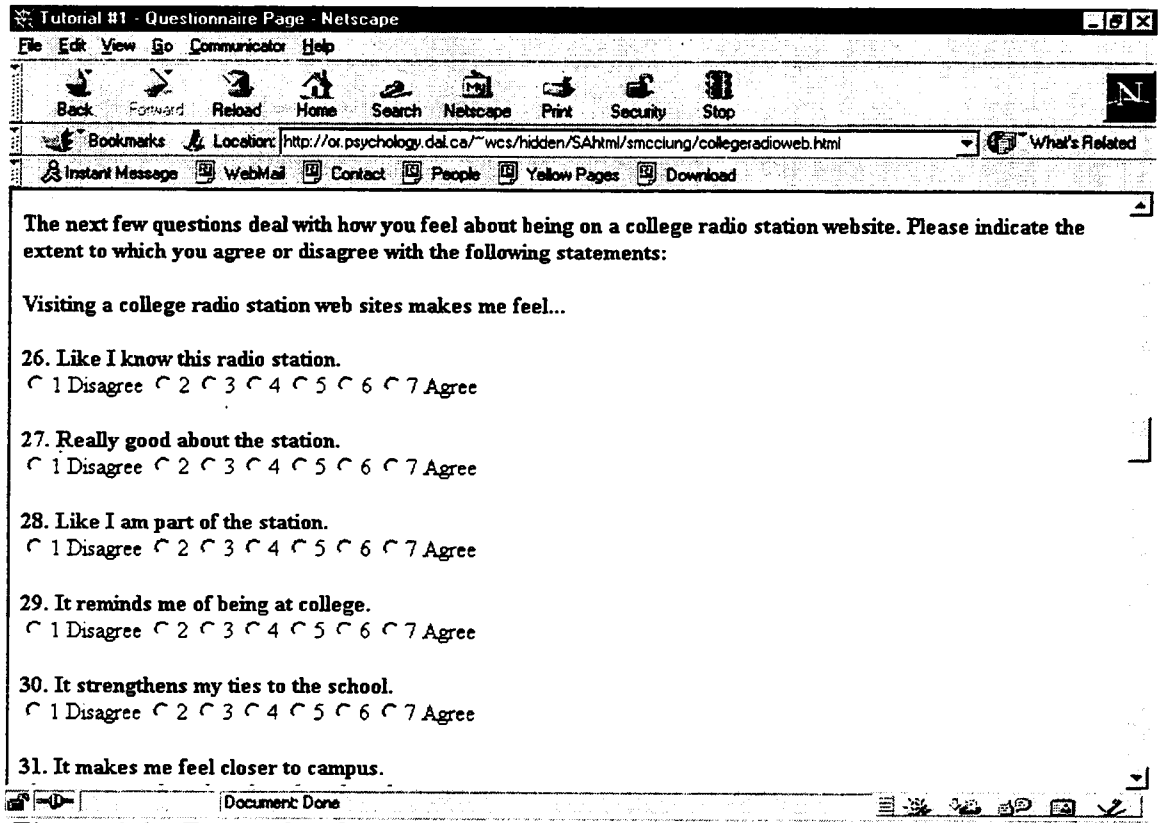

Figure 4.6 – Factor Six Questions.

Table 4.17 - Factor Six: Companionship

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Q26	568	1.00	7.00	4.9947	1.7753
Q27	568	1.00	7.00	4.8134	1.8754
Q28	568	1.00	7.00	3.9630	2.1357
Valid N (listwise)	568				

Alpha Level = .8719, N of Items = 3.

The Hypotheses

H1 – A significant positive correlation exists between use of college radio web sites for entertainment and time spent on the site.

H2 – A significant positive correlation exists between use of the college radio web sites for information and time spent on the site.

With any exploratory study there are certain assumptions that have to be made based on previous work in the field. While there are no previous studies that examine the uses of college radio station web sites, there is plenty of research available examining the uses and gratifications of many media like radio and television.

Two of the consistent uses found for television and radio are entertainment and information. Rubin (1984, p. 71) reports that about 70 percent of respondents agree that they watch television to learn about people or events. People have long used both media for both purposes and have spent hours with each media for each use. Rubin (1983) also reports that the average estimate of weekday viewing in a TV uses and gratifications study sub-sample was 2.56 hours per person (p.42). The tenth GVU study reports that 34 percent of Internet users will spend more than 10-20 hours per week on-line (Pitkow, 1999) and as mentioned previously, younger users, teenagers, are spending more time than ever on the World Wide Web.

Based on previous research (Rubin, 1983; Pitkow, 1998; Pitkow,1999) the above hypotheses were created assuming that people who used college radio sites would spend similar time browsing sites as they did with traditional media. Additionally, the researcher assumed that there would be a greater return to the sites per week based on the

younger audience's tendency to spend more time on the Internet than other demographic categories.

However, the data collected here present a different picture concerning time spent with college radio sites than many previous uses and gratifications studies and some of the GVU data would indicate. These differences make the hypotheses very difficult to prove. Apparently the people who use college radio station web sites are the type of users who don't stay long. Users who said they only stay on the site less than five minutes made up 13.9 percent of the total patrons who visit college radio sites. The data also indicate that most users of college radio station web sites stay for less than a half an hour. The data collected indicate that 75.1 percent of the people who use college radio station web sites stay on the site for a half an hour or less per visit, which leaves little variance in the responses of users time spent with college radio station pages. Users who indicated they stay on the site from 6-15 minutes per visit make up 41.5 percent of total users and those who stay on the site from between 16-30 minutes per visit make up 19.5 percent of the total users (Figure 4.7).

It should be noted here that the construction of the question on the on-line survey had an HTML error in it that gave the survey taker a response that had nothing to do with the question being asked. Unfortunately the researcher did not detect the error until after the data were collected. Only 1.1 percent of the respondents chose the invalid answer (N=6) and while the error is unfortunate, the number of people who chose the answer is only slightly more than one percent of the total number of users.

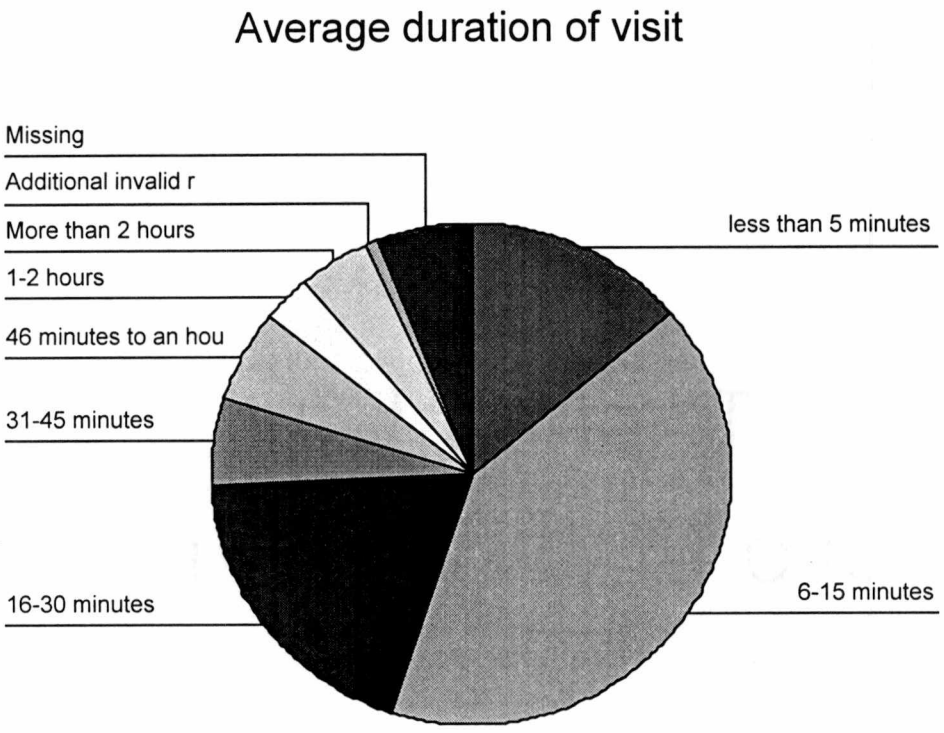

Figure 4.7 Average Duration of Visit.

Because of the lack of variance in the response to the question time spent on the site, one would expect that the hypotheses would not be supported. However, the correlations were run and both hypotheses were supported – with one caveat.

The test indicates that **H1** – A significant positive correlation exists between use of college radio web sites for entertainment and time spent on the site is supported. There is statistical significance (.000); however, the correlation between the two is weak (.254) which means the hypothesis can be supported, but not strongly (Table 4.18).

Table 4.18 – Correlations for Hypotheses One and Two.

Correlations

			ENTERTAI	INFO	Average duration of visit
Spearman's rho	ENTERTAI	Correlation Coefficient	1.000	.322**	.254**
		Sig. (1-tailed)	.	.000	.000
		N	568	568	535
	INFO	Correlation Coefficient	.322**	1.000	.075*
		Sig. (1-tailed)	.000	.	.042
		N	568	568	535
	Average duration of visi	Correlation Coefficient	.254**	.075*	1.000
		Sig. (1-tailed)	.000	.042	.
		N	535	535	535

**. Correlation is significant at the .01 level (1-tailed).

*. Correlation is significant at the .05 level (1-tailed).

The correlation also supports **H2** – A significant positive correlation exists between use of college radio web sites for information seeking and time spent on the site. Again, the relationship is statistically significant (.042); however, the correlation between time spent on the site and using the site for information is so low (.075) that the hypothesis is not well supported.

In both cases it can be said the hypotheses are statistically supported. Low correlations in both hypotheses suggest a weak relationship between both time spent on the site and information seeking and time spent on the site and entertainment. The relatively short user duration for these sights may suggest that users monitor these sights to quickly see what is on the site. In other words, people may not be using these sites for information or entertainment for prolonged periods, but rather to check in on what is the latest on the cutting edge of college radio.

R3 - What do audiences value in college radio station web sites?

This question deals with the technological side of the Internet and what interactive technology people want on college radio station web sites. On the survey, respondents were asked in one question what they valued in college radio station sites. The respondents were given a choice of seven items to choose from. The respondents could choose none or all seven of the items. This was not an exclusive answer type of question that was predominant to the rest of the survey. Users here could make more than one choice to answer this particular item.

Question 50 from the Survey

50. What interactive capabilities do you value on a college radio station web site? Please choose all that apply.

- Downloading things from the site
- E-mail links to the staff/station
- A chat room
- A Web-Ring program that links me to similar sites
- Search Engines
- Audio Streaming (Web-Radio) so I can hear the broadcast live on the net
- Listening to music clips on audio (.wav or Real-Audio) files.

These particular items were used based on prior content analysis research on television station web sites (Bates et al, 1996) and the latest industry debates about what should actually be on broadcast station sites (Ritchell, 1998; Tedesco, 1999). Most of the interactive programs listed here have been found on both television and radio web pages. One particular program, the Web-Ring, is a fairly new program and was not on any of the web sites of the college stations that participated in this study. However, the college

radio station web-ring does exist and is being used by a growing number of college radio stations on their web sites at the time the survey was conducted.

Interestingly, only four of the seven options were chosen as responses by the users of this survey. E-mailing things to the staff/station, search engines, and a chat room were not selected by any respondents as being valuable to college radio station sites. E-mail links are pretty much standard on any radio station site, and may have been "taken for granted" as valuable by the respondents. Search engines and chat rooms rarely appear on broadcasting sites and may have been seen as unimportant to a college radio station site. For whatever reason, these three programs failed to be chosen as responses by the survey respondents.

About a third (30.1%, n=171) of the respondents said that a Web-ring program linking them to similar sites is valuable on a college radio site. This program is fairly new (as of the survey period) to many Internet users and it could be that the numbers were low for this answer because not many people are familiar with the program. However, it is important to note that new interactive programs like this one are seen as valuable to some users. It may indicate that college radio web site users are more familiar with the cutting edge technology the Internet has to offer.

More than forty percent of the users (42.1 %, n=239) responded that "downloading things from the site" was valuable in a college radio station site. Typically the things downloaded from broadcast sites are items like screensavers and other station promotional items. The bottom line on this question could very well be that people like to get free stuff. Radio stations are notorious for giving away free things over the air to

attract listeners and college radio stations are no different. It could be that people still have that expectation from radio station World Wide Web sites and is a carry-over from the actual broadcast operation.

More than half of the survey respondents (54.2 %, n=308) said that, "Listening to music clips on audio (.wav or Real-Audio) files," was valuable (Table 4.19). College radio has long been known for its experimental nature and the music scenes that can develop around the stations. In short, music is important to listeners of college radio and apparently those listeners want to hear some of the music on the web site. Some commercial stations have experimented with music on their sites and according to this study, putting music clips and samples on the site is valuable to users of the site.

Table 4.19 - Valued Interactive Features

Interactive Feature	Frequency (n)	Percent of Respondents
A Web-Ring program that links me to similar sites.	171	30.1 %
Downloading things from the site.	239	42.1 %
Listening to audio (.wav or Real-Audio) files.	308	54.2 %
Audio Streaming (Web-Radio) so I can hear the station broadcast live on the net.	469	82.6 %

Clearly, one interactive feature that users find valuable on college radio station sites is audio streaming. More than eighty percent of users of college radio station sites (82.6%, n= 469) say they want to hear the over-the-air broadcast through the Internet. While the debate rages on by radio owners and programmers concerning the importance of streaming the over-the-air signal on the web, it looks like users of college radio station sites do want the feature.

These four interactive features are considered valuable to users of college radio station web sites. This question was intended to determine what *interactive* features users of these sites wanted.

Another question was asked on the survey that attempted to determine the main reason that people used college radio station sites. This question was structured differently on the actual on-line survey from question number 50 (What Interactive programs users value) because users were only given a choice of one response on this question. By constructing the question in this manner, survey respondents were restricted to a single answer that best represented the single reason they used the site. Respondents were given a choice of five main reasons they used the site and each user could choose only one response.

Almost half of the survey respondents (43.5%, n=247) indicated that the main reason they visit college radio station pages is to check on the music (Table 4.20). This result suggests that the people who use these pages are clearly interested in the music and programming that college radio stations work with. Many college radio stations do post their playlists (the latest additions to the current songs being played on the air) on their

Table 4.20 - Main reason for visiting College Radio Station Web Site.

Reason	Frequency	Percent	Valid Percent	Cumulative Percent
Invalid Response	1	.2	.2	.2
To Check the Music	247	43.5	43.5	43.7
It helps me strengthen contact with the college	33	5.8	5.8	49.5
To get Information	139	24.5	24.5	73.9
To be entertained	94	16.5	16.5	90.5
No particular reason	54	9.5	9.5	100.0
Total	568	100.0	100.0	

sites and this result indicates that people want to know what kind of music and what artists are being played on the air.

The second biggest reason for using college radio station sites is to get information (24.5%, n=139). Typically the information posted on the sites is information about the staff, promotions, and upcoming events like concerts and fundraising activities being conducted by the station. This reason is a standard uses and gratifications typology and was an attempt to determine whether information-seeking activities were important to users of these sites.

Other reasons for using college radio station sites were "to be entertained" (16.5%, n=94), "no particular reason" (9.5%, n=54) and "it helps me strengthen contact with the college" (5.8%, n=33). While these reasons collectively appear to be important, accounting for more than a third of total responses, individually they account for a smaller percentage of the main reason(s) people use these sites. Clearly the biggest reason for using these sites is to check on the music.

Summary

The data suggests that people value and use college radio station web sites for reasons that are musically, or audio inclined. Most respondents want to hear the broadcast signal over the Internet. Many users want to hear music clips in the form of audio files that can be downloaded from the page. Finally, the main reason people use college radio station sites is to check on the music. As suggested previously, the music is a central element in college radio. Record companies put substantial financial resources into college radio in the form of promotional recordings and promotional items. "Music scenes" can develop around college radio station and local musicians have been known to use college radio stations to get the exposure they need to begin and establish their careers.

This information suggests that the users of college radio station sites are musically oriented and that the programming at the station is a central reason for using the ancillary college radio station site. While Internet technology and cutting edge programs do appear to account for some of the value of these pages, the bottom line appears to be, as

this data suggests, that these sites are being used to keep up with what the stations are programming musically.

Qualitative Thematic Responses

"College radio is the way- the truth and the light. I will follow."
(A user of college radio station web sites).

One of the opportunities the users had in participating in this survey was the chance to add anything they thought about college radio sites or the survey. The last question on the survey was simply a text-box that allowed participants to say anything they wished. Above the text-box were the simple instructions, "Is there anything else you would like to tell us about your experience visiting college radio station web sites? If so, please write in the space provided."

Not every participant took advantage of the opportunity to provide the qualitative feedback the researcher was seeking. Eighty-four of the 568 people who completed surveys filled in an answer to the last question collecting qualitative data. Some participants responded but the information had nothing to do with college radio or their web sites. For example, one survey participant, noting the survey was based at the University of Tennessee took the time to comment on the Volunteers chase for the national championship in football (which was eventually won by The Volunteers). Some respondents provided their insight as to the effectiveness of the survey, "This server ask too many damn stupid questions." However, four distinct themes emerged that were helpful in answering Research Question Two. Other uses were noted but these uses

didn't fit into any of the four themes listed here. Examples included a radio station executive that was looking for a band that was on that particular label and several displays of people's general like or dislike for a particular station such as " I LOVE RAIDO K !!!!!"

Theme One: "Better music than ordinary commercial radio."

Many of the responses were concerned with the music. It seems that music is important to the users of college radio and their accompanying web sites. The following are examples of the, "Music" theme.

- "Only been on the Internet for 2 years -- college radio keeps me current with new music. Would like to find other college radio sites."
- "WUTK Rocks! The best station I've ever heard. Wish there was one like it in Chicago!"
- "Listening to college radio (especially from my home town) is the ONLY way to hear real radio. Everything else on the air is mindless dribble designed to sell me the latest greatest apple peeler- to numb my mind with the currently socially acceptable music 'hits'. Someone else's idea of normal."
- "Hearing music not available on local radio is the main motivation."
- "I like hearing the new modern rock- there are NO local stations playing this music."
- "It's good to see the playlist ..."
- "It is the only way to hear radio programming that suits my personal taste. Local programming in my area sucks."
- "College radio is fresher and more interesting- and generally plays better music than ordinary commercial radio-"

- "Radio K is the hip-hoppinest grooviest and least wick-wick-wiggedy wack station in the Twin Cities!"

- "My wife and I tune in to college radio for music we can't find in our listening area. We enjoy nonformatted- noncommercial music. It's also fun to hear regional differences."

- "Radio K has changed my life. No longer do I suffer from commercial radio @#$%. They know everything about anything worth attending- or just hearing about. The new music brought to my attention daily- is the only thing that keeps me at my job. Long live Radio K. Long live all college radio."

Many of these responses are based around the users like for the music being played on a particular college radio station and the music listed on the station web sites. However, many of the responses not only referred to the music but centered around being able to hear the music from outside the broadcast area. Those responses comprised a second theme in the qualitative responses, replies that were concerned with the technology of the Internet.

Theme Two: "Streaming audio so that they have live music over their computer."

This theme was also prevalent in the responses of users. While most users were complementary of the technology available to them via the Internet, some users were unhappy with the quality of the streamed product. Several users noted that it is nice to hear music from outside their region.

- "I only go to hear new music it's hard for me to hear now that I live abroad."

- "My work location is outside the station broadcast range- so I visit the site primarily to play the live RealAudio broadcast."

- "I feel that it is a wonderful thing that people can now listen to so many stations from around the country and the world via the Internet."

- "The damn signal always breaks off- so I can't hear it- or I have to keep reloading the signal. What a pain in the ass- I'm telling you."

- "It doesn't make sense to have a radio sight (sic) that doesn't provide access to audio streaming. I don't really get much out of one that only provides me with sports broadcasts."

- "I like poking around random sites that contain streaming audio that I can listen to."

- "The most important thing- *bar none* is the fact that FCC regulations don't allow KUOM to broadcast after sundown. KUOM plays a lot of music that is interesting (regardless of whether I like any particular song) and that keeps me listening all day after my favorite morning show goes off. I really want to keep listening at night- and the streaming audio available on the web site."

- "I use the site mainly for sports broadcasts and sports info....Sports Talk- coming events- play-by-play- etc."

- "Your survey should take into account that a number of people use the streaming audio so that they have live music over their computer. I went back to a college station that I like to do only that. Thanks."

The responses seem to support the desirability for audio streaming on the radio sites. Interestingly the people who like streaming, like it regardless of the kind of programming provided. In other words there people who liked the streaming to hear the music but others liked to listen to sports. Clearly people who visit a college radio station site want to hear the audio signal over the Internet no matter is the signal is carrying news, sports or other programming.

Theme Three: " Kansas just seems a little closer to Texas." (The Social Integrative Function).

While the index measuring the Social Integrative function indicates that using college radio station web sites for this purpose is not an important use for most respondents, there are some users who indicate that this is a very important use to them. That use is suggested in the qualitative data collected here and in qualitative data collected from users of Classic Rock radio station web site users (Murphy, 1998). In the case of college radio station sites, some users indicated they actually used the sites to feel closer to family members, their children who may work on the air at the station.

- "I love to listen to KJHK because my daughter goes to school there and Kansas just seems a little closer to Texas when I hear the radio broadcast. It has helped so very much in letting her go!

- "I like listening to Radio K simply because it reminds me of home while I'm at school."

- "I'll feel as though I'm not giving you the whole story about why I visit this web site if I don't tell you this: My best friend goes to school & is the program director there- so I visit the site to hear his show- & to know how he's doing."

- "I do not know how helpful my answers will be because I am an alumni of the station and really only use the site to keep track of current events at WUEV. Oddly enough- just about the only question you didn't ask was whether the subject worked at or had any other ties to the station."

- "I'm a proud alumni of Ithaca College- class of 1971. I visit the Ithaca web site often- and visit the campus at least 4 or 5 times every year. Although some of the music WICB plays is awful- they do cater well to their particular audience and do an excellent job."

Some users are visiting these sites to keep track of what is going on at the school or station and to feel closer to the people or campus they are separated from. Again the

data collected here simply centers around a theme that was provided from *some* listeners and is not generalizable to all users of college radio web sites.

Theme Four: " It is easy to navigate."

The fourth theme to emerge from the qualitative data is the surfing the web theme. This deals with the users interactive behavior on the college radio site. Most of these data talk about navigational issues within the site and hyperlinks to other sites from the college radio station page. Surfing is one of the activities that makes the Internet a unique medium and surfing is one apparent use of college radio station web site pages.

- "I like the way the WJCU web site is arranged. It is easy to navigate and I have fun looking at the things posted on it."
- "I really only log on to radio K because I can listen while I surf."
- "I really enjoy the KVSC web site as well as the links to other web sites. I'm not a real comfortable web surfer- KVSC gets me places I'd never see otherwise and is a wonderful diversion from work."
- "The web site for 88.9 V-Rock is very simple to navigate."
- "The web has been a GREAT tool to exchange info- whether on new bands/ shows or just to see what the formats of other stations are like."

People seem to use these sites for surfing. Links to other sites, links to music, artists and concert information seem to be important to the users of college radio station web page users.

Summary of Thematic Data

While the qualitative data collected here is not generalizable to all college radio station web site users, the thematic data collected in this study does provide some insight to the uses of college radio station web sites. While the data collected here does not break any new ground in terms of radio web site uses, it does help clarify and support the quantitative data collected in the study.

Four clear themes developed out of the data collected in this study. Music is an important part of these sites. People want to hear the music, see playlists, find out about concert information, and find information about the bands and artists the station is playing. Streaming the over-the-air signal is also important to the people who use these pages. No matter what the programming, people who use these sites apparently want to hear what the station is airing. College radio station web sites are used by some people to keep in touch. The users may be keeping in touch with the people at the station or the host institution, but it is clear *some* people use these pages to keep up with a part of the station while they are away. And finally, people like to surf college radio station web sites. People like to move around the individual sites and they like to surf to other sites that are hyper-linked from the college radio station page.

Again, these data are not generalizable to every college radio station web page user, but the information collected here does support the quantitative data collected as part of this study. Every survey participant had the opportunity to provide input in this part of the study, however, not every participant did. Still, the data is an important tool in understanding what uses people have for college radio station web sites.

CHAPTER FIVE

Conclusions

The purpose of this study was to explore who uses college radio station web sites and to attempt to learn more about why people use these pages. In Chapter One, several reasons were presented concerning the importance of executing this study. In this chapter, it is important to re-visit those reasons to determine if this study did address the concerns stated at the beginning of this research. It is also important to draw conclusions based on findings that may not have been anticipated by the researcher at the outset of the study. This chapter will attempt to address each issue and draw conclusions based on other results found in the research.

The Importance of the Study

One of the basic premises of this study is that college radio station web pages are "Ambassadors" of the university on the World Wide Web. This study does provide some

evidence that audiences are accessing the pages from outside the listening area of the broadcast signal. Some listeners use the pages to catch up on what's going on at the station while they are away, some hit the pages to see musical differences in separate regions of the country. While this does not appear to be an important use of the pages for most listeners, some people do access the pages to keep tabs on the university. It can be said that these pages do in some way represent the university or college that hosts the sites. However, at this stage of Internet development and the evolution of college radio web sites, it probably can be concluded that while these pages do in some way play a role in representing the university on the Internet that role still is minimal.

There was also some support for the notion that people use the pages to stay in touch. The social integrative function of the media allows people to stay in touch or to feel better about the people and institutions of home. While the data point out that people do use these pages somewhat for that purpose, it just isn't an important use for most people. The social integrative function, if proven in this study, would have been a good reason for college radio stations to ask for more financial support for these sites. The argument would have been that since these pages played an important role in keeping alumni "close" to the campus, funding should be provided by the university to make the sites better and more appealing to the people who use them. The data however, indicates that the social integrative function is not too terribly important to the people who use these sites. This conclusion is in many ways disappointing because additional funding for these sites could have meant a lot in terms of the sophistication of these sites. Professional designers could have been brought in to at least consult in the design of the

pages. As it stands now, these pages will still be probably be designed by students who are in the developmental stages of web design and understanding what the web can do. Maybe that is the point of the pages though, to let the students experiment, just like they do on the air.

Another important reason cited in Chapter One for doing this study was to look at the role technology played in these sites and to determine if the users of these sites valued the technology. Apparently the users of these sites do value the Internet technology currently available and want it on the sites. People overwhelmingly want the streaming technology that allows the user to hear the station over the Internet. Users also value other Internet specific technology like Web-Rings and files to download that will enable them to hear the music and artists the station is playing. The technology that makes these sites entertaining seems to be very important to these users. They want to hear the music, they want to sample the music of new artists and they want to be linked to similar sites that may show them something new. While entertaining content seems to be very important to these users, they also value and understand the importance of the technology that makes these sites entertaining.

The final reason for doing this study as posited in Chapter One was to determine how important these sites were for music and the music industry. Clearly these sites are important to the users because of the music. The number one reason people go to these sites is to check on the music. More than 80 percent of the uses in the study want to hear the station over the Internet and that is probably to hear the music. People also want to

sample the music the stations play – on demand. In other words they want downloadable files to access whenever they wish. College radio station sites are about the music.

Of all of the reasons listed in Chapter One cited as important for study, it seems that the music is the most important. Generally these sites are used for entertainment. People want to be able to go to these sites and hear music and find out about the artists on the stations. The best way to do that is to actually hear the broadcast signal over the Internet and the users of these pages make that clear. If anything definitive can be taken from this study, it is that if you have a college radio station, you'd better stream the signal if you want people to use the site. That conclusion is undeniable.

The Demographic Conclusions

The results indicate that young white males use these sites. This result isn't a surprise because it generally matches the profile of the user of college radio stations and to an extent the profile of the Internet user at the point this survey was conducted. The people who use these sites are also generally well educated. Most of the users either have a college degree or have some college credit. Again, this result is not much of a surprise because the study is about college radio sites.

What college radio stations need to take from this study is that their sites are serving an audience that at this time is fairly well defined. What the station sites now have to do is capitalize on the data collected here. College-aged males *have* some disposable income, interests, and entertainment needs. If college radio stations can determine what these people like to do and how they spend their money, they might well

be able to construct the sites so that local businesses will want to advertise on the sites. Again, there are FCC restrictions concerning what college radio stations can do over the air, but what these stations do with their web pages is a completely different matter.

Stations could be able to market promotional items that appeal to their core audience such as tee shirts and caps. The stations could work with area business to promote concerts, food specials and other items that the core audience buy and use. Most of these sites are not doing that – yet. However, after the conclusion of the study, one station, KUOM at the University of Minnesota began marketing a compilation CD of local artists that was produced by the station on the Internet site in the spring of 1999. WMUC at the University of Maryland is currently marketing station tee-shirts on their web site.

This is the kind of marketing that college radio stations can conduct on their web sites. This medium hits the target audience and will provide funds for the station without ever involving the FCC. If there is any conclusion to be drawn from the demographic data found in this study it is that college radio station web sites have a clearly defined audience and the stations can use this information and their web sites to provide additional funding for the stations. College radio stations are beginning to do this as this study concludes, but we are just beginning to unlock the potential of these web sites as a marketing tool, funding source and educational tool. One important conclusion to draw here is that the station sites now have a measured audience. The stations should use their web sites to target this audience.

Conclusions about the Uses of College Radio Station Web Sites

The Applied Implications

As stated in Chapter Four of the study, this question was the cornerstone of this research. The goal with this inquiry was to better determine why people used these sites. A factor analyses was conducted to determine if the survey was asking the proper questions to answer research question two. However, the answers themselves yielded tepid results. While there was some evidence to indicate that the users of these pages visit the sites to interact with the staff and other people at the station, the survey respondents didn't think that was a particularly important reason to use the pages.

Similar results were found with questions dealing with the social integrative function, interaction with the page, and several of the other factors. Generally, there was no great support for any of these indices as uses of the station web sites except for entertainment. Entertainment was the only index of the six factors that each question in the group had a mean above four, which was the center of the Likert scale on the survey. However, even this index had two question means lower than 5 and only one question, "the site is entertaining," with a mean above five.

Generally the question means in each of the factors were around the center of the Likert scale, which in this survey was four. The conclusion one can draw from the factor analysis data and the means of those questions is that, except for the use of entertainment, the other uses are not particularly important to the patrons of college radio station web

sites. The data gathered here may leave one with the conclusion that all of the factors are uses of these sites, but not particularly important uses for the patrons.

The same conclusions can be drawn from the hypotheses. As explained in Chapter Four of the study, the question dealing with time spent on the site was problematic. There was not much variance in the answers to the question concerning time spent on the site. Still, there was statistical support for each hypothesis. However, the correlation in each hypothesis was weak. In other words, the statistical proof was verified but in reality the relationships were so slight that it was difficult to observe.

The results for research question two were not disappointing, however they do leave one asking the question, "Is there *any* important use for college radio station web sites?" The thematic qualitative data does provide some insight to the uses of these sites but then again the results are not indicative of every user in the survey, just those who took the time to respond to the question. One insight the qualitative data does support is that people who use these sites like music and the music played on college radio stations. If listening to music, downloading music files, checking music charts and finding out more about the artists played on college stations is considered entertainment, then it could be said that there is some support in this study that the music is the reason people navigate college radio station World Wide Web sites.

It could be said that the conclusions concerning the uses of college radio station web sites are pretty inconclusive, however that may not be the entire truth. There is some evidence here that the people who visit these sites are music fans. The data suggests that hearing the music, seeing playlists and being generally entertained by these sites is an

important use of college radio station web sites. As also noted earlier in this study, this is a beginning point in the study of college radio station web sites. Considering the data collected here, we may conclude that the music is important to the people who use these sites.

Understanding that the music is an important reason people use these sites does benefit college radio. Most obviously it helps the students who construct these sites to use the music as a feature on the site. Links to current station playlists, new artists added to the music rotation, information about local bands and the music scene in the area could be featured on the main pages of these sites. Sub-level pages could go into extensive detail about the artists aired on the station and the sites could provide fan information about the artists in the area. This could be a new avenue for the development of the music scene that surrounds the college radio station.

One use of these sites could be to support local musicians and promote the station at the same time. College radio has long been known for playing local music and the stations now have an additional venue to promote the artists the station plays and the artists that perform in the area. In turn, the artists could promote the station at live performances. The possibilities for music promotion are endless, but understanding that the people who use the web sites for music oriented reasons does give the people who design the pages a starting point for knowing what content to put on the pages.

Stations could also use these sites as a promotional vehicle in cooperation with the record companies. Artists could be featured monthly on a featured artist page and the station could have a promotional tie-in with the artists' label to provide give-aways and

other promotions. Record companies put a lot of money into college radio and have been traditionally supportive of the artists on college radio with promotional products like CD's and posters (McClung and Wilkinson, 1997). College radio stations now have a vehicle to promote themselves and the artists (and music) they play that lets the user not only hear the music, but see and find out more information about the music they are hearing in a multimedia environment. The possibilities for promotion with music are endless on a college radio station web site.

The data collected in this study indicate that music is important to the people who use these sites. The sites that give users more access to the music and musicians will probably be the most successful college radio station web sites.

The Theoretical Implications

An inquiry of this magnitude should also address the broader implications of research beyond the contribution of development to web sites and web audiences. This research is no exception because there is a contribution to the body of uses and gratifications literature that is important to note.

This study has concerned itself, in large part, with the uses people have for college radio station web sites. The literature notes there are traditional uses people have for the media. Many of those uses, especially uses of electronic media have been examined in this study as well. However, this study breaks new uses and gratifications ground because several of the use categories noted in this study are relatively new. The most prevalent factor introduced here is that of interaction. For the first time interaction is

determined to be a dual-level use. In other words, this study is one of the first to differentiate interaction as two distinct uses. Interaction with the radio station staff and interaction with the page clearly factor out as two different uses in this study. The differentiation between these two levels of interaction is especially important for use of media sites because with media sites like television and radio station pages, the user is usually called upon to engage in both interaction activities. All sites require interaction with the page simply to navigate around the site to find information. Media sites, unlike many other pages on the Internet however, often call for the user to interact with the people *at the station.* Many radio and televisions sites ask for various forms of feedback like e-mailing in for contests, surveys, and to talk to the announcers.

This study makes a differentiation in the interaction factor and includes both definitions but looks at them as separate uses. Clearly, this bi-leveled definition of interaction broadens the use of the term interactivity and distinguishes the uses that are inherent to this medium. In the case of college radio station web pages neither use is deemed an extremely important use by the patrons of these sites, but the point remains that there are two distinct meanings for the term interactivity. This study confirms the dual meaning for the term interactivity and should be seen as an important contribution to the overall body of uses and gratifications literature.

Secondly, there is another use factor that seems to be emerging here that may be another contribution to the uses and gratifications literature. One theme that emerged in the factor analysis in this study that combines traditional uses to comprise a new Internet use is that of surfing. Uses and gratifications literature makes a distinction between the

uses of passing time and escape (Rubin, 1983). This study seems to combine the uses of passing time and escape to form the hybrid use of surfing. The questions that make up the surfing factor, it passes time, it is relaxing, it helps me take my mind off of things combine the elements of both escape and passing time to form the new use of surfing. While surfing may not clearly be established in this study as an important use of college radio station sites, it has emerged as a use and that is an important contribution to the overall body of uses and gratifications literature much like the "pass time" use.

In a broader, theoretical sense, this study has contributed to the uses and gratifications perspective by defining new uses for a new medium. Interactivity has clearly been defined here in a dual sense and both definitions of interactivity seem to be uses of college radio station web sites. Surfing is an activity that many people engage in to pass time and to escape. This study suggests that elements of two previous, traditional media uses have been combined to form the hybrid Internet use, surfing. While none of these uses were extremely important to users of college radio sites, the data suggests that people do visit these sites for new Internet specific uses of interactivity and surfing.

Conclusions on what users value in College Radio Station Web Sites

One conclusion about what users value in college radio station web sites is certainly clear -- the people who use these sites want to hear the broadcast signal over the Internet. Streaming the broadcast signal was valued by more than 80 percent of the people who were surveyed in this study. Again this could be related to the desire to hear

the music the station is playing. In any event, this study does conclusively determine that if you have a college radio station web site, you had better stream the over-the-air signal.

Secondly, apparently it would be a good idea to provide users some samples of the music the station is playing in the form of audio files that can be downloaded by the users of the sites. More than half of the people surveyed stated that they liked to listen to music "clips" which were downloadable from the site. Again, hearing the music and finding out more about the music seems to be one of the main motivations for having the files on the sites. It is one thing the sites can do to bring the users closer to the music.

Other technological programs such as Web-Rings and Chatrooms seem to be valued by some users but not to the level those concerning the music. One can conclude from the results of this research that the people who use college radio station web sites value the technology that allows them to hear the music. Features such as streaming and downloadable files are valued by the people who frequent college radio station web sites.

Conclusions about radio stations on the World Wide Web

Murphy (1998) reports that the gender of a Classic Rock Web Site visitor closely resembles that of the target market of a Classic Rock Radio Station (p. 100). Other demographic characteristics of Classic Rock site users also resemble the demographic profile of the listener of classic Rock stations. There is evidence gathered in this study suggesting that the users of college radio station web sites are similar demographically to the users of college radio.

While research concerning the users of radio web sites is in its infancy, there may be evidence to suggest that "the apple doesn't fall far from the tree." The users of these radio sites are, demographically at least, similar to the listeners of the radio stations. The caveat in making this conclusion comes with the profile of the listeners of both of these formats. One would expect that listeners of Classic Rock stations and college radio station would be primarily male. At this point, most users of the Internet are male. The real test of this conclusion would be to survey users of a radio station site whose broadcast format appeals primarily to females. Such a survey would work nicely with users of an Adult Contemporary format. By working with a predominately female format one could better judge whether the listeners of the station are actually the users of their sites as opposed to people surfing on the Internet.

Summary

Most of the data collected in this research is descriptive in nature and the study itself is exploratory. The benchmark is now set for future research on college radio station web sites. While much of the data examined in this study did generally provide some evidence as to why people used college radio station web sites, there was one theme or use that commonly occurred throughout the data collected here – the music.

The music is important to people who use these sites. It is not surprising that this information should come from this study because college radio has historically been closely involved with music and college radio has been known for developing music

scenes (Lee, 1995). This new extension of college radio on the World Wide Web seems to be another tool for college radio to explore and promote the music the stations play.

With the addition of these pages college radio stations have the opportunity to gain additional funding by promotional activities that involve the core audience of the web pages and the music and musicians that the station deals with. Web pages allow college radio the freedom to market and fundraise through promotions that are not subject to FCC guidelines that can inhibit college radio from successfully obtaining the outside resources to make the station fiscally sound. The web pages these stations construct offer the stations, at least the opportunity, to branch out in promotions and marketing strategies.

The ability to diversify promotions and fund-raising strategies also has positives for the stations that have curricular ties to their broadcasting departments. Sales and Promotions courses in the broadcasting departments of these institutions now have a new outlet with which to work. Marketing the web pages and using them as teaching vehicles for promotions and advertising tools could be integrated into the classroom. Like the college radio station, these web pages present a real-life opportunity for students to learn how to deal with clients in promotion and advertising. Now that we have some understanding of who uses these pages and what they use the sites for, broadcasting departments have the opportunity to teach students how to develop and implement marketing and promotional campaigns with this new medium.

Understanding who uses these pages and why also helps those given the duty of designing college radio station web pages. The information gathered here helps people

who design college radio station sites understand just exactly what is important for the people who use these pages. Designers of any web site know that the audience is one of the biggest considerations in determining what content will be on the site and what design features are important.

College radio station web sites are, at this stage of their evolution, about music. That shouldn't be a surprise considering the close relationship college radio in general has with the music it plays. The ancillary web pages are used to find out about the music and to hear the music.

Recommendations for Future Study

Should this study be replicated in the future, several areas should be addressed in order to make the future studies more insightful and comprehensive.

Recommendation Number One: User Profile

This recommendation suggests that the study be replicated at a time when the population of on-line users is more diverse. As of this writing the Internet is still a fairly male dominated medium from a user standpoint. That is changing, however. More women are going on-line and people of varying age groups are starting to go down the information superhighway. Subsequent studies at a later date may reveal that college radio station web sties are not primarily used by young, white, males. Currently the demographics of the college radio station web site user generally reflects the profile of the Internet user as suggested in the latest GVU survey (Pitkow, 1999). Future studies

may see a shift in the demographic nature of the user as a more diverse population of the Internet user in general develops.

Recommendation Number Two: Participating Institutions

This study would have been richer if there had been more participating stations representing a broader range of institutions. Should the study be replicated a concerted effort should be taken to gather more participating stations in the survey. This study had several different types of institutions participating including large land-grant universities like the University of Minnesota, mid-sized universities such as Marshall and Tulane, and small institutions like Doane College. However small, private, liberal arts schools did not participate in the study, historically black colleges were not represented here and technical universities like Georgia Tech, which may not have broadcasting departments, were not included in this study. While the researcher did make every possible attempt to contact every type of institution possible, the above profile schools were missing from the study.

Additionally more participating institutions would most likely have produced a larger sample size. While the researcher was pleased with the final sample size, more completed surveys would always help. Raising the number of participating schools could probably be done by taking more time in the recruiting process. The stations were contacted and asked to participate in a month and a half period over the summer. The author would recommend that the recruitment period begin in the spring when the researcher would be assured that the students in charge of the station and web site are

enrolled in school. During the summer the number of students on campus is lower. If the recruitment process began in the spring it may help to acquire more stations because the students responsible for the web sites would be available. This researcher suspects that a large number of stations didn't participate in the study because the contact in charge of the college radio station web site may have been away from campus on summer break. Extending the recruitment period, and conducting the recruitment period in the spring may aid in boosting the number of stations that participate in any future study.

Recommendation Number Three: Re-Catagorize the Duration Question

The world is full of people lamenting "Had I known then what I know now." This is one of those type of situations. The question in this study dealing with time spent on the college radio station web sites is problematic. The question was taken from the GVU surveys which actually asks about the time a user spends on the *Internet*. What this research was asking was how much time the user spends on *college radio sites.*

While a user may spend more then two hours a day surfing the World Wide Web, not many people spend that much time on a particular site, especially a college radio site. As the question in this study was constructed, more than 80 percent of the users responded in the first three categories of the question. Those categories combined meant that the majority of users spent half an hour or less on the college radio station page. This was a problem because it left little variance in the answers and statistically the question was difficult to work with.

Should the study be replicated the question asking about time spent on the site needs to be re-structured to better represent the time periods people actually spend on college radio station sites. A recommendation may look as follows:

- 0 – 5 Minutes
- 6 – 10 Minutes
- 11-20 Minutes
- 21-30 minutes
- 31-45 minutes
- 46 – 60 minutes
- 1 – 2 hours
- More than 2 hours
- Leave it on while working

Structuring the question in this manner would most likely provide the researcher with more variance in the answers and make the data easier to work with statistically. The problem with the question in this survey is that with most of the answers bunched into three categories near the bottom of the scale, the correlation axis seemed to "flatten out" resulting in low correlations providing no real insight into the hypotheses posed in this research.

Summary

Generally the researcher was pleased with the results and conclusions of this study. It does provide a starting point in research concerning college radio station web

sites. With any research, there are things methodologically that could have and should have been done differently. However, at the time the mistakes weren't known. None of these flaws seems to jeopardize the results of the research, but could refine the survey should it be conducted again.

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APPENDIX

College (student-run) Radio Stations List From M.I.T.

College

1.CFAK - 88.5 FMC- Sherbrooke, QC (Université de Sherbrooke)
2.CFBU -103.7 FM - St. Catharines, ON (Brock University)
3.CFFF - 92.7 FM - Peterborough, ON (Trent University)
4.CFUV -101.9 FM - Victoria, BC (University of Victoria)
5.CHLQ - 93.1 FM - Charlottetown, PE
6.CHMR -103.7 FMC- St. John's, NF (Memorial Univ of NF)
7.CHRW - 94.7 FM - London, ON (University Of Western Ontario)
8.CIOI -101.5 FM - Hamilton, ON (Mohawk College)
9.CIOO -100.1 FM - Halifax, NS
10.CISM - 89.3 FM - Montreal, QC (Universite de Montreal)
11.CITR -101.9 FM - Vancouver, BC (University of British Columbia)
12.CIXX -106.9 FM - London, ON (Fanshawe College)
13.CJLX - 92.3 FM - Belleville, ON (Loyalist College)
14.CJSW - 90.9 FM - Calgary, AB (University of Calgary)
15.CKDJ - 96.9 FM - Ottawa, ON (Algonquin College)
16.CKMO -103.1 FM - Victoria, BC (Camosun College)
17.CKUT - 90.3 FM - Montreal, QC (McGill University)
18.KACV - 89.9 FM - Amarillo, TX (Amarillo College)
19.KAGJ - 89.5 FM - Ephraim, UT (Snow College)
20.KALA - 88.5 FM - Davenport, IA (St. Ambrose University)
21.KALW - 91.7 FM - San Francisco, CA
22.KAMP - 1570 AM - Tucson, AZ (University of Arizona)
23.KAOR - 91.1 FM - Vermillion, SD (University of South Dakota)
24.KASB - 89.3 FM - Bellevue, WA (Bellevue High School)
25.KAUR - 89.1 FM - Sioux Falls, SD (Augustana College)
26.KAZU - 90.3 FMC- Pacific Grove, CA
27.KBCS - 91.3 FM - Bellevue, WA (Bellevue Community College)
28.KBCU - 88.1 FM - North Newton, KS (Bethel College)
29.KBGA - 89.9 FM - Missoula, MT (University of Montana)
30.KBVR - 88.7 FM - Corvallis, OR (Oregon State University)
31.KCOE -106.9 FMC- Cedar Rapids, IA (Coe College)
32.KCPR - 91.3 FM - San Luis Obispo, CA (Cal Poly State University)
33.KCR -- 98.9 FMC- San Diego, CA (San Diego State Univ.)
34.KCSS - 91.9 FM - Turlock, CA (California State Univ. Stanislaus)
35.KCSU - 90.5 FM - Fort Collins, CO (Colorado State University)
36.KDUR - 91.9 FM - Durango, CO (Ft. Lewis College)
37.KEOL - 91.7 FM - La Grande, OR (Eastern Oregon State College)
38.KEPC - 89.7 FM - Colorado Springs, CO (Pikes Peak Comm College)
39.KHNS -102.3 FM - Haines, AK
40.KIPO - 89.3 FM - Honolulu, HI
41.KJHK - 90.7 FM - Lawrence, KS (University of Kansas)
42.KJNB - 99.9 FMC- Collegeville, MN (St. John's University)
43.KLSU - 91.1 FM - Baton Rouge, LA (Louisiana State Univ.)
44.KMNR - 89.7 FM - Rolla, MO (University of Missouri)
45.KNWD - 91.7 FM - Natchitoches, LA (Northwestern State University)
46.KPAC -- 530 AMC- Stockton, CA (University of the Pacific)

100.WERS - 88.9 FM - Boston, MA (Emerson College)
101.WESN - 88.1 FM - Bloomington, IL (Illinois Wesleyan University)
102.WEVL - 90.1 FM - Memphis, TN
103.WFAL -- 680 AM - Bowling Green, OH (Bowling Green State Univ.)
104.WFCF - 88.5 FM - St. Augustine, FL (Flagler College)
105.WFHB - 91.3 FM - Bloomington, IN
106.WFID - 95.7 FM - San Juan, PR
107.WFIT -- 540 AMC- New York, NY (Fashion Institute of Technology)
108.WFUV - 90.7 FM - New York, NY
109.WGCS - 91.1 FM - Goshen, IN
110.WGLS - 89.7 FM - Glassboro, NJ (Rowan College of NJ)
111.WGMU - 1370 AM - Fairfax, VA (George Mason University)
112.WGTS - 91.9 FM - Washington, DC
113.WGXM - 99.5 FM - Dayton, OH (University of Dayton)
114.WHCL - 88.7 FM - Clinton, NY (Hamilton College)
115.WHPK - 88.5 FM - Chicago, IL (University of Chicago)
116.WHRW - 90.5 FM - Binghamton, NY (SUNY Binghamton)
117.WHSR -- 530 AMC- Baltimore, MD (Johns Hopkins University)
118.WHUS - 91.7 FM - Storrs, CT (University of Connecticut)
119.WICB - 91.7 FM - Ithaca, NY (Ithaca College)
120.WIQX - 91.7 FM - Millersville, PA (Millersville University of PA)
121.WITR - 89.7 FM - Henrietta, NY (Rochester Inst. of Technology)
122.WIUS - 1570 AM - Bloomington, IN (Indiana University)
123.WIUV - 91.3 FM - Castleton, VT (Castleton State College)
124.WIXQ - 91.7 FM - Millersville, PA (Millersville University)
125.WJUL - 91.5 FM - Lowell, MA (Univeristy of Massachusetts)
126.WKDI - 93.5 FMC- Dekalb, IL (Northern Illinois University)
127.WKDU - 91.7 FM - Philadelphia, PA (Drexel University)
128.WKNC - 88.1 FM - Raleigh, NC (North Carolina State University)
129.WLCV -- 570 AM - Louisville, KY (University of Louisville)
130.WLHD -100.7 FMC- Athens, OH (Ohio University)
131.WLVR - 91.3 FM - Allentown, PA (Lehigh University)
132.WMBR - 88.1 FM - Cambridge, MA (M.I.T.)
133.WMCN - 91.7 FM - St. Paul, MN (Macalester College)
134.WMFO - 91.5 FM - Medord, MA (Tufts University)
135.WMHB - 90.5 FM - Waterville, ME (Colby College)
136.WMHC - 91.5 FM - South Hadley, MA (Mount Holyoke College)
137.WMHD - 90.5 FM - Terre Haute, IN (Rose-Hulman Inst of Technology)
138.WMMT - 88.7 FM - Whitesburg, KY
139.WMPG - 90.9 FM - Portland, ME (University of Southern Maine)
140.WMSE - 91.7 FM - Milwaukee, WI (Milwaukee School of Eng.)
141.WMTS - 88.3 FM - Murfreesboro, TN (Middle Tennessee State Univ.)
142.WMTU - 91.9 FM - Houghton, MI (Michigan Technological Univ.)
143.WMUA - 91.1 FM - Amherst, MA (University of Massachusetts)
144.WMUC - 88.1 FM - College Park, MD (University of Maryland)
145.WMUR -- 750 AMC- Milwaukee, WI (Marquette University)
146.WMWM - 91.7 FM - Salem, MA (Salem State College)
147.WNDY - 91.3 FM - Crawfordsville, IN (Wabash College)
148.WNUR - 89.3 FM - Evanston, IL (Northwestern University)
149.WNYO - 88.9 FM - Oswego, NY (State University of New York)
150.WNYU - 89.1 FM - New York, NY (New York University)
151.WOMR - 92.1 FM - Provincetown, MA
152.WONU - 89.7 FM - Kankakee, IL (Olivet Nazarene University)

47.KQAL - 89.5 FM - Winona, MN (Winona State University)
48.KRFH -- 610 AMC- Arcata, CA (Humboldt State University)
49.KSCU -103.3 FM - Santa Clara, CA (Santa Clara University)
50.KSFH - 90.5 FMC- Mt. View, CA (Saint Francis High School)
51.KSHU - 90.5 FM - Huntsville, TX (Sam Houston State University)
52.KSJC - 89.5 FM - Stockton, CA (San Joaquin Delta College)
53.KSLU - 89.9 FMC- Canton, NY (St. Lawrence University)
54.KSMC - 89.5 FM - Moraga, CA (St. Mary's College)
55.KSPC - 88.7 FM - Claremont, CA (Pomona College)
56.KSRX - 99.9 FMC- Greeley, CO (University of Northern Colorado)
57.KSUA - 91.5 FM - College, AK (University of Alaska Fairbanks)
58.KTEQ - 91.3 FM - Rapid City, SD (SD School of Mines and Tech)
59.KTRU - 91.7 FM - Houston, TX (Rice University)
60.KTUH - 90.3 FM - Honolulu, HI (University of Hawaii)
61.KUCB -102.1 FMC- Boulder, CO (University of Colorado)
62.KUCB -- 530 AMC- Boulder, CO (University of Colorado)
63.KUGS - 89.3 FM - Bellingham, WA (Western Washington University)
64.KUNV - 91.5 FM - Las Vegas, NV (University of Nevada)
65.KUOI - 89.3 FM - Moscow, ID (University of Idaho)
66.KUPS - 90.1 FM - Tacoma, WA (University of Puget Sound)
67.KVCM -- 830 AM - Van Nuys, CA (Los Angeles Valley College)
68.KVRX - 91.7 FM - Austin, TX (University of Texas)
69.KWJC - 91.9 FM - Liberty, MO (William Jewell College))
70.KWUR - 90.3 FM - St. Louis, MO (Washington University)
71.KXLU - 88.9 FM - Los Angeles, CA (Loyola Marymount University)
72.KXRJ - 91.9 FM - Russellville, AR (Arkansas Tech University)
73.KZSC - 88.1 FM - Santa Cruz, CA (University of California)
74.KZUU - 90.7 FM - Pullman, WA (Washington State University)
75.WAER - 88.3 FM - Syracuse, NY (Syracuse University)
76.WAMH - 89.3 FM - Amherst, MA (Amherst College)
77.WBGU - 88.1 FM - Bowling Green, OH (Bowling Green University)
78.WBJB - 90.5 FM - Lincroft, NJ (Brookdale Community College)
79.WBOR - 91.1 FM - Brunswick, ME (Bowdoin College)
80.WBRS -100.1 FM - Waltham, MA (Brandeis University)
81.WBRU - 95.5 FM - Providence, RI (Brown University)
82.WBSR - 96.5 FMC- Providence, RI (Brown)
83.WBUQ - 91.1 FM - Bloomsburg, PA (Bloomsburg University)
84.WBZC - 88.9 FM - Pemberton, NJ (Burlington County College)
85.WCBN - 88.3 FM - Ann Arbor, MI (University of Michigan)
86.WCHC - 88.1 FM - Worcester, MA (College of the Holy Cross)
87.WCMW -103.9 FM - Harbor Springs, MI (Central Michigan Univ)
88.WCMZ - 98.3 FM - Sault Ste. Marie, MI (Central Michigan Univ.)
89.WCNI - 91.1 FM - New London, CT (Connecticut College)
90.WCPR -- 530 AMC- Hoboken, NJ (Stevens Inst. of Technology)
91.WCPR - 90.3 FMC- Peoria, IL
92.WCSB - 89.3 FM - Cleveland, OH (Cleveland State University)
93.WCTL -106.3 FM - Union City, PA
94.WDSR - 97.7 FMC- Pittsburgh, PA (Duquesne University)
95.WEFT - 90.1 FM - Champaign-Urbana, IL
96.WEGL - 91.1 FM - Auburn, AL (Auburn University)
97.WEKH - 90.9 FM - Hazard, KY (Eastern Kentucky University)
98.WEMC - 91.7 FM - Harrisonburg, VA (Eastern Mennonite University)
99.WERG - 89.9 FM - Erie, PA (Gannon University)

153.WOWL -- 530 AMC- New Haven, CT (Southern Connecticut State U.)
154.WPCD - 88.7 FM - Champaign, IL (Parkland College)
155.WPCR - 91.7 FM - Plymouth, NH (Plymouth State College)
156.WPSU - 91.5 FM - State College, PA (Penn State University)
157.WQAQ - 98.1 FM - Hamden, CT (Quinnipiac College)
158.WQFS - 90.9 FM - Greensboro, NC (Guilford College)
159.WQUB - 90.3 FM - Quincy, IL (Quincy University)
160.WRBC - 91.5 FM - Lewiston, ME (Bates College)
161.WRCM -- 850 AMC- Manhattan, NY (Manhattan College)
162.WRCT - 88.3 FM - Pittsburgh, PA (Carnegie Mellon)
163.WREK - 91.1 FM - Atlanta, GA (Georgia Tech)
164.WRFG - 89.3 FM - Atlanta, GA
165.WRFW - 88.7 FM - River Falls, WI (University of Wisconsin)
166.WRMC -- 540 AMC- Bethlehem, PA (Moravian College)
167.WRMC - 91.1 FM - Middlebury, VT (Middlebury College)
168.WRPI - 91.5 FM - Troy, NY (Rensselaer Polytechnic Institute)
169.WRPR - 90.3 FM - Mahwah, NJ (Ramapo College of NJ)
170.WRSK - 88.1 FM - Slippery Rock, PA (Slippery Rock University)
171.WRUR - 88.5 FM - Rochester, NY (University of Rochester)
172.WRUV - 90.1 FM - Burlington, VT
173.WRUW - 91.1 FM - Cleveland, OH (Case Western Reserve)
174.WSAM -- 610 AMC- West Hartford, CT (University of Hartford)
175.WSBF - 88.1 FM - Clemson, SC (Clemson University)
176.WSBU - 88.3 FM - St. Bonaventure, NY (St. Bonaventure Univ.)
177.WSOU - 89.5 FM - South Orange, NJ (Seton Hall University)
178.WSRN - 91.5 FM - Swarthmore, PA (Swarthmore College)
179.WSUP - 90.5 FM - Platteville, WI (University of Wisconsin)
180.WSYC - 88.7 FM - Shippensburg, PA (Shippensburg University)
181.WTBU - 89.3 FM - Boston, MA (Boston University)
182.WTSR -- 560 AMC- Towson, MD (Towson University)
183.WTSR - 91.3 FM - Trenton, NJ (Trenton State College)
184.WTUL - 91.5 FM - New Orleans, LA (Tulane University)
185.WUEV - 91.5 FM - Evansville, IN (University of Evansville)
186.WUIC - 89.5 FM - Chicago, IL (University of Illinois)
187.WUNH - 91.3 FM - Durham, NH (University of New Hampshire)
188.WUOG - 90.5 FM - Athens, GA (University of Georgia)
189.WUOL - 90.5 FM - Louisville, KY (University of Louisville)
190.WUSR - 99.5 FM - Scranton, PA (University of Scranton)
191.WUTM - 90.3 FM - Martin, TN (University of Tennessee Martin)
192.WUVT - 90.7 FM - Blacksburg, VA (Virginia Tech)
193.WVAW -- 640 AMC- Norfolk, VA (Virginia Wesleyan College)
194.WVFI -- 640 AMC- Notre Dame, IN (University of Notre Dame)
195.WVGS - 91.9 FM - Statesboro, GA (Georgia Southern University)
196.WVKR - 91.3 FM - Poughkeepsie, NY (Vassar College)
197.WVUA - 90.7 FM - Tuscaloosa, AL (University of Alabama)
198.WVUM - 90.5 FM - Coral Gables, FL (University of Miami)
199.WVVS - 90.9 FM - Valdosta, GA (Valdosta State University)
200.WVYC - 99.7 FM - York, PA (York College of Pennsylvania)
201.WWEC - 88.3 FM - Elizabethtown, PA (Elizabethtown College)
202.WWFM - 89.1 FM - Trenton, NJ (Mercer County Community Col.)
203.WWLR - 91.5 FM - Lyndonville, VT (Lyndon State College)
204.WWOZ - 90.7 FM - New Orleans, LA
205.WWSP - 89.9 FM - Stevens Point, WI (University of Wisconsin)

206.WWVU - 91.7 FM - Morgantown, WV (West Virginia University)
207.WXDU - 88.7 FM - Durham, NC (Duke University)
208.WXJM - 88.7 FM - Harrisonburg, VA (James Madison University)
209.WXPN - 88.5 FM - Philadelphia, PA (University of Pennsylvania)
210.WZBC - 90.3 FM - Newton, MA (Boston College)
211.WZIP - 88.1 FM - Akron, OH (University Of Akron)
212.WZLY - 91.5 FM - Wellesley, MA (Wellesley College)
213.WZMB - 91.3 FM - Greenville, NC (East Carolina University)
214.WZRD - 88.3 FM - Chicago, IL (Northeastern Illinois University)

College (student-run) Radio Stations List From X-Cast.

CIMN- 104.5fmca University of Prince Edward Island
KABF- 88.3FM Community Radio
KACC-FM Alvin Community College
KACV- 89.9FM Amarillo College
KAFA- 104.5FM U.S. Air Force Academy
KAGJ- 89.5FM Snow College
KAGU- 88.7FM Gonzaga University
KALA- 88.5FM St Ambrose University (Davenport, IA)
KALX- 90.7FM University of California - Berkeley
KAMP- 1570AM University of Arizona- Tucson
KAMU- 90.9FM Texas A&M
KANM- 99.9fmca Texas A&M University
KAOR- 91.1FM University of South Dakota
KAOS- 89.3FM Evergreen State College
KASB- 89.3FM Bellevue High School (Bellevue, WA)
KASF- 90.9FM Adams State College
KASR- 680AMcc Arizona State University
KASU- 91.9FM Arkansas State University
KAUR- 89.1FM Augustana College
KAZU- 90.3FM
KBAU- 90.7FM Ambassador University
KBBK- 104.7fm 530AM Biola University
KBCC- 88.5fmca Bakersfield Community College
KBCS 91.3fm Bellevue Community College
KBCU- 88.1FM Bethel College (North Newton, KS)
KBHU- 89.1FM Black Hills State University
KBIA- 91FM Missouri School of Journalism
KBLE- 90.7fmca Gateway Technical Institute
KBLZ- 89.9fmca University of Nebraska at Omaha
KBLZ- 93.7fmca University of Central Oklahoma
KBOO- 90.7FM(Portland, OR)
KBSB- 89.7FM Bemidji State University
KBSU- 90.3FM Boise State University
KBUX- 91.1FM Ohio State University
KBVC-AMcc Buena Vista University
KBVR- 88.7FM Oregon State University
KBYU- 89.1FM Brigham Young University

KCAC- 89.5FM Camden School District (Camden, AR)
KCAT- 91.1FMca Central Washington University
KCCK- 88.3FM Kirkwood Community College (Cedar Rapids, IA)
KCCR- 94.5fmca Pacific Lutheran University
KCEB- 1560AMcc Cerritos Community College
KCED- FM Centralia College
KCFS- 100.1FM Sioux Falls College
KCFV- 89.5FM St. Louis Community College
KCIL- 89.9FM Lick-Wilmdering High School
KCLU- 88.3FM California Lutheran University
KCMC- 570AMcc Central Methodist College
KCMU- 90.3FM University of Washington (Seattle, WA)
KCOE Coe College (Cedar Rapids, IA)
KCOU- 88.1FM University of Missouri
KCPR- 91.3FM Cal Poly State University
KCR- 98.9fmca San Diego State University
KCRH- 89.9FM Chabot College
KCRW- 89.9FM Santa Monica College
KCSB- 91.9FM University of California Santa Barbara
KCSC Chadron State College
KCSC- 95.5FMca California State University - Chico
KCSF- 90.1fmca City College of San Francisco
KCSN- 88.5FM Cal State- Northridge
KCSS- 91.9FM California State University at Stanislaus
KCSU- 90.5FM Colorado State University
KCUI- 89.1FM Central College (Pella, IA)
KCWC- 88.1FM Central Wyoming College
KDCC-FMca Dodge City Community College
KDCR Drury College
KDCV- 91.1FM Dana College
KDHX- 88.1FM
KDIC- 88.5FM Grinnell College (Grinnell, IA)
KDLX- 106.7FMca Northwest Missouri State University
KDNE- FM Doane College
KDNK- 90.5FM Community Radio (Carbondale, CO)
KDNZ- 880AMcc University of San Francisco (San Francisco, CA)
KDRK- 105.5fmca Drake University (Des Moines, IA)
KDSU- 91.9FM North Dakota State U. (Fargo, ND)
KDUP- 860AMcc University of Portland
KDUR- 91.9FM Fort Lewis College
KDVS- 90.3FM University of California at Davis
KECG- FM El Cerrito High/ Contra Costa College
KEDG- 530 AMcc California State University at Sacramento
KEDP- 91.1FM New Mexico Highlands University
KEOL- 91.7FM Eastern Oregon State College
KEPC- 89.7FM Pikes Peak Community College
KERA- 90.1FM
KFCR- 93.5fmca University of Massachusetts
KFHS- 94.9FM Fort Hays State University
KFJC- 89.7FM Foothill College
KFKX-AMca Hastings College
KFLI- 106.7FMca Embry Riddle Aeronautical University
KFSR- 90.7FM Fresno State

KGCR- 620AMcc Grossmont Community College
KGLP- 91.7FM University of New Mexico- Gallup
KGLT- 91.9FM Montana State University
KGNU- 88.5FM Community Radio
KGRG- 89.9FM Green River Community College
KGRK- 970AMcc University of Northern Iowa (Cedar Falls, IA)
KGSP- 92.3FM Park College
KGTS- 91.3FM Walla Walla College
KGUR- 101.7fmca Cuesta College
KGWC Golden West College
KHCR- 530AM Los Angeles Harbor College
KHDX- 93.1FM Hendrix College
KHIB- 91.9FM Southeastern Oklahoma State University
KHKE- 89.5FM University of Northern Iowa
KHSU- 90.5FM Humboldt State University
KHWK Cable 38 Northeast Community College
KICB- 88.1FM Iowa Central Community College (Ft. Dodge, IA)
KIDE- 91.3FM Hoopa Valley Tribal Council
KIGC- 88.7FM William Penn College (Oskaloosa, IA)
KJAG- 1640AM South Mountain High School
KJCC- 104.1FM San Jose City College
KJHK- 90.7FM University of Kansas
KJLU-FM Lincoln University of Missouri
KJNB- 99.9FM St. John's University
KJRP- 96.1FM San Bernardino Valley College
KKOM- cable channel 3 East Texas State University
KKSM- 1320AM Palomar College
KLA- 99.9FMca/530AMcc UCLA (Los Angeles, CA)
KLBC- 91.1fmca Long Beach City College
KLC- 104.1fmca Lewis and Clark College
KLCR- 96.9fmca Loras College (Dubuque, IA)
KLIF- 550AMcc Briarcliff College (Sioux City, IA)
KLMU- 840AMcc Loyola Marymount University
KLPI- 89.1FM Louisiana Tech University
KLRE- 90.5FM University of Arkansas- Little Rock
KLSU- 91.1FM Lousiana State University
KMBU- 98.3FMca Pepperdine University
KMHD- 89.1FM Mt. Hood Community College
KMNR- 89.7FM University of Missouri - Rolla
KMSA- 91.3FM Mesa College
KMSC- 650AMcc Moorhead State University
KMSM- 106.9FM Montana Tech
KMSU- 790AMcc Minot State University
KMUD- 91.1FM
KMUW- 89.1FM Wichita State University
KMVC- 91.7FM Missouri Valley College
KMXQ Southeast Missouri State University
KMXX- 530 AM/100.1FM Menlo College
KNAB- 830AM/90.1FM Chapman University
KNBU- 89.7FM Baker University
KNEU- 102.1fmca Truman State University
KNGX- 91.3FM Rogers State College
KNHC- 89.5FM Nathan Hale High School (Seattle, WA)

KNLU- 91.1FM Northeast Louisiana University
KNSU- 91.5FM Nicholls State University
KNWD- 91.7FM Northwestern State University of Louisiana
KOCC- 89.9FM Oklahoma Christian University (Oklahoma City, OK)
KOOP- 550AMcc Eastern Washinton University
KORD- 730AMcc Concordia College
KOSU- 91.7FM Oklahoma State University, Stillwater
KPAC- 530AMcc University of the Pacific
KPAW Doane College
KPBS- 89.5FM San Diego State University
KPFA- 94.1FM Community Radio
KPNI Southern Methodist University
KPSU- 1450AM Portland State University
KPUR- 94.5FM Pacific University
KQAL- 89.5FM Winona State University
KRC- 102.1fmca Rockhurst College
KRCC- 91.5FM Colorado College
KRCX- 590AMcc Regis University
KRFA- 560AM 90.5fmca University of Arkansas
KRFH- 610AMcc Humboldt State University
KRLX- 88.1FM Carleton College
KRNL- 89.7FM Cornell College (Mt. Vernon, IA)
KRNR- 88.5fmca Mankato State University
KRNU- 90.3FM University of Nebraska- Lincoln
KROL Radio Carroll College
KRPR- 89.9FM Rochester Community College
KRPS- 89.9FM Pittsburgh State University
KRRC- 104.1FM Reed College
KRSC- FM Rogers State College
KRUA- 88.1FM University of Alaska/Anchorage
KRUI- 89.7FM University of Iowa (Iowa City, IA)
KRUX- 91.5FM New Mexico State University
KRVM- 91.9FM School District 4-J
KRVS- 88.7FM University of Southwest Louisiana
KSAK- 90.1FM Mount San Antonio College
KSAU- 90.1FM Stephen F. Austin University
KSBR- 88.5FM Saddleback College
KSCR- 89.3FMca University of Southern California
KSCU- 103.3FM Santa Clara University
KSCV- 91.3FM University of Nebraska at Kearney
KSDB- 91.9FM Kansas State University
KSDJ-FM South Dakota State University
KSDT- 95.7fmca University of California at San Diego
KSFC-AMcc St. Francis College
KSFH- 90.5FM St Francis High School
KSFS- 100.7fmca San Francisco State University
KSHU- 89.3FM Sam Houston State University
KSJC- 89.5FM San Joaquin Delta College
KSJD- 91.5FM San Juan Basin Area Vo-Tech
KSJS- 90.7FM San Jose State University
KSLC- 90.3FM Linfield College
KSLH-FM Webster University
KSLU- 89.9FM Southeastern Louisiana University

KSLU- 90.3FM St. Louis University
KSLU- 640AMcc/88.9fmca St. Lawrence University
KSMC- 89.5FM St. Mary's College of California
KSMU- 640AMcc Southern Methodist University
KSPB- 91.9FM Robert Louis Stevenson High School
KSPC- 88.7FM Pomona College
KSPC- 91.9FM Robert Louis Stevenson School
KSRC-AMcc Sul Ross State University
KSRH- 88.1FM College of Marin
KSRQ-FM Northland Community Tech. College
KSSB- 106.3fmca California State University - San Bernardino
KSSU-FM Southwest State University
KSTM Simpson College (Indianola, IA)
KSTO- 590AMcc St. Olaf College
KSUA- 103.9FM University of Alaska/Fairbanks
KSUH- fmca California State University at Hayward
KSUN- 91.5FM Sonoma State University
KSVR- 90.1FM Skagit Valley College
KSWC- 100.3FM Southwestern College
KSYM- 90.1FM San Antonio College
KTCC-FM Colby Community College
KTCU- 88.7FM Texas Christian University
KTEC- 89.5FM Oregon Institute of Technology
KTEK- 88.7FMca New Mexico Tech
KTEQ- 91.3FM South Dakota School of Mines & Technology
KTOW- 102.3FM Radio SRO
KTRU- 91.7FM Rice University
KTSB- 91.7fmca University of Texas at Austin
KTSC- 89.5FM University of Southern Colorado
KTSW- 89.9FM Southwest Texas State University
KTUH- 90.3FM University of Hawaii
KTXT- 88.1FM Texas Tech University
KUAR- 89.1FM University of Arkansas- Little Rock
KUCB- 104fmca University of Colorado
KUCI- 88.9FM University of California - Irvine
KUCR- 88.1FM University of California at Riverside
KUGS- 89.3FM Western Washington University
KUHF- 88.7FM University of Houston
KULV- 530AMcc University of La Verne
KUMM- 89.7FM University of Minnesota at Morris
KUNI- 90.9FM University of Northern Iowa (Cedar Falls, IA)
KUNM- 89.9FM University of New Mexico
KUNR- 88.7 FM University of Nevada
KUNV- 91.5FM University of Nevada - Las Vegas
KUOI- 89.3FM University of Idaho
KUOM- 770AM University of Minnesota
KUOP- 91.3FM< University of the Pacific
KUOR- 89.1FM University of Redlands
KUOW- 94.9FM University of Washington
KUPS- 90.1FM University of Puget Sound
KURE- 88.5FM Iowa State University
KUSF-90.3FM University of San Francisco
KUSR- 91.5FM Iowa State University (Ames, IA)

KUTE- 660AMcc University of Utah
KUWR- 91.9FM University of Wyoming
KUWS- 91.3FM University of Wisconsin- Superior
KVCM- 830AM Los Angeles Valley College
KVCO- 88.3FM Cloud Community College
KVHS- 90.5FM Clayton, Valley High School
KVLU- 91.3FM Lamar University
KVNO- 90.7FM University of Nebraska at Omaha
KVRX- 91.7FM University of Texas at Austin
KVSC- 88.1FM St. Cloud State University
KWAR- 89.1FM Wartburg College (Waverly, IA)
KWAV- 88.3FM Central Missouri State University
KWBU- 107.1FM Baylor University
KWBY Oklahoma State University
KWCR- FM Weber State University
KWCW- 90.5FM Whitman College
KWEB- 91.1FM Webb School of California
KWJC- 91.9FM William Jewell College
KWLC- 1240AM Luther College (Decorah, IA)
KWMU University of Missouri at St. Louis
KWRS- 90.3FM Whitworth College
KWSB- 91.1FM Western State College
KWSC- 91.9FM Wayne State College
KWTR- 530AMcc Whittier Colelge
KWTS- 91.1FM West Texas A&M University
KWUR- 90.3FM Washington University
KWVA- 88.1FM University of Oregon
KWWC- 90.5FM Stephens College
KXJR- 91.9FM Arkansas Technical University
KXLU- 88.9FM Loyola Marymount University
KXUM- 670amcc University Of Mary
KYSC-FM Yakima Valley Community College
KZSC- 88.1FM UC - Santa Cruz
KZSU- 90.1FM Stanford University
KZUU- 90.7FM Washington State University (Pullman, WA)
WILL- 90.9FM University of Illinois- Champaign/ Urbana

Check out Stations on the W-side

[Main] [XCast Stations] [The Resource]

All comments, corrections, and inquiries: e-mail us at XCast!

East of the Mississippi Alpha
Stations on the W-side: WA-WG

106 VIC Ithaca College
ACRN- 99.3FMca Ohio University
CJAM- 91.5FM University of Windsor
CKON- 97.3FM Mohawk Nation Radio
CLN University of Maine

CTV Columbia (New York, NY)
KBLE- 90.7FMca Gateway Technical Institute
KBUX- 91.1FM Ohio State University
KFCR- 93.5FMca University of Massachusetts
KSFC- AMcc St. Francis College
KSLU- 88.9FMca St. Lawrence University
KUWS- 91.3FM University of Wisconsin- Superior
Media Technology Sanford Regional Vocational Tech.
Mercer Radio Mercer University
MSTV- ch30 Mississippi State University
MSU Telecasters Michigan State University
NCC-Radio Newberry College
Osprey Network University of North Florida
TEN University of Wisconsin- Fox Valley
TSU Tennessee State University
UTV13 University of Pennsylvania
WABY- 640AM Belmont Abbey College
WAER- 88.1FM Syracuse University
WAHS- 89.5FM Avondale High School
WAIC- 91.9FM American International College
WAIH- 90.3FM SUNY- Potsdam
WAJC- 104.5FM commercial
WAKE- 89.5FMca Wake Forest University
WALF- 89.7FM Alfred University
WALT Davidson College
WAMF-FM Florida A & M University
WAMH- 89.3FM Amherst College
WAMU- 89.3FM American University
WAPS- 89.1FM Akron Public Schools
WAPX- 91.7FM Austin Peay State College
WAQU- 530AMcc Aquinas College
WARC- 90.3FM Allegheny College
WARG- 88.9FM Argo High School
WARY- 88.1FM Westchester Community College
WASU- 90.5FM Appalachian State University
WAUG- 570AMcc Augustana College
WAVE- 107.3FMcc Carthage College
WAWL- 91.5FM Chattanooga State Technical Comm. College
WAYN- 1180AM Wayne State University
WBAA- 101.3FMca Purdue University
WBAI- 99.5FM Community Radio
WBAR- 87.9FMcc Barnard College
WBAU- 90.3FM Adelphi University
WBCC-AMcc Bethune-Cookman College
WBCR- 590AMcc Brooklyn College
WBCR- 90.3FM Beloit College
WBEZ- 91.5FM Community Radio
WBFH- 88.1FM Andover High School
WBFO- 88.7FM University of Buffalo
WBGO- 88.3FM Community Radio
WBGU- 88.1FM Bowling Green State University
WBHI- 90.7FM Bogan High School
WBHU- 90.3FM University of Alabama- Birmingham

WBIM- 91.5FM Bridgewater State College
WBJB- 90.5FM Brookdale Community College
WBKE- 89.5FM Manchester College
WBKX- 104.5fmca Northen Michigan University
WBLD- 89.3FM West Bloomfield Schools
WBMB- 590AM Baruch College
WBNY- 91.3FM Buffalo State College
WBOR- 91.1FM Bowdoin College
WBRH- 90.3FM Baton Rouge High School
WBRS- 100.1FM Brandeis University
WBSD- 89.1FM Burlington High School
WBSR- 96.5FMcc Brown University
WBSU- 89.1FM SUNY- Brockport
WBTY- 530AMcc Bentley College
WBUL- 93.5FMca University of South Florida
WBUQ- 91.1FM Bloomsburg University
WBVR- 1620AMcc Beaver College
WBWC- 88.3FM Baldwin-Wallace College
WBYQ- 96.7FM Essex Community Venter
WBZC- 88.9FM Burlington County College
WCAL- 94.1FMca Calvin College
WCBE- 90.5FM Columbus Public Schools
WCBN- 88.3FM University of Michigan
WCBU Bradley University
WCCB- 640AMcc Clarion University of Pennsylvania
WCCE-FM Campbell University
WCCG- 1360AMcc Canisus College
WCCH- 103.5FM Holyoke Community College
WCCH- 91.9FM Wheaton College
WCCM- 640AMcc County College of Morris
WCCN- 560AMcc Catonsville Community College
WCCR- 90.1FMca Purdue University
WCCR- CaTV Concord College, Division of Fine Arts
WCCS- 96.5FMca Wheaton College
WCCX- 104.5FM Carroll College
WCDB- 90.9FM SUNY- Albany
WCDE- 90.3FM D & E College
WCEB- 91.9FM Corning Community College
WCFM- 91.9FM Williams College
WCHC- 88.1FM Holy Cross College
WCHP- 650AMcc Central Michigan University
WCKS- 1610AM Grand Valley State University
WCLC College of Lake County
WCLH- 90.7FM Wilkes University
WCMA Center for the Media Arts
WCNI- 91.1FM Connecticut College (New London, CT)
WCOT- 1590AM/89.1fmca SUNY Institute of Technology
WCOW- 600AM SUNY- Old Westbury
WCPE- 530AMcc Union County College
WCPR- 530AM Stevens Institute of Technology
WCRN- 590AMcc William Peterson College
WCRX- 88.1FM Columbia College
WCSB- 89.3FM Cleveland State University

WCTF- 640AM SUNY- Farmingdale
WCUA- 91.3fmca Catholic University
WCUR- 680AMcc West Chester University
WCVF- 88.9FM SUNY- Fredonia
WCVH- 90.5FM Hunterdon Central Regional HS
WCVM- 98.7FMca SUNY- Morrisville
WCVY- FM Coventry Public High Schools
WCWM- 90.7FM College of William and Mary
WCWP- 88.1FM Long Island University
WCWS- 90.9FM College of Wooster
WCXS- 94.5FMca Community Radio
WCYJ- 88.7FM Waynesburg College
WCYT- 91.1FM Homestead High School
WDBK- 91.5FM Camden County College
WDBM- 88.9FM Michigan State University
WDCC- 89.9FMca Duchess Community College
WDCE- 90.1FM University of Richmond
WDCR- 1340AM Dartmouth College
WDCR- 1550AM University of Dayton
WDCR- 640AMcc Delaware County Community College
WDCT William Davies Career Technical HS
WDCV- 88.3FM Dickinson College
WDET- 101.9FM Wayne State University
WDFH- 90.3FM Community Radio
WDGC- 88.3FM Downers Grove High School South
WDJM- 91.3FM Framingham State College
WDNR- 89.5FM Widener University
WDOM- 91.3FM Providence College
WDPS- 89.5FM Dayton Public Schools
WDSR- 97.7FMca Duquesne University
WDTS- 620AMcc Delaware Tech Community College
WDTU- 640AMcc SUNY- Delhi
WDUB- 91.1FM Denison University
WDWN- 89.1FM Cayuga Community College
WEAA- 88.9FM Morgan State University
WEAX- 88.3FM Tri-State University
WECB- 99.9FM/ 640AMcc Emerson College
WECC Earle C. Clements Job Corps Center
WECI- 91.5FM Earlham College
WECR- 550AMcc Eckerd College
WECS- 90.1FM Eastern Connecticut State University
WECW- 107.7FM Elmira College
WECX- 530AM Eckerd College
WEFT- 88.3FM Community Radio
WEGL- 91.1FM Auburn University
WEHC- 90.7FM Emory & Henry College
WEHR- 93.7FM Penn State University
WEIU- 88.9FM Eastern Illinois University
WEKU- 90.9FM Eastern Kentucky University
WELH- 88.1FM Wheeler School
WEMC- 91.7FM Eastern Mennonite University
WEMU Eastern Michigan University
WEOS- 89.7FM Hobart and William Smith Colleges

WERB- MCTC (Middletown, CT)
WERG- 89.9FM Gannon University
WERS- 88.9FM Emerson College
WERU- 710AM Embry Riddle Aero. University
WERW- 1570AMcc Syracuse University
WESN- 88.1FM Illinois Weslean University
WESS- 90.3FM East Stroudsburg University
WESU- 88.1FM Wesleyan University (Middletown, CT)
WEVL- 90.1FM Community Radio
WEXP- 530AMcc La Salle University
WEXR- Ch.6 Monroe-Woodbury High School
WFAL- 680AMcc Bowling Green State University
WFCF- 88.5FM Flagler College
WFCI- 89.5FM Franklin College
WFCR- 88.5FM University of Massachusetts
WFCS- 107.7FM Central Connecticut State University (New Britain, CT)
WFCX- 1130AM/99.3FMca St. John Fisher College
WFDD- 88.5FM Wake Forest University
WFDM- 1460AM Farleigh Dickinson University
WFDU- 89.1FM Fairleigh Dickinson University
WFFC- 89.9FM Ferrum College
WFFT- 104.9FM SUNY- Buffalo
WFHB- 91.3FM Community Radio
WFHC- 91.5FM Freed-Hardeman University
WFIN- 650AM Jacksonville University
WFIT- 530AM Fashion Institute of Technology
WFIT- 89.5FM Florida Institute of Technology
WFIU Indiana University
WFIX- 91.5FMca Michigan State University
WFMQ-FM Cumberland University
WFMU- 91.1FM (former) Upsala College
WFNM- 89.1FM Franklin & Marshall College
WFNP- 88.7FM SUNY- New Paltz
WFPL- 89.3FM Community Radio
WFPR University of Wisconsin- Green Bay
WFPR- 640AMca Franklin Pierce College
WFRS-AMcc Franciscan University of Steubenville
WFSE- 88.9FM Edinboro University
WFSR- 87.7fmca University of West Florida
WFSS- 91.9FM Fayetteville State University
WFUV- 90.7FM Fordham University
WFWM- 91.7FM Frostburg State University
WGAJ- 91.7FM Deerfield Academy
WGAO- 88.3FM Dean College
WGCC- 90.7FM Genesee Community College
WGDR- 91.1FM Goddard College
WGEV- FM Geneva College
WGFR- 92.7FM Adirondack Community College
WGHR- 102.5FM Southern Polytechnic State University
WGKR- 540AMcc Jersey City State College
WGLS- 89.7FM Rowan College of New Jersey
WGLT- 89.1FM Illinois State University
WGLZ- 91.5FM West Liberty State College

WGMB- 640AMcc Bridgewater College
WGMU- 1370AM George Mason University
WGRE- 91.5FM DePauw University
WGSE- 91.7FM Gaston College
WGSU- 89.3FM SUNY- Geneseo
WGTB- 92.3FMca Georgetown University
WGTS- 91.9FM Columbia Union College
WHAR- 89.7FMca Community Radio
WHAT- 640AMcc Bradford College
WHAT- 800AM Dowling College
WHCL- 88.7FM Hamilton College
WHEI- 88.9FM Heidelberg College
WHEN Western Illinois University
WHFH- 88.5FM Homewood Flossmoor HS
WHFR- 89.3FM Henry Ford College
WHHR Purdue University
WHHS- 107.9FM Haverford High School
WHJT-FM/ WSLI-AM Mississippi College
WHLC- 590AM Lehman College
WHPC- 90.3FM Nassau Community College
WHPK- 88.5FM University of Chicago
WHRB- 95.3FM Harvard University
WHRC- 640AMcc Haverford College
WHRM- 620Amcc Hiram College
WHRV- 89.5FM Community Radio
WHRW- 90.5FM SUNY- Binghamton
WHSE- 640AMcc Smithtown High School
WHSN-FM Husson College
WHSR- 530AM Johns Hopkins University
WHUS- 91.7FM University of Connecticut (Storrs, CT)
WHVC Hudson Valley Community College
WHYC- 88.5FM Hyde County Public Schools
WICB- 91.7FM Ithaca College
WICR- 530AMcc Iona College
WIDA- 540AM Mount Ida College
WIDB- 104.3FMca Southern Illinois University- Carbondale
WIDR- 89.1FM Western Michigan University
WILY- 90.1FMca Purdue University
WIRE- 600AMcc Dowling College
WIRE- 800AMcc University of Virginia
WIRQ- 94.3FM Irondequoit High School
WISU- 89.7FM Indiana State University
WITC- 88.9FM Cazenovia College
WITR- 89.7FM Rochester Inst. of Tech.
WIUP- 90.1FM Indiana University of Pennsylvania
WIUS- 1570AM Indiana University
WIUS- 88.3FM Western Illinois University
WIUV- 91.3FM Castleton State College
WIXQ- 91.7FM Millersville University
WJEF- FM Jefferson High School
WJHD- 90.7FM Portsmouth Abbey School
WJHU- 88.1FM John Hopkins University
WJJW- 91.1FM North Adams State College

WJMD- 90.1FMcc Kalamazoo College
WJMF- 88.7FM Bryant College
WJMU- 89.5FM Milikin University
WJPZ- 89.1FM Syracuse University
WJRH- 104.9FM Lafayette College
WJSC- 90.7FM Johnson State College
WJSV- 90.5FM Morristown High School
WJTB- 550AMcc New Jersey Institute of Technology
WJUL- 91.5FM University of Massachisetts at Lowell
WKAR- 90.5FM Michigan State University
WKCO- 91.9FM Kenyon College
WKCR- 1610AM Miami-Dade Community College
WKDI- 93.5FMca Northern Illinois University
WKDT- 89.3FM US Military Academy
WKDU- 91.7FM Drexel University
WKGC- 1480AM Gulf Coast Community College
WKHR- 88.3FM Kenston High School
WKKL- 90.7FM Cape Cod Community College
WKNC- 88.1FM North Carolina State University
WKNH- 91.3FM Keene State College
WKNT- 87.9FMca Kent School
WKPS- 90.7FM Penn State University
WKPW-FM Morton Memorial HS/Eder Career Cntr.
WKPX- 88.5FM Piper High School
WKR- TV19FM Evanston Township High School
WKRB- 90.9FM Kingsborough Community College
WKRC- 100.9FMca Kiski School
WKSR- 730AMcc Kent State University
WKSU Kent State University
WKVR- 92.3FM Juniata College
WKWC- FM Kentucky Wesleyan College
WKWZ- 88.5FM Syosset High School
WLAY- 90.1fmca Purdue University
WLBN- 570AMcc Albion College
WLCA- 89.9FM Lewis & Clark Community College
WLCV- 570AM University of Louisville
WLCX- 600AMcc Longwood College
WLFM- 91.1FM Lawrence University
WLFR- 91.7FM Stockton State College
WLHA- 90.5FM University of Wisconsin- Madison
WLHD- 100.7FMca Ohio University
WLHU- 90.3FMca Lock Haven University
WLJS- 91.9FM Jacksonville State University
WLKR- 640AMcc Lake Superior State University
WLNX- 88.9FM Lincoln College
WLNZ- 102.5fmca Lansing Community College
WLOZ- 89.3FMca University of North Carolina- Wilmington
WLRA- 88.1FM Lewis University
WLRC- 89.1fmca Lenoir-Rhyne College
WLRH- 89.3FM University of Alabama- Huntsville
WLSO- 90.1FM Lake Superior State University
WLTL- 88.1FM Lyons Township High School
WLUR- 91.5FM Washington & Lee University

WLVR- 91.3FM Lehigh University
WLYN Lynn University
WMAX- 540AMcc Hesser College
WMBK- 530AMcc Millbrook School
WMBR- 88.1FM Massachusetts Institute of Technology
WMCB-AMcc Medaille College
WMCC Monroe Community College
WMCE- 88.5FM Mercyhurst College
WMCI- 88.3FM Massasoit Comm. College
WMCO- 90.7FM Muskingum College
WMCR- 640AMcc Monmouth College
WMCR- 640AMcc Western Maryland College
WMCR- 90.1FM Marist College
WMCX- 88.9FM Monmouth College
WMEB- 91.9FM University of Maine- Orono
WMFO- 91.5FM Tufts University
WMHB- 90.5FM Colby College
WMHC- 91.5FM Mount Holyoke College
WMHD- 90.5FM Rose-Hulman Institute of Technology
WMHT- 91.5FM Chapel Hill Community College
WMHW- 91.5FM Central Michigan University
WMKY- 90.3FM Moorehead State University
WMLN- 91.5FM Curry College
WMNF- 88.5FM Tampa Community Radio
WMNJ- 88.9FM Drew University
WMOC St John's University/Staten Island
WMOT- 89.5FM Middle Tennessee State University
WMPG- 90.9FM University of Southern Maine
WMRE- 530AMcc Emory University
WMRH- 90.1fmca Purdue University
WMSC- 101.5FM Montclair State College
WMSE- 91.7FM Milwaukee School of Engineering
WMSR- 540AMcc University of Ohio, Miami
WMSS- 91.1FM Middletown Area High School
WMSV- 91.1FM Mississippi State University
WMTB- 89.9FM Mount St. Mary's College
WMTS- 88.3FM Middle Tennessee State University
WMTU- 91.9FM Michigan Technological University
WMUA- 91.1FM University of Massachusetts- Amherst
WMUC-88.1FM University of Maryland- College Park
WMUH- 91.7FM Muhlenberg College
WMUL- 88.1FM Marshall University
WMUR- 750AMcc Marquette University- Milwaukee
WMUW- 88.5FM Mississippi University for Women
WMVB- 890AMcc Art Institute of Pittsburgh
WMVL- 1620AM Manhattanville College
WMWA- 88.5FM Glenbrook South High School
WMWC- 91.5FMca Mary Washington College
WMWC-AMcc Mt. Wachusett Community College
WMWM- 91.7FM Salem State College
WMXC Middlesex Community Technical College
WMXM- 88.9FM Lake Forest College

Next Page: Stations on the W-side: WN-WZ

[Main] [XCast Stations] [The Resource]

East of the Mississippi Beta
Stations on the W-side: WN-WZ

WNAA-FM North Carolina A&T State University
WNAZ- 750AM Nazareth College of Rochester
WNBY-AMcc Newbury College
WNCB Niagara County Community College
WNCC- 97.7fmca Northhampton Community College
WNCW- 88.7FM Isothermal Community College
WNEC- 91.7FM New England College
WNEK- 105.1FM Western New England College
WNHS- 104.1FM The New Hampton School
WNHU- 88.7FM University of New Haven
WNKR- 101.1fmca Nova University
WNKU- 89.7FM Northern Kentucky University
WNMC- 90.9FM Northwestern Michigan College
WNMH- 91.5FM Northfield Mt. Hermon School
WNPC-TV6 SUNY- New Paltz
WNSB- 91.1FM Norfolk State University
WNSU-92.9fmca Nova Southeastern University
WNTE- 89.5FM Mansfield University
WNTH- 88.1FM New Trier High School
WNTI- 91.9FM Centenary College
WNUB- 88.3FM Norwich University
WNUR- 89.3FM Northwestern University
WNWG- 570AMcc Ohio University
WNYE- 91.5FM New York City Board of Education
WNYK- 88.7FM Nyack College
WNYO- 88.9FM SUNY- Oswego
WNYT- 550AMcc New York Institute of Technology
WNYU- 89.1FM New York University
WOBC- 91.5FM Oberlin College
WOBN- 101.5FM Otterbein College
WOCC- 530AM Orange County Comm. College
WOCC- 90.5fmca Ocean County College
WOCH University of Massachusetts- Amherst
WOCR- 89.7FM Olivet College
WODU- 640AMcc Old Dominion University
WONB- 94.9FM Ohio Northern University
WONC- 89.1FM North Central College
WONU-FM Olivet Nazarene University
WONY- 90.9FM SUNY- Oneonta
WORB- 90.3FM Oakland Community College
WORT- 89.9FM Community Radio, non-com
WORW- 91.9FM Port Huron Northern High School

WOSL Ohio State University
WOSR- 99.9FM Ohio State University
WOTA- 530AMcc Dekalb Technical College
WOUB- 1340AM Ohio University
WOUI- 88.9FM Illinois Institute of Technology
WOVI- 89.5FM Novi High School
WOWL- 1610AMcc Florida Atlantic University
WOWL- 530AM Southern Connecticut State University
WOZQ- 91.9FM Smith College
WPAA- 91.7FM Phillips Academy
WPBX- 88.3FM LIU/ Southhampton
WPCR Rutgers University
WPCR- 91.7FM Plymouth State College
WPEA- 90.5FM Philips Exeter Academy
WPHS- 89.1FM Warren Cousino High School
WPIR- 87.9FM Pratt Institute
WPIR- 90.1FM Worcester Polytechnic Institute
WPKN- 89.5FM Community Radio
WPLH- 103.1FM Abraham Baldwin College
WPLS- 96.7FM Furman University
WPLT- 93.9FM SUNY- Plattsburgh
WPMX Onondaga Community College
WPNR- 90.7FM Utica College
WPOB- 88.5FM Plainview/Old Bethpage Central High School
WPPJ- 670AM Point Park College
WPRK- 91.5FM Rollins College
WPSA- 98.3FM Paul Smith's College
WPSC- 88.7FM William Paterson College
WPSH- 630AMcc Penn State University/ Harrisburg
WPSR-FM Evansville-Vandenburg School Corp.
WPSU- 91.5FM Penn State University
WPTS- 92.1FM University of Pittsburgh
WPUB- 640AM Pace University
WPUM- 90.5FM St. Joseph's College
WPUR- 590AMcc SUNY- Purchase
WQAB- 91.3FM Alderson-Broaddus College
WQAC- 90.9FM Alma College
WQAQ- 88.3FM Quinnipiac College (Hamden, CT)
WQAX- 100.3fmca University of Indiana
WQBR- 640AMcc Eastern Michigan University
WQCC- 91.9FM Queensborough Community College
WQFS- 90.9FM Guilford College
WQHS- 730AMcc University of Pennsylvania
WQRI- 88.3FM Roger Williams University
WQSU- 88.9FM Susquehanna University
WQUB- 90.3FM Quincy University
WRAS- 88.5FM Georgia State University
WRBB- 104.9FM Northeastern University
WRBC- 91.5FM Bates College
WRBU- 1610AMca Butler University
WRBU- 88.1FMca Bradley University
WRCM- 850AMcc Manhattan College
WRCR- 640AMcc Rockford College

WRCT- 88.3FM Carnegie Mellon University
WRCU- 90.1FM Colgate University
WRDL- 88.9FM Ashland University
WRDP- 640AMcc DePaul University
WREK- 91.1FM Georgia Institute of Tech.
WRFL- 88.1FM University of Kentucky
WRFL- 90.1FMca Purdue University
WRFM Montgomery County Community College
WRFT- 540AMcc Temple University
WRFW- 88.7FM University of Wisconsin- River Falls
WRGW- 540AMcc George Washington University
WRHO- 89.7FM Hartwick College
WRHU- 88.7FM Hofstra University
WRIU- 90.3FM University of Rhode Island
WRKC- 88.5FM King's College
WRKU- 640AM Kutztown University
WRLC- 1110AMcc Rutgers State U./ Livingston College
WRLC- 91.7FM Lycoming College
WRMC Mitchell College
WRMC- 640AMcc Moravian College
WRMC- 91.1FM Middlebury College
WRMT- 1530AMcc Mohawk Valley Community College
WRMU-FM Mount Union College
WRND- 91.7FM Notre Dame College
WRNU- 610AMcc Rutgers University/ Newark
WRNU- 640AMcc Niagara University
WRNV- 89.7FM U.S. Naval Academy
WROC- 650AM Montgomery College
WRPI- 91.5FM Rensselaer Polytechnic Institute
WRPN-FM Ripon College
WRPR- 90.3FM Ramapo State College
WRPW- 630AMcc Pace University
WRRC- 107.7FM Rider University
WRRG- 88.9FM Triton College
WRSE- 88.7FM Elmhurst College
WRSJ-FMca St. John the Baptist High School
WRSK- 88.1FM Slippery Rock University
WRSR- 530AM Ulster County Community College
WRST- 90.3FM University of Wisconsin- Oshkosh
WRSU- 88.7FM Rutgers University
WRTC- 89.3FM Trinity College
WRTV- 600AM Iona College
WRTV-AMcc George Washington University
WRUB- 770AM SUNY- Buffalo
WRUC- 89.7FM Union College
WRUR- 88.5FM University of Rochester
WRUV- 90.1FM University of Vermont
WRUW- 91.1FM Case Western Reserve University
WRVU- 91.1FM Vanderbilt University
WSAM- 106.3FMca/Ch.4 University of Hartford
WSAP- 91.1fmca St. Andrews College
WSBF- 88.1FM Clemson University
WSBU- 88.3FM St. Bonaventure University

WSCR- 610AM Comm. College of Allegheny County
WSCS- 90.9FM Colby-Sawyer College
WSCW- 640AMcc Worcester State College
WSDH-FM Sandwich High School
WSDP- 88.1FM Plymouth-Salem High School
WSFR Suffolk University
WSFX- 89.1FM/ 105.7FM Luzerne County Community College
WSGN-FM Gadsden State Community College
WSGR- 590AM Ohio University
WSGR- 91.3FM St. Clair County Community College
WSHC- 89.7FM Shepherd College
WSHL- 91.3FM Stonehill College
WSHU- 91.1FM Sacred Heart University
WSIA- 88.9FM College of Staten Island
WSIU- 88.3FM Southern Illinois University- Carbondale
WSJB- 91.5FM St. Joseph's College
WSJR- 530AMcc St. Joseph's University
WSJU- 640AMcc St John's University
WSKB- 89.5FM Westfield State College
WSMC- 91.7FMca/ 830AMcc St. Mary's College of Maryland
WSMR- 530AMcc St. Mark's School
WSMU- 91.1FM University of Massachusetts- Dartmouth
WSNC- 94.7fmca St. Norbert College
WSND- 88.9FM University of Notre Dame
WSOE- 89.3FM Elon College
WSOS- 530AM Shorter College
WSOU- 89.5FM Seton Hall University
WSPN- 91.1FM Skidmore College
WSRN- 91.5FM Swarthmore College
WSSB-FM South Carolina State University
WSTB- 88.9FM Streetsboro High School
WSTK- AMcc St. Thomas Aquinas College
WSUC- 90.5FM SUNY- Cortland
WSUP- 90.5FM University of Wisconsin- Platteville
WSUR- 107.5fmca Salisbury State University
WSUR- 89.7FMca/ 91.9FMca Shenandoah University
WSUW- 91.7FM University of Wisconsin- Whitewater
WSVA- 590AMcc School of Visual Arts
WSVC-AMcc St. Vincent College
WSWI-AM University of Southern Indiana
WSYC- 88.7FM Shippensburg University
WTAW- 1150AM
WTBR-FM 89.7 Taconic High School
WTBU- 89.3FMcc Boston University
WTCC- 90.7FM Springfield Technical Comm. College
WTGP- 88.1FM Thiel College
WTHS Washington Township High School
WTHS- 89.9FM Hope College
WTJU- 91.1FM University of Virginia
WTLS- Ch.4 Lakeland Comm. College
WTMD- 89FM Towson State University, MD
WTOH- 105.9FM Spring Hill College
WTPC- 105.3FM Principia College

WTPL- 610AMcc Tusculum College
WTPS- 99.9FM Community Radio
WTSC- 91.1FM Clarkson University
WTSR- 560AMcc Towson State University, MD
WTSR- 91.3FM Trenton State College
WTTU- 88.5FM Tennessee Tech
WTUL- 91.5FM Tulane University
WTWR University of Detroit
WTYL Bucks County Comm. College
WUAG- 103.1FM University of North Carolina- Greensboro
WUAW- 88.3FM Central Carolina Community College
WUCF- 89.9FM University of Central Florida
WUDM- 860AMcc University of Detroit Mercy
WUEC- 89.7FM University of Wisconsin- Eau Claire
WUEV- 91.5FM University of Evansville
WUFI- 530AMcc Florida International University
WUFT- 89.1FM University of Florida
WUIC- 89.5FM University of Illinois at Chicago
WUJC- 88.7FM John Carroll University
WUKY- 91.3FM University of Kentuky
WUMB- 91.9FM University of Massachusetts- Boston
WUMD- 560AMcc University of Maryland- Baltimore
WUMD- Ch 18/21 Cable University of Michigan - Dearborn
WUMF- 100.5FM University of Maine
WUMS- 92.1FM University of Mississippi
WUNC- 91.5FM University of North Carolina
WUNH- 91.3FM University of New Hampshire, Durham
WUOG- 90.5FM University of Georgia
WUOL- 90.5FM University of Louisville
WUOT- 91.9FM University of Tennessee
WUPI- 92.1FM University of Maine- Presque Isle
WUPJ- 1610AMcc University of Pittsburgh- Johnstown
WUPX- 91.5FM Northern Michigan University
WUSB- 90.1FM SUNY- Stony Brook
WUSC- 90.5FM University of South Carolina
WUSM- 88.5FM University of Southern Mississippi
WUSO- 89.1FM Wittenberg University
WUSR- 99.5FM University of Scranton
WUTK- 90.3FM University of Tennessee
WUTM- FM University of Tennessee - Martin
WUTS- 91.3FM University of the South
WUTZ- 1075AM University of Tampa
WUVA- 92.7FM University of Virginia
WUVT- 90.7FM Virginia Polytechnic Inst. (Virginia Tech)
WVAC- 107.9FM Adrian College
WVAU- 90.5FM American University
WVAW- 640AMcc Virginia Wesleyan College
WVBC- 88.1FM Bethany College
WVBU- 90.5FM Bucknell University
WVCP-FM Volunteer State College
WVCS- 91.9FM California University of Pennsylvania
WVCW- 105.3fmca Virginia Commonwealth University
WVFI- 640AMcc University of Notre Dame

WVFS- 89.7FM Florida State University
WVGS- 91.9FM Georgia Southern University
WVHC- 91.5FM Herkimer County Comm. College
WVHS Waubonsie High School
WVIA- 89.9FM Community Radio
WVJC- 89.1FM Walbash Valley College
WVKC- 90.7FM Knox College
WVKR- 91.3FM Vassar College
WVLS- 89.7FM Highland High School
WVMH- 90.5FM Mars Hill College
WVMM-FM Messiah College
WVMW- 91.5FM Marywood College
WVOE- 107.5FM Northwestern College
WVOF- 88.5FM Fairfield University
WVOU- 540AMcc Ursinus College
WVRU- 89.9FM Radford University
WVSS- 100.1fmca University of Wisconsin- Stout
WVSU- 91.1FM Samford University
WVTC- 90.7FMca Vermont Technical College
WVUA- 90.7FM University of Alabama- Tuscaloosa
WVUD- 91.3FM University of Delaware
WVUM- 90.5FM University of Miami
WVUR- 95.1FM Valparaiso University
WVVS- 90.9FM Valdosta State University
WVXU- 91.7FM Xavier University
WVYC- 88.1FM York College
WWAS- 88.1FM Pennsylvania College of Tech.
WWCU- 90.5FM Western Carolina University
WWEB- 89.9FM Choate Rosemary Hall
WWEC- 88.3 FM Elizabethtown College
WWFM- 89.1FM Mercer County Community College
WWHR- 91.7FM Western Kentucky U.
WWHS- 92.1FM Hampden-Sydney College
WWIH- 90.3FM High Point College
WWLR- 91.5FM Lyndon State College
WWPT- 90.3FM Staples High School
WWPV- 88.7FM St. Michael's College
WWSP- 89.9FM University of Wisconsin- Stevens Point
WWSU- 106.9FM Wright State University
WWTA- 88.5FM Tabor Academy
WWUH- 91.3FM University of Hartford
WWVU- 91.7FM West Virginia University
WXAC- 91.3FM Albright College
WXAV- 88.3FM St. Xavier University
WXBA- 88.1FM Brentwood High School
WXBC- 540AM Bard College
WXCI- 91.7FM Western Connecticut State University
WXDU- 88.7FM Duke University
WXGC- 88.9FM Georgia College
WXII-FMca Eastern Kentucky University
WXIN- 90.7FM Rhode Island College
WXJM- 88.7FM James Madison University
WXLV- 90.3FM Lehigh Carbon Community College

WXOU- 88.3FM Oakland University
WXPL- 91.3FM Fitchburg State College
WXPN- 88.5FM University of Pennsylvania
WXRT University of Pennsylvania
WXUT- 88.3FM University of Toledo
WXVU- 89.1FM Villanova University
WXYC- 89.3FM University of North Carolina- Chapel Hill
WYBF- 89.1FM Cabrini College
WYBC- 94.3FM Yale University (New Haven, CT)
WYCE- 88.1FM Grand Rapids Comm. Media Center
WYCS-FM York County School Board.
WYRE- 103.9fmca University of Wisconsin- Waukesha
WYSO- 91.3FM Antioch College
WYSU- 88.5FM Youngstown State University
WYUR- 640AMcc Yeshiva University
WZBC- 90.3FM Boston College
WZBT- 91.1FM Gettysburg College
WZIP- 88.1FM University of Akron
WZLY- 91.5FM Wellesley College
WZMB- 91.3FM East Carolina University
WZRD- 88.3FM Northeastern Illinois University
WZRX- 95.3fmca University of Wisconsin- Parkside
WZZE- 97.3FM Glen Mills High School

Main Station Page

[Main] [XCast Stations] [The Resource]

All comments, corrections, and inquiries: e-mail us at XCast!

The Survey.

Thank you for agreeing to participate in this very important project. If you have reached this page, then you must be 18 years or older. By completing the survey, you are giving consent to use your responses in the study. This survey should take you about 10 minutes to complete.
Please answer the questions as best you can. Again, thank you for your participation. Regards, Survey Director.

To start, we would like to know why you visit the college radio station web sites you currently browse. Please indicate the extent to which you
agree or disagree with the following statements:

I visit college radio station web sites because...

1. I can find concert information.
   1 Disagree 2 3 4 5 6 7 Agree

2. I can find information about the music.
   1 Disagree 2 3 4 5 6 7 Agree

3. I can get information about community events.
   1 Disagree 2 3 4 5 6 7 Agree

4. I can get information about campus.
   1 Disagree 2 3 4 5 6 7 Agree

5. I have fun playing with it.
   1 Disagree 2 3 4 5 6 7 Agree

6. The site is entertaining
   1 Disagree 2 3 4 5 6 7 Agree

7. The site is exciting.
   1 Disagree 2 3 4 5 6 7 Agree

8. The site is imaginative.
   1 Disagree 2 3 4 5 6 7 Agree

9. I can e-mail the announcers.
   1 Disagree 2 3 4 5 6 7 Agree

10. I can chat with other listeners.
    1 Disagree 2 3 4 5 6 7 Agree

11. I can communicate with people at the station.

1 Disagree 2 3 4 5 6 7 Agree

12. I can request songs.
1 Disagree 2 3 4 5 6 7 Agree

13. I can sign up for contests.
1 Disagree 2 3 4 5 6 7 Agree

14. It helps me pass time.
1 Disagree 2 3 4 5 6 7 Agree

15. It helps take my mind off of things.
1 Disagree 2 3 4 5 6 7 Agree

16. It is relaxing.
1 Disagree 2 3 4 5 6 7 Agree

Now, we would like to know why you enjoy visiting the radio station web sites you currently browse. Please indicate the extent to which you
agree or disagree with the following statements:

I enjoy visiting radio station web sites because...

17. I can get free stuff from the station.
1 Disagree 2 3 4 5 6 7 Agree

18. I can download pictures.
1 Disagree 2 3 4 5 6 7 Agree

19. I can download text files
1 Disagree 2 3 4 5 6 7 Agree

20. I like the color scheme.
1 Disagree 2 3 4 5 6 7 Agree

21. The words are easy to read.
1 Disagree 2 3 4 5 6 7 Agree

22. It is easy to surf (navigate) through.
1 Disagree 2 3 4 5 6 7 Agree

23. It is always current.
1 Disagree 2 3 4 5 6 7 Agree

24. It has links to other sites I like.
1 Disagree 2 3 4 5 6 7 Agree

25. It has useful information.
1 Disagree 2 3 4 5 6 7 Agree

The next few questions deal with how you feel about being on a college radio station website. Please indicate the extent to which you agree or
disagree with the following statements:

Visiting a college radio station web sites makes me feel...

26. Like I know this radio station.
1 Disagree 2 3 4 5 6 7 Agree

27. Really good about the station.
1 Disagree 2 3 4 5 6 7 Agree

28. Like I am part of the station.
1 Disagree 2 3 4 5 6 7 Agree

29. It reminds me of being at college.
1 Disagree 2 3 4 5 6 7 Agree

30. It strengthens my ties to the school.
1 Disagree 2 3 4 5 6 7 Agree

31. It makes me feel closer to campus.
1 Disagree 2 3 4 5 6 7 Agree

32. Like I am strengthening contact with the school.
1 Disagree 2 3 4 5 6 7 Agree

33. What is the main reason you visit college radio station web sites.

34. When did you first visit this station's website?

35. On an average visit to a college radio station website, how long do you stay?

36. In an average week, how many times do you visit the college radio station that led you to this survey?
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 or more times a week.

37. I plan to listen to the station more.
1 Disagree 2 3 4 5 6 7 Agree

38. I plan to listen to the morning show more.
1 Disagree 2 3 4 5 6 7 Agree

39. I plan to attend more station concerts (shows).
1 Disagree 2 3 4 5 6 7 Agree

40. I plan to attend more station live on-site broadcasts.
1 Disagree 2 3 4 5 6 7 Agree

41. I plan to attend more station events.
1 Disagree 2 3 4 5 6 7 Agree

42. I plan to request more songs.
1 Disagree 2 3 4 5 6 7 Agree

43. I plan to try to win more prizes.
1 Disagree 2 3 4 5 6 7 Agree

44. I plan to call to give my opinion.
1 Disagree 2 3 4 5 6 7 Agree

45. I plan to visit the college radio station web site again.
1 Disagree 2 3 4 5 6 7 Agree

46. I plan to e-mail the station.
1 Disagree 2 3 4 5 6 7 Agree

47. I plan to tell others about the college radio station web site.
1 Disagree 2 3 4 5 6 7 Agree

48. I plan to shop at the businesses I hear mentioned on the station.
1 Disagree 2 3 4 5 6 7 Agree

49. Can you listen to the college radio station's broadcast live on the station's web site?
No Yes I don't know.

You're almost done. Now just a few more questions about you:

50. What interactive capabilities do you value on a college radio station web site? Please choose all that apply.
Downloading things from the site.
E-mail links to the staff/station.
A chat room.
A Web-Ring program that links me to similar sites.
Search engines.
Audio streaming (Web-Radio) so I can hear the station broadcast live on the net.
Listening to music clips on audio (.wav or Real Audio) files.

51. Please type in the name of the college or university whose radio station web site that led you to this survey.

52. Please type the radio station's CALL LETTERS (ex. WXYZ, KXYZ) or the name of the web site that lead you to this survey.

53. If you live in the United States, please type your state's 2 letter abbreviation. Non-U.S. residents type "XX" in the box and answer the NEXT question.

54. If you do NOT live in the United States, please type in your city & country here.

55. Can you listen to the station's broadcast signal on the radio where you currently live?
No Yes

56. Did you graduate from the college that hosts the web site that brought you to this survey?
No Yes Currently attending. Attended, but didn't graduate.

57. What is your gender?
Male Female

58. What is your age?

59. What is your race?

60. What is your marital status?

61. Please indicate the highest level of education completed.

62. Which category best describes your total household income?

63. What technology do you USUALLY use to access the Web?

64. When accessing college radio station web sites, where are you usually physically located?

65. Is there anything else you would like tell us about your experience visiting college radio station web sites? If so, please write the space provided.

You are done! Thank you for your opinions!
Click below to SUBMIT your responses to this important study and GO BACK to your COLLEGE RADIO STATION'S web site If you have any questions or want to learn more about this study, click here to contact the Survey Director, smcclung@utk.edu.

VITA

Steven was raised in Rupert, West Virginia and graduated High School from Greenbrier West in 1980. He then entered Marshall University where he received a Bachelors Degree in Counseling/Rehabilitation in 1984 and a Masters Degree in Speech/Broadcasting in 1986. After leaving Marshall, Steven embarked on a career in broadcasting that began in Myrtle Beach, South Carolina.

He worked in a series of radio and television news jobs at the Beach where he eventually moved to the morning anchor position at WPDE-15. Soon after he was hired in Charleston, SC as a reporter at WCIV-4. A couple of years later Steven returned to the grand Strand where he again worked in television and radio news.

An opportunity arose to move to Atlanta, Georgia to work with a former Beach colleague in the Atlanta market and Steven worked at WAPW in the early 1990's. A drop in ratings forced the station to re-format and he then re-located to Pittsburgh, PA where he worked as a traffic reporter for several radio and television stations in that market.

In the mid-1990's he returned to Atlanta where he worked in radio and began teaching at Clayton State College. His department head, Judy Brown, encouraged Steven to return to school to finish his Doctorate. She said she had gone to Tennessee and thought it would be a good place to go.

In the fall of 1995 he started the Doctoral program in Communications at the University of Tennessee.

He is currently an Assistant Professor of Broadcasting at Georgia Southern University in Statesboro, Georgia.