Distance education has become a mainstay in higher education, in general, and in counselor education, specifically. Although the concept sometimes still feels new, universities have been engaged in some form of distance learning for over 20 years. In the field of distance counselor education, it is imperative to understand where we have been, where we are now, and where we are going. This article will lay the foundation for the special section of *The Professional Counselor* on distance counselor education and will explore the history of using technology in education, recent research about distance education in counseling and counselor education, and topic areas discussed throughout this special section. This special section will bring clarity to current and emerging best practices in the use of technology in the distance education of professional counselors, clinical supervisors, and counselor educators.

**Keywords:** online, distance education, counselor education, technology, best practices

Counselor educators have become comfortable and adept over the years at fostering students’ development in clinical skills in traditional residential formats. For many counseling faculty, in-class, face-to-face (F2F), personal encounters are foundational and irreplaceable. For educators with this mindset, distance learning is not an opportunity but a threat to what they consider the best teaching and learning practice (Layne & Hohenshil, 2005). No matter one’s personal preference or belief, the advent of distance learning is challenging the sovereignty of the purely residential experience.

For the purposes of this discussion, we are using the term *distance education* versus the more prolific term *online education*. The U.S. Department of Education’s Office of Postsecondary Education (OPE) has officially adopted the broader term of distance education, which focuses on the physical separation in the teacher–student relationship (OPE, 2012). This is in contrast to the term online education, which emphasizes the internet-facilitated communication that supports the teaching relationship at a distance.

The number of students in distance education programs has been increasing each year (Friedman, 2018). By 2016, over 6 million students in the United States were engaged in distance education, and nearly half were exclusively taking online classes (Seaman et al., 2018). Over two-thirds of the students were enrolled in distance learning courses at public universities (Lederman, 2018). In contrast, the total number of residential students dropped by over 1.1 million (6.4%) between 2012 and 2016 (Seaman et al., 2018). The growth in enrollment and the future of higher education continues to move toward distance education.

The same trends have impacted counselor education. At the time of this writing, the Council for the Accreditation of Counseling and Related Educational Programs (CACREP) reported that there are 69 CACREP-accredited master’s programs that are considered distance education, 34 of which are clinical mental health counseling programs (CACREP, n.d.). Over 25% of counseling students are now enrolled in academic programs defined as distance education (Snow et al., 2018). Because
an increasing number of programs are including distance education opportunities, the need for an exploration of efficacious deliveries of distance education content is imperative (Cicco, 2012).

The growth in distance education programs is often based on mixed motivations. One motivation is the desire to provide greater access for traditionally underserved populations (Bennett-Levy et al., 2012). For example, distance education can benefit students in rural areas as well as those living abroad (Sells et al., 2012). Remotely located service providers can benefit as well. Agencies that lack immediate physical access to counselor education programs now have the online tools to train members of their community locally in advanced mental health skills through distance education so they can continue serving their communities while in school. Distance education programs also can better support working adults and caregivers who in theory are within geographic proximity of a campus but are constrained by complex schedules, responsibilities, and mobility-related issues (e.g., disabilities, difficult travel). The ability to engage in academic studies from any location around the globe, within a more flexible scheduling model, is a game-changer (Bennett-Levy et al., 2012). Additionally, adult learners increasingly prefer the autonomy and self-direction found in these distance education formats (Ausburn, 2004).

Distance education programs allow access to a greater pool of qualified, diverse faculty. Qualified counselor educators anywhere in the world with access to a computer and an internet connection are prospective instructors. Most importantly, distance education programs eliminate the constraints of geographic proximity, worsening traffic commutes, and parking concerns. For the distance education program, it is all about access for any faculty member or student in the world (Reicherzer et al., 2009).

A more pragmatic motivation for universities is to view distance education programming as a source of revenue, growth, and efficiency (Jones, 2015). For example, distance education courses eliminate the costs and limitations of brick-and-mortar classrooms. Unfortunately, students may not benefit when universities increase online class sizes and hire less expensive adjuncts to increase the bottom line (Newton, 2018). Some universities might even tack on special technology or distance education fees.

It is our belief that the counseling profession should take the lead in proactively investigating the promise of the distance education experience, including the technologies, pedagogies, and methods. We must determine which best practices create excellent educational experiences for the ultimate benefit of our counseling students and the clients they will serve. This special section of The Professional Counselor is an essential step in that direction.

A History of Learning Technologies and Their Impact on Distance Counselor Education

If we take a step back, we can see that there has been a continual movement toward infusing technology into the general educational process and, more recently, specifically in counseling and counselor education. We have moved from a strictly oral tradition in which vital knowledge and skills were passed on in F2F interactions to a present-day, technologically mediated set of interactions in which teacher and student may never meet in person and where dialogues are reduced to bits and bytes of information transmitted across the internet.

In ancient times, essential knowledge, skills, histories, and traditions were only preserved in the memories of those able to experience events directly or to receive critical information from others. People were living repositories of essential skills of survival, cultural insight, and wisdom. If they failed to pass it on orally or through example, what they knew and embodied was lost forever. It is a surprise to
many that Socrates did not pen a single word. His choice of influence was through discussions with his followers and came to be known as the Socratic method. Socratic concepts would have been lost forever, but fortunately, followers such as Plato put them in writing.

The Written Word

Socrates’s ideas on teaching and learning lived through an early technology: the written word. The technological advancement of written language, writing devices, and the availability of parchment and paper as a set of communication tools was revolutionary in furthering information sharing and learning. Scholarship became associated with the ability not only to think critically, but also to read about the thoughts of others and respond in writing to contribute to the public discourse. Written documents were copied and distributed in what was the earliest form of distance education. During the medieval period, the copying of important texts often fell to those within monastic religious life, usually as a compulsory duty. Copying books for six or more hours per day for years was a noted source of drudgery (Greenblatt, 2011), but the printing press removed the need for such anguish.

The Printing Press

The limitation of scribes hand-copying documents meant that access to readable material was for society’s select few. Gutenberg’s invention of the printing press in approximately 1438 increased access to print (Szabo, 2015). For the first time in history, the works of scholars, philosophers, and artists could be printed in books and made available to a wider public. With written materials available, the literacy rates in Europe rose from approximately 10% in the 1400s to over 90% by the middle of the 20th century (Roser & Ortiz-Ospina, 2018). The printing press laid the groundwork for innovation in education as well. In the 1720s, the printing press allowed for the first distance education correspondence courses in Boston, representing the “written era” of technology-enhanced education (Drumbauld, 2014). More technologies would eventually revolutionize progress in educational methods.

Sound Recordings and Film

The phonograph was invented by Thomas Edison in 1877 as a device to both record and play back sound (Thompson, 2016). It did not replace writing and books but could record and preserve the sounds of music, events, and the words of famous people and other languages. For example, when people could hear what foreign dialects sounded like from the lips of native speakers, language instruction was transformed.

The development of celluloid film recording and motion pictures in 1895 led to newsreels and documentaries in the early 1900s that provided the public with information about current affairs and historical and cultural events. For the first time in history, people could experience significant events in recorded sight and sound versus only reading about them. Moreover, they could now learn by seeing (O’Shea, 2003).

Radio, Television, and the Telephone

Relatedly, the advent of commercial radio broadcasting in the 1920s provided the first live reporting of events (University of Minnesota, n.d.). For example, radio audiences heard powerful first-hand emotions in the reporter’s voice as he watched the Hindenburg disaster unfolding before his eyes. In the 1920s, colleges and universities began to take advantage of this new, powerful medium. For example, Pennsylvania State University was the first university to be granted a broadcast license to begin offering college courses over the radio (Dawson, 2018).
The “radio era” quickly transitioned to the “TV Era” in the late 1960s when televisions were in most homes in the United States. People could both see and hear world events at a distance. Stanford University was one of the first institutions to capitalize on this burgeoning technology for educational purposes. The Stanford Instructional Television Network was started in 1968 and offered instruction for part-time engineering students (LeDesma, 1987).

Radio and television broadcasts were significant innovations. Their drawback from an educational perspective was that they were primarily one-way mediums and the audience was merely a passive recipient of sights and sounds. It was the telephone that provided the masses with the first means to engage in two-way conversations at a distance. For the first time in history, the average person could not just listen at a distance, but also could talk back. An early telephone-based education using this two-way communication medium was offered by the University of Wisconsin in 1965 (Drumbauld, 2014). Computers and the internet would soon become the next revolutionary communications medium.

**Computers and the Internet**

Computers were useful as standalone information processors, but it was the unifying ability for computers to communicate that set the stage for the next revolution in information dissemination since Gutenberg’s printing press—the internet. The internet is in actuality a shortened version of the term *internetworking*, which was born in 1969 when the Advanced Research Projects Agency Network (ARPANET) successfully sent the first message between computers (Leiner et al., 1997). That was followed by the standardization of the Transmission Control Protocol/Internet Protocol (TCP/IP) to give all researchers a standard computer language in order to talk together on this small but growing assemblage of internetworked computers (Leiner et al., 1997). Technical advances continued to follow, but the fledgling internet was not accessible to the average person. Defense researchers, academics, and early computer buffs with the drive and savvy to understand and write in computer languages like Unix to execute functions like domain name system lookup, file transfer protocol, and simple message transfer protocol dominated the internet (Leiner et al., 1997). The basic networking foundations were developed, but the average person was waiting for the time when the internet would move from the researchers’ lab to broader computing access.

**Personal Computing**

For decades, computers were costly in price, massive in size, and difficult to maintain, and required a dedicated, specialized operating staff. This meant computer access was only for select university personnel, government employees, larger businesses, and electronic hobbyists. Access changed with the advent of the Apple II in 1977, the IBM PC in 1981, the Apple Macintosh in 1984, and the Windows operating system in 1990 (Allan, 2001). The era of the personal computer (PC) was born and it soon became a must-have technology and home appliance for an increasing number of individuals in society. Functional, affordable, and easy to operate, computers were now available to the general consumer, opening up a worldwide network of information sharing.

**The World Wide Web**

Early PCs were standalone machines, and few connected to the government-dominated internet. In the 1980s, there began a movement for PCs to connect to proprietary, fledgling dial-up modem-driven services like America Online (AOL; Rothman, 2015). These computer connection services allowed dial-up modem access, information sharing, and file uploading and downloading for a monthly subscription (Haigh et al., 2015). Email communications could be sent but only for those on closed, proprietary networks.
Some universities began their own networks or used services like AOL in order to connect faculty, staff, and students. These online services were far more comfortable to use than the more complex internet, which still required a level of technical sophistication. Although these services were accessible, they were somewhat isolated as each service provider had an exclusive dial-up modem for access and an entity unto itself.

In 1990, only 2.6 million people worldwide had access to the fledgling internet (Roser et al., 2020). A significant breakthrough occurred with the development of hypertext language in 1991 and the first integrated web browser, called Mosaic, in 1993 (Hoffman, n.d.). Access to the internet and its wealth of resources suddenly became available with a point and click of a computer mouse. The term World Wide Web accurately described internet connectivity that spanned the world and connected smart devices to include computers, tablets, gaming consoles, and phones. If a device had a central processing unit, it could connect. By 2018, 4.2 billion people, or 55.1% of the world population, had internet access (Internet World Stats, 2019). In response, the number of digital websites grew from 130 in 1993 to over 1.9 billion today (InternetLiveStats.com, n.d.).

The Digital Age

Digitization has created a world library and communication platform where text, audio, and video recordings are available to anyone with a computer, tablet, gaming console, or smartphone connected to the internet. Anything that can be digitized can be stored and transmitted in real time. The internet merely has taken our previous modes of physical and analog forms of communication and moved them into the digital stream. Internet publishing is a simple extension of Gutenberg’s printing press. The local library is now a part of the World Wide Web library. Text messaging is the modern-day telegraph, and cellular phone services have cut out the need for copper wiring. Streaming audio and video are what radio and television were. Cutting edge videoconferencing platforms are the new F2F communication mode. Reality has now become a virtual reality. For the counselor educator, all of the world’s accumulated technological advances and resources can rest in the palm of your hand. All of the technologies have come together to support progress toward what we call the distance learning era.

Distance Education

Even though we tend to think of distance education as a recent development, Pennsylvania State University offered correspondence education to rural farmers using U.S. mail in 1892, over 125 years ago (Dawson, 2018). Correspondence courses were the precursors to the more sophisticated distance education approach offered by the University of Phoenix in 1976. The 1990s brought about the most significant changes regarding online educational delivery, with the University of California-Berkeley offering the first completely online curriculum in 1994, and Western Governor’s University, established in 1997, helping Western states maximize educational resources through distance education (Drumbauld, 2014). Today, the distance education student population has grown to over 6 million students in the United States (Seaman et al., 2018). Counselor education programs have developed along with this national trend. Today, 69 counseling programs are offering CACREP-accredited distance education degrees (CACREP, n.d.).

Web-Facilitated Faculty–Student and Student–Student Interactions

In the early 1990s, Moore and Thompson (1990) and Verduin and Clark (1991) defined the core conditions that distance education should achieve to become as effective as F2F instruction. These conditions were timely instructor feedback to students and regular student-to-student interactions. Almost 30 years later, those conditions have been fulfilled. Secure audio- and videoconferencing
platforms, such as Zoom and Adobe Connect, now allow faculty and students to connect F2F in real time, synchronously (Benshoff & Gibbons, 2011).

E-learning platforms, such as Blackboard, Canvas, and Moodle, now provide an integrated solution for faculty to asynchronously post syllabi, assignments, and instructional resources for instant download by students. Students can then respond to faculty questions via threaded discussions, upload papers, and take online assessments. Faculty, in turn, can review student work and provide feedback as fast as they can type.

It is now clear that with the combined power of the PC and facilitated technologies, timely instructor feedback and regular student-to-student interactions are possible. The future is here, and all that remains is for counselor education instructional pedagogy to catch up, as well as keep up, with the technological advances that are driving changes in education.

Clarity of Focus: What Is Distance Counselor Education?

Terms like online education, distance learning, and hybrid program, without a clear understanding of their proper use, are problematic. The determination of an academic program as distance education, online, hybrid, or residential has implications for federal financial aid, regional accreditors, and CACREP. So, what is distance education, how is it linked to advances in educational technology, and how does it relate to counselor education?

In practice, various terms, such as distance learning, online learning, and online education, are used. The OPE (2012) has officially adopted the term distance education and further defines distance education as instructional delivery that uses technology in courses for students separated from their instructor to support “regular and substantive interaction between the students and the instructor, either synchronously or asynchronously” (p. 5). The technologies referred to by the OPE are generally internet-based and may include the use of email, audioconferencing, videoconferencing, streaming videos, DVDs, and learning management systems.

Januszewski and Molenda (2013) defined educational technology as “the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources” (p. 1). Simply put, educational technology is about the physical tools we use in education and the processes that we implement to intentionally shape the relationship of the tools to the subject matter, teacher, student, and social learning environment. These tools and processes combine to form the educational pedagogy to support learning and the OPE (2012) mandate for “regular and substantive interaction between student and instructor” (p. 5).

The OPE (2012) categorizes programs as distance education if at least 50% or more of their instruction is via distance learning technologies. In contrast, residential programs, as categorized by the OPE, CACREP, and federal financial aid regulations, are allowed to infuse significant distance education elements into their instructional coursework as long as they do not exceed the 49% threshold. As an example, a 60 semester unit (90 quarter units) residential program could still offer 29 semester units (44.5 quarter units) of distance education coursework and technically remain residential by OPE standards.

The Continuum of Residential to Distance Education Programming

At one end of the spectrum are purely residential programs, offering 100% of courses in person. The next step along the spectrum is residential hybrid programs. These are still considered residential in providing the preponderance of courses in residence, but they can contain up to 49% of their credit
units online and technically maintain their residential classification. Next along the spectrum are limited residency distance learning programs. These provide 50% or more of courses online but require some level of on-campus participation. A 2018 study by Snow et al. found that 90% of CACREP-accredited distance education programs were considered limited residency. They required students to attend a campus residency at least once and up to four times during their degree program. Finally, at the opposite end of the spectrum is a small but growing number of programs offering entirely distance education formats. These offer 100% of their coursework at a distance with no campus residency requirement.

The Infusion of Distance Education Technology in All Education

It is difficult to imagine any counselor education in 2020 to be technology-free and without some integration of distance education elements into individual class sessions, full courses, or programs. In concept, one could argue that there is a bit of online educator in the majority of faculty members today, whether they realize it or not. Most universities now require faculty, even the most technophobic, to have access to a computer and read and respond to email communications. Critical information is commonly only accessible on institutional web pages. Confidential information, such as student advising information, is often available online via secure portals—no more hard copy student files. Grades are now commonly put online. All of these widely used technologies support students learning at a distance.

The advent of the modern learning management system in the form of web-based platforms, such as Blackboard, Canvas, and Moodle, has added a level of access and interactivity to all programs in the teaching spectrum, from entirely residential to entirely online. Faculty engaged in all formats can use these educational platforms to post text, audio, video, and recorded lectures. Students can view materials, upload their papers, and post responses for review and grading. Discussion groups can interact using asynchronous, threaded discussions within these portals. Embedded grade books keep students informed of their progress at all times. These learning platforms, along with other educational technologies, are now commonly employed in both residential and distance education courses, making the programs look increasingly more similar than different.

Reducing the Distance in Distance Education

Assuming the presence of residential courses with as much technology infused into them as many distance education courses, what is the difference? Both formats require “regular and substantive interaction between the students and the instructor” (OPE, 2012, p. 5). The key word in distance education is distance. The OPE (2012) refers to distance education where students are physically separated from their instructor. Academic programs are required to support, facilitate, and ultimately ensure that regular and substantive interactions occur between students and instructors. The implicit assumption is that residential faculty in close physical proximity to their students have adequate if not superior amounts of regular and substantive interactions with students and thus greater connection and engagement. But, is that necessarily true?

We suggest that rather than focus on whether a class is considered residential or distance education, the concern should be about the amount of regular and substantive interactions, which decrease the social distance between students and faculty and thus help foster community and quality student engagement. Reducing social distance, a measure of relationship and connection, is a significant factor in promoting student engagement. The Great Schools Partnership (2016) defined student engagement as “the degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or being taught, which extends to the level of motivation they have to learn and progress
in their education” (para. 1). There is ample evidence that students who feel a sense of community and connection, no matter what the delivery model, demonstrate better academic performance and higher levels of satisfaction and retention (Benshoff & Gibbons, 2011; Chapman et al., 2011; Rovai & Wighting, 2005). The decreased social distance between faculty and students is a good indicator of “regular and substantive interactions” and thus greater student engagement in the learning process. The physical proximity of faculty and students within residential learning programs can certainly provide opportunities for direct interaction and decreased social distance, but without appropriate faculty desire to connect and engaging pedagogy, there is no guarantee. Numerous studies involving residential programs document cases of student disconnect, alienation, and reduced graduation rates on college campuses (e.g., Feldman et al., 2016; O’Keefe, 2013; Redden, 2002; Rovai & Wighting, 2005; Tinto, 1997). Helping students feel connected to their faculty, fellow students, and campuses is an important task for those operating in both residential and distance learning arenas. Distance education faculty using the appropriate technological tools and pedagogy can overcome the obstacles of physical separation and facilitate meaningful, regular, and substantive interactions.

As we reflect on our educational careers, the authors remember auditorium-style classes in large lecture halls. The physical distance to the instructor might have been 50 feet, but it might as well have been 50 miles as it was difficult to connect with an instructor when competing with 99 other students for attention. Conversely, we have experienced an online class where faculty and students were geographically scattered, but small class sizes allowed us all to make stronger connections. We have come to believe that online education done right can take the distance out of distance education.

The ability of students and faculty to connect at a distance is ever increasing. What was once almost purely an asynchronous model of instruction (i.e., threaded discussion posts and emailed assignments) now has evolved with the addition of interactive videos and training modules, recorded lectures, “real-time” synchronous classes, and live videoconferencing for classroom experiences, advising, and clinical supervision. These tools are allowing students to watch expert counseling role models demonstrate and practice clinical skills themselves while getting real-time feedback from instructors and fellow students. For many counselor education programs, distance education and online learning experiences are now better characterized as virtual remote classrooms.

The Special Section: Distance Counselor Education

This special section reviews the historical context of distance education, seeks to understand the critical elements and best practices for effective distance education, and makes modest projections about future trends. Six additional articles can be found in this issue that provide greater focus on the following areas of consideration: (a) student selection, development, and retention; (b) challenges and solutions of clinical training in the distance environment; (c) distance education pedagogy similarities and differences compared to residential instruction; (d) legal and ethical considerations for distance counselor education; (e) opportunities and challenges of multicultural and international distance education; and (f) student perceptions and experiences in distance education.

Student Selection, Development, and Retention: Who Can Best Succeed?

There are several measures of student success, including retention, academic performance, and graduation rates. Researchers have examined the success of students enrolled in online programs or classes to better understand those factors that lead to or impede student success. Sorenson and Donovan (2017) sought to explore why undergraduate students at an online, for-profit university were
dropping out. The authors determined that attrition could be attributed to several factors, including a perceived lack of support by the university and faculty, difficulty balancing multiple priorities, a lack of awareness of how much time is required, and academic issues (Sorenson & Donovan, 2017).

How do we determine the best “fit” through our student selection process? A student’s undergraduate college grade point average does seem to serve as a significant predictor of success in graduate distance learning programs (Cochran et al., 2014). Graduate Record Exam scores, previous work experience, and application essays also are commonly used to select students, but Overholt (2017) did not find them useful in predicting student success among non-traditional graduate student populations. Gering et al. (2018) determined that more salient factors for predicting success included initiative, the ability to take responsibility for one’s education, and time management. Yukselturk and Bulut (2007) have described these factors as representing self-regulated learners.

Gering et al. (2018) also found some external student success factors to be crucial, including a supportive family, strong social connections with other students, strong teaching presence, and receiving prompt and regular feedback and guidance. It is clear then that student success in distance learning courses is partially dependent upon student attributes but also on their level of external support, the actions of the instructor, and a supportive institution.

Clinical Training in the Virtual Remote Environment: What Are the Challenges and Solutions?

It is one thing to offer didactic learning at a distance but quite another when we think about how to conduct engaging clinical skills development in the distance education environment. How do we support the development of appropriate knowledge, skills, and dispositions to help counseling students succeed? The virtual remote classroom allows students to observe faculty experts and student volunteers engaged in clinical role-play simulations. Students can team up with other students in virtual breakout rooms to practice skills they have just watched remotely. Videoconference tools with embedded recording features can capture verbal and non-verbal interactions. Faculty can subsequently observe student role plays live or via recorded sessions.

According to Reicherzer et al. (2012), online and hybrid counselor training programs using a blend of asynchronous, synchronous, and in-person training can produce counselors capable of meeting site supervisors’ expectations of clinical skill preparation before entering practicum and internship. Other researchers found that student learning outcomes are higher for hybrid or blended programs than for fully online or fully residential programs (Means et al., 2010).

Graduates of such programs have an advantage over residential students in their experience with the technologies required for implementing telemedicine and online counseling in their practices—a necessary competency for future practice in the 21st century. With their background in distance learning, these students will have firsthand knowledge of what it takes to properly implement online tools for facilitating strong therapeutic connections. Their remote experiences will provide valuable insights to mental health agency leaders who eventually need to integrate telemedicine into their work to keep pace with future trends and demands (Zimmerman & Magnavita, 2018). This will set these students apart from other clinicians graduating today who lack the training outcomes to participate competently with the proper ethical safeguards in the online world (Barnett, 2018).

Virtual Remote Educational Pedagogy: Similar or Different From Residential Instruction?

In education, the preferred relationship of balancing course content, pedagogy, and technology will
vary by institution and instructor. One example is the philosophy of José Bowen (2012). He prefers
the live classroom experience, creating more value within the live classroom experience and using
technology outside the classroom (Bowen, 2012). He is not against technology, but he believes it is best
used outside the classroom to free up more time for richer in-class dialogue. Other programs may adopt
a model with more reliance on technology for primary content delivery with the instructor taking a
backseat to the online delivery systems. In the context of online and technology-enhanced counselor
education, how do those of us who work and teach virtually maximize the available technology to create
a vibrant, interactive experience? Can we leverage technological tools to provide the resources needed for
success while still creating an impactful and compelling experience? What is the appropriate balance?

In a study of online courses with demonstrated effectiveness, Koehler et al. (2004) determined that
three components must dynamically constrain and interact with each other: content, pedagogy, and
technology. Faculty must demonstrate expertise in their subject matter, skill teaching in an online
environment, and an understanding of as well as effectiveness in utilizing technology in dynamic
ways. If all three are present in a course, students report having a better learning experience.

Total distance learning, blended learning, and fully residential learning approaches share
another common success—the importance of a positive, supportive learning community. In a
study by Murdock and Williams (2011), distance learning students who felt connected and a part
of the university community reported more satisfying learning experiences. At least in these cases,
successful connection was more important than any particular teaching pedagogy or technology.

Legal and Ethical Considerations in Online Delivery

Online educators are subject to the same statutory and regulatory compliance concerns as their
residential counterparts. Online educators have additional complications, challenges, and risks
because of their reliance on web-based technologies and online communication. Security, privacy,
and access are some of the considerations faced by educators teaching at a distance.

Cybersecurity is now an overarching concern in higher education (White, 2015). Most, if not all,
of the student’s personal information, academic record, and submitted course materials are stored
in computer files in cloud-based storage. Increasingly, physical student records do not exist as
backups. We are moving toward total dependence on reliable, secure access to internet-based storage
and retrieval solutions. Distance educators face a level of risk each time student and institutional
information is stored, accessed, and shared across cyberspace. There are plenty of bad actors in
society focused on disrupting and exploiting these kinds of private information.

The Family Education Rights and Privacy Act (U.S. Department of Education, 2018) requires the
protection of the student’s personally identifiable information and education records from unauthorized
disclosure. Protection requirements apply to the institution in general; educational service providers
providing outsourced services; and every administrator, staff member, and faculty member with access
to student records. Although cybersecurity is an important security component, there are other simple,
practical questions for the individual educator to ponder. For example, when involved in asynchronous
communications via email, how do you know it is the actual student? When a distance learning faculty
member gets a phone call from an online student they do not know well, how do they verify identity?
In 2007, a residential student impostor lived on Stanford’s campus for 6 months, ate in the cafeteria, and
lived the campus experience until finally caught (Novinson, 2007). If it can happen in a residential setting
where we interact with students directly, it can surely happen in an online environment.
Compliance regulations for the Health Insurance Portability and Accountability Act of 1996 (HIPAA) govern the security of communications that clinical site supervisors, clinicians in training, and faculty supervisors maintain about client cases (HIPAA, 2015). Clinical faculty conducting individual, triadic, or group supervision via telecommunication must verify that technologies meet HIPAA compliance. There also is the requirement that student clinicians must not be discussing confidential issues within earshot of friends, families, and roommates—and not doing so via the local coffee shop’s wireless hotspot.

Online education provides access to students at a distance, and in many respects, it provides access and opportunities for those who previously had few options to extend their learning. Online courses may not prove accessible to people with disabilities as the reliance on embedded web technologies may present challenges (Edmonds, 2004). The Americans with Disabilities Act (ADA) requires educational institutions to make their physical campuses accessible to people with disabilities and the virtual campuses as well. The ADA government website provides guidelines of what is required to make web-based information accessible to those with various disabilities (United States Department of Justice, n.d.).

Issues of student sexual harassment can occur, necessitating Title IX investigations and interventions (Office for Civil Rights, 2018). University administrators must learn how to handle these and other related issues at a distance with students who may be physically separated.

Online educators must comply with federal statutes and regulations, those in their institution’s home state, and those in the state in which the student resides. State-by-state approval is possible but cumbersome. There are initiatives, such as the National Council for State Authorization Reciprocity Agreements, to establish a state-level reciprocity process (National Council for State Authorization Reciprocity Agreements, n.d.).

Multicultural and International Distance Education: What Are the Opportunities and Challenges?

Another important consideration is how well distance counseling programs effectively attract, retain, and support students from diverse backgrounds. Since its rise in availability, distance education has been a strong draw for people from diverse backgrounds, particularly women of color (Columbaro, 2009). Walden University, one of the largest online universities in the country, reported in 2015 that of its almost 42,000 graduate students, 76.7% were women and 38.7% were African American (Walden University’s Office of Institutional Research and Assessment, 2015).

In addition to the strong representation of students of color in online education, there is a growing number of international students who also are taking advantage of opportunities to learn at a distance (Kung, 2017). Kung (2017) reported data from the Institute of International Education that showed a 7.1% increase in the number of international students studying in U.S. colleges and universities. Distance learning can accelerate this increase as online students do not require an F-1 visa to participate at a distance. With this rise, Kung calls for an increase in cultural awareness, sensitivity, and preparation for working with international students in online settings.

Counselor Education at a Distance: Student Perspectives

Given the rise in the number of distance counselor education programs, it seems that there would be a wealth of literature to help us understand the real experiences of students training to be professional counselors in online formats. Although there have been studies examining general student perceptions of engagement, social presence, and outcomes in online learning environments (Bolinger & Halupa, 2018; Lowenthal & Dunlap, 2018; Murdock & Williams, 2011), specific experiences of online counseling students across the wide variety of delivery methods has...
not, to these authors’ knowledge, been conducted. As technology improves and options for learning management, videoconferencing, and student assessment platforms increase, programs training counselors at a distance have a widening variety of ways in which this learning can occur.

Asynchronous, synchronous, blended, hybrid, and fully online are just a few modalities that counseling students use to experience their education. A glimpse into the experiences of students will shed light on how our most important players in this ever-changing game of distance counselor education view the efficacy of their respective training, now and in the future.

The Future of Distance Counselor Education

As we examine emerging technologies and near-future possibilities, it can seem like science fiction. The use of avatars and other simulation and gaming technologies in counselor training, for example, have been examined for potential substitutions for counseling practice with peers and real people. Walker (2009) studied the use of avatars in one virtual platform, Second Life, for skills training among master’s-level counseling students. Counseling students’ attitudes regarding the effectiveness of this medium to enhance skills development were measured, and findings suggested that this technological enhancement was efficacious to student learning, engagement, and overall skill development.

Virtual reality (VR) is already used in counseling and is being explored as a way to create environments that can help address trauma and phobias and enhance mindfulness training and techniques. Riva and Vincelli (2001) contend that the use of VR in clinical settings can serve as a “sheltered setting” (p. 52) where clients can explore distress-producing stimuli in a safe and controlled environment.

What potential does this technology have in the training of the next counselors? Might we have “virtual” clients that counselors interact with, in real time, in a VR environment? Buttitta et al. (2018) of California State University, Northridge’s counselor education program are already doing so in training their counseling students. They recently presented initial findings at the 2018 Western Association for Counselor Education and Supervision (WACES) Conference where they demonstrated how they could change the avatar’s voice and physical look to become a person of any age, gender, or ethnicity. Their initial impressions are that student learning is as good with avatars as with role-playing students.

We see this idea tested in training programs in other fields. Plessas (2017) conducted a study of the effectiveness of using VR “phantom heads” for dental students to practice their skills on. Findings suggested that along with concurrent, augmented feedback from supervisors, this training method creates a level of efficiency and safety. Additional platforms for virtual counseling are being developed, necessitating enhanced training of counselors who are equipped to work with new technologies and environments.

Conclusion

As counselor training programs become more technologically savvy, different models and methods of online pedagogy are available to them. What once was almost purely an asynchronous model of instruction (i.e., discussion posts and assignments in a learning management system like Blackboard or Canvas) now has the ability to add interactive videos and training modules, recorded lectures and discussions, and “real-time” synchronous classes and supervision groups using platforms such as Zoom, Skype, or GoToMeeting. The opportunity–capability gap between distance
education and residential classrooms is shrinking. According to Cicco (2011), there is greater efficacy of training when online learning includes opportunities for counseling modeling by experts using videos and podcasts as well as opportunities for students to engage in the practice and demonstration of clinical skills. Today’s distance education classroom can do all that and more.

Students in online core counseling skills courses have reported higher self-efficacy (using the Counseling Self-Estimate Inventory) than their counterparts in traditional F2F classrooms (Watson, 2012). Repeated studies draw similar conclusions regarding gains in self-efficacy using online instruction (Smith et al., 2015). Higher levels of internal motivation, student confidence, and self-efficacy are due in part to the structure of online courses and the requirement for students to engage in independent, autonomous learning exercises (Wadsworth et al., 2007).

The evidence we have examined leads us to the conclusion that not only is online and distance education here to stay, but there also are excellent reasons and justifications for its current use and future expansion. We trust that this special section will help to shed light on those aspects of distance counselor education programs proven effective and provide information to the benefit of all counselor training programs—no matter what delivery methods are utilized.

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References
Allan, R. A. (2001). A history of the personal computer: The people and the technology (1st ed.). Allan Publishing.
Ausburn, L. J. (2004). Course design elements most valued by adult learners in blended online education environments: An American perspective. Educational Media International, 41, 327–337. https://doi.org/10.1080/0952398042000314820
Barnett, J. E. (2018). Integrating technological advances into clinical training and practice: The future is now! Clinical Psychological Science Practice, 8(25), 1–4. https://doi.org/10.1111/cpsp.12233
Bennett-Levy, J., Hawkins, R., Perry, H., Cromarty, P., & Mills, J. (2012). Online cognitive behavioural therapy training for therapists: Outcomes, acceptability, and impact of support. Australian Psychologist, 47(3), 174–182. https://doi.org/10.1111/j.1742-9544.2012.00089.x
Benshoff, J. M., & Gibbons, M. M. (2011). Bringing life to e-learning: Incorporating a synchronous approach to online teaching in counselor education. The Professional Counselor, 1, 21–28. https://doi.org/10.15241/jmb.1.1.21
Bolinger, D. U., & Halupa, C. (2018). Online student perceptions of engagement, transactional distance, and outcomes. Distance Education, 39, 299–316. https://doi.org/10.1080/01587919.2018.1476845
Bowen, J. A. (2012). Teaching naked: How moving technology out of your college classroom will improve student learning. Jossey-Bass.
Buttitta, D., Gehart, D., Minton, S., & Spencer, S. (2018, November). Transforming counselor education with virtual reality. WACES Annual Conference 2018. Symposium conducted at the meeting of the Western Association for Counselor Education and Supervision, Santa Rosa, CA.
Chapman, R., Baker, S. B., Nassar-McMillan, S., & Gerler, E. (2011). Cybersupervision: Further examination of synchronous and asynchronous modalities in counseling practicum supervision. Counselor Education and Supervision, 50(5), 298–313. https://doi.org/10.1002/j.1556-6978.2011.tb01917.x
Cicco, G. (2011). Assessment in online courses: How are counseling skills evaluated? *Journal of Educational Technology, 8*(2), 9–15. [https://eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=EJ1102103](https://eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=EJ1102103)

Cicco, G. (2012). Counseling instruction in the online classroom: A survey of student and faculty perceptions. *Journal on School Educational Technology, 8*(2), 1–10. [https://eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=EJ1101712](https://eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=EJ1101712)

Cochran, J. D., Campbell, S. M., Baker, H. M., & Leeds, E. M. (2014). The role of student characteristics in predicting retention in online courses. *Research in Higher Education, 55*, 27–48. [https://doi.org/10.1007/s11162-013-9305-8](https://doi.org/10.1007/s11162-013-9305-8)

Columbaro, N. L. (2009). E-mentoring opportunities for online doctoral students: A literature review. *Adult Learning, 20*(3–4), 9–15. [https://doi.org/10.1177/104515950902000305](https://doi.org/10.1177/104515950902000305)

Council for the Accreditation of Counseling and Related Educational Programs. (n.d.). *Directory of accredited programs*. [https://cacrep.org/directory](https://cacrep.org/directory)

Council for the Accreditation of Counseling and Related Educational Programs. (2015). 2016 CACREP standards. [http://www.cacrep.org/wp-content/uploads/2018/05/2016-Standards-with-Glossary-5.3.2018.pdf](http://www.cacrep.org/wp-content/uploads/2018/05/2016-Standards-with-Glossary-5.3.2018.pdf)

Dawson, M. (2018, December 11). *We are . . . wherever you are: Penn State marks 125 years of distance learning*. [https://news.psu.edu/story/496777/2017/12/11/academics/we-are-wherever-you-are-penn-state-marks-125-years-distance](https://news.psu.edu/story/496777/2017/12/11/academics/we-are-wherever-you-are-penn-state-marks-125-years-distance)

Drumbauld, B. (2014, July 11). *A brief history of online learning (infographic)*. [https://www.straighterline.com/blog/brief-history-online-learning-infographic](https://www.straighterline.com/blog/brief-history-online-learning-infographic)

Edmonds, C. D. (2004). Providing access to students with disabilities in online distance education: Legal and technical concerns for higher education. *American Journal of Distance Education, 18*, 51–62. [https://doi.org/10.1207/s15389286ajde1801_5](https://doi.org/10.1207/s15389286ajde1801_5)

Feldman, D. B., Davidson, O. B., Ben-Naim, S., Maza, E., & Margalit, M. (2016). Hope as a mediator of loneliness and academic self-efficacy among students with and without learning disabilities during the transition to college. *Learning Disabilities Research & Practice, 31*(2), 63–74. [https://doi.org/10.1111/ldrp.12094](https://doi.org/10.1111/ldrp.12094)

Friedman, J. (2018, January 11). *Study: More students are enrolling in online courses*. [https://www.usnews.com/higher-education/online-education/articles/2018-01-11/study-more-students-are-enrolling-in-online-courses](https://www.usnews.com/higher-education/online-education/articles/2018-01-11/study-more-students-are-enrolling-in-online-courses)

Gering, C. S., Sheppard, D. K., Adams, B. L., Renes, S. L., & Morotti, A. A. (2018). Strengths-based analysis of student success in online courses. *Online Learning, 22*(3), 55–85. [https://doi.org/10.24059/olj.v22i3.1464](https://doi.org/10.24059/olj.v22i3.1464)

Great Schools Partnership. (Ed.). (2016). Student engagement. In *The glossary of education reform*. [https://www.edglossary.org/student-engagement](https://www.edglossary.org/student-engagement)

Greenblatt, S. (2011). *The swerve: How the world became modern*. W. W. Norton.

Haigh, T., Russell, A. L., & Dutton, W. H. (2015). Histories of the internet: Introducing a special issue of *Information & Culture. Information & Culture: A Journal of History, 50*(2), 143–159. [https://doi.org/10.1353/lac.2015.0006](https://doi.org/10.1353/lac.2015.0006)

Health Insurance Portability and Accountability Act of 1996. [https://aspe.hhs.gov/report/health-insurance-portability-and-accountability-act-1996](https://aspe.hhs.gov/report/health-insurance-portability-and-accountability-act-1996)

Hoffman, J. (n.d.). *The history of the web*. [https://thehistoryoftheweb.com/timeline](https://thehistoryoftheweb.com/timeline)

Internet World Stats. (2019). *Internet world stats. Usage and population statistics*. [https://www.internetworldstats.com/stats.htm](https://www.internetworldstats.com/stats.htm)

InternetLiveStats.com. (n.d.). Total number of websites. [http://www.internetlivestats.com/total-number-of-websites](http://www.internetlivestats.com/total-number-of-websites)

Januszewski, A., & Molenda, M. (2013). *Educational technology: A definition with commentary*. Routledge.

Jones, C. (2015). Openness, technologies, business models and austerity. *Learning, Media and Technology, 40*, 328–349. [http://doi.org/10.1080/17439884.2015.1051307](http://doi.org/10.1080/17439884.2015.1051307)

Koehler, M. J., Mishra, P., Hershey, K., & Peruski, L. (2004). With a little help from your students: A new model for faculty development and online course design. *Journal of Technology and Teacher Education, 12*, 25–55. [https://pdfs.semanticscholar.org/4df3/3eb2f0b7e70dcf3358ccbf25fb6f2583ea9f.pdf](https://pdfs.semanticscholar.org/4df3/3eb2f0b7e70dcf3358ccbf25fb6f2583ea9f.pdf)

Kung, M. (2017). Methods and strategies for working with international students learning online in the U.S. *TechTrends: Linking Research and Practice to Improve Learning, 61*, 479–485. [https://doi.org/10.1007/s11528-017-0209-x](https://doi.org/10.1007/s11528-017-0209-x)
Layne, C. M., & Hohenshil, T. H. (2005). High tech counseling: Revisited. *Journal of Counseling & Development, 83*, 222–226. https://doi.org/10.1002/j.1556-6678.2005.tb00599.x

Lederman, D. (2018, January 5). Who is studying online (and where)? *Inside Higher Ed*. [https://www.insidehighered.com/digital-learning/article/2018/01/05/new-us-data-show-continued-growth-college-students-studying](https://www.insidehighered.com/digital-learning/article/2018/01/05/new-us-data-show-continued-growth-college-students-studying)

LeDesma, B. (1987, November 20). Stanford instructional television network: Network brings classes to working students. *The Stanford Daily*, p. 8. [https://archives.stanforddaily.com/1987/11/20?page=8&section=MODSMD_ARTICLE25#article](https://archives.stanforddaily.com/1987/11/20?page=8&section=MODSMD_ARTICLE25#article)

Leiner, B. M., Cerf, V. G., Clark, D. D., Kahn, R. E., Kleinrock, L., Lynch, D. C., Postel, J., Roberts, L. G., & Wolff, S. (1997). *Brief history of the internet*. [https://www.internetsociety.org/internet/history-internet/brief-history-internet](https://www.internetsociety.org/internet/history-internet/brief-history-internet)

Lim, J., Kim, M., Chen, S. S., & Ryder, C. E. (2008). An empirical investigation of student achievement and satisfaction in different learning environments. *Journal of Instructional Psychology, 35*(2), 113–119.

Lowenthal, P. R., & Dunlap, J. C. (2018). Investigating students’ perceptions of instructional strategies to establish social presence. *Distance Education, 39*, 281–298. https://doi.org/10.1080/01587919.2018.1476844

Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*. U.S. Department of Education Office of Planning, Evaluation, and Policy Development Policy and Program Studies Service. [https://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf](https://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf)

Moore, M. G., & Thompson, M. M. (1990). *The effects of distance learning: A summary of literature*. ASCDE research monograph no. 2 (ED330321). ERIC. [https://files.eric.ed.gov/fulltext/ED330321.pdf](https://files.eric.ed.gov/fulltext/ED330321.pdf)

Murdock, J. L., & Williams, A. M. (2011). Creating an online learning community: Is it possible? *Innovative Higher Education, 36*, 305–315. https://doi.org/10.1007/s10755-011-9188-6

Newton, D. (2018, May 23). Study: Online college classes cost less to deliver because they are larger, hire cheaper teachers. *Forbes*. [https://www.forbes.com/sites/dereknewton/2018/05/23/study-online-college-classes-cost-less-to-deliver-because-they-are-larger-hire-cheaper-teachers](https://www.forbes.com/sites/dereknewton/2018/05/23/study-online-college-classes-cost-less-to-deliver-because-they-are-larger-hire-cheaper-teachers)

Novinson, D. (2007, May 24). Imposter caught. *The Stanford Daily*. [https://www.stanforddaily.com/2007/05/24/imposter-caught](https://www.stanforddaily.com/2007/05/24/imposter-caught)

Office for Civil Rights. (2015, September). *Title IX and sex discrimination*. U.S. Department of Education. [https://www2.ed.gov/about/offices/list/ocr/docs/tix_dis.html](https://www2.ed.gov/about/offices/list/ocr/docs/tix_dis.html)

Office of Postsecondary Education, Accreditation Division. (2012). *Guidelines for preparing/reviewing petitions and compliance reports*. U.S. Department of Education. [https://www.asccc.org/sites/default/files/USDE%20agency-guidelines.pdf](https://www.asccc.org/sites/default/files/USDE%20agency-guidelines.pdf)

O’Keeffe, P. (2013). Sense of belonging: Improving student retention. *College Student Journal, 47*, 605–613. [https://pdfs.semanticscholar.org/2fd4/83eb62cf5094f147c9a129470808bc2d07f2.pdf](https://pdfs.semanticscholar.org/2fd4/83eb62cf5094f147c9a129470808bc2d07f2.pdf)

O’Shea, J. S. (2003). Motion pictures and the college: A history of “learning by seeing.” *Bulletin of the American College of Surgeons, 88*(8), 16–23.

Overholt, C. E. (2017). *Predicting non-traditional student success in online higher education programs through logistic regression* (Publication No. 10243850) [Doctoral dissertation, The Chicago School of Professional Psychology]. ProQuest Dissertations and Theses Global.

Plessas, A. (2017). Computerized virtual reality simulation in preclinical dentistry: Can a computerized simulator replace the conventional phantom heads and human instruction? *Simulation in Healthcare: Journal of the Society for Simulation in Healthcare, 12*, 332–338. https://doi.org/10.1097/SIH.0000000000000250

Redden, C. E. (2002, October). *Social alienation of African American college students: Implications for social support systems*. Paper presented at the National Convention of the Association for Counselor Education and Supervision, Park City, UT. [https://eric.ed.gov/?id=ED470257](https://eric.ed.gov/?id=ED470257)

Reicherzer, S., Coker, K., Rush-Wilson, T., Buckley, M. Cannon, K., Harris, S., & Jorissen, S. (2012). Assessing clinical mental health counseling skills and practice standards in distance education. *Counseling Outcome Research and Evaluation, 3*(2), 104–115. https://doi.org/10.1177/2150137812452558
Reicherzer, S., Dixon-Saxon, S., & Trippany, R. (2009, June). Quality counselor training in a distance environment. *Counseling Today, 51*(12), 46–47. [https://www.counseling.org/resources/library/Counseling%20Today/June2009CTOnline.pdf](https://www.counseling.org/resources/library/Counseling%20Today/June2009CTOnline.pdf)

Renfro-Michel, E. L., O’Halloran, K. C., & Delaney, M. E. (2010). Using technology to enhance adult learning in the counselor education classroom. *Adultspan Journal, 9*, 14–25. https://doi.org/10.1002/j.2161-0029.2010.tb00068.x

Riva, G., & Vincelli, F. (2001). Virtual reality as an advanced imaginal system: A new experiential approach for counseling and therapy. *International Journal of Action Methods, 54*(2), 51–64.

Roser, M., & Ortiz-Ospina, E. (2018, September 20). *Literacy*. [https://ourworldindata.org/literacy](https://ourworldindata.org/literacy)

Roser, M., Ritchie, H., & Ortiz-Ospina, E. (2020). *Internet*. [https://ourworldindata.org/internet](https://ourworldindata.org/internet)

Rothman, L. (2015, May 22). *A brief guide to the tumultuous 30-year history of AOL*. [http://time.com/3857628/aol-1985-history/](http://time.com/3857628/aol-1985-history/)

Rovai, A. P., & Wighting, M. J. (2005). Feelings of alienation and community among higher education students in a virtual classroom. *The Internet and Higher Education, 8*(2), 97–110. [https://doi.org/10.1016/j.iheduc.2005.03.001](https://doi.org/10.1016/j.iheduc.2005.03.001)

Seaman, J. E., Allen, I. E., & Seaman, J. (2018). *Grade increase: Tracking distance education in the United States*. Babson Survey Research Group. [https://onlinelearningsurvey.com/reports/gradeincrease.pdf](https://onlinelearningsurvey.com/reports/gradeincrease.pdf)

Sells, J., Tan, A., Brogan, J., Dahlen, U., & Stupart, Y. (2012). Preparing international counselor educators through online distance learning. *International Journal for the Advancement of Counselling, 34*, 39–54. [https://doi.org/10.1007/s10447-011-9126-4](https://doi.org/10.1007/s10447-011-9126-4)

Siemens, G., Gašević, D., & Dawson, S. (2015). *Preparing for the digital university: A review of the history and current state of distance, blended, and online learning*. [http://linkresearchlab.org/PreparingDigitalUniversity.pdf](http://linkresearchlab.org/PreparingDigitalUniversity.pdf)

Smith, R. L., Flamez, B., Vela, J. C., Schomaker, S. A., Fernandez, M. A., & Armstrong, S. N. (2015). An exploratory investigation of levels of learning and learning efficiency between online and face-to-face instruction. *Counseling Outcome Research and Evaluation, 6*, 47–57. [https://doi.org/10.1177/2150137815572148](https://doi.org/10.1177/2150137815572148)

Snow, W. H., Lamar, M. R., Hinkle, J. S., & Speciale, M. (2018). Current practices in online education. *The Professional Counselor, 8*, 131–145. [https://doi.org/10.15241/ws.8.2.131](https://doi.org/10.15241/ws.8.2.131)

Sorenson, C., & Donovan, J. (2017). An examination of factors that impact the retention of online students at a for-profit university. *Online Learning, 21*(3), 206–221. [https://olj.onlinelearningconsortium.org/index.php/olj/article/view/935](https://olj.onlinelearningconsortium.org/index.php/olj/article/view/935)

Walker, V. L. (2009). Using 3D virtual environments in counselor education for mental health interviewing and diagnosis: Student perceived learning benefits (Publication No. 3374779) [Doctoral dissertation, Regent University]. ProQuest Dissertations and Theses Global.
Watson, J. C. (2012). Online learning and the development of counseling self-efficacy beliefs. *The Professional Counselor, 2*, 143–151. https://doi.org/10.15241/jcw.2.2.143

White, L. (2015). *Top 10 campus legal issues for boards*. Association of Governing Boards of Universities and Colleges. https://agb.org/product/top-10-campus-legal-issues-for-boards/

Yukselturk, E., & Bulut, S. (2007). Predictors for student success in an online course. *Educational Technology & Society, 10*(2), 71–83. https://pdfs.semanticscholar.org/5721/20ca1c8593e338228cedc390b5aa284678c7.pdf

Zimmerman, J., & Magnavita, J. (2018). Adopting new technology for your practice: How to assess fit and risks. In J. Magnavita (Ed.), *Using technology in mental health practice* (pp. 209–221). American Psychological Association. https://doi.org/10.1037/0000085-013