

TECHNICAL COMPETENCIES FOR COUNSELOR EDUCATION: RECOMMENDED GUIDELINES FOR PROGRAM DEVELOPMENT

**ACES Technology Interest Network (2007)
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Acquisition of technology competence can be infused throughout counselor education curricula at the master's and doctoral program levels. Integration of technology into curricula reflects recognition that education, practice and research competence is strengthened through focused and appropriate use of computer-mediated technology. Engendering the types of knowledge and skills described in these guidelines will foster the development of a level of technological literacy that enables students to participate fully in 21st century counseling practice, and provide a foundation upon which emerging technologies can be evaluated and integrated into practice where appropriate.

Application of technology into counseling practice holds promise to enhance practice management, client and professional education, and access to information that can directly impact counseling effectiveness. Use of various forms of technology can be adjunctive to practice and designed to facilitate the human interactions that are the foundation of counseling efficacy. In recognition of the role of technology applications in contemporary society and in practice, as well as the role of counseling professionals as influential leaders in policy and advocacy within the profession, counselor education programs will work toward integration of technology proficiency development into curricula over time and in concert with ongoing curriculum development initiatives.

Inclusivity of Technology within Counselor Education

Competence in the use of technology in counselor education, practice and research is sensitive to issues of multiculturalism, diversity, and contemporary ethical standards of practice. Counselor educators are familiar with issues associated with the digital divide; i.e., access and capacity to use technology applications by diverse and multicultural populations. With this insight, counselor educators model access and inclusivity for diverse populations and people from varied socioeconomic backgrounds by ensuring technology access to students challenged by the 'digital' divide. Counselors also recognize the potential of technology to further separate underrepresented populations from effective services, and safeguard potential practices of exclusion.

Knowledge of digital divide issues informs the counselor educator's efforts to prepare both the master's and doctoral level counselor education student with reference to the incorporation of technology applications into practice, research and education. Further, the counselor educator seeks understanding of digital divide issues as they may impact the counselor's role with client populations, peers, and consumers of mental health and wellness services.

University Technology Support

Universities are rich with resources and support to assist counselor educators with the development of technological knowledge and competencies. As such, counselor educators do not necessarily need to be "experts" in each technology competency described below. However, counselor educators do need to be able to identify campus resources that can facilitate the development of these competencies and integrate them within their curricula.

Master's Level Education

Within counselor education, the acquisition of technology competencies at the master's level prepares counselor professionals for entry to the profession. Counselor education students in master's level programs are exposed to the purpose and method of various forms of technology during the academic and internship experiences.

Master's level competencies are presented including basic knowledge, basic competence and integrated competence. *Basic knowledge* focuses on the graduate's ability to recognize and be informed regarding technology as it applies to the counseling profession. *Basic competences* are technology skills that are essential for current master's graduates entering counseling practice. We are suggesting that all master's graduates demonstrate basic competence across each of the 11 technology competencies. The *integrated competence* level, although beyond the current reach of many counselor education and training programs, suggests an advanced level of ability in technology that some graduates will acquire or possess.

Doctoral Level Education

At the doctoral level of education, students extend master's level competence in the application of computer and related technology to assess the appropriateness of technology applications to teaching, practice and research. Doctoral level counselor education students should develop a level of competence that combines the knowledge and skills detailed below for master's level students with pedagogical knowledge of how these competencies can be developed in future counselors. At the doctoral level of counselor education, students extend competence to assess the appropriateness of technology applications to teaching, practice and research.

Master's Level Technology Competencies

Competency 1

Be able to use productivity software to develop web pages, word processing documents (letters, reports), basic databases, spreadsheets, and other forms of documentation or materials applicable to practice.

Rationale. The competent use of productivity software facilitates counseling practice by enabling counseling professionals to communicate information efficiently and effectively. Informed use of productivity software can greatly reduce the amount of time spent engaging in repetitive clerical tasks, therefore enhancing the services that can be provided to clients.

Basic Knowledge	Basic Competence	Integrated Competence
<ul style="list-style-type: none"> Ability to use office productivity applications (e.g., Microsoft Word, Corel WordPerfect) to develop word processing documents. Awareness of capabilities of other productivity applications (e.g., Microsoft Excel and Access, Macromedia Dreamweaver, Nvu). 	<p>In Addition to Basic Knowledge:</p> <ul style="list-style-type: none"> Ability to create documents with a variety of formatting options (e.g., tables, multiple columns, images) with word processing software. Ability to create basic spreadsheets, databases (e.g., Microsoft Excel, Numbers). Ability to create basic web pages (e.g., Java Web Start, SwingSet2). 	<p>In Addition to Basic Competence:</p> <ul style="list-style-type: none"> Ability to use collaboration functions of word processing software (e.g., comments and tracking changes) Ability to construct complex spreadsheet, SPSS/SAS matrices, or databases. Ability to create interactive web pages

Competency 2

Be able to use such audiovisual equipment as video recorders, audio recorders, projection equipment, video conferencing equipment, playback units and other applications available through education and training experiences.

Rationale. Teaching and learning no longer occur through “traditional” face-to-face interactions. The development of skills around the use of video projection, recording, and conferencing will facilitate counseling professionals’ participation in a variety of supervision, teaching, collaboration, and professional development opportunities.

Basic Knowledge	Basic Competence	Integrated Competence
<ul style="list-style-type: none"> Know how to use DVD/VHS players. Know how to use LCD projector with a laptop computer (e.g., connection set up for PowerPoint slide projection). 	<ul style="list-style-type: none"> Ability to download audio or video clips and display in software (e.g., insert clips into PowerPoint slide deck). 	<ul style="list-style-type: none"> Ability to use equipment to create audio or video materials (e.g., Windows Movie Maker). Ability to use videoconferencing equipment for a point-to-point videoconference (e.g., ??)

Competency 3

Be able to acquire, use and develop multimedia software, (i.e., PowerPoint/Keynote presentations, animated graphics, digital audio, digital video) applicable to education, training, and practice.

Rationale.: Education and training experiences during counselor education can include opportunities to develop professional communication competencies that are enhanced through the use of multimedia software. The technology savvy counselor can increase these capacities to extend knowledge and counseling services through integration of appropriate technology software applications.

Basic Knowledge	Basic Competence	Integrated Competence
<ul style="list-style-type: none"> Know the various types of digital media available (e.g., audio, graphics, video) Know software and methods of displaying digital media content (e.g., desktop media players, portable media players) Know the ethics of digital media copyright, fair use and flexible copyright licensure (creative commons) 	<ul style="list-style-type: none"> Able to produce a multimedia presentation using standard productivity software (e.g., PowerPoint/Keynote) 	<ul style="list-style-type: none"> Able to create and produce digital audio and/or video media Able to incorporate digital media into other productivity software end product (i.e. web pages, presentations, spreadsheets) Able to produce CD and or DVD products containing created digital multimedia content

Competency 4

Be able to use statistical software to organize and analyze data.

Rationale. Counseling practice is, by nature and design, reflective. Developing competence with statistical software enhances counseling practice by allowing counseling professionals to efficiently and effectively use data to reflect on their practice

Basic Knowledge	Basic Competence	Integrated Competence
<ul style="list-style-type: none"> Knowledge of various statistical software programs (e.g., Excel, SPSS, SAS) that can be used to assist with data analysis 	<ul style="list-style-type: none"> Ability to enter data into a software program in preparation for analysis Ability to generate descriptive statistics and create graphs and tables to visually display the results of data analyses (e.g., SPSS, Excel) 	<ul style="list-style-type: none"> Ability to create SPSS/SAS data sets to conduct inferential and multivariate statistical tests Ability to access consultation regarding emergent technology-supported data analysis methods (e.g., campus-based technology resources).

Competency 5

Be able to use computerized and/or internet-based testing, diagnostic, and career decision-making programs with clients.

Rationale. There is a wide range of computer software regarding testing, assessment, and career decision-making. These technology solutions are increasingly recognized as invaluable tools in the counseling professional's toolbox.

Basic Knowledge	Basic Competence	Integrated Competence
<ul style="list-style-type: none">• Know different types of computer mediated assessment available to practicing counselors.• Know resources for locating and evaluating computerized testing, diagnostic and career-decision making programs• Know the ethical considerations when using computer mediated assessment with diverse populations (e.g., ACA Code of Ethics, Section E)	<ul style="list-style-type: none">• Able to assess the ethical appropriateness of using computer mediated assessment in a counseling practice (e.g., ACA Code of Ethics, Section E).• Able to demonstrate the use of <i>at least one</i> computerized/internet-based testing, diagnostic <u>or</u> career decision-making program.,	<ul style="list-style-type: none">• Able to administer, with proper training, computer mediated assessments.• Able to modify computer mediated assessment reports and evaluate their validity (e.g., edit or modify report templates)..• Able to produce reports based on computer mediated or technology supported assessments within established ethical guidelines and standards of practice (e.g., ACA Code of Ethics, Section E).

Competency 6

Be able to use email.

Rationale. : Email is perhaps the most widely-used technology communication tool on the Internet. It is necessary for practicing counselors to develop knowledge of the ethical implications of using email, the security of email messages, and techniques for enhancing privacy and security and efficiency while using email.

Basic Knowledge	Basic Competence	Integrated Competence
<ul style="list-style-type: none"> • Knowledge of different methods for accessing email (e.g., web-based email, email clients such as Outlook and Thunderbird) • Knowledge of HIPAA/FERPA regulations and how they apply to client confidentiality (e.g., electronic records and transmission) • Knowledge of methods to prevent spam and maintain email security (e.g., filters, blockers). 	<ul style="list-style-type: none"> • Able to use email to send a message to multiple recipients (e.g., using CC and BCC fields) • Able to use the attachment feature. • Able to use email protection software (e.g., install antivirus, anti-spam filers/blockers) 	<ul style="list-style-type: none"> • Able to combine other productivity software with email software to send a message to pre-existing lists (e.g., using a mail merge to send email) • Able to apply email within counseling practice according to established ethical guidelines and protections to client population and counselor professional (e.g., ACA Code of Ethics, Section B).

Competency 7

Be able to help clients search for and evaluate various types of counseling-related information via the Internet, including information about careers, employment opportunities, educational and training opportunities, financial assistance/scholarships, treatment procedures, and social and personal information.

Rationale. The Internet is revolutionizing how information is obtained and disseminated. Developing skills in evaluating the quality of Internet information and knowledge of the various ways information can be obtained on the Internet can ensure counseling professionals provide clients with efficient and effective methods to use and evaluate the Internet as a source of sound information.

Basic Knowledge	Basic Competence	Integrated Competence
<ul style="list-style-type: none"> • Understand how to use a web browser to bookmark useful sites. • Ability to discern and critique quality of internet resource materials. 	<ul style="list-style-type: none"> • Knowledge of major reliable sites related to their field of study (e.g., professional association web sites and links). • Ability to engage in advanced search techniques (e.g., Boolean keywords, methods for expanding or narrowing the search terms). 	<ul style="list-style-type: none"> • Ability to use web crawlers or news readers to customize information from the internet to a web page. • Knowledge of strengths and limitations of various search engines.

Competency 8

Be able to subscribe, participate in, and sign off counseling related listservs or other internet based professional communication applications.

Rationale. Participating in Internet-based professional communities ensures counseling professionals have a vehicle for both sharing and obtaining information, and provides a mechanism for maintaining professional connections without regard to time or space boundaries.

Basic Knowledge	Basic Competence	Integrated Competence
<ul style="list-style-type: none">• Know the major professional listservs/discussion boards in counseling and mental health and their membership.• Know means of internet-based professional communication applications (i.e. listserv, threaded discussion boards, blogs, chat rooms, instant messaging, RSS feeds).• Know netiquette practice for participating in internet-based professional communities.	<ul style="list-style-type: none">• Able to use the internet to locate internet-based professional communities.• Able to subscribe, participate, and sign off a listserv/discussion board.	<ul style="list-style-type: none">• Ability to moderate or manage an internet-based professional community.

Competency 9

Be able to access and use counseling-related research databases.

Rationale. The professional literature and research knowledge base grow each year. Having knowledge of how to access databases of research knowledge (e.g., PsycInfo, ERIC) enhances counseling practice by providing counseling professionals with tools to sift through the literature to find meaningful and relevant research-based knowledge.

Basic Knowledge	Basic Competence	Integrated Competence
<ul style="list-style-type: none">• Understand how to log onto a library catalog or electronic database and conduct a basic search.• Ability to print search results.	<ul style="list-style-type: none">• Understand how to use database thesaurus or other features.• Understand how to use Boolean logic to conduct a database search.• Understand how to output search information in several formats.	<ul style="list-style-type: none">• Ability to use advanced features of academic database, such as specific codes and export of citations into other citation formatting programs.

Competency 10

Be able to use the Internet to locate, evaluate, and use continuing education, professional development and supervision options in counseling.

Rationale. The increased availability of continuing education options publicized through Internet channels, as well as the user-friendly access to self-study programs for professional development that meet licensure or certification standards, requires competence in the use of the Internet to search, evaluate appropriateness, register for, and complete requirements. Competence to access technology supported education and development options strengthens practice and supports life long learning as a core value of the profession.

Basic Knowledge	Basic Competence	Integrated Competence
<ul style="list-style-type: none">• Understand the requirements for continuing education in their licensed jurisdiction.• Knowledge of reputable outlets for computer mediated professional development.	<ul style="list-style-type: none">• Ability to pursue professional development through computer mediated instruction from reputable providers.	<ul style="list-style-type: none">• Ability to provide quality content material for professional development to providers.

Competency 11

Be able to perform basic computer operation and maintenance tasks.

Rationale: Understanding basic computer operation and maintenance tasks enables counseling professionals to ensure their digital information is relatively safe and secure. This competence increases productivity through the use of basic knowledge and troubleshooting to solve and prevent common problems.

Basic Knowledge	Basic Competence	Integrated Competence
<ul style="list-style-type: none">• Ability to operate a computer and common peripherals such as printers, mice, and keyboards.• Ability to perform basic computer operations such as moving and renaming files, changing the date and time, and adding or removing new programs.• Ability to employ antivirus programs to ensure Internet use security and protection.	<ul style="list-style-type: none">• Ability to describe and implement a solution for backing up important files and documents.• Ability to search for files and folders on a computer's hard drive.• Ability to perform basic maintenance operations such as defragmentation, clearing the browser cache, and securely deleting files and folders.	<ul style="list-style-type: none">• Ability to deploy a wired or wireless network securely.• Ability to diagnose and troubleshoot hardware and computer performance problems.

Competency 12

Be knowledgeable about legal, ethical, and efficacy issues associated with delivery of counseling services via the internet.

Rationale. The use of the Internet as a counseling tool has significant legal, ethical and efficacy implications. Knowledge of both federal and state laws related to Internet-based counseling and ethical guidelines from professional organizations can ensure counseling professionals provide services that meet legal and ethical standards of the profession as well as contemporary standards for efficacy of practice. In addition, counselors should acquire technology competence, knowledge of computer mediated applications associated with this form of counseling delivery, and ensure that services are sustained.

Master's & Doctoral Students

- Knowledge of and ability to ensure compliance with state and federal laws concerning electronic records and the delivery of counseling over the internet.
 - Knowledge concerning HIPAA/FERPA regulations and how they apply to client confidentiality (electronic records and transmission).
 - Knowledge concerning the Responsibility of Users of Standardized Tests.
 - Knowledge of professional organization standards concerning technology and counseling.
 - Ability to construct a business plan or feasibility study for internet counseling prior to initiating this form of practice.
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Doctoral Level Technical Competencies

Recognizing that graduates from doctoral-level Counselor Education programs work in a variety of settings, doctoral technology competencies should reflect the diversity of work settings and tasks in which they engage. Listed below are areas of advanced technical competence that doctoral graduates may find useful based on their specific employment setting. Doctoral preparation programs should consider exposing their doctoral students to a variety of technology skills beyond those of the master's degree that fit best with the future demands on the doctoral student's anticipated areas of employment or practice.

Research concentration

- Doctoral students demonstrate competence in use of statistical software (e.g., SPSS/SAS) associated with the execution of a research project including initial conception, design, data input, and analysis of data, and/or
- Doctoral students demonstrate a working understanding of the applications of qualitative analysis software (e.g., N6/NVIVO, Ethnograph) associated with the execution of research including initial conception, design, data input, and analysis of data

Practice concentration

Agency and private practice settings. Doctoral students should demonstrate understanding and application of counseling agency database management systems (Athena, Therascribe), including kinds of information stored, diagnosis strategies, treatment planning, data input, data retrieval and security and legal access issues.

School settings. Doctoral students should have exposure to types of student information systems, including kinds of student record information stored, data input, data retrieval methods and security, and legal access issues.

Teaching concentration

- Doctoral students should have exposure to distance learning web-based class management (WebCT/VISTA, Blackboard) technology, including such activities as experiencing online courses, training in web-based course development and instructing online courses.
- Doctoral students should have exposure to distance learning videoconferencing (Polycom) including such activities as experiencing videoconferencing, training in using videoconferencing equipment, and execution of a videoconferencing class.
- Doctoral students should have exposure to web-based and Internet facilitated conferencing systems applicable to teaching and learning (e.g., Macromedia Breeze).
- Doctoral students should have exposure to technology-enhanced classrooms and the variety of technology assisted teaching (digital projectors, digital projection cameras, Smartboards, Clickers) that can be enacted through technology-enhanced classrooms
- Doctoral students should have exposure to a variety of technology delivery methods used in instruction (presentation software, CD/DVD ROM, digital cameras, digital video cameras, etc) including development and methods of construction of the technology delivery methods