

UTILIZATION OF TECHNOLOGY IN CACREP APPROVED

COUNSELOR EDUCATION PROGRAMS

by

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ABSTRACT

This study focused on the use of technology within CACREP approved counselor education programs throughout the United States. The procedure for this project was handled totally online. An initial e-mail was sent to 146 possible participants to request corrected addresses or names, if necessary, and to alert them to the coming introduction and invitation to participate in this survey. There were 44 respondents who agreed to take part in this project. They were given a password to the survey instrument and directed to the researcher's web page. From there, they clicked on a button visible on the first page that took them to the password page of the survey instrument. They then completed the survey consisting of fill in the blank; yes, no; open-ended questions; and multiple choice questions and hit the "submit" button to indicate that they were finished.

Literature pertaining to the use of technology in general as well as in counselor education programs was extensively reviewed. This demonstrated the current movement in education toward alternative delivery methods for course instruction. The results indicated that counselor educators are aware of the increase in the use of technology in programs, but were not as convinced of the effectiveness of this method of course delivery. Though most were comfortable with PowerPoint presentations by faculty and students, participants were not widely accepting of classes online, or broadcast via satellite.

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Chapter I

INTRODUCTION

In order for graduate counselor education programs to remain competitive, as well as serve students, they must integrate technology within their curriculum. The encroachment of silicon chips and technology into the field of counselor education is anathema to many counselor educators. Concerns of violations of confidentiality (Casey & Bloom, 1994; Sampson, Kolodinsky, & Greeno, 1997) and other ethical issues leave many counselor educators grappling with maintaining standards, while attempting to implement technological advances into counseling and counselor education programs.

Resistance to the use of technology in counselor education programs is understandable. Counselors value personal contact; monitor body language for clues to client feelings; listen to vocalizations for changes or contradictions; and determine client comfort levels when culturally appropriate, by eye contact. Counselors depend on the ability to communicate in order to build rapport with clients. Once rapport has been established, the work of counseling can begin. Counselor educators subscribe to these ideas and teachings. Even so, Lundberg (2000) contends that humanistic approaches to counseling and counselor education are compatible with the use of technology. His findings indicated that counseling students were appreciative of the use of email and the Internet as a vehicle for learning. Harris-Bowlsbey (1984) suggested that a combination of technology along with human touch might achieve a balance between the two and be beneficial to the client.

However, there are others who say technology leaves something to be desired in the

transition from interacting with a person in the room to a flat, two-dimensional medium that may have faulty reception or transmission difficulty. Concern here would be to ensure that counselor educators have training opportunities available to them in the use of new technology for teaching.

With the burgeoning field of silicon chips, and the more affordable cost of technology, a plethora of educational possibilities have emerged. The days of distance education being structured and defined as correspondence classes are over. Technology makes this exchange of information instantaneous and lessens the paper trail. There are delivery methods that infuse life into presentations along with techniques for increasing person-to-person contact. Computer delivery of classes via the Internet is no longer a novelty, but an alternative offered at many institutions. Distance learning should be seen as a means for connecting the learner with distributed resources (Filipczak, 1995).

The pace of the world is ever increasing, business as well as education is conducted through electronic means. The exchange of information happens in a flash rather than five business days. Tools for delivering lectures, facilitating group discussions, administering tests, giving presentations, and conducting supervision sessions have expanded enormously in the past decade. Technology continues to improve our productivity, increase our speed, and provide unlimited access to communication in addition to providing an array of entertainment. Counselor educators are advised to take advantage of these tools to more effectively connect with students who benefit from a variety of learning style presentations.

Rationale

Technology in Counselor Education.

According to the United States Department of Education (Lewis, Alexander, & Farris, 1998), by 2010, college enrollments will top 20 million. Campuses are already bursting at the seams (American Association of University Professors [AAUP], 1997). Administrators are advocating offering classes online rather than expanding the physical facilities, and deciding that distributed education is quickly becoming an integral part of higher education. According to the National Center for Education Statistics (NCES), 34% of the colleges were offering distance education courses to graduate students in 1994 (Lewis, et al, 1998). In November 1999, 74 million people in the United States were using the Web, with 118.4 million having access to the Web (NetRatings, Inc., 1999).

For the past several years, students have arrived on campuses with computer skills that outdistance many instructors. The majority of entering freshmen have grown up with computers in their homes and/or access to computers at schools. These students bank by computer, play games alone or with others at a distance via the computer, date and exchange ideas via chat rooms and listservs, pay bills, and make purchases large and small. Access to services twenty-four hours a day, seven days a week, has become the norm. Students will insist on the same service from their college (Traub, 1997). Online instruction is not just for distance education per se, but can be utilized to augment traditional classes and provide options for students whose complicated lives do not allow for specific time commitments.

We live in a world where a person can be connected to business or information wherever he/she goes, 24 hours a day, 7 days a week. Today's society is increasingly complexity.

Graduate students living in this high tech world find they have multiple responsibilities and demands on their time, energy and resources. In a few years, graduate students will come from the pool of students presently in college, who have grown up with computers in their homes. Many colleges and universities have received directives from administration to infuse counseling programs with technology (Baltimore, & Jencius, 2000). Using the Internet for classes overcomes obstacles such as space, and scheduling (Kerka, 1996), and satisfies administrative directives.

The Association for Counselor Education and Supervision (ACES, a division of the American Counseling Association) has developed Guidelines for Online Instruction in counselor education programs (1999). ACES has also published Recommended Basic Guidelines for the Technical Competencies of Counselor Education Students (1999). Hohenshil (as cited in Morrissey, 1998) states these were conceived to ensure that future counselors utilize the technological advances as counseling resources. Daniels (as cited in Morrissey, 1998) notes that some faculty are innovative in their use of technology and some do not have the skills the students have. Online resources and classes are being integrated successfully into many counselor education programs with support and appreciation by counseling students (Hayes, & Robinson III, 2000; Lundberg, 2000).

Counselor educators have determined that students in graduate counselor education programs need basic computer skills. However, it is not known how well counselor educators are prepared to demonstrate or teach these skills. A study done in 1999, by Myers and Gibson, indicated that of the 12 competencies required for their counseling students, educators' skills in

these same areas, were highest in the use of e-mail and listservs. Counselor educator faculty were lowest in computerized testing, diagnostic, and career-decision-making programs with clients, in addition to using productivity software to develop web pages, presentations, letters, and reports. They conclude by suggesting further research be done to determine the importance of the 12 competencies in a variety of situations in conjunction with determining what is already being infused into counselor education programs. Lee and Pulvino (1988) compare students learning computer skills to counseling students acquiring new counseling skills. They contend that the process is similar and draw parallels between the two based on the basic counseling principles.

Preparing counselors to assist and train people of all lifestyles to adjust and live within a rapidly changing world is another charge for the counselor educator. They are training counselors to assist students in schools in addition to assisting clients from every walk of life, to attain and function at ever increasing, changing levels. It is imperative that these educators upgrade their technology skills accordingly. It is by modeling appropriate use of technology whereby counseling students learn (Stevens & Lundberg, 1998). This study will look at how counselor educators feel about using technology in their programs as well as their perception of the training opportunities available to them.

Internet Surveys

There have been mixed reports of the success of surveys done via the Internet (Nesbary, 2000). Most literature on Internet surveys points out the non-randomness of the sample due to the nature of computer access and ownership as one of the major problems with Internet surveys (Swoboda, Muehlberger, Weitkunat, & Schneeweiss, 1997). However, Schmidt (1997)

advocates survey research done via the Internet. As for the issue of sampling, the Internet was begun in 1969, by the Department of Defense (Bowman & Bowman, 1998) and utilized by the academics working on the project for the purpose of sharing knowledge (Gray, 1999). The majority of colleges and universities are connected to E-mail at minimum, and most have a presence on the WWW (World Wide Web). Of the 146 liaisons listed on the Council for Accreditation of Counseling and Related Educational Programs (CACREP) web site, only two did not have E-mail addresses listed. Both of those addresses were found at the colleges' web site. The nature of surveying counselor educators about the use of technology therefore seems reasonable to do via the Internet. Swoboda et al, note that those who do respond via the Internet respond more quickly than those using regular mail systems.

Statement of the Problem

While there have been many studies on the use of technology in education, studies specific to what technologies graduate counselor education programs are using have not been undertaken. This researcher found no studies delineating what technology CACREP programs are using. Nor were there any studies indicating how technology was being utilized within these programs. Isolated reports were found discussing the merits of a particular type of technology for a few counselor education programs (Sharf & Lucas, 1993; Sampson, 1995; Wagman & Kerber, 1984; White, 1988). However, nothing indicating all the technologies utilized by any one university's or groups of universities' counselor education programs was found. There is no base study of all the CACREP graduate counselor education programs regarding their use of state-of-the-art technology. In order to make decisions regarding appropriate methods of incorporating

technology into counselor education programs, there must be a working knowledge of what technology is being used and how it is utilized. There also needs to be an inventory of counselor educator programs to ascertain what training is offered to them in addition to what support is available for taking on new technology related endeavors. Once this information is gathered, training needs can be addressed.

Purpose

This study looked at all the CACREP graduate counselor education programs in the contiguous United States to ascertain what types of technology were being utilized in addition to how technology was being used. The goals for this research project were to gather information on the use of technology within colleges and universities in CACREP approved graduate counselor education programs throughout the United States to redress the lack of information concerning this issue. The research questions for the study follow:

1. What do the CACREP universities offer in the way of technology?
2. How is technology being incorporated into counselor education programs at CACREP approved colleges and universities?
3. Which courses are presently being offered through online or interactive video methods?
4. What training has the CACREP University's counselor education faculty had in the use of technology?
5. What, if any, technology requirements are made of the students in the program?

This study serves as a base line to determine what is happening now in the field of counselor education and help to identify future directions for research in addition to determining topics for educator training.

Limitations of Study

CACREP approved counselor education programs were chosen for this study because they set the standard for the profession and have been looked to as leaders within the field. However, there is a possibility that in choosing only these programs, other counselor education programs may have had much to contribute in the way of technology utilization, and their input is missing. Additionally, due to only the last four questions being open-ended, it may have limited the type and amount of information garnered. To compensate for this limitation, additional space was provided for counselor educators to detail information they feel is pertinent to the study.

This study was conducted wholly through the Internet and the response rate was 30%. Nesbary (2000) reports the Internet as providing a slightly lower response rate than direct traditional mail. In order to increase the rate of response, all 146 CACREP programs were chosen rather than a sampling of these programs. Anticipating a representative sample reply from the largest sample feasible for this type study was meant to compensate for this limitation.

Definition of Terms

For the purposes of this study, terms are defined as follows:

Asynchronous - refers to events happening at different times, example: e-mail is done through a send and receive mode rather than needing all parties involved to be present at one time.

Browser - Also known as a “Web browser”. Any program used to access and search the World Wide Web, for instance, Netscape navigator or Communicator, Microsoft Explorer, Mosaic, Lynx, etc. (Grohol, 1999).

CDs - compact disks

Chat rooms/forums - permit users to simultaneously view the sending and receiving of text messages (Bowman & Bowman, 1998).

Distance learning - is used synonymously with online or televised classes

Distributed learning - learning that is delivered in ways other than traditional classroom settings.

These include: streaming video, interactive computer classes, online classes, correspondence classes, etcetera.

Download - transferring files or software from another computer to your computer

DVDs - digital videodisks

E-mail - electronic mail

Listservs - email software programs that allow for easy distribution of email to large groups of persons with ensuing dialogue (Bowman & Bowman, 1998). These listservs are usually oriented to a particular topic or profession. For example, CESNET is the listserv for counselor education and supervision, while COUNSGRADS is for counseling graduate students (Bloom & Waltz, 2000).

Hard drive - computer’s internal storage device - holds files, programs etc.

HTML - Hypertext Markup Language - the publishing standard used to create web pages. It defines what happens when one clicks on a hypertext link embedded in the page (Grohol,

1999).

Interactive/streaming video - the connection of two remote sites through means of television cameras, microphones, and monitors as well as equipment to control these technologies at each location, broadcasting via satellite to the other location. May be more than two locations involved.

Internet - Largest global network of business, educational, and personal computers connected through regular and high-speed telephone lines. Requires specific types of software to access it, such as a Web browser (Grohol, 1999).

Online classes - refers to entire classes or partial classes offered via the Internet, Intranet (internal, limited-access websites, Kerka, 1996) and/or the World Wide Web (WWW).

Real-time interaction - refers to interaction that is happening in the present and not recorded.

Snail-mail - refers to the use of the postal services for the sending and delivery of messages, bills, etc.

Synchronous - happening at the same time

WWW - World Wide Web - A network of graphical hypertext servers linked by the Internet offering graphics, sound, text, and in some cases video clips providing information. This is the newest (since 1993) and fastest growing aspect of the Internet because of its ability to offer more than just plain text online.

Summary

This study was a baseline study of all CACREP approved graduate counselor education programs. The intent was to determine what technology was being utilized and how this was being done in addition to obtaining a “snapshot” view of the infrastructure supporting the efforts to use technology. Training needs for faculty in addition to possibilities for future use of technology within counselor education programs can then be assessed and training opportunities developed.

Chapter 2

LITERATURE REVIEW

This chapter is a review of the literature as it pertains to technology used in education in general, as well as its utilization within counselor education programs and counseling profession. The uses of technology within counselor education programs over the years, along with the present day use will be reviewed. Practitioner use of technology and considerations regarding the continued and expanded uses of technology will also be explored.

Technology in Education

Past Progress

Hayes (1999) presents an extensive review of the introduction of computers to education. In his article, he reviews the history of computers as far back as the late 1950s, and continues with International Business Machines' (IBM's) development of the first computer program for educators in 1960. During the early 1960's, universities began developing programs that utilize computer technology within education. These humble beginnings have grown with time and the sophistication of technology. We have moved from large room-sized computers to laptops that weigh as little as five pounds. Advances have progressed in the field of videoconferencing along with improved audio techniques. With today's technology, we have the capacity to serve groups of people at multiple sites, utilizing videoconferencing and computer technology (Bowman & Bowman, 1998).

Nesbary (2000) indicated that the growth of the Internet is far outdistancing other technological innovations. Radio took 36 years before 50 million people tuned in, television

required 13 years, the personal computer took 16 years, and the Internet only 4 years to reach 50 million users (ibid.).

Distance Education

Technology has been an important component of education for many years and an integral part of distance education. Russell (1999) compiled a report of studies done on nontraditional methods of education dating back to 1928. These earliest studies began investigating correspondence courses and progressed to: audio; films with sound; televised courses; and culminated in studies of computer learning versus traditional learning. A total of 355 studies to date have shown no significant differences between attitudes toward classes taken traditionally or non-traditionally. Russell has a link on his web site to an additional 14 studies indicating significant differences in favor of technology over traditional methods of teaching.

Present Technologies within Education

Much of this literature review focuses on distributed learning due to the fact that this is where technological advances are taking the field of education. Streaming video to satellite locations, Internet classes or partial class materials online, video conferencing for faculty meetings and interviews all are made possible through the use of technology.

Other uses of technology within education encompass computers: for testing; tutorials; presentation of materials; drill and practice; recreational and educational games; enrichment activities; experimentations; simulations; to access information via CD-ROM or the Internet; word processing; authoring; and multimedia presentations in addition to uses for communication and time management (Jaber, 1997). Laserdisc technology for showing movie segments is used

in education in addition to digital cameras, scanners, modems and overhead projectors.

Streaming video, video or audio conferencing, DVD (digital videodisk) technology, VCR (video cassette recorders) is all being utilized not only for classroom instruction, but also for faculty meetings and conferences.

Distributed learning today is delivered through a variety of methods. These include: classes beamed to a variety of locations via satellite through the medium of television; online classes; interactive video used for instruction and meetings; as well as correspondence classes which may use paper or printed material in addition to email. Reported advantages of distance education are: the ability to interact with a larger student body; no geographical constraints; flexible schedules for both students and professors; and the ability to easily update class materials (Kerka, 1996). Increasing numbers of institutions are employing technology as a means of expanding their student base.

Virtual colleges. Colleges and universities are trying to determine the next step in the educational use and application of technology. For example, six university professors, each from a different college have joined forces to offer an advanced Latin course incorporating technology and face-to-face discussion (Young, 2000). Others are combining resources to present classes online with ease of transfer credits to a variety of institutions. There are several all-virtual universities in existence (Carnevale, 2000) with additional institutions considering this as an option. Walker (2000) reports that the British government has taken the initial steps to form an international Ae-university” to allow them to be competitive with programs in a global market.

Fifteen community colleges in Pennsylvania created the Pennsylvania Virtual

Community College Consortium allowing state residents to utilize distance education classes from any of the member colleges (Lords, 2000). The world has shrunk due to the far-reaching web of technology, and opportunities for education have expanded beyond the confines of the traditional university campus. We are connected on a much larger scale than ever before thought possible.

Twenty-two executive officers of virtual universities across North America signed an agreement to encourage transfer arrangements and collaboration among the twenty-two universities (Young, 2000). This is an unusual move considering that universities, especially those in cyberspace, are competitive. This may mark a new trend in collaboration in academia.

Transitions. Teaching roles are subtly changing due to initiatives from administrators to include technology in teaching (Hohenshil & DeLorenzo, 1999) in addition to examples set by peers and students for implementing technological advances that augment the learning process. The increasing availability of grants for technology is enabling growth within the field of education. T.H.E. Journal has published a series of articles on training the teachers of teachers. In May of 1997, Greenhalgh wrote an article titled: Using the Internet: Concept to Classroom, which delineates a process for building a support system of technology aware faculty to increase the institutions' use of technology within classes. Kahn (1997) presents Creation and Maintenance of a Syllabi Web Site: A Case Study leading the instructor through the rationalization for using the web as a syllabus along with the how-to of site design and maintenance.

Deal (1998) reports the changes she noticed after returning from sabbatical. She found

students far advanced in their use of technology, and professors lagging behind in modeling integration of technological advances. She addresses faculty anxieties and students' incentives to learn the use of technology. Nixon and Leftwich (1998) suggest a four step model to transition from a traditional classroom environment to a distance learning one, while Cooper (1999) provides a three step process for developing an online course.

One important consideration prior to beginning an online course is how to keep the students from feeling isolated, and encourage interaction. Kubala (1998) recommends a face-to-face orientation with technical staff and faculty to give a walk-through demonstration of the program to be utilized. He also states that one of the problems of distance education is faculty working in isolation, and stresses the importance of collaboration. Collaboration by professionals is encouraged. The value of failure is in documenting and sharing information so others may benefit (Unsworth, 1997). The Internet was initiated as a collaborative effort for sharing information and should continue in the same spirit (Gray, 1999). Requiring participation in chat rooms, or online group discussions is one of eight suggestions presented by Klemm (1998) to enhance participation by students as well as faculty when dealing with an Internet class.

Present Concerns

Quality of online courses. Efforts are being made to evaluate the quality of online courses to ensure they are comparable to the same class delivered in the traditional method (Bloom & Waltz, 2000). The National Education Association (2000) devised Quality On the Line: Benchmarks for Success in Internet-Based Distance Education (The Institute for Higher Education, 2000). Within this executive summary, a study done by The U.S. Department of

Education's National Center for Education Statistics (Lewis, et al, 1998) was cited indicating an increase in distance education classes by 72 percent between 1994-95 and 1997-98. With the burgeoning array of classes and entire programs being offered online, quality is an important consideration. Carnevale reports the difficulty of obtaining accurate information from cyberspace (2000). Senator Bob Kerrey did not recommend that new laws be enacted to regulate distance education learning for quality, but instead, feels that there needs to be better incentives for quality in distributed learning (ibid).

Accreditation. If a university is looking for accreditation, the three normal components, site visit, student to teacher ratio, and library visit are virtually missing for electronically offered classes. These standards will also need to be revisited (Bloom & Waltz, 2000).

In June of 1998, The Commission on Colleges, Southern Association of Colleges and Schools, adopted a policy for the evaluation of electronically offered degree and certificate programs. This policy was the result of collaboration between 8 regional accrediting commissions. It is in recognition of the growing field of distance learning, whether it is an entire program or specific classes. Its intent is to explain how the regular accreditation standards are applicable to classes taken off-campus. Additionally, this policy serves as a guideline as well as a method of evaluation for classes offered through the use of technology. The purpose is to maintain the same standards of quality for all classes along with support for faculty and students.

Copyright/ownership. Of increasing concern with online classes is the issue of copyright and intellectual property. According to Judith Boettcher (1999), public hearings on the recently passed Digital Millennium Copyright Act (DMCA) of October 28, 1998 was to be held on

November 29, 2000 and the report sent to Congress on February 28, 2001. These hearings were the result of a joint study required by Section 104 of the DMCA and pertains to the use of material for Internet classes. Boettcher gives a layman's summary of the DMCA in addition to a discussion of the Fair Use Guidelines for Educational Multimedia. She posits that Section 106 gives copyright owners the right to reproduce the work, derive additional work from the original, distribute copies, give presentations from the work, and display the work on a web page.

Tuition costs. Another current issue dealing with distributed learning is that of tuition. Some universities in the south are looking at cutting tuition rates for online courses (Carnevale, 2000). However, on the other side of this debate is the fact that online courses often mean additional time for faculty in answering student email enquiries in addition to up-front time to develop the course. This up-front time also includes a steep learning curve for many faculty. Couple this with the possibility of an increased student load per course due to online courses being more accessible, and the work load per course may increase dramatically. There are many issues to consider when determining the best use of technology within the field of education.

Technology in Counselor Education Programs

Journal articles for the past 20 years have marked the influx of technology in counselor education programs. In the 1980s, articles appeared in counseling journals denoting the uses of technology within the profession as well as explaining computer terms. This section examines the multiple uses of computers and technologies for counselor education programs.

Counselor Training Applications

The use of computers in counselor education programs dates back to 1965. Weizenbaum (1965), described two, then newly developed computers, ELIZA and DOCTOR designed to simulate client behaviors. According to Cutter (1996), ELIZA was named after the leading role in “My Fair Lady” and was a program written by Weizenbaum to provide interaction with a client. In 1966, Colby, Watt, and Gilbert discussed computers developed to portray psychoanalytic techniques (Bowman & Bowman, 1998). Work was done on a program that would emulate Beck’s cognitive counseling techniques (Selmi, Klein, Greist, Johnson, & Harris, 1982). These first attempts were not widely utilized.

A basic introduction to personal computers and the technology of computers appeared in a special edition of Counselor Education and Supervision in 1984. Michael Green (1984) wrote an article for counselor educators explaining the terms used for computers in addition to providing information on the differences between computers. He suggests that counselor education programs seek assistance from experts in computer systems to design a program that meets the needs of the counseling department.

Hosie and Smith (1984) reviewed options for computer-assisted instruction (CAI) and worked extensively with a program called Programmed Inquiry Learning or Teaching (PILOT). Their conclusion was favorable of the PILOT program as a way to facilitate question and answer formats that are interactive. They provide an example of the use of this system for counselor training. Hosie and Smith (ibid) also discussed the merits of programming languages that are more user friendly for counselor educators who want to write their own programs.

Wagman and Kerber (1984), along with Phillips (1983) describe two computer programs that act as therapists and provide role models for counseling students. The PLATO DCS (Dilemma Counseling System) provides interaction between computer and user through a systematic process of programmed information. This program has three components: Systematic Dilemma Counseling, Dilemma Counseling, and Structural Dilemma Solutions. Another system, MORTON, was designed to treat mild to moderate depressive disorders. It utilizes cognitive behavioral and educational components to present to the client. It is not, however, adept at interpreting input from clients. Although both programs are designed to assist clients with specific problems, the authors suggest they can be utilized by counseling students as role models for counseling techniques.

Lichtenberg, Hummel, and Shaffer (1984) discussed the merits of a program called CLIENT I that simulates clients in initial counseling sessions, this enables counseling students to practice interviewing techniques. Froehle, (1984) also writes about computer applications. He describes three separate programs designed to input counselor and client responses during a session, automated recording of counselor observed behaviors during sessions, and a system to monitor reported covert behavior by client and counselor.

Halpain, Dixon, and Glover (1987) used the above mentioned computer programs and added scripts to include: person-centered therapy, Gestalt therapy, behavior therapy, and rational-emotive therapy, dialogues to the initial program. They reported that the simulations resulted in a favorable response from counseling students and that the material was very manageable.

Alpert, Pulvino, and Lee (1984) wrote an article delineating the many ways computer technology could assist with the education and record keeping of counseling students. They suggested use of a program called The Counselor Accountability System by Instructional Enterprises, in 1983. The purpose of this program was to allow, by the use of pre-designed forms, counseling students to keep a counseling log, goals and counseling notes. These would then be usable in a statistical program to generate information regarding accountability for counselors.

In 1988, Lambert evaluated the use of technology in counselor education programs. He remarked that there are new programs in computer technology and also in the field of interactive video. Lambert suggests that the declining cost of computer technology, and increasing choices of available programs are changing our everyday language and providing counselor educators with unlimited sources of tools for teaching. Using a simulation program that provides varying levels of difficulty aimed at improving counselor skills, Lambert includes descriptions of programs designed specifically for training rehabilitation counselors. He also discusses an interactive video program that teaches a variety of approaches to marital therapy. Lambert concludes by saying that he is surprised that there is not more widespread use of these programs and states that there is little use of computers in counselor training programs. Progress is slow in this area, but moving forward (Lambert, 1988). Waltz (1987) concurs stating that most counselors find it difficult to find software programs that are relevant.

Sharf and Lucas (1993) reviewed a Computerized Counseling Simulation (CCS) program that was able to discriminate different levels of counselor trainee experiences. They suggest this

program may be more useful for beginning counseling students who are working on basic skills. The major advantage of this type of program, according to Sharf and Lucas, is that it provides a method of assessing counseling skills using controlled conditions and is therefore more useful for research.

Neukrug (1991) devised a method of using an old computer with a word processing package still on it, as a tool for live supervision. Using a two-way mirror setup for live supervision, he threaded the keyboard cord into the viewing room through a hole drilled in the wall. It was then connected to a computer in the counseling room. The computer had a monitor situated so that the student counselor could see the screen, but the student client could not. The supervisor would type feedback, which then appeared on the monitor. This was only visible to the counseling student and others, behind the two-way mirror, who may have been watching the session. Feedback was immediate and unobtrusive.

A pilot study done in Virginia (Quinn, 1999) of four universities with CACREP approved counselor education programs, found that all had at least one transmitted class and used videos to record and present issues for supervision. Another program used DVDs in recording and presenting practicum and intern counseling sessions; one had two totally on-line classes; most had faculty and/or students who utilized PowerPoint for presentations; and all used e-mail to communicate with one another and with students.

Computer/Counselor Skill Development

Although Cairo and Kanner (1984) did not find that learning computer skills had any similarities with learning counseling skills, Lee and Pulvino (1988) contend that there are

parallels between the two tasks. They used seven principles in counseling and illustrated the similarities between the two processes. These seven principles follow:

1. Establishing a relationship - beginning counseling students must overcome fears of inadequacy, many students approach computers with the same fears.
2. Learn the client's language - just as counselors learn to reflect their understanding of the client's world, so too, the computer uses a different language; to successfully operate the computer, one must learn its language.
3. Learn to model clients' thinking processes - learning how the client and computer process information, provides the counseling student with skills necessary to understand client world view and work within specific software packages to facilitate goals.
4. Establishing goals and steps needed to achieve those goals - a necessary process within the role of the counselor/client relationship. It is how we determine what the client wants from counseling as well as how to get there. With computers, the operator has a specific goal (example: writing a dissertation) and must know the procedure the computer has for arriving at that goal.
5. Obtain feedback - this is what keeps counselors on track and a process computers use to inform us that we are not giving a command properly, or asking questions to ascertain if the command given is really what we intend. Example: "are you sure you want to delete this file?"
6. If what you are doing is not producing the desired results, do something different -

counseling students learn quickly to implement this or become frustrated in the process. The same applies with computers. We soon learn that if what we are doing is not giving us the desired results, we need to try something different.

7. Creative adaptation and development of intervention strategies - clients differ even when presenting with similarly labeled problems or concerns. As there are many ways to approach client concerns, so too there are many ways to approach a solution, or means to a goal within computer programs. For example, if one wanted to do a budget on computer, a person could do it within a spreadsheet program or a word processing program.

Modeling

As previously mentioned, Deal (1998) noticed a marked difference between student computer skills and professors' computer skills. The professors were lagging far behind their students. The same seems to be true within counselor education programs. Waltz contends that the "essential ingredient of effective computer use in counseling, is leadership" (1987, p. 5). It is by modeling appropriate use of technology whereby counseling students learn (Stevens & Lundberg, 1998). Counselor educators are under pressure to learn additional technology skills to meet student demands. Waltz (1987) stressed the need for a few counselor educators within each counseling program to repeatedly demonstrate correct ethical use of computer technology to assist students with acquisition of these skills.

Present Concerns

Although some view the computer as a means to expand our worldview to many new human experiences, others see it as a form of isolation. There are ethical considerations of confidentiality along with logistic problems that need to be considered. Problem examples include: how to bring cohesion and rapport to a group in two separate locations; how to enhance the vital exchange of information normal in a classroom; and how to get that valuable “spark” instructors receive from direct student feedback. These are all potentially lost when interacting through an electronic media. However, there are journals and publications devoted to improving the interaction between both students and students in addition to those between students and faculty. The Syllabus (<http://www.syllabus.com>), is a free publication for people who work within education and contains useful ideas on connectivity along with creativity. Investigations in the area of technology in education will lead to a wealth of suggestions and learning experiences for counselor educators.

Career Development

Cairo, and Kanner (1984) note that the first use of computers within the counseling profession was for the purpose of career development. They suggest a careful scrutiny of the match between what computers are capable of and where it would be appropriate to use computers in counselor training. Cairo’s and Kanner’s contention is that not all counselor tasks can be substituted by technology, but it may be a useful tool to augment the teaching/learning process. They anticipated that counseling students and counseling educators would enthusiastically accept computers.

Counselors have long accepted the computer as a useful tool for accessing information on career guidance and ease of use when job searching online. Imel (1996) notes that computer-based career information systems (CCIS) are most effective when customized on a state level. These career information delivery systems (CIDS) share basics such as assessment, career searches, occupational information and education requirements. However, the main difference is being tailored to investigate in-state employment options. Sampson, Kolodinsky, and Greeno (1997) state that many job seekers are going directly to the Internet and bypassing the career counselor.

Suggestions for improving CIDS were offered by Lester and Ollis (1988). Involving employer input regarding changing workforces that necessitate employee flexibility and adaptability, could be addressed as training needs for the job seeker. They also propose improving counselor training in CIDS systems by keeping abreast of rapidly changing technology advances and utilizing these changes within the search process.

Lundberg and Thirsk (1995) stated the necessity of counselors staying current on career information available on the Internet. They provide their students with a “map” of how and where to search for job information, and suggest counselors continually check and update their career mapping information. An additional benefit of the Internet is the reality factor. According to Lundberg and Thirsk, students and adults using the Internet for career development, may actually see what type of jobs are available, the requirements for the position and the location of specific occupations. This acts as a reality check for many job seekers.

In 1999, Hohenshil and DeLorenza wrote an article providing an in-depth description of

an online career development course. They suggested procuring release time to develop the class, which is work intensive in the beginning. Another valuable suggestion was to pilot the course with volunteer students a full semester before the class is to be taught. This helped them to eliminate an idea they had for each student sharing assignments with all of the other students to provide connectivity. However, the piloting career students reported that the assignment was giving them too much email and that it was not very useful. Hohenshil and DeLorenza (1999) provided a model structure for an online career development class as well as student reactions. They included in their requirements, assignments that utilized the resources of the Internet, listservs, and email. All assignments were sent to the professors through email and replies made through email. This prevents any software incompatibility and eliminates the possibility of viruses being exchanged. Their students' feedback praised the class format as much for its content as for the ability to learn to be more comfortable using the Internet.

When training career counselors in the use of the Internet as a resource tool, Stevens and Lundberg (1998) see potential problems. The information on the Internet is not organized and clients, along with counselors, soon suffer from information overload and by being side tracked. They suggest developing protocols to teach counseling students how to evaluate and utilize online sources for career development information.

Computer-Assisted Testing and Diagnosis

Computer-Assisted Testing (CAT) is increasingly used throughout the counseling profession (Sampson, 1995). These uses include, test administration, test scoring, profile generation, a narrative interpretation generated by the program for counselor and client, and a

videodisk-based interpretation that is generalized and can be presented immediately after the client takes the test. Therapists welcome the speed with which psychological assessment instruments are scored and reports are compiled, but Sampson warns that it is the counselor's responsibility to "guide the design and use of this technology".

Furlong and Hayden (1993) reviewed four different computer programs that train counselors in the use of the Diagnostic and Statistical Manual of Mental Disorders, third edition, revised (DSM-III-R). These programs present case studies and counseling students diagnose the identified client. The feedback is immediate and the consensus is that the programs do indeed aid the student in gaining confidence and proficiency with the use of the DSM-III-R.

Research

Educational researchers are familiar with and use statistical programs to help with the analysis of data. These programs are stand-alone computer programs and make the storing and handling of large amounts of data more manageable. In many areas of our lives as counselor educators, and as counselors, technology has improved our services.

The first step for many researchers is to do a search on the Internet for information pertaining to the research topic. These searches may begin with online access through the institute's library database, which, in most cases, can be accessed from any computer or laptop. The libraries at many institutions subscribe to journals that are online in addition to housing printed versions. Therefore, much literature review may be handled from the comfort of one's own home. Copies of articles may be ordered through online sources and inter-library loan systems.

Internet Used For Research

As of April 18, 2001 there are over 118 web experiments listed on the web page for the American Psychological Society. Internet research is quickly becoming a viable method of research. With more and more people being connected to the Internet every day, the potential is astounding. Michael Birnbaum (2000) reports extensively on the use of the Internet/web for psychological research. He states that the advantages are: improved access to a broader range of subjects; lower costs; quicker turnaround; and the ability to reach people one would otherwise not be able to reach, such as those stricken with panic attacks.

However, Swoboda, Muhlberger, Weitkunat, and Schneeweib (1997) caution that the population of Internet users are not representative of the general population but tend to be “young, upper class, highly educated males”. Hopefully, this will change with the cost of computer technology declining.

There have been only a few studies done comparing e-mail surveys to regular surveys, but those that have indicate a slightly higher rate of return for regular mail than for e-mail surveys (Dillman, 2000; Krantz & Dalal, 2000; Nesbary, 2000). Comely, as cited in Nesbary (2000), conducted a study of return rate differences between e-mail surveys and regular mail surveys. His findings indicated that e-mail return rates were much faster than regular mail, 87% arrived within 7 days as opposed to 63% of regular mail responses arriving in 10.8 days. Furthermore, he found that regular mail respondents had a return rate of 17%, while e-mail respondents rate of return was 13.5%. This study had a return rate of 30%, which was similar to the pilot study and better than Comely’s results.

These same authors point out that one of the reasons Internet/e-mail surveys are not universal is that not everyone has access to a computer. Nesbary (2000) mentions that only half of the households have computers in the home. However, most psychological studies done previously were performed with college volunteers or students seeking extra credit in classes (Birnbaum, 2000). The potential with e-mail and Internet surveys and studies is that the number of participants is greatly increased due to the ability to reach possible participants from around the world rather than only students at a particular university (Dillman, 2000). The main focus here is the accessibility to e-mail by the designated population. As previously mentioned, all participants except 2 had e-mail addresses and being in academia, were thought to be versed in the use of e-mail. Therefore, it was concluded that e-mail might be an acceptable mode of surveying this population. Steps were taken as suggested by Nesbary (2000) to implement procedures to improve the return rate. According to Reips (2000) the benefits of doing research on the Internet, far out weigh the disadvantages.

Information continually changes and requires updating. The time saved between updating a computer web site and publishing an updated directory is years different. We receive information that is current at an accelerated rate. This quick turn-around of updated information is being applied to journal articles. Some (Jencius & Baltimore in Bloom & Waltz, 2000) are having work submitted via the Internet and the material is then distributed to the review board electronically. Programs such as Corel Word Perfect and Microsoft Word have the capability of editing text of an article without disturbing the original document. This cuts back on the cost of postage and copying, in addition to reducing turn-around times (Baltimore & Jencius, 2000;

Smaby, Maddux, Zirkle, & Henderson, 2000).

A consideration pertaining to research done on the Internet arose at a recent presentation done at the Virginia Counseling Association convention in Roanoke, on November 16, 2000. The issue was, how much research done on the Internet is acceptable from students turning in research papers. Additionally, the participants wanted to know how to verify the veracity of the sources cited in student papers. Discussion centered on the fact that many professional journals are offered online as well as the possibility of a Mental Health Net centralizing resources and perhaps acting as a gatekeeper to ensure client safety (Quinn, 2000).

Counseling Practitioner Technology Usage

School Counselors

Presently there is a demand for additional school counselors and counselor education programs are attempting to meet this need. For example, at Virginia Tech, 75% of the master's level counseling students are in the school-counseling tract. School counselors need to be competent in the use of computer technology in order to advocate for the children they work with. A powerful tool for school counselors is skill in technology and yet this is more often than not, overlooked in graduate programs (Gerler, 1995; Stone & Turba, 1999). School counselors' skills should include a minimum of basic computer skills in addition to technology skills such as: a working knowledge of the Internet and its resources; how to utilize chat rooms, listservs, and distance education classes; guidance counseling software; video conferencing; online guidance information; assisting students with Internet searches and keeping informed about rapidly changing technology (Stone & Turba, 1999).

Career advising for a life time, begins with school counselors providing a guidance program stressing education as a means of economic and social security. Technology provides an improved vehicle for offering all parties involved in a student's decision making process the most up to date information required to set higher goals and a broader range of opportunity (ibid). Counselors who are skilled in the use of the Internet have increased resources available to them (Wilson, Jencius, & Duncan 1997).

Technology is changing our everyday lives at work and at home. Teachers are being trained in the use of technology and school children are being exposed at early ages to new technologies (Porter & Foster, 1998). Educators train workers for the future and as such must maintain a leading edge with the ever-growing world of technology. It is important for guidance counselors to provide students with the tools necessary to access the most recent information quickly. Staying current with computer technology, the Internet, CD-ROMs with career development resources and computer programs designed for career development, are important considerations for guidance counselors (Stone & Turba, 1999).

Therapists

The Internet. The Internet has broadened our world tremendously. Many facets of everyday life can be accomplished via the Internet. Money can be transferred from one account to another, bills paid, purchases made both large and small, researching data bases, new friends made, marriages made and unmade, businesses begin and end, medical information obtained, gifts sent to friends, support groups attended and discussions with people anywhere in the world take place in an instant. Therefore, it is no surprise that Internet counseling services are rapidly

expanding as well (Powell, 1998).

There are a variety of terms used to represent counseling online: Cybercounseling, web counseling, cyberpsychotherapy, and e-therapy. Services to individuals are offered via e-mail, with group sessions held in chat rooms using real time. An advantage to cybercounseling is the ability to reach more people, even those in remote locations, handicapped or late stage terminally ill patients (ibid). Powell's study found that most of the 50 counselors listed in the Mental Health Net, were seasoned therapists. She also points out that counseling at a distance is nothing new. Even Freud conducted diagnosis and treatment via snail mail. Some people report being helped by advice columns or radio talk shows, and even television shows featuring counselors. Crisis hot lines are using telephones to counsel people in emergency situations.

Sampson, Kolodinsky, and Greeno, (1997) see the Internet as having the potential for multiple uses for counselors. They contend that the Internet is a resource for advertising counseling services. Additionally, the Internet may serve as a starting place for clients to lookup the names and telephone numbers of therapists anywhere they may go. Web pages for counselors giving their qualifications as well as possibly having a video explaining their theoretical perspective may also be useful to counselors. There is already access to a variety of self-help material available for clients. Practitioners can utilize this resource by assigning homework to clients or merely supplying the URLs for these resources (ibid.).

Barak (1999) reviewed 10 different types of counseling online. These ranged from self-help guides, to ongoing personal counseling. Some of these services are synchronous and some asynchronous. A review of self-help software (Cutter, 1996) indicates that a variety exists. He

lists sites where one may purchase or download the software programs for individual use. Cutter claims that online therapy is in the beginning stages and problems are inherent. Grohol (1999) sees e-therapy as an asynchronous process done through email. He includes the ability of the counselor and the client to fully think about responses, as one of the benefits of this method of therapy. Additionally, he cites the ready availability of Internet resources as another benefit. However, Grohol contends that on the down side, without nonverbal clues, the client may not be fully understood. Also, because this mode depends on the written word, one must be comfortable with the writing process.

Psychologists, counselors, and social workers, are making extensive use of the Internet to conduct research. They feel there is an ability to reach a greater variety of people other than the psychology students who gains class credit for participation in research projects.

Technology and Children

Work with at-risk youths is being done utilizing technology such as Nintendo, home entertainment software, computer games, and programs designed to produce cards or sale flyers (Casey, 1992). These programs are used, much as play therapy has been utilized, to help build rapport, and produce covert learning through a multi sensory mode. The advantages include less resistance on the part of the client; the use of multi-sensory learning modes; the ability to repeat a sequence and encourage practice of risk-taking behaviors in a safe environment; and mastery of skills which improve self-esteem (ibid.). Powell (1998) suggests that computers and online counseling may work with children who have attention deficit disorders. Using computers helps these children to remain focused.

Concerns

Sampson et al, 1997, identified eight areas of concern for counselor Internet use:

1. Confidentiality in areas such as email;
2. Validity of data delivered via computer networks;
3. Misuse of computer applications by counselors who do not have appropriate training;
4. Lack of counselor awareness of location-specific factors, for example recent history in a specific location;
5. Equality of access to Internet and information highway resources such as hardware and software for individuals;
6. Credentialing.

Powell (1998) contends that another issue exists. How will duty to warn and mandatory reporting be handled over the Internet? Does one follow the state laws of the practitioner or the state laws of the client? These are as yet unresolved problems. Childress (2000) adds concerns that the theoretical premises for therapy are based on person-to-person contact and may be different in this new medium. He also points out that diagnosis may be difficult through a printed form and therefore it will be tough to devise an appropriate treatment plan. Identity is another issue. It would be easy for a client to misrepresent his or her self through online therapy (ibid.).

The American Counseling Association has recently presented Ethical Standards for Internet Online Counseling (1999). Barak (1999) points out that the American Psychological Association has similar guidelines developed in 1997 and the National Board of Certified

Counselors also developed Internet counseling guidelines in 1997. Nonetheless, the potential for problems does exist with solutions in the making.

SUMMARY

Counselor education programs are a bit behind in the rush to move from traditional classroom instruction to distance and distributed learning. The reasons are valid and worthy of investigation and problem solving. Guidelines are helpful, but additional research needs to be done to see just where technology fits into counselor education programs. This research project is an attempt to fill in some of the gap.

Chapter 3

METHODOLOGY

This study was a survey approach to investigating the use of technology within counselor education programs throughout the United States. The survey design was a mix of open-ended questions, checklists, and yes/no responses. It was also a follow-up of a qualitative study previously done in Virginia (Quinn, 2000). During the pilot study, it was determined that counselor educators were extremely busy and were not universally open to giving up a portion of time for interviews. Therefore, this study was done using the survey format via e-mail and the Internet, in quest of an increased response rate. Additionally, the results from the pilot study indicated that it might be beneficial to broaden the definition of technology to include telephone use, CD ROM use, and DVD use, along with leaving categories open to add hereto-unconsidered methods of using technology.

The pilot study also provided a base for analyzing the open-ended questions. Categories emerging from this study included: e-mail used for communication between faculty and faculty, faculty and student, as well as student and student. Additionally, e-mail was used to provide students with pertinent information regarding classes, scheduling, important dates, advising and handling issues that might arise. Other categories that emerged included: DVD production and playback; CD production and playback; audio/video equipment; fax machines, scanners, laser disks; television monitors and transmission equipment; and the computer. Computer technology was utilized for: e-mail communication; listservs; chat rooms; Internet searches for research, and

class preparation; the use of PowerPoint presentations in class by both faculty and by students; and class preparation of materials and handouts. These same categories as well as additional ones emerged from this nationwide study.

Participants

The participants for this study were representatives of CACREP approved graduate counselor education programs throughout the United States. CACREP programs were chosen for this study because they set the standard by which other counselor education programs are evaluated and viewed. There were 146 of these programs listed on the CACREP web site in the United States. All included in the study.

Initial contacts were listed on the CACREP web site along with the college or university name and E-mail addresses. These contacts were listed as the CACREP liaison and each was asked to participate in the study. Additionally, if the contact did not feel knowledgeable about the content area of the study, they were asked to pass the survey to someone who was knowledgeable. This person could have been another faculty member or a graduate student.

Instrumentation

The main method of gathering information was through a survey instrument housed on a web site on the Internet. The survey was produced using a word processing software package and then converted manually to HTML (hypertext markup language, commonly used on the Internet). Once converted, the text could then be loaded onto WhizQuest and published to the Internet.

The CACREP programs were first contacted by E-mail using the addresses listed with the

contact's name, on the CACREP web site, and told that there would soon be a more in-depth explanation of a survey on the use of technology coming to them via this e-mail address.

Additionally, they were informed that some of the questions in the survey referred to the ACES' (Association for Counselor Education and Supervision) Guidelines for Online Instruction in Counselor Education, as well as their Technical Competencies for Counselor Education Students, and given the Internet addresses. This gave the participants an opportunity to visit the site and familiarize themselves with these guidelines.

Each message was addressed to a specific participant and not sent as e-mail with multiple addressees. An attempt was made to secure the e-mail addresses of those universities without e-mail listings. Usually, the college or university had a web site with a search utility wherein one could look up a department or, people within a department and obtain the desired e-mail address. If this still failed to provide a working e-mail address, another person within the department was contacted. E-mail was directed to the indicated CACREP liaison or graduate school counselor education department head.

An introductory letter was then sent via e-mail that stated the purpose of the study and asked that the survey information be given to a person within the counselor education program who was perceived as being the most knowledgeable about the department's use of technology. The messages were sent with a "return receipt" function that would inform the researcher that the e-mail was delivered successfully to the addressee. Having experienced e-mail delivery that failed, the researcher wanted to ensure that mail was properly delivered for this study. If the message was returned as undeliverable, the introductory letter served the additional purpose of

alerting the researcher that a different participant or address needed to be located. The steps mentioned above were then taken to obtain participants.

The URL (Uniform Resource Locators - address) for the researcher's web page was an active link within the introductory e-mail message. By clicking on this URL, participants indicated their willingness be a part of this study. Clicking on the URL will open the researcher's web page where a "Technology Survey" button was readily available. Clicking on this button opened a password protected survey instrument. The introductory letter contained a password that would allow only those invited to participate access to the survey. After typing in the password, participants needed only fill out the questions and click on the "submit" button when finished. This sent their responses to the WhizQuest server where only the researcher had access to the responses.

The instrument itself consisted of options to select from a list; yes/no responses; and a few open-ended questions such as "Describe how technology is used to influence your instruction." Along with the introduction letter, URL and password functioning, the instrument was field tested prior to the actual survey being conducted. This field-testing was an informal process to work out any glitches in the survey instrument. People who participated in the field-testing ranged in their computer skills from basic to expert. All replied that the survey required about 20-25 minutes to complete. This information was included in the introductory letter. The field-testing enabled the researcher to determine any problems with the survey. None were detected at that time.

Data Collection Process

The Education Technology Department at Virginia Tech manages a server that has a survey conveyor called Whiz Quest, wherein the survey instrument was housed. This server was reported to be the most stable and dependable on campus. Participant responses were received and compiled by this program. WhizQuest utilized open-ended questions, multiple choice, and yes/no responses. Additionally, the data could be copied as a spreadsheet and loaded into a Microsoft Excel program and then manually converted to SPSS 8.0 Graduate Pack. SPSS yielded the descriptives and frequencies needed for the multiple choice and yes/no questions. The open-ended responses were compiled using Thematic Analysis.

At the beginning of the survey demographic information such as name and name of the university was asked. This information was solely for the purpose of tracking which universities had responded and which had not. A table was set up to record which letters/e-mails had been sent along with reply dates. The table also was used to track the follow-up communications.

This study was confidential. The report only contained group data, and this was explained in the initial letter. The Institutional Review Board of Virginia Tech determined that informed consent was not necessary for an online exempt survey. Also indicated within the initial contact information was a schedule of when reminders would be sent. After ten days, those universities not responding were sent an e-mail reminder to participate in the study. This communication asked that the survey information be passed to another faculty member within the program who may have an interest in participating if the designated contact's time was too constrained to do so themselves.

When email was undeliverable to a specific address, it was returned to the sender with a message saying that it could not be delivered. When this happened, the researcher went to the university's web site, and performed a search for the counselor education department. Another introductory e-mail was sent to the department seeking someone else to represent the institution. When this also failed, the researcher e-mailed the department to again attempt to obtain a representative from the university.

If a college or university had still not responded after three weeks of the initial e-mail/ mailing, a third reminder was sent out also with the option to pass the survey to another faculty member who was interested in the use of technology. If, after another week (four weeks from the initial contact) there has still been no response from the counselor education program faculty, another faculty member was chosen to participate. The same initial and follow up procedures were then set up for this person. Listings of faculty members were also available from 10th Edition Counselor Preparation 1999-2001 (Hollins & Dodson, 2000) and also from Peterson's Graduate Studies in Education 1999, so the researcher was not relegated only to the Internet for e-mail addresses. The new faculty contacts were asked if they would be interested in participating and having their university represented in the study. This communication also explained the steps taken thus far to have their university represented. A reminder to this second contact person was sent after ten days. If after three weeks there has still been no response, the researcher acquiesced that this university choose not to be included in this particular study.

Analysis of Data

All returned surveys were examined for completeness and accuracy. A chart had been devised to record each CACREP institution along with the contact person and their email address. Additionally, the chart had spaces to record the date each communication and reminder was sent out and when a response was received. As the surveys returned, they were recorded on the chart. This helped determine which institution needed a reminder and ensure that only one response from each institution was received.

The program WhizQuest housed the survey instrument and compiled the responses in a way that was easily converted to a Microsoft Excel spreadsheet. From Excel, the information was manually entered into SPSS, which is capable of running descriptives and frequencies on data. Thematic Analysis was used to analyze the qualitative information gathered from open-ended questions.

The first part of the survey contained demographic information. This descriptive data was reported as frequencies and percentages using the descriptive features of the SPSS 8.0 program.

The last four questions were open-ended questions and were analyzed using thematic analysis. The expected responses were categorized by uses of technology for: didactic teaching; skills teaching/modeling; communication; research and advising. As each survey was returned, information was compiled by WhizQuest and housed on their server. The researcher had access to this password-protected information and checked and double-checked to ascertain any new patterns that emerged. Additionally, this allowed the inclusion of unexpected or unique uses of technology. Another chart was devised to list each category and each institution's responses

within that category. The use of a variety of colored markers to highlight each category made repeated information searches more manageable. It was expected that salient categories would emerge from the reading and re-reading of the returned materials. They would then be recorded in the distinct categories constructed by the analysis as typologies. The nominal data has been reported as frequencies in categories

Chapter 4

RESEARCH RESULTS

This chapter provides a thorough report of the sample universities as well as reporting on a method of conducting a web survey. The results will address the research questions presented in chapter one. They are:

1. What do CACREP universities offer in the way of technology?
2. How is technology being incorporated in counselor education programs at CACREP approved colleges and universities?
3. Which courses are presently being offered through online or interactive video methods?
4. What training has the CACREP University's counselor education faculty had in the use of technology?
5. What, if any, technology requirements are made of the students in the program?

Description of Sample Characteristics

DemographicsUniversity Characteristics

Of the 146 CACREP university liaisons/department heads contacted to participate in the study, 7 non-participants replied that they were too busy, and two indicated that they would pass the survey to doctoral students in hope that these students would choose to participate. There was no response from the doctoral students at these universities. Another professor at a different facility stated that there was no way he/she could estimate the questions pertaining to faculty

skills. This person also did not fill out the survey. Forty-four universities completed the questionnaire, a return rate of 30%. The remainder did not reply in any manner after 4 different attempts to elicit their response.

States represented in the study included: Arizona, Colorado (3 universities), Connecticut, Florida (3 universities), Idaho (2 universities), Illinois (2 universities), Indiana, Louisiana, Minnesota, Mississippi, Missouri (2 universities), Montana, Nebraska, New York, North Carolina (5 universities), Ohio (4 universities), Pennsylvania (2 universities), Tennessee, Texas (2 universities), Virginia (6 universities), Washington, West Virginia, and Wyoming.

The responding universities ranged in size from 2% having a total student population of below 1,000; 9% with a population of between 1,001-5,000; 25% between 5,001-10,000; 41% between 10,001-20,000 and 23% having a total student population of over 20,001.

Counselor Education Program Characteristics

Of the universities responding to the survey, 48% reported having a student program enrollment of over 96, while the rest were in the lower ranges. See Table 1 for breakdown of categories.

Table 1
Counselor Education Student Population
 No. of CE students % of Responses

26-35	6.8%
36-45	6.8%
46-55	11%
56-65	6.8%
66-75	2.2%
76-85	6.8%
86-95	9%
96+	47.7%
Total	43
Missing	1

The university respondents indicated that there was slightly more full-time faculty than adjunct faculty, as shown in Table 2. Taking the numbers at the highest extreme in each category, full-time faculty would be at 365, while adjunct faculty would be at 261. At the lowest number in the range, full-time faculty would be at 193 with adjunct at 125.

Table 2
Faculty Employment Status

# of faculty	Full-time	Adjunct
0-5	38.6%	63.6%
6-10	54.5%	15.9%
11-15	4.5%	2.2%
16-20	2.2%	2.2%
21+	0	4.5%
Total	44	39
Missing	0	5

Of the 44 universities represented, 59% indicated that they offered courses off campus while 36% indicated they did not offer courses off campus. Only 11% of the universities indicated that they are considering offering courses off campus; and 22.7% said they are not considering it.

Respondents who indicated that they have been offering distance or distributed courses had 50% reporting having done so for 0-5 years, while only 2% had been doing this for 6-10 years, and 7% of the 59% have been involved in this type of course work for 11-15 years.

Question number 32 asked, "In your opinion, the level of technology used in your program", with choices given as:

- _ has not affected your program's enrollment;
- _ has somewhat increased your program's enrollment;
- _ has decreased our program's enrollment; or
- _ you have no knowledge of how technology has affected your program's enrollment."

Fifty-two percent of the respondents said that their level of technology has not affected their program's enrollment, while 14% say it has increased their enrollment and 32% indicated that they have no knowledge of the affect on enrollment.

Counselor Education Faculty Characteristics

The 44 universities represented reported having a faculty consisting of slightly more males than females, as shown in Table 3. Fifty-four percent disclosed having above 50% males on their faculty, while twenty-three claimed to have a female population of 50% and above. The number of universities reporting below 50% was tied at 19% for males as well as for females.

The mix of male to female faculty in CACREP counselor education programs seems evenly distributed throughout the country.

Table 3
Faculty Gender

<u># of Universities responding In each category</u>		
<u>Percentages</u>	<u>Male</u>	<u>Female</u>
100%	0	0
90-99%	1	0
80-89%	2	3
70-79%	2	2
60-69%	12	7
50-59%	7	11
40-49%	9	5
30-39%	6	10
20-29%	2	1
10-19%	2	2
1-9%	0	1
Total	43	42
Missing	1	2

The responses suggested that university faculty was composed of members belonging to the upper age groups when the range of choices was from 22-25 on up to 55 plus. Table 4 shows the number of universities that responded in each category of age range.

Table 4
Faculty Age Range

Percentages	<u>Age Ranges</u>				
	22-25	26-34	35-44	45-54	55+
100%	0	0	0	1	0
90-99%	0	0	0	0	0
80-89%	0	0	0	5	0
70-79%	0	1	2	3	3
60-69%	0	0	1	2	1
50-59%	0	0	0	5	4
40-49%	0	0	2	5	3
30-39%	0	0	10	9	5
20-29%	0	12	11	2	5
10-19%	2	7	10	8	10
1-9%	34	22	6	2	12
Totals	36	41	42	42	43

Seventy seven percent of the institutions indicated only 1-19% of their faculty is aged 22-25, youth among counselor education faculty seems to be a minority. This is to be expected when one considers the rigors of academia along with the requisite credentials for teaching in a graduate program in a university setting. Most faculty seem to be in the above 35-age range.

The results of the teaching experience query indicated faculty years of teaching experience comparable with faculty age. That is, the older the faculty members are, the more years of teaching experience they possessed. See Table 5 for specifics.

Table 5
Faculty Teaching Experience

Percentages	<u>Faculty Years of Teaching Experience</u>					
	0-4	5-10	11-15	16-20	21-25	26-30
100%	0	1	0	0	0	0
90-99%	0	0	0	0	0	0
80-89%	1	0	0	0	0	0
70-79%	1	1	3	0	1	0
60-69%	0	1	2	0	1	0
50-59%	1	4	1	2	0	0
40-49%	2	6	6	2	0	2
30-39%	2	4	7	4	3	3
20-29%	9	12	4	8	5	6
10-19%	5	10	3	10	5	5
1-9%	20	3	8	13	19	19
Total	41	42	34	39	34	35
Missing	3	2	10	5	10	9

Ninety-eight percent of the responding universities indicated that they had at least 1-9% of their faculty with expert computer skills as well as advanced skills. See Table 6 for the breakdown of faculty computer skills. There seemed to be several different ways of thinking among the respondents in this category. Some university liaisons chose 100% for expert computer skills in addition to 100% for advanced computer skills. It is assumed that their thinking was: if a person had expert skills then it stands to reason they also had advanced skills. Similarly, a few chose 100% in the category of basic but then indicated they had faculty with 1-9% having no computer skills. This method of choosing was perplexing. The universities did not all respond in similar thinking patterns that were easily discernable. Perhaps an alternative would be to better clarify each category and state that each was exclusive.

Table 6
Faculty Computer Skills

Percentages	<u>Estimated Level of Computer Skills for Faculty</u>					
	Expert	Advanced	Intermediate	Basic	Beginner	None
100%	4	2	9	22	4	0
90-99%	1	0	2	0	0	0
80-89%	2	0	2	2	0	0
70-79%	3	3	3	0	0	0
60-69%	5	1	3	0	0	0
50-59%	4	6	3	0	0	0
40-49%	1	5	2	1	0	0
30-39%	5	9	6	1	0	0
20-29%	7	5	0	4	0	0
10-19%	6	7	6	2	1	0
1-9%	5	2	3	6	20	23
Total	43	40	39	38	25	23
Missing	1	4	5	6	19	21

When asked how many programs had faculty who satisfied the ACES Guidelines for Technical Competencies, 25% reported that 100% of their faculty satisfied these competencies. This was the largest category of respondents to this question. See Table 7 for the specifics of each category.

Table 7
Faculty ACES Competencies

<u>Estimated Number of Programs with Faculty Satisfying ACES Competencies</u>	
Percentages	Program Responses
100%	11
90-99%	2
80-89%	5
70-79%	3
60-69%	3
50-59%	5
40-49%	2
30-39%	3
20-29%	3
10-19%	1
1-9%	0
Total	38
Missing	6

Response to Research Questions

Question One: What do CACREP Universities Offer in the Way of Technology?

Technologies in General

In order to answer this question, the survey listed the 11 technologies found in the pilot study and respondents chose “Yes, Available but not used, Not available, Do not know”.

Additionally, the last open-ended question gave participants the opportunity to write in other technologies their programs were utilizing that may not have been mentioned within these 11 categories.

One of the participants explained that their Family and Marriage Counseling and the Mental Health Counseling programs did not use much technology. Technology use was relegated

to video tape recording and playback equipment as well as email. However, the school counseling program students were expected to utilize PowerPoint presentations with their students as a counseling technique; digital video with students as feedback; as well as creating and book-marking Web pages that could be used in the counselor's office while working with students. Currently, this program is investigating digital video clips as an interactive teaching technique.

The same university reported having pioneered Cyberspace Group Supervision, which features 5-6 students emailing one another via a listserv. They have also experimented with bulletin boards, and chat rooms. This counseling program has been involved in a local online high school by "chatting" with students and creating an online guidance newsletter.

Another program reported having classes that are combinations of web instruction and in-class time. This program uses a multi-modal delivery method as well as IITV and the web. It is assumed that IITV means interactive instructional television.

One program reported using digital audio/visual communication links via fiber-optic cables to consulting rooms for remote supervision of student practice including recording and remote camera controls as well as radio frequency voice communication. An additional use of technology by another program is taking advantage of html coding. Html, which stands for hypertext markup language, is a programming language that uses codes and is extensively utilized on the Internet to present information commonly viewable to multiple computer formats. This particular program reported utilizing html to write the self-study for CACREP. That way, it would be available for review on the web thus eliminating the need for 15-20 hard copies of

about 1,000 pages per set.

This study's reported use of technology in CACREP counselor education programs is comparable to those found in the pilot study. Video tape recording and playback mechanisms were reported in 93% of the programs, while audio recording and playback devices were reported used in only 70% of the respondent programs. Interactive satellite has been utilized at 48% institutions and digital cameras in 43% programs. Table 8 shows the breakdown of utilized technology within this study.

Table 8
Technology Utilized

Technologies used	Percent of responses
Audio recordings & playback	65.9%
Video recording/playback	93%
Interactive Satellite	47.7%
PowerPoint for class by faculty	75%
PowerPoint for class by students	70%
CD-ROMS	50%
Laserdiscs	31.8%
Scanners	70%
Fax Machines	84%
Modems	86%
Digital Cameras	43%
Overhead Projectors	81.8%

Computer Use

Questions pertaining to computer use were in a separate category to facilitate delineation of the multiple purposes for this type of technology. Most respondents who answered the open-ended questions indicated that they used e-mail, listservs, chat rooms, and discussion boards

extensively for communication. See Table 9 for the list of computer uses as indicated by the CACREP programs. The majority of counselor education faculty, 84% respondents, utilized computers to prepare lecture and handout material for students. Preparing reports netted 82% responses while 68% participants chose running statistical analyses such as SPSS. Fifty-nine percent of the universities indicated they use computers to assist with time management, while response to drafts of student thesis and dissertations only had 15.9% programs indicate that this was a use they found for computers.

Table 9
Internet Utilization

Use of Internet	Percent of Responses
Department Web Page	86%
Faculty Web Page	75%
Email to faculty & students	86%
Database Access	68%
Posting class information	66%
Chat rooms for personal use	45%
Listservs	80%
Research to prepare for class	70%
Research B traditional studies	70%
Publishing in electronic journals	34%
Reading Professional electronic journals	73%
Requiring students to read electronic journals	54%
Requiring students to participate in chat rooms	34%

Question Two: How Is Technology Being Incorporated in Counselor Education Programs at

CACREP Approved Colleges and Universities?

In order to answer this question, four open-ended questions were asked on the survey.

They were:

1. Describe how technology is used in your institution's counselor education program to influence instruction.
2. Describe how technology is used in your institution's counselor education program to demonstrate appropriate counseling methods.
3. Describe how technology is used in your institution's counselor education program to communicate among faculty & students as well as student to student.
4. Describe how technology is used in your institution's counselor education program to assist with research and/or advising.

The responses to these questions provided rich material from 73% participant universities.

To Influence Instruction

In response to this first question, many universities reported that their faculty require students to submit assignments via e-mail and others require submission of materials through web pages. Several respondents reported using computers for the development of course materials, and others mentioned an increase in the use of PowerPoint presentations by both faculty and students. One program is hoping to soon be able to digitize videos for classroom

presentations. This program presently has facilities for real-time distance learning and is just beginning in this area.

In one specific program only the school counseling students are required to use technology. Development of each individual's web pages is a requisite. Many of the programs are beginning to branch out to the field of distance education. They are using the Internet to post portions of each class, such as the syllabi and assignments. This is handled through listservs as well as by the use of chat rooms. Some believe this increases learning because of the conversations taking place between classes. It has also been cited as contributing to more in-depth conversations in classes. Still other counselor education programs reported utilizing packaged Internet instruction programs such as WebCT and Blackboard Course Information, to handle not only entire classes, but also to make available, components of classes they feel are not suitable for totally online instruction.

Several programs mentioned they are in the process of replacing old video recording and playback equipment with digital equipment. It is generally felt that the digital equipment allows students and faculty to program a disk and go directly to one or more locations on the disk instantaneously rather than fast forwarding and overshooting or having to go back and forth to locate a particular segment to display.

Two institute representatives wrote that most doctoral student communication and transfer of written materials happened through the Internet and e-mail. Doctoral dissertations are submitted electronically at several universities. Research and publication collaboration with graduate students from other universities happens through e-mail at one university.

One professor reported the extensive use of technology within: their clinic during techniques classes for all programs; practicum for mental health counseling; instruction in career classes; software for, research and statistical analysis, and literature searches; but did not elaborate as to what specific technology is being used. However, this program does not feel a push to incorporate distance learning into their program. They have a “selective admission” and cater mostly to full-time cohorts. The main focus of this program at present is building relationships, especially with outlying schools and this is done on a face-to-face basis.

Another professor utilizes a unique approach with technology by taking all the visual and audio content of lectures and burning them into CDs in each of his/her classes. “Students are then given a CD for each class taken [with this professor], and are required to cover the material at home prior to the class meeting”. This frees up the class time for experiential components and interactive sessions. The professor admits this is more difficult to do and more time consuming, but that it allows more time for “process of teaching skills”. This program is “skeptical of fully technology based courses because they often turn out to be correspondence courses on the web”.

Only one program reported having Human Development, Research Design, and Multicultural Counseling courses in three distinct formats. There are separate courses in these subjects that are complete in each format and offered in three formats. Those formats are: interactive TV, web classes, and courses that are done using traditional methods. This program also reports having a long tradition of alternative delivery of classes. Yet another program reports using interactive TV, in addition to “video tapes and Internet course work such as weekly discussion questions, transcriptions of sessions, journal entries and the final examination.” Yet

another program sees instruction as influencing technology and adds that technology has enhanced the kinds of materials one can require for additional reading, as it is available without charge in many places. This program additionally sees web pages as opening another area for instruction in that one can provide a myriad of information through this medium.

Two universities spoke about having high tech rooms with full production studios for interactive distance education. One talked about these rooms having “smart cameras that follow the professor”. This same program reported having collaborative labs where they teach theory, Family systems, etcetera, that have one touch consoles that integrate VHS, DVDs, Doc Cam, built-in computer and external laptop so that all work can be projected through the built-in LCD projector. In addition, each pair of students in the room, sitting at a table of 4, have a desktop computer that can be controlled from the console. This enables whatever the student is working on to be transmitted through the LCD to all other computers and the instructor also has this capacity. Additionally, this program is doing research on the effects of this high tech environment on counseling students. They also have laptop classrooms, but did not elaborate on exactly what this is.

To Demonstrate Appropriate Counseling Skills

Overwhelmingly, the majority of programs use videotaping of practicum sessions as well as internship sessions for critique. Additionally, most programs use videotapes to demonstrate appropriate counseling skills by showing professionally made counseling tapes in class. Many program representatives mentioned the use of two-way mirrors as a videotaping method as well as live supervision method for practicum and internship students.

Some unique uses of technology include: using Blackboard to provide feedback for supervision; a “center for simulation” where the program prepares simulation sets for techniques classes; case management, supervision and suggestions for skill development to therapists in Eastern Europe; making digital video vignettes for Web pages; using the computer in the school counseling program as a prop when counseling students; and examples of skills in video format delivered to students by CDs. Several professors in one program are involved in 3-D, virtual reality research comparing regular videotape and the 3-D version. Only one program reported having a “center for simulation where they prepare simulation sets for techniques classes.”

While some programs also included TV scenarios and film segments being used for instruction of techniques, others included overheads, PowerPoint presentations and communication through email as adjuncts to their teaching. Three programs replied that they did not use technology to demonstrate appropriate counseling skills.

To Communicate

The majority of respondents simply listed e-mail, listservs, and chat rooms. However, one participant said that chat rooms have lost their appeal as they are time specific, but they are still in use within this program. Additionally, this program posts department forms, department handbook, graduation information as well as exams and supervision expectations on the Web. Another program has conferencing capabilities for off-campus students. This is explained as sites through which students can send messages to one another and to their professors. This is handled through the Web with a program that students can download to their machines.

Several university participants reported using Blackboard Course Info to post material for each class, set up student e-mails, and have assignments online as well as having students submit assignments online. One university program maintained they are putting all of their course information for each class online through Blackboard Course Info.

To Assist With Research And/Or Advising

E-mail was again cited as the main mechanism for advising, while Internet searches and the Web were vehicles for conducting research. Several participants mentioned that their student handbooks were online and this facilitated self-advising. One program also has created sites for school counseling students to obtain information pertaining to acquiring a school-counseling license within the state. Literature reviews through online library searches, online journals as well as online assessments are other methods of research listed by participants. Additionally, SPSS for data analysis, SYSTAT, and SAS packages were listed as uses of technology for research. Listservs were also stated as an integral component of advising, informing students about class sequencing, and positing information pertaining to programs of study.

Question Three: Which Courses Are Presently Being Offered Through Online Methods or Via Interactive Satellite?

To gather this information, four questions were asked with response choices as check boxes in front of the CACREP content areas of: Human Growth and Development; Social and Cultural Foundations; Helping Relationships; Group Work; Career and Lifestyle Development; Appraisal; Research and Program Evaluation; Professional Orientation; Practicum; and Internship. The results are listed in Figures 1 through 4. The four questions were:

1. Please indicate which of the CACREP required courses your counselor education department offers totally online.
2. Please indicate which of the CACREP required courses your counselor education department offers partially online.
3. Please indicate which of the CACREP required courses your counselor education department offers through totally interactive video.
4. Please indicate which of the CACREP required courses your counselor education department offers partially through interactive video.

All of the core curriculum areas required by CACREP are being affected by the use of technology. Many counselor education programs, 66%, are posting partial class information on the Internet. Various respondents indicated that some of the uses for the Internet were to post: class assignments, program handbooks, newsletters and announcements on the web. Several counselor education programs discussed totally technological classrooms while for others; e-mail is the primary use they have for the Internet.

Research and Program Evaluation courses were most likely to be offered totally online with 11% of respondents so indicating, see Figure 1 for details. Human Growth and Development courses along with Internships were the next largest group to be offered totally online. These categories represented 9% each for responses.

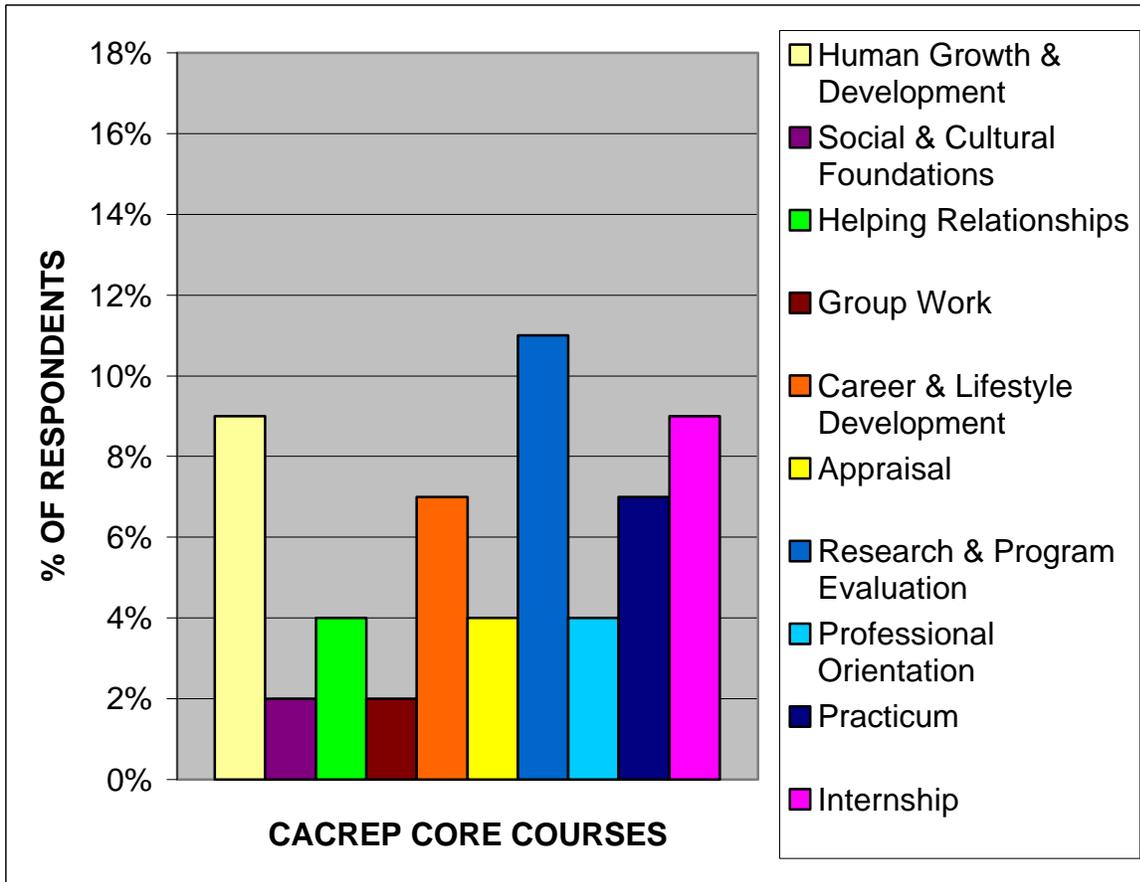


Figure 1: CACREP CORE COURSES TOTALLY ONLINE

Courses offered partially online brought an increase in most of the course categories, see Figure 2 for details. Professional Orientation, Group Work and Practicum were the only classes to remain the same.

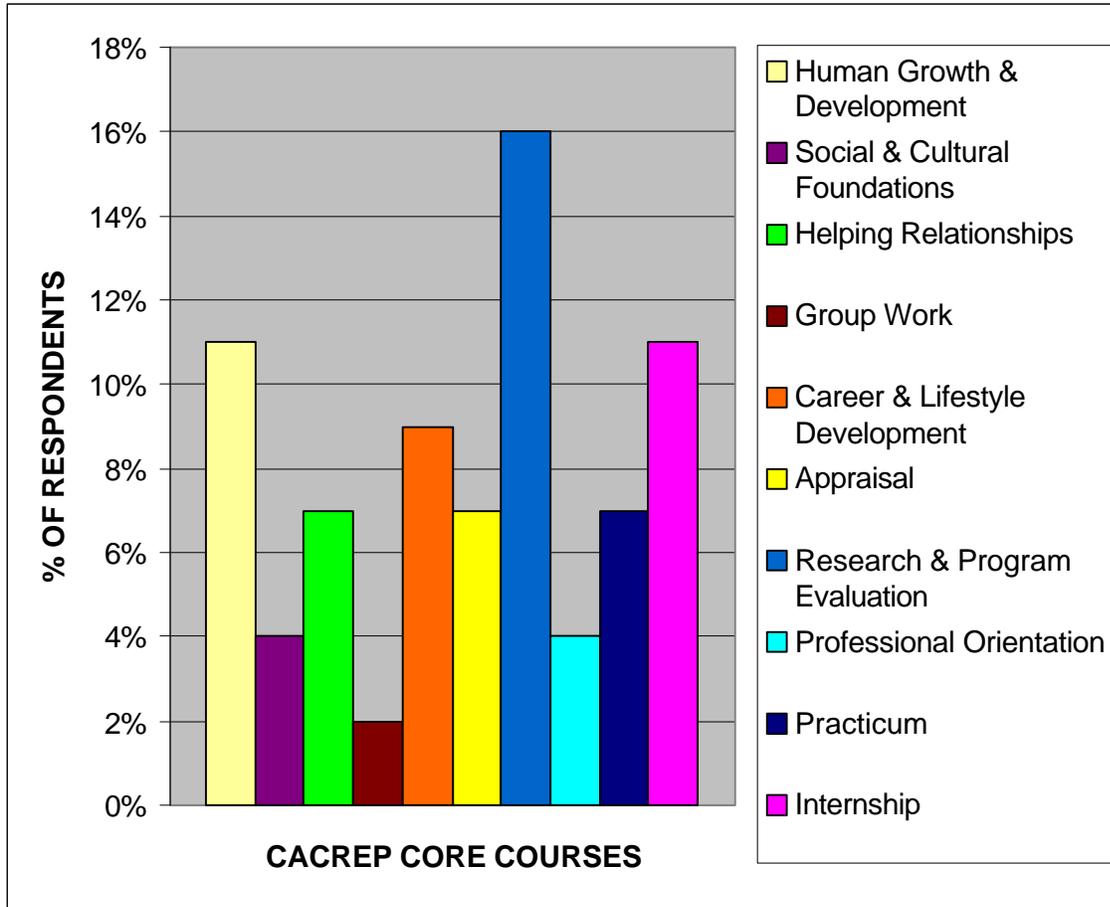


Figure 2: CACREP CORE COURSES PARTIALLY ONLINE

In the open-ended questions responses, professors indicated that partially online included posting: syllabi; assignments; announcements; in addition to conducting class discussions.

Courses offered totally via interactive video, see Figure 3, saw a decrease of respondents for all core classes except Appraisal and Social and Cultural Foundations, both of which remained the same at 7%.

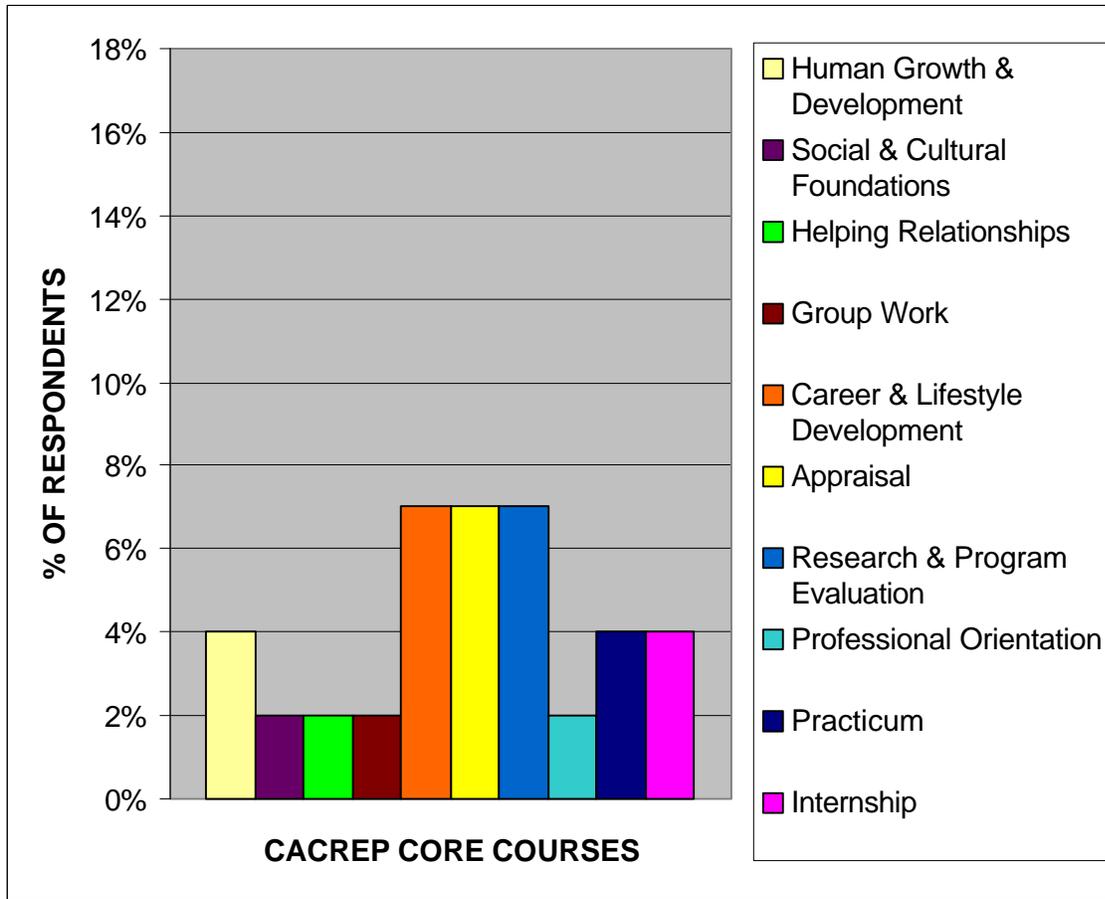


Figure 3: CACREP CORE COURSES OFFERED TOTALLY INTERACTIVE VIDEO

Courses offered partially through interactive video saw a slight increase for the career and human growth and development courses. The other core courses either stayed the same or decreased in interactive video usage. See Figure 4 for details.

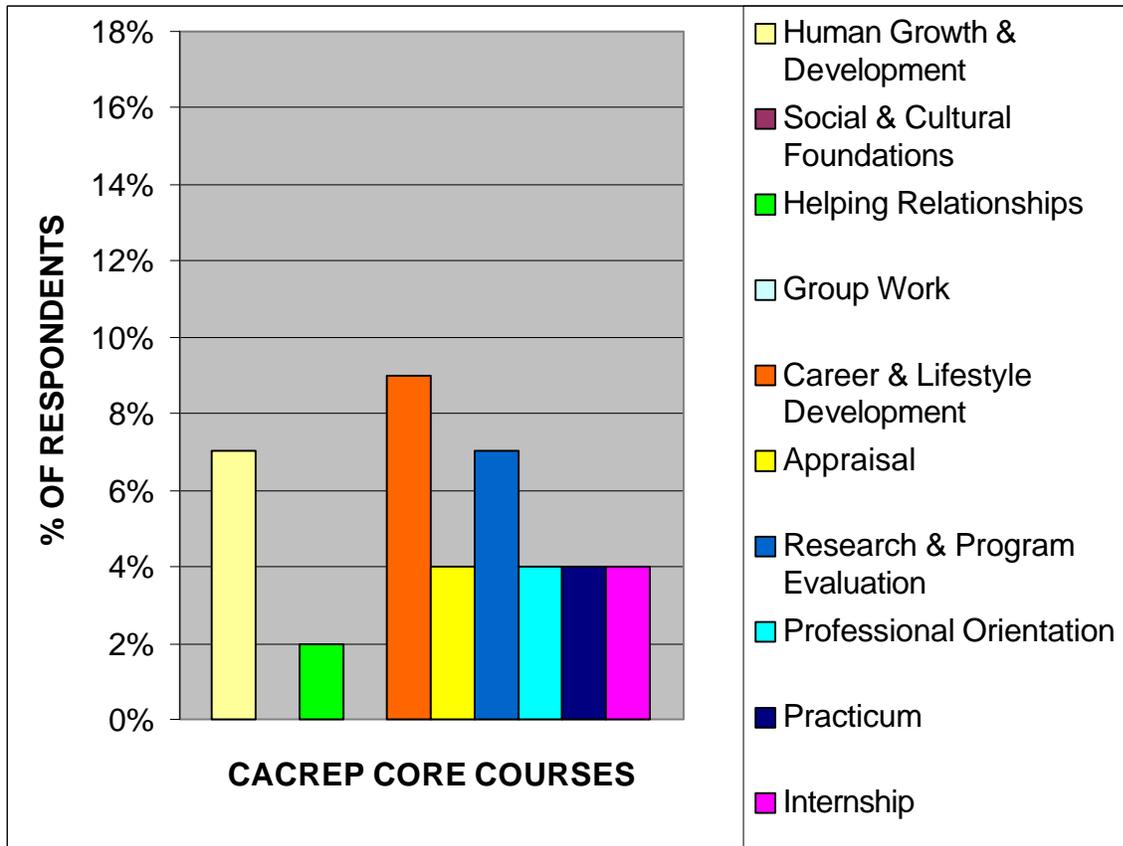


Figure 4: CACREP CORE COURSES PARTIALLY INTERACTIVE VIDEO

Question Four: What Training Has The CACREP University's Faculty Had In The Use Of
Technology?

Five questions were asked to elicit this information. They are listed below along with the results for each question.

1. Regarding training offered to faculty for utilizing new technology on campus:

- Your campus has adequate training.
- Your campus has limited training B but still needs improvement.
- Your campus does not have training.
- You do not know about the training.

Of the responding program representatives, 95% answered this section. Of that 95%, 65.9% indicated that their university had adequate training. Another 27% indicated that their university had training but this needs to be improved. Only 1 participant did not know about the training and two declined to answer this question.

2. Regarding on-going support (such as help systems for using the Internet for courses, etc.) offered to faculty for utilizing new technology on campus:

- Your campus has adequate on-going support.
- Your campus has support but needs improvement.
- Your campus does not offer on-going support.
- You do not know about the on-going support.

For this question also, there were 42 responses with 2 refraining from replying. Fifty-four percent of the participants replied that their university offered adequate on-going support, while

36% said that the on-going support offered was limited and needed improvement. Only 1 person said their university did not offer adequate support and another indicated that they did not know about the on-going support within their university.

3. What incentives are offered by your university/college to promote the use of technology?

- Faculty is granted release time.
- Faculty is offered a monetary bonus.
- Distance or distributed learning departments at this university offer faculty fellowships.
- Considered when deciding promotion and tenure.
- You do not know of any incentives.
- Other B Please elaborate below. Participants were then provided with a space in which to write information not listed above.

The respondent could make only one choice. Therefore, 11% of the participants elected to choose “other” and add what they had to leave out because of the limited response mechanism. Those responses will be included in the reported numbers.

A surprising number of participants, 61%, did not know what incentives if any were offered at their university to encourage utilization of new technology in teaching. Release time was granted in 16% of the institutions; monetary bonuses in 11%; distance learning programs offered fellowships in 11% of the universities, while 9% of the participants indicated that the use of technology was included when deciding promotion and tenure. Eleven percent of the

respondents chose the “other” category. Of these professors, 60% said that they received new computers for attending workshops to upgrade their computer skills; 4.5% of these computers were laptops. One person replied that their university offered good publicity for training sessions and skills development workshops as well as a forum for sharing ideas. They continued to say that using technology was simply a part of the culture. One university reported having release time, fellowships, as well as consideration for promotion and tenure to encourage the use of technology in their teaching. Another reported having release time and a monetary bonus for producing classes on the Internet.

4. What organizational structure does your university have to facilitate the use of technology?

_ This campus has a separate distance education or distributed education department that is available for our use.

_ Academic departments provide technical assistance by having a designated technology person within the department.

_ You do not know what your university offers.

_ Other B Please elaborate. Participants were then provided with a space in which to write information not listed above.

All participants responded to this question. There were 43% of the professors who indicated there was a separate distance education or distributed education department that is available for their use while another 27% selected academic departments as providing this assistance.

Professors at 9% of the programs said that they did not know, and 20% chose “other”. Of this

20%, 55% stated their institution has a separate distance education department as well as a faculty development department and both provide workshops and training in the use of technology for teaching. One response said that there were many opportunities to learn through workshops but did not state what those opportunities were. Another said there were no such offerings or organizational structure within their university and that faculty who were interested in using technology were self-taught. Additionally, one reply was that there was a separate distance education office, but no on-going support as far as this person knew.

5. Does the majority of your counselor education faculty know how to access assistance at your university for help when utilizing new technology? Yes, or No.

Forty-one participants chose “Yes” while two chose “NO”. One person did not respond to this question.

Question Five: What, if any, Technology Requirements are Made of the Students in the Program?

The question: “Is your counselor education program utilizing ACES Technical Competencies for Counselor Education Students?” along with the responses: “Yes”, “No”, or “Is Considering” was instrumental in securing this information. The responses were: 39% yes, 20% no, and 36% considering, with 2 non-respondents. Additionally, interspersed throughout the questionnaire’s lists were questions about requirements of students. These were reported under other sections but will be repeated here for clarification. Eighty-six percent of the professors chose the use of e-mail between faculty and students as one use of the Internet for their program. The use of listservs were chosen by 80% of the professors; requiring students to read electronic

journals by 55%; and students participating in chat rooms was required by 34% of the programs. It would seem that the largest numbers of programs, 86%, are requiring the use of e-mail which, in turn requires some familiarity with computers and the Internet. Additionally, to read electronic journals and participate in listservs and chat rooms also requires some basic computer skills. Although requiring basic computer skills may not be overtly stated as necessary for entering students, it seems to be an expected skill. This is consistent with the findings from the pilot study in which a professor stated that this was not a requirement per se, but it was necessary to function in the program. This professor also mentioned that all students are issued an e-mail address upon registering for classes with the university (Quinn, 2000).

One unique requirement from one program was that they require Masters students to have “electronic portfolios” but did not explain what this entails. Additionally they “require their PhD. students to take a course on Applications of Technology in Counselor Education”.

Chapter 5

DISCUSSION, AND RECOMMENDATIONS

This chapter presents the conclusions drawn from this study, discusses the potential implications, and suggests recommendations based on the findings. Because this sample was specific to counselor educators from CACREP approved counselor education programs, it was designed to ascertain base line knowledge of the types of technologies utilized within the programs. The purpose was to determine where the field of counselor education was headed with the initiatives to remain competitive, incorporate technological advances into curriculum and instruction, and still remain a very humanistic field. CACREP programs set the standards for the profession and as such are looked to for leadership.

The focus of this study has been to determine what universities offer in the way of technology, training, and support as well as how counselor education programs take advantage of or have knowledge of this system. Another area of interest when assessing the skills of counselor educators was how they incorporate technology in their work and what they expect from the counseling students. Therefore, this study utilized the frequencies of responses and descriptive information to determine these outcomes.

Summary of Results

1) Research question one examined what CACREP universities offer in the way of technology. The findings indicated that CACREP approved counselor education programs are utilizing traditional technology as well as incorporating new technologies. Traditional

technology reported used by respondents includes: audio recording and playback devices, 66%; video tape recording and playback devices 93%; fax machines 84%; and overhead projectors 80%. Of the more recently produced technologies: 48% are utilizing interactive satellite; 75% are using PowerPoint for class presentations by faculty with 70% reporting students using PowerPoint for class. Additionally, the percent of faculty using CD-ROMS is 50%; laser disks usage is 32%; 70% are using scanners; 86% for modems; and 43% are using digital cameras. It seems that audio recording and playback equipment is being phased out and scanner use is relatively high as is technology utilizing the computer.

2) The second research question deals with how technology is being utilized.

The overwhelming majority of the respondents, 86%, use computer technology for communication between peers and students; 84% use the computer for the development of materials for class; online research, 70%; and posting class information, 66%. Additional uses include the department web site, 86%, along with individual faculty member web sites, 75%; practicum and internship recording on video tape, 93%, as well as on laser disk recording and playback, 32%.

3) The courses offered through online or interactive video were addressed in research question three. The course most often offered totally online is Research and Program Evaluation, 11%, with Internship and Human Growth and Development, both at 9%, closely following. See Figure 1 for additional details. The courses most often offered through totally interactive satellite are: Career and Lifestyle Development at 9% of respondents, with Human Growth and Development and Research and Program Evaluation closely following at 7%. See Figure 3 for

additional details.

4) Question four deals with the training of CACREP universities counselor education faculty in the use of technology. Of the professionals responding, 66% indicate that their training was adequate with 12% indicating that they have training but there needs to be improvement in this area. Two percent did not know about the training and 4% did not respond to this question.

5) Question five pertains to the technology requirements made of students in the CACREP approved counselor education programs. Of the faculty responding to this study, 39% indicated that they use the ACES Competencies for their students. Those who did not require these competencies were 20% of the respondents with 36% indicating that they were considering implementing these requirements and 4% not replying. Open-ended question responses showed a propensity toward requiring all students to have access to e-mail. If 86% of the responding faculty use e-mail for communication with their students, then one would suppose that the students are required to also have access to e-mail.

Discussion

Demographics

The ratio of full-time to adjunct professors in counselor education programs is higher than those reported throughout universities nationwide. These results denote that CACREP counselor education programs are above the norm for ratio of full-time to adjunct faculty in humanities programs (Cox, 2000). Additionally, 59% of responding programs offered distance or distributed education in CACREP facilities with 23% of the participants stating they were not even considering it. Although 7% of the respondents marked having offered distance courses for

11-15 years, this means of distribution of courses seems relatively new within counselor education programs.

In today's educational environment, with multiple demands made on students and students accustomed to services twenty-four hours a day, seven days a week, it is important to update programs to satisfy these demands or be left out of the competition. The global atmosphere of the world today, makes achieving higher educational goals possible through a variety of methods heretofore not available. Collaboration between universities will broaden the scope of possibilities.

The results of the faculty age, being mostly above age 35, is to be expected when one considers the rigors of academia along with the requisite credentials for teaching in a graduate program in a university setting. Additionally, years of teaching experience increasing with age is also an expected outcome.

Research Question One

The following conclusions were drawn from the sample of 44 CACREP approved counselor education programs across the United States. The first research question asked what the universities with CACREP approved counselor education programs offered in the way of technology. There was a wide range of responses in the individual technologies fields, as indicated in Table 8. Ninety-three percent of the respondents reported that their institutions offer the use of video recording and playback devices, 66% use audio recording and playback equipment while 48% of the counselor education participants broadcast classes via interactive satellite. In addition, all of the responding universities provided e-mail addresses to each entering

student. The area where the counselor educators said they did not have sufficient information was incentives to develop courses utilizing new technologies. With 61.4% of the participants not knowing what the incentives were, there appears to be a communication gap between those offering the incentives and the potential recipients of the incentives. This is an area that could be improved on within these programs.

Several programs mentioned the availability of Blackboard Course Info, and/or WebCT, which are programs for publishing classes to the web. Although others did not mention this, it cannot be assumed that the universities involved do not have either of these programs available because it was not directly asked. Therefore, if this study were to be repeated, it would be useful to have these listed as offerings of the university. Additionally, one faculty mentioned that WebCT had a very steep learning curve that was discouraging. Those utilizing Blackboard Course Info found this to be a more user-friendly program (Quinn, 2000).

Presently, there are other options for those wanting to publish courses on the web. Macromedia's: Dreamweaver, Fireworks and Coursebuilder software can be incorporated into Blackboard Course Info and present a manageable package of course information for those who prefer to use their creativity to individually create their own course format. Hohenshil and DeLarenzo (1999) wrote about using the Internet to house their career development course. Additionally, they presented a format for the components of their class. The main drawback to this method of publishing a class is that your intellectual property is not protected (Boettcher, 1999). Anyone who is interested can copy all of the class information. If this is not a concern for individuals, then their method of class presentation on the Internet is the easiest to achieve. One

participant in this study mentioned that he/she was in the process of making a “hybrid” career development course and this researcher is surmising that the above-mentioned method is being utilized for this specific course.

Although there seems to be a consensus within the field of counselor education that not all courses are suitable for total online presentation, the sections of the courses that involve paper, (i.e. syllabus, handouts, assignments, etcetera) might be offered through this method thus cutting costs in printing for the department. Additionally, it makes it difficult for students to say, they lost the syllabus, or cannot find it. It is accessible to them at all hours of the day from any computer with web access.

Research Question Two

The second research question asked how the counselor education programs were utilizing technology in their programs. The responses indicate that programs are using a wide variety of technology in different aspects of their programs. Some programs are more advanced in their use of technology and others are just beginning. Programs are at two different ends of the technology continuum. As instructors improve their technology skills, this continuum should shorten.

The switch to digital video and cameras allows for additional possibilities in classes as well as for online presentation. Programs or counseling sessions recorded digitally can be programmed to go directly to a specific place and shorten hunting time during supervision. The same can be done with feature films on laser disks. This allows professors to show specific places in productions where the supposed counselor’s skills are particularly good or unethical.

If a session has been recorded digitally, it is easily uploaded to a web site and can be

made available to the course participants. Most of the respondents were knowledgeable about listservs and disseminating information to classes through this method. Listservs can be password protected, as can web sites. This would help to ensure protection of intellectual property.

There are publications available that are out of the area of counselor education but are in education, that assist professors with making the transition from traditional classes to classes delivered through alternative means. It may be beneficial to present some of these methods to counselor educators at conferences and seminars or through articles in professional counseling journals. There were two articles familiar to this researcher that explain in depth how to produce a course for publication to the Internet. One is by Karyn Dayle Jones and Chris Karper (2000), and the other article is by Hohenshil and DeLorenzo (1999). Both articles walk the reader through developing an online course; one article is in counseling techniques, while the latter article is about career development. Both articles clearly delineate methods for developing courses for the web.

Research Question Three

The third question pertains to which classes are being offered using alternative delivery methods. All of the core curriculum areas required by CACREP are being affected by the use of technology. Many counselor education programs, 66%, are posting class information on the Internet. Various respondents indicated that some of the uses for the Internet were to post: class assignments, program handbooks, newsletters and announcements on the web. Several counselor education programs discussed totally technological classrooms while for others; e-mail is the

only use they have for the Internet.

Research and Program Evaluation courses were most likely to be offered totally online with 11% of respondents so indicating, see Figure 1 for details. Human Growth and Development courses along with Internships were the next largest group to be offered totally online. These categories represented 9% each for responses. This researcher expected to see the human growth and development class offered online, as it is a more didactic course. The research and program evaluation courses could also accommodate themselves to an online format; however, the internship courses offered online, were not an expected and did not develop as a category in the pilot study.

Courses offered partially online brought an increase in most of the course categories, see Figure 2 for details. Professional Orientation, Group Work and Practicum were the only classes to remain the same. Note the increase of percentages on axis y. In the open-ended questions responses, professors indicated that partially online included syllabus, assignments, announcements, and class discussions.

Courses offered via totally interactive video, see Figure 3, saw a decrease of respondents for all core classes except Appraisal and Social and Cultural Foundations, both of which remained the same. Again, it would stand to reason that the more didactic classes could be delivered via interactive satellite as well as group class, and practicum and internship supervision components.

An innovative use of technology was the program with the instructor who put all of his/her visual and audio lecture material on CDs and distributes these to students at the beginning

of class. This was the only use mentioned among the participants, of “burning” (making) CDs.

This material could also be available on a web site.

While some counselor educators are presenting class material via the Internet and through interactive television, as well as through video taped classes, some programs are just beginning in this area. This is congruent with the literature reporting the increase of distance/distributed education courses (Lewis, et al, 1998). However, one respondent stated that their program was shying away from online classes because they did not think the quality of the classes thus far was up to their standards. The participant continued to say the online classes they have seen so far, are not much better than correspondence classes on the web.

This professor’s concerns are similar to those expressed by others (Bloom & Waltz, 2000). The National Education Association (2000) devised Quality On The Line: Benchmarks for Success in Internet-Based Distance Education, which are guidelines for producing instruction via the Internet. ACES (1999) has developed standards for online counselor education courses to ensure quality of course is comparable to traditional courses. Research suggests that the quality of learning via Internet classes is comparable and sometimes better than those offered in a traditional manner (Russell, 1999). There are processes at work to aid the professor in determining if his/her course will present itself in similar quality to traditional courses.

Research Question Four

The fourth question refers to faculty training in technology. Counselor educators are improving their technology skills as evidenced by Table 6. Of the 44 counseling programs responding, 25% reported that 100% of their faculty satisfied the ACES Guidelines for Technical

Competencies set up for students. These findings differ from a survey done by ACES in 1999 on technology competencies of faculty and students (Myers, 1999). The results of this previous study indicated that faculty as well as student technology skills were not at a “uniform high level of competence”.

There were 15.9% of the programs that did not indicate an estimate of their faculty computer skills satisfying the ACES recommendations for students. This may have been due to the fact that there was no “0%” category. If this study is repeated, it may be beneficial to include a “0% category. Another reason for the number unreported may be that some felt they did not know if their faculty members had these skills or not. This might also be a category of choice in future studies.

Research Question Five

The final question pertains to requirements made of students in counselor education programs. At a minimum, students are expected, though not formally required, to be able to use e-mail. It is believed that as the present population of undergraduate students reaches graduate schools, their computer skills will outdistance those of the instructors (Traub, 1997). It is curious that universities are requiring entering freshmen to have computers that meet minimum specifications and yet graduate programs are reluctant to do this when graduate students should have advanced skills.

Recommendations

For Counselor Educators

Counselor educators are becoming increasingly aware of the need to improve technology skills to remain competitive in the field of education. Global marketing has become an everyday term in this technological age. Education has entered this arena and has expanded its potential to a worldwide audience. Specific degrees are no longer relegated to campus locations, but are available in the home or work place, library or anywhere one can plug in a laptop computer. Even this is changing as laptops can be run from batteries and through a satellite connection not requiring an electric plug.

In order for counselor educators to more rapidly improve their technology skills, they would benefit from investigating options and suggestions from the experts on distance and distributed education. Conferring with the departments within their respective universities that deal with distance and distributed education would be a way to utilize the technologies made available by the university.

The journals mentioned within this report as well as journals within the profession, would serve their clientele by including articles specific to how to implement strategies to increase personal interactions in online courses, in addition to courses broadcast via satellite. There is a very inclusive and useful Internet site with information on developing Internet courses. The URL for this site is: <http://www.outreach.utk.edu/weblearning/>

Additionally, it would be helpful to construct and share methods of evaluating to determine the success or failure of expeditions in technology usage. Failures, as well as success,

need to be disseminated. Learning occurs from knowing what does not work as well as what does work (Unsworth, 1997).

Cooperation and collaboration of efforts; promulgation of information on successes and failures will build working relationships among counselor educators. These suggested changes are drastically different from the traditional workings of universities and programs in education, and yet may extend possibilities and potentially enrich what can be offered to students.

It would be useful to poll counselor educators to determine why they do or do not take advantage of offerings of the university to improve technology skills. The learning curve for technology is steep, and may seem burdensome for busy counselor educators. However, it is important to remain competitive in the field as educators and as counselors. After all, counselor educators are producing counseling practitioners and as such need to know what the demands are in the working world.

Many of the responses from counselor educators indicated that they have different requirements for students in school counseling tracts than in other tracts. There were more requirements made of school counseling students regarding the acquisition of technology skills. With limited time resources for guidance counselors, some school counselors are developing web material to assist with counseling concerns. Stone and Turba (1999) suggest that school counselors have online guidance classrooms where students can go for assistance with career development as well as other concerns. In Virginia, there is a program that was developed for all schools kindergarten through 12th grade that does just this. The program is available on CD-ROM as well as a web site (<http://vaview.vavu.vt.edu/>). It is distributed by Virginia VIEW (Vital

Information for Education and Work), which is part of the Virginia Tech Educational Leadership and Policy Studies department.

On the university counseling center level, for example, Virginia Tech's counseling center web page has components to assist students deal with test anxiety, study skills, relaxation, as well as a handbook online for students with Attention Deficit Disorder. School counselors must be proficient enough to utilize programs such as these and to develop their own materials specific to their student population. The main avenue for training for school counselors is in counselor education programs. Therefore, these several universities requiring updated technology skills from their students remain at the cutting edge of the technology requirements for students.

Technology has affected all aspects of the counseling profession. There are organized web sites where counselors can provide counseling services through the Internet. An example of one such web site can be found at: <http://www.counselingnetwork.com/>. In addition, there are numerous sites that can be found that address a plethora of counseling concerns. These sites can be technical or easy to understand and a counselor needs to be able to determine if the site is a good referral for his/her client or if the site is better suited for a professional. The skills are also needed to assess the site to ensure that the information it provides is legitimate. Therefore, it would behoove a counselor to stay abreast of the latest resources available not only to the professional, but to assist clients in dealing with concerns or health issues in their lives as well. In this regard, counselor educators who are following the ACES Guidelines for Student Competencies are teaching students how to discern appropriate sites as well as inappropriate

sites for counseling or client information.

This researcher recommends that a comparable study of counseling practitioners be done to determine what their skills are in technology and how they use technology with clients or in their work. It would be interesting to do this study using both online survey and a traditional mail survey and notice the difference, if any, in the return rate. Return rates on electronic surveys are reported to improve when each mailing is individually addressed to the recipient (Nesbary, 2000).

For Certification/Licensing Agencies

During the process of this research study, no information was found relating to the use of technology for the purposes of licensure or certification. However, if the licensing boards were to include requirements regarding technology skills, this may be a way to encourage practitioners to improve these skills. This researcher suggests the adoption of ACES Technical Guidelines for Counseling Students for the profession as a whole. Protection of clients is the main focus of licensing agencies and as such, counselors who can evaluate a web site and decide if the information is based on research or theory and would be helpful to clients is important. If these skills are not taught as part of the counseling curriculum, practitioners may not ever take the time to learn these skills.

Another aspect of this is that an important skill a counselor needs is the ability to understand the clients' phenomenological reality. Two years ago, in November 1999, 74 million people in the United States were using the Web, with 118.4 million having access to the Web (NetRatings, Inc., 1999). According to Global Research (2001), 215.6 million English-speaking

people are utilizing the Internet. They estimate that by 2003, there will be 230 million people online. Therefore, it is paramount that counselors be prepared to utilize these resources in their practice. Licensing is for the protection of the client and with the beginnings of counseling implemented on the web, it behooves licensing boards to regulate cyber counselors, address issues such as confidentiality and ethics pertaining to client protection. Skills to do this are learned in counselor education programs.

For Research Techniques

Though this study was focused on CACREP approved counselor education programs, it would be helpful to know what other programs are doing with technology. Although the participants for this study were drawn from a pool of 146 possible subjects, the response rate was 30%. This may have been because the others were not interested in technology; were doing a similar study; were not doing much in the way of technology; or overlooked the survey. The latter is difficult to imagine with the constant barrage of reminders to participate that were sent out. It may also be useful to pole counselor educators to determine why they do or do not take advantage of workshops offered by the respective universities to facilitate or enhance the use of technology within the counseling curriculum.

The online version of this survey was 10 pages long. This may also have been a deterrent, although participants were told that the actual filling out of the survey took from 20-25 minutes. A paper version of this survey could be done in chart form as a checklist and reduced in size. Perhaps a hardcopy of the survey mailed using the traditional postal service may have increased the response rate. The survey would be visible on the recipients' desks along with the return

addressed envelope, which may have served as a more constant reminder to fill out and return the survey.

This researcher believes that online research is a viable and economical method of conducting research. As technology improves, so too will the methods for participating in, and providing research opportunities. Information is more readily available; contacts and returns can be speedily transacted; and the storage of information is more easily handled.

Another method of online research was recently reported by Cabaniss (2001) who used a Delphi technique totally online. The purpose of her study was to determine what counselor educators, practitioners and technology experts saw computer technology being utilized for presently, and what their future predictions for the use of computers were. Cabaniss' findings were similar to this study in that technology is a part of our everyday lives and will only increase in its importance of how we conduct business and manage our lives.

Chapter Summary

Technology is always changing and to be viable as counselor educators and practitioners, it is imperative that we remain skilled in its use. Counselor educators are slowly integrating technology into their curriculum. To remain competitive in a global market, these skills need to be constantly updated. Becoming informed about what is available in training for use of technology within each university is an important first step.

An additional study looking at what practitioners are using would also be beneficial to the field. Integrating technology skills into licensure and certification programs may be the impetus needed to encourage practitioners and educators to acquire these skills.

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APPENDIX A

Survey Instrument

Technology in CACREP Counselor Education Programs

Your name and your university name are for tracking purposes only, and will not be disclosed. Data will be reported as group data only. For other responses, please move your cursor to your response selection and left click the mouse button once.

1. Please enter your name:
2. Please type the name of the institution you represent.
3. How large is your university/institution's total enrollment?
4. How large is your counselor education program's enrollment (both full-time and part-time students)?
5. How many full time faculty does your counselor education program employ?
6. How many adjunct or part-time faculty does your counselor education program employ each year?
7. What percentage of your total faculty is male?
8. What percentage of your total faculty is female?
9. What percent of your program's faculty is between the age of 22-25?
10. What percent of your program's faculty is between the age of 26-34?
11. What percent of your program's faculty is between the age of 35-44?
12. What percent of your program's faculty is between the age of 45-54?
13. What percent of your program's faculty is age 55+?
14. What percent of your program's faculty has between 0-4 years teaching experience?
15. What percent of your program's faculty has between 5-10 years teaching experience?
16. What percent of your program's faculty has between 11-15 years teaching experience?
17. What percent of your program's faculty has between 16-20 years teaching experience?
18. What percent of your program's faculty has between 21-25 years teaching experience?
19. What percent of your program's faculty has between 26-30 years teaching experience?
20. In general, what percent of your counselor education faculty has expert computer skills (can self-teach new programs)?
21. In general, what percent of your counselor education faculty has advanced computer skills (comfortable utilizing a variety of software programs and not timid about experimenting with new

programs)?

22. In general, what percent of your counselor education faculty has intermediate computer skills (manage to utilize software programs for word processing etc. with limited instruction)?

23. In general, what percent of your counselor education faculty has basic computer skills (can use email and word processing programs)?

24. In general, what percent of your counselor education faculty has beginner computer skills (just getting started)?

25. In general, what percent of your counselor education faculty has non-existent computer skills?

26. Does your counselor education program offer courses off the main campus as well as on campus?

Yes No

27. If you answered "no" to question #26, is your counselor education program considering offering courses off the main campus as well as on campus?

Yes No

28. If your program is using distance learning (internet, interactive video, correspondence), how

long have you been offering this option?

29. Is your counselor education program utilizing the ACES Guidelines for Online Instruction in Counselor Education? (Association for Counselor Education and Supervision - these may be found at the following Internet address: <http://filebox.vt.edu/users/thohen/acesweb>)

Yes No Is considering

30. Is your counselor education program utilizing the ACES Technical Competencies for Counselor Education Students? (These competencies may be found at the following Internet address: <http://filebox.vt.edu/users/thohen/competencies.htm>).

Yes No Is considering

31. In your opinion, what percent of your FACULTY has computer skills that satisfy the basic computer competencies suggested for students by ACES-TIN?

32. In your opinion, the level of technology used in your program:

- has not affected your program's enrollment.
- has somewhat increased your program's enrollment.
- has decreased your program's enrollment.
- You have no knowledge of how technology has affected your program's enrollment.

33. Regarding training offered to faculty for utilizing new technology on campus:

- Your campus has adequate training.
- Your campus has limited training - but still needs improvement.
- Your campus does not have training.

- You do not know about the training.

34. Regarding on-going support (such as help systems for using the Internet for courses, etc.) offered to faculty for utilizing new technology on campus.

- Your campus has adequate on-going support.
- Your campus has support-but needs improvement.
- Your campus does not offer on-going support.
- You do not know about the on-going support.

35. What incentives are offered by your university/college to promote the use of technology?

- Faculty is granted release time.
- Faculty is offered a monetary bonus.
- Distance or distributed learning departments at this university offer faculty fellowships.
- Considered when deciding promotion and tenure
- You do not know of any incentives.
- Other - Please elaborate below:

36. If you answered "other" to #35, or needed to make more than one choice, please indicate your response here



37. What organizational structure does your university have to facilitate the use of technology?

- This campus has a separate distance education or distributed education department that is available for our use.
- Academic departments provide technical assistance by having a designated technology person within the department.
- You do not know what your university offers.
- Other - Please elaborate below.

38. If you answered "other" to #37, please elaborate here



39. Does the majority of your counselor education faculty know how to access assistance at your university for help when utilizing new technology?

Yes No.

40. Please indicate which of the CACREP required courses your counselor education department offers totally online.

- Human Growth & Development
- Social & Cultural Foundations
- Helping Relationships
- Group Work
- Career & Lifestyle Development
- Appraisal
- Research & Program Evaluation
- Professional Orientation
- Practicum
- Internship

41. Please indicate which of the CACREP required courses your counselor education department offers partially online.

- Human Growth & Development
- Social & Cultural Foundations
- Helping Relationships
- Group Work
- Career & Lifestyle Development
- Appraisal
- Research & Program Evaluation
- Professional Orientation
- Practicum
- Internship

42. Please indicate which of the CACREP required courses your counselor education department offers totally interactive video.

- Human Growth & Development
- Social & Cultural Foundations
- Helping Relationships
- Group Work

- Career & Lifestyle Development
- Appraisal
- Research & Program Evaluation
- Professional Orientation
- Practicum
- Internship

43. Please indicate which of the CACREP required courses your counselor education department offers partially through interactive video.

- Human Growth & Development
- Social & Cultural Foundations
- Helping Relationships
- Group Work
- Career & Lifestyle Development
- Appraisal
- Research & Program Evaluation
- Professional Orientation
- Practicum
- Internship

For the next 11 questions: ARE THESE TYPES OF TECHNOLOGY USED IN YOUR COUNSELOR EDUCATION PROGRAM?

Choose from the following options:

- yes = yes
- available but not used = available but not used
- not available = not available
- do not know = don't know.

44. Video tape recording & playback devices

- yes available but not used not available do not know

45. Interactive satellite transmission to remote sites for faculty/staff meetings

- yes available but not used not available do not know

46. PowerPoint (or other) Presentation software for class material by faculty

- yes available but not used not available do not know

47. PowerPoint (or other) Presentation software for class material by students

- yes available but not used not available do not know
48. CD-ROMS (similar to audio CDs)
- yes available but not used not available do not know
49. Laserdisks (11" disk, like an LP record)
- yes available but not used not available do not know
50. Scanners
- yes available but not used not available do not know
51. Fax machines, either within your computer or as a separate unit
- yes available but not used not available do not know
52. Modems (either internal or external)
- yes available but not used not available do not know
53. Digital Cameras
- yes available but not used not available do not know
54. Overhead projectors
- yes available but not used not available do not know
-

For the next 13 questions: DOES THE MAJORITY OF THE COUNSELOR EDUCATION FACULTY AT YOUR UNIVERSITY USE THE INTERNET FOR:
 Choose from the following options:

yes = yes

no = no

don't know = don't know.

- 55. A counselor education department web site (does the department have a web site)?**
- yes no don't know
- 56. Individual faculty member's web sites (do any of the instructors/faculty in your counselor education department have a web site)?**
- yes no don't know
- 57. Email to faculty or students?**
- yes no don't know
- 58. Database access (such as library access, ERIC access etc.)?**
- yes no don't know
- 59. Posting class information (such as a syllabi, class assignments...)?**
- yes no don't know
- 60. Chat rooms for personal use? (Areas set up on the web where communication occurs between two or more people at the same time by typing from computers connected to the web from anywhere.)**
- yes no don't know
- 61. Listservs (communication between subscribers through email)?**

- yes no don't know
62. Research to prepare for class?
- yes no don't know
63. Research - traditional research studies (data collection)?
- yes no don't know
64. Publishing in electronic journals?
- yes no don't know
65. Reading professional electronic journals?
- yes no don't know
66. Requiring students to read electronically published journals?
- yes no don't know
67. Requiring students to participate in chat room activities?
- yes no don't know
-

For the next 5 questions: DOES THE MAJORITY OF YOUR COUNSELOR EDUCATION FACULTY USE COMPUTERS TO:

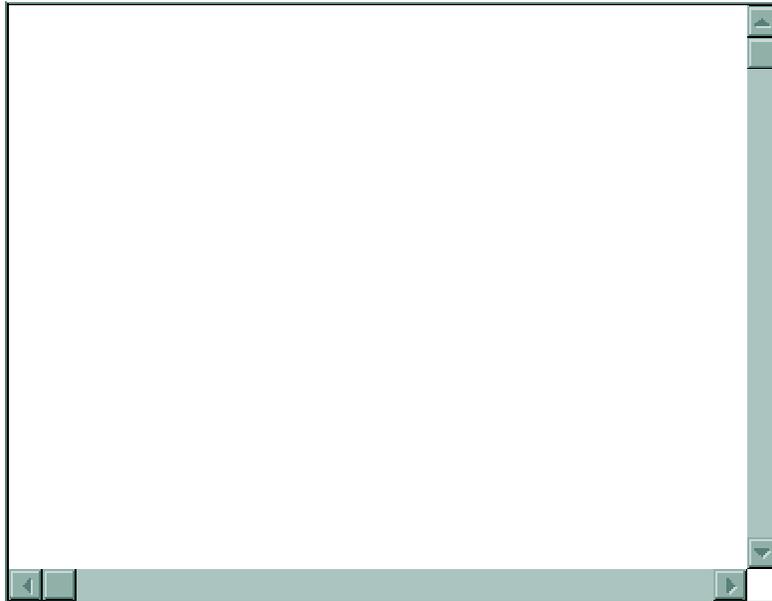
Choose from the following options:

yes = yes

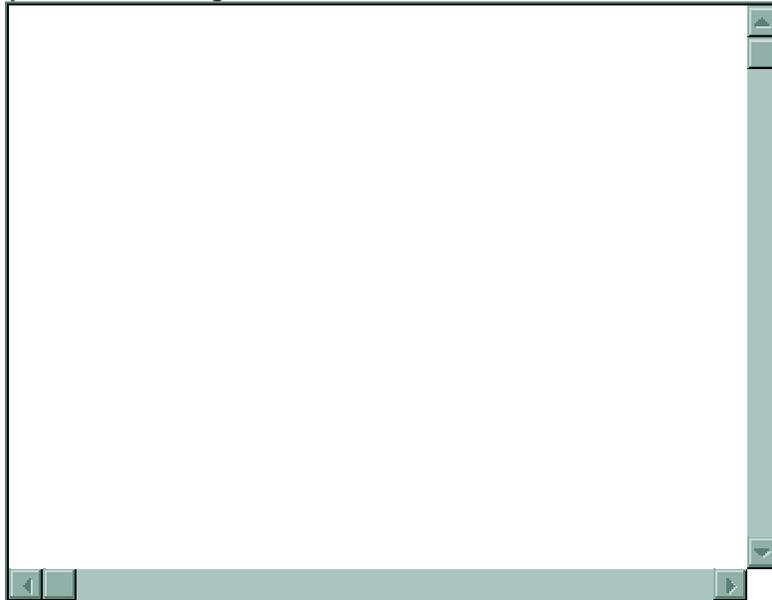
no = no

don't know = don't know.

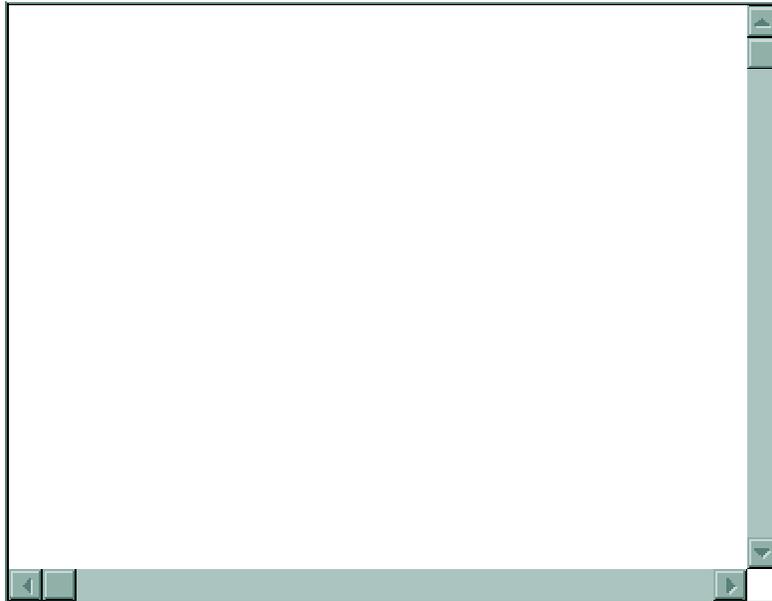
- 68. Prepare reports**
- yes no don't know
- 69. Run statistical analyses such as SPSS...**
- yes no don't know
- 70. Prepare class lecture material or handouts for students**
- yes no don't know
- 71. Respond to drafts of students' theses or dissertations**
- yes no don't know
- 72. Assist with time management**
- yes no don't know
- 73. Describe how technology is used in your institution's counselor education program to influence instruction.**



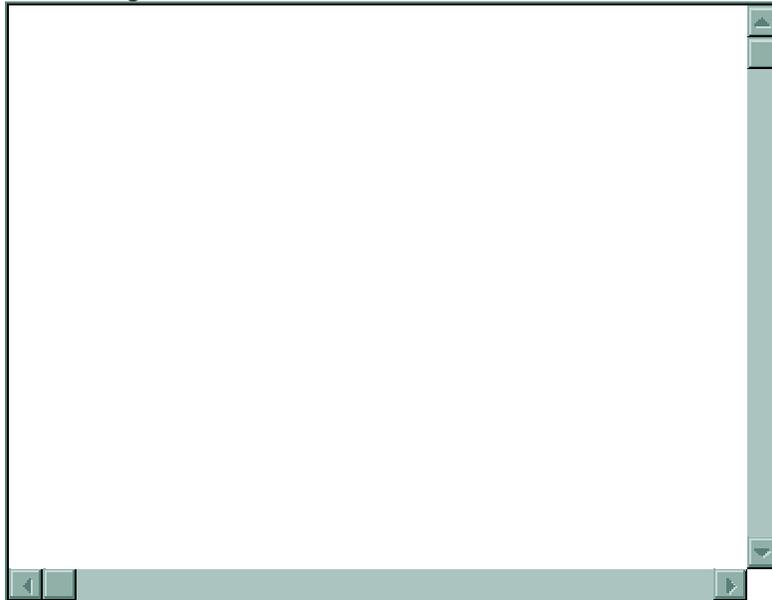
74. Describe how technology is used in your institution's counselor education program to demonstrate appropriate counseling methods.



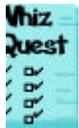
75. Describe how technology is used in your institution's counselor education program to communicate among faculty & students as well as student to student.



76. Describe how technology is used in your institution's counselor education program to assist with research and/or advising.



77. If your counselor education department is using technology in a way not mentioned please use this space to describe it.

A large, empty rectangular text input box with a thin black border and a light gray background. It has small scroll bars on the right and bottom edges.

78. May I contact you via email or phone to clarify a point if needed?

Yes No email phone

Thank you for your help!
Last updated February 22, 2001 by Avis Quinn,



Send comments about this questionnaire to [Avis C. Quinn](#)

This page generated by WhizQuest v1.1 on 5-Jul-2001 at 08:21 am
Developed at [ISIS, Virginia Tech](#)
Contact [Developers](#)

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Appendix B

Initial Contact E-mail

Subject: My name is Avis Quinn and I am a doctoral candidate in the counselor education program at Virginia Tech. This message is to alert you to a survey that will be distributed to you within the next week. This is an ACES sponsored study of CACREP approved counselor education programs and the use of technology within those programs. The survey has been field-tested and takes from 20-25 minutes to fill out. Most of the survey is point and click, with a few open-ended questions at the end. Some of the questions refer to the ACES-TIN recommended competencies for counselor graduate students. The following Internet address will take you to these recommendations to review: ACES Recommended competencies

<http://filebox.vt.edu/users/thohen/competencies.htm>

ACES guidelines for online instruction: <http://filebox.vt.edu/users/thohen/acesweb> If you have any questions, please feel free to contact me. Thank you, Avis Quinn aviscqui@vt.edu or aviscqui@earthlink.net

Appendix C

Letter of Instruction and Invitation

Subject: ACES sponsored CACREP technology study

Dear Dr. _____

As promised in my last E-mail, this is your connection to my survey dealing with the use of technology in CACREP accredited counselor education programs. My name is Avis Quinn, and I am a Ph.D. candidate in the counselor education program at Virginia Tech. This survey is part of my dissertation in Tech's CACREP accredited counselor education program. I appreciate your time and interest in this survey. The purpose of this ACES-TIN sponsored study is to survey all the CACREP approved counselor education graduate programs in the United States and determine what technologies are being used and how these are being utilized. This is an anonymous study and all results will be reported as group data. I am requesting your name and the name of the university you represent for tracking purposes only. I feel it is important to get a snapshot of what counselor education programs are doing with technology in order to be better prepared for future directions and also to determine training needs for students and faculty.

By clicking on the URL: <http://filebox.vt.edu/users/aviscqui/> you will be taken to my web page. There you will see a button marked "Technology Survey". Click this and you will be taken directly to the survey instrument. The survey is password protected to eliminate random responders. The password you need is "xxxx" without the quotation marks. It is case sensitive and in lower case letters. Trial runs indicate that the survey requires from 20 to 25 minutes. Most of it is point and click with a few open-ended questions near the end. After completing the instrument, please notice a "submit" button at the bottom to return the survey. Simply left click this button when you finish and you are done.

If you feel another faculty member would better represent your knowledge of the use of technology within your department, please pass this introduction to them. It is imperative that we have as many of the CACREP programs represented as possible to gain the broadest perspective on this important issue. If you have any problems or difficulties with any of these steps, please feel free to E-mail me or contact me by phone. Thank you, in advance, for your good help with this research.

Sincerely, Avis Quinn, MS, NCC aviscqui@vt.edu (540) 953-3009 B home

Appendix E

Follow-up #1

Dear Dr. _____

My name is Avis Quinn and I am a doctoral student at Virginia Tech. I would again like to extend an invitation to have your institution represented in a study I am doing of technology use in counselor education programs with CACREP accreditation. Data will be reported as group data only. Names and institutions are for tracking purposes only. Some of the questions refer to the ACES-TIN ACES Recommended competencies found at:<http://filebox.vt.edu/users/thohen/competencies.htm> and the ACES guidelines for online instruction found at: <http://filebox.vt.edu/users/thohen/acesweb> By clicking on the URL: <http://filebox.vt.edu/users/aviscqui/> you will be taken to my web page. There you will see a button marked "Technology Survey". Click this button (your informed consent) you will be taken directly to the survey instrument. The survey is password protected to eliminate random responders. The password you need is "xxxx" without the quotation marks. It is case sensitive and in lower case letters. If you have any questions please email me at aviscqui@vt.edu or aviscqui@earthlink.net or phone me at 540-953-3009. Thank you in advance for your participation. Avis Quinn

Appendix F

Follow-up #2

Dear Dr. _____

My name is Avis Quinn and I am a doctoral student at Virginia Tech. I would again like to extend an invitation to have your institution represented in a study I am doing of technology use in counselor education programs with CACREP accreditation. Data will be reported as group data only. Names and institutions are for tracking purposes only. Some of the questions refer to the ACES-TIN ACES Recommended competencies found at:

<http://filebox.vt.edu/users/thohen/competencies.htm> and the ACES guidelines for online instruction found at: <http://filebox.vt.edu/users/thohen/acesweb> By clicking on the URL: <http://filebox.vt.edu/users/aviscqui/> you will be taken to my web page. There you will see a button marked "Technology Survey". Click this button (your informed consent) you will be taken directly to the survey instrument. The survey is password protected to eliminate random responders. The password you need is "xxxx" without the quotation marks. It is case sensitive and in lower case letters. If you have any questions please email me at aviscqui@vt.edu or aviscqui@earthlink.net or phone me at 540-953-3009. Thank you in advance for your participation. Avis Quinn

Appendix G

Follow-Up #3

Subject: ACES-TIN sponsored study

Dear Dr. _____,

In case there was a cyber glitch in your not responding to my past requests, I am resending this message to ensure your university's participation in this nationwide study.

My name is Avis Quinn and I am a doctoral student at Virginia Tech. I would again like to extend an invitation to have your institution represented in a study I am doing of technology use in counselor education programs with CACREP accreditation. Data will be reported as group data only. Names and institutions are for tracking purposes only. If you are unable or unwilling to participate in this survey, please pass this to a peer to ensure your program's inclusion.

Some of the questions refer to the ACES-TIN ACES Recommended competencies found at: <http://filebox.vt.edu/users/thohen/competencies.htm> and the ACES guidelines for online instruction found at: <http://filebox.vt.edu/users/thohen/acesweb> By clicking on the URL: <http://filebox.vt.edu/users/aviscqui/> you will be taken to my web page. There you will see a button marked "Technology Survey". Click this button (your informed consent) you will be taken directly to the survey instrument. The survey is password protected to eliminate random responders. The password you need is "xxxx" without the quotation marks. It is case sensitive and in lower case letters. If you have any questions please email me at aviscqui@vt.edu or aviscqui@earthlink.net or phone me at 540-953-3009. Thank you in advance for your participation. Avis Quinn

Appendix H

Curriculum Vitae Avis C. Quinn, PhD, NCC

OFFICE ADDRESS:

Virginia Tech
ELPS Department
308 E. Eggleston - 0302
Blacksburg, VA 24061-0302
E-mail: aviscqui@vt.edu

HOME ADDRESS:

503 Woodbine Drive
Blacksburg, VA 24060-1457
E-mail: aviscqui@earthlink.net
Web page: <http://filebox.vt.edu/users/aviscqui>

EDUCATIONAL BACKGROUND

PhD - VIRGINIA TECH Blacksburg, VA June 2001
MAJOR: COUNSELOR EDUCATION
MS - RADFORD UNIVERSITY Radford, VA December, 1997, Magna Cum Laude
Major: Counselor Education
BGS: RADFORD UNIVERSITY Radford, VA May, 1995, Cum Laude
Majors: Psychology, Management

CERTIFICATION

NATIONAL CERTIFIED COUNSELOR (NCC) #54525

HONORS

Rising Star Award, Mental Health Association of the New River Valley Inc., (Nov. 2000.)
Chi Sigma Iota, Counseling Academic & Professional Honor Society International (1996)
Phi Kappa Phi, National Honor Society (1996)
Nominated for Newsletter Award for Rho Chi Epsilon, CSI (1997)
Phi Theta Kappa, International Scholastic Order of the Two Year College (1993)

PROFESSIONAL ASSOCIATIONS

American Counseling Association (ACA)
American College Counseling Association (ACCA)
American Mental Health Counselors Association (AMHCA)
Association for Humanistic Education and Development (AHED)
Association for Counselor Education Supervision (ACES)

Association of Play Therapy (APT)
 International Marriage & Family Counseling Association (IMFCA)
 New River Valley Counseling Association (NRVCA) board member
 Southern Association of Counselor Education and Supervision (SACES)
 Virginia Marriage & Family Counselors Assoc. (VMFCA) committee member
 Virginia Association of Clinical Counselors (VACC)
 Virginia Association of Play Therapy (VAPT)

CLINICAL EXPERIENCE

PRO-BONO THERAPIST 10-00 to present
MENTAL HEALTH ASSOCIATION OF NEW RIVER VALLEY Blacksburg, VA
 Provide counseling and assessment services to indigent individuals and families.
 Confer with staff psychiatrists to determine client needs.
 Maintain confidential records
 Strict adherence to the American Counseling Association code of ethics

PROFESSIONAL STAFF COUNSELOR August, 2000 - December, 2000
RADFORD U. CENTER FOR COUNSELING & STUDENT DEVELOPMENT RADFORD, VA
Supervision provided by: DR. SUE CONRAD, LPC
 Utilize and implement assessment and interventions during crisis situations
 Provide counseling for students for personal, career and academic issues
 Provide outreach presentations on services, stress management and depression
 Provide group counseling, depression and anxiety
 Maintain confidential records
 Strict adherence to the American Counseling Association code of ethics

COUNSELING INTERNSHIP August, 1999 - May, 2000
THOMAS COOK COUNSELING CENTER, VIRGINIA TECH BLACKSBURG, VA
Supervised by: Dr. Sherry Lynch, LPC 400 hours
 Provided group and individual counseling to undergraduate and graduate student attending Virginia Polytechnic Institute and State University.
 Co-facilitated group relaxation therapy for students

Provided referrals to community mental health care professionals, as well as university psychiatrists, dieticians, physicians, and other school personnel.

Participated in weekly group and individual supervision sessions.

Administered the following assessments: Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI), Eating Disorders Inventory (EDI-2), Strong Interest Inventory (SII), Myers-Briggs Type Indicator (MBTI), State-Trait Anxiety Inventory (STAI), and the Personality Assessment Inventory (PAI).

YOUTH AND FAMILY COUNSELOR

April 30, 1998 - August, 1999

NEW RIVER VALLEY COMMUNITY SERVICES

BLACKSBURG, VA

Supervisor: Linda Felts, LCSW & Marilyn Hutchins, LPC

2560 hours

Counsel seriously emotionally/behaviorally disturbed youth and their families In-Home Services

Maintain confidential records

Utilize and implement assessment and interventions during crisis situations

Consult with school personnel and counselors to determine best services for child

Coordinate services between state agencies to ensure client needs are met

Participate in individual and group supervision

Liaison interdepartmental services

SPECIAL NEEDS FOSTER CARE CLINICIAN

Feb., 1998 - April, 1998

CONNECTIONS

Roanoke, VA

Coordinator: Gerry Tankersly

Provide assessment for special needs children

Place special needs foster children in appropriate foster care

Provide support and educational guidance for foster parents

Provide emotional support, counseling, etc. for special needs foster children

Supervise parent/family visits between foster children and their families

Home visits to foster children/homes to ensure safety

Maintain confidential records

Adhere to ACA code of ethics

GRADUATE ASSISTANT (GA)

August, 1997 - Dec., 1997

RADFORD UNIVERSITY COUNSELING AND PREVENTION SERVICES

Radford, VA

Supervisor: Dr. Alan Forrest, LPC, LMFT

300 hours

Counsel students and general public needing assistance

Maintain confidential records

Administrative Assistant responsibilities for Mental Health Consortium

Strict adherence to the American Counseling Association code of ethics

COUNSELING INTERNSHIP

August, 1997 - December, 1997

RADFORD U. CENTER FOR COUNSELING & STUDENT DEVELOPMENT

Radford, VA

Supervisor: Dr. Sue Conrad, LPC, LMFT, Dr. Heidi Levine, LCP

300 hours

Utilize and implement assessment and interventions during crisis situations

Provide counseling for students for personal, career and academic issues

Provide outreach presentations on services, stress management and depression

Provide group counseling, depression and anxiety

Maintain confidential records

Strict adherence to the American Counseling Association code of ethics

Participate in supervision (individual and group)

Attend weekly training sessions

GRADUATE ASSISTANT (GA)

May, 1997 through July, 1997

RADFORD U. CENTER FOR COUNSELING & STUDENT DEVELOPMENT

RADFORD, VA

Supervisor: Dr. Sue Conrad, LPC, LMFT

Same as above

EMPLOYMENT EXPERIENCE - OTHER

INTERPRETER FOR THE DEAF

Nov., 1988- May, 1997

NEW RIVER COMMUNITY COLLEGE

DUBLIN, VA

Supervisor: Lucy Howlett

RESEARCH EXPERIENCE

UTILIZATION OF TECHNOLOGY IN CACREP APPROVED COUNSELOR EDUCATION

PROGRAMS May 1999 - June 2001

DISSERTATION

Utilization of Technology in CACREP Approved Counselor Education Programs

A study of all CACREP approved counselor education programs within the United States. This study was to determine what types of technology are being used, how it is being used and what are possibilities for the future.

COUNSELOR EDUCATORS GO ON-LINE: AN ANALYSIS OF STUDENTS' AND INSTRUCTORS' EXPERIENCE WITH A WEB-BASED COURSE

COLLABORATIVE STUDY

Fall 2000

Study done on the process of putting the Human Development Across the Lifespan class online and evaluation the experience. Teacher/student interactions, student/student interactions, suggestions for improving the class, as well as how all involved experienced these, were analyzed. Collaborating were: Dr. Hildy Getz, Avis Quinn, Ryan Greene, and Katherine Walker.

TECHNOLOGY IN CACREP COUNSELOR EDUCATION PROGRAMS IN VA Spring 1999

PILOT STUDY FOR DISSERTATION

Study of four CACREP approved counselor education programs in Virginia to ascertain what types of technology are being utilized and how this effects the program. This was a qualitative study.

PERSONALITY CHARACTERISTICS OF PLAY THERAPISTS

Spring 1998

A study of counselors and their attitudes toward play with clients. The main participants were from the state of VA and these were compared to play therapists throughout the United States.

GRADUATE ASSISTANT (GA)

Fall 1999 - May 2000

Virginia Polytechnic Institute & State University

Blacksburg, VA

Supervisor: DR. HILDY GETZ, LPC, LMFT

Assisted faculty members with research and article revisions, faculty activity reports, and improvement of computer literacy skills. Scheduled and supervised practicum students at the master's level. Develop forms for practicum students, supervisors, and professors use as well as construct web page to house practicum forms and make available to students, supervisors, and

professors online. Conducted group supervision in addition to individual supervision.
Participated in supervision of supervision group discussions.

PROGRAMMER TECH (Full-time summer position) May, 2000 to August, 2000

VIRGINIA TECH - VIRGINIA VIEW BLACKSBURG, VA

VA VIEW (VITAL INFORMATION FOR EDUCATION AND WORK)

Supervisor: DR. MARY LANDON-MOORE, LPC

Researched and developed material for Power Point presentation on Non-Traditional Occupations. Developed interactive tutorial on CD Rom, for VA VIEW's software program

Conducted web searches for educational institutions to add to web site.

TEACHING EXPERIENCE

Spring, 2001 **Radford University** - Advanced Practicum in Counseling

Fall 2000 - May 2001 **Virginia Tech**- VA VIEW –

Developed tutorial for interactive online program Graduate Assistant - *Supervisor:* Dr. Mary Landon-Moore

Spring 2000, **Virginia Tech** GA

Developed forms for masters level Practicum class. Implemented online forum for storage and retrieval of Practicum forms. **Supervised Practicum Students**

Fall 1999, **Virginia Tech** Teaching Internship

Converted the Human Development Across the Lifespan class to online format. Set up program for the class online. Provided technical support/instruction to faculty for online class.

Summer 1999 **Virginia Tech** Teaching Internship

Taught Human Development Across the Lifespan to masters level students.

1994-1997 **New River Community College** Taught a variety of classes in the Interpreter Training program. These included: Beginning, Intermediate and Advanced American Sign Language; Deaf Culture; Interpreting; Diversity Interpreting.

PUBLICATIONS

Quinn, A. C., (in review). Technology in Virginia counselor education programs.

Virginia Counseling Journal.

Getz, H., Quinn, A., Greene, R., & Walker, K. (manuscript). Counselor educators go

online: An Analysis of Students' and Instructors' Experience with a Web-Based Course.

Quinn, A. C., (1997). Central legal & ethical issues when working with elderly clients. Virginia Association of Marriage and Family Counselors, newsletter.

PRESENTATIONS

VIRGINIA COUNSELORS ASSOCIATION - November 2000

AA Creative Approach to Teaching & Evaluating an On-line Course"

Presenters: Dr. Hildy Getz, Avis Quinn, Ryan Greene, Katherine Walker

VIRGINIA COUNSELORS ASSOCIATION - November 2000

"State-of-the-Art Technology in Virginia Counselor Education Programs"

VA TECH BEHAVIORAL STATISTICS CLASS - Fall, 1999

"Results of survey on Play Therapy and Therapists' Personalities"

VIRGINIA COUNSELORS ASSOCIATION - November 1997

"Working with Elderly Clients and Their Families: Ethical and Legal Issues"

Presenters: Avis Quinn, Dr. James Guamer

VIRGINIA COUNSELORS ASSOCIATION - November 1997

"Deaf in the United States: A Cultural Perspective"

Presenters: Avis Quinn, Dr. Donald Anderson

VIRGINIA COUNSELORS ASSOCIATION - November 1997

"Religious Values in the Counseling Process: Ethical and Practical Implications"

Presenters: Dr. Jim Guamer, Everett Painter, and Avis Quinn

RADFORD UNIVERSITY COUNSELING FACULTY - Fall 1997

"Stress Management"

RADFORD UNIVERSITY DORM PRESENTATION - Fall 1997

"Stress Management"

ACTIVITIES

Committee Chair of Technology for VCA 2001-

Committee Chair - Newsletter - Board of VA Marriage & Family Counselors, 1998B present.

Board of Directors for New River Valley Counseling Association 1997 - present

President, 2001-2002

Administrative Assistant Mental Health Consortium - 1997

Historian for Rho Chi Epsilon chapter of Chi Sigma Iota, 1996-1997

Board of Distance Learning Resource at New River Community College - 1994-1997

Served on New River Community College EEO/AA committee, 1991-1996

TECHNOLOGY COMPETENCIES

Computer literate (PC format) - familiar with Macintosh

Instruction via Interactive Television (VTEL)

Online/Internet class instruction

Skilled In: WordPerfect 4.0-8; Printshop; Corel Gallery; Windows 3.11 & 95 & 98 & 98SE;

Internet/Web software: Netscape; Dreamweaver; Fireworks, Microsoft Explorer & Outlook Express

Microsoft Products: Word; Power Point; Web Compass; and a variety of E-mail packages

Classes on-line software: Blackboard/Course Info; Symposium; & Centra 99; Coursebuilder

Graphic software: Adobe Photoshop 5; Printshop 11; Corel Graphics

Presentation software: Corel Word Perfect Presentations; MS Power Point 2000;

Have worked with **HTML coding** to produce survey instrument for dissertation.