Integrating Technology in Counselor Education Programs

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Abstract

The use of technology has become an indispensable part of our society and our daily lives, and it has been prominent in education since the beginning of personal computers, particularly with computer assisted technology and learning. In the field of counseling, counselor educators and supervisors can use this medium to enhance their teaching and practice. In the last two decades, counseling professionals have seen the value of computer-based and technology-assisted applications in the delivery of counseling courses and counseling supervision. This paper highlights a few common ways technology may be used generally across the educational spectrum, provides a comprehensive analysis of technology-assisted teaching and supervision that is utilized in the delivery of counselor education courses and training, and discusses advantages, disadvantages, the legal and ethical considerations that must be addressed when using technology in counseling courses and supervision, and the importance of infusing technology in counseling courses.

Keywords

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INTRODUCTION

Technology has been used in the field of counseling for more than five decades. In the 1960s, 1970s, and 1980s, the counselor educators used computer applications to train counselors in skill development (Hayes, 2008a). In the late 1960s, the idea of using computers as therapists was explored. For example, ELIZA, a natural language processing program that processes the users’ responses to scripts was developed in 1966. The programmers pursued the person-centered approach to create reflective comments. In the 1970s, counselors began to interface with computers much more using instructional computer programs (Granelllo, 2000). In the 1980s, computers interviewed, took background histories, conducted assessments, interpreted test results, rendered diagnoses, provided information, made suggestions for action, advised on course selection, and offered consultation (Lichtenberg, 1984). In the 1990s, as technology advanced, counselor education programs began to use course web sites, presentations with graphic software packages, video clips, and videotaping sessions in observation labs to graphically illustrate key counseling concepts (Baggerly, 2002).

In recent years with the advancement of technology, various tools and applications are being used to enhance student learning through its integration in the classrooms. As the usage of technology in the classroom setting increases, colleges and universities around the world are exploring ways to offer courses online for undergraduate and graduate programs. This gives students greater access to a wide array of courses online, thus affording greater opportunities for students to obtain a quality education. Also, research shows that students feel confident to use technology to learn and demonstrate their knowledge if they are given hands-on learning opportunities (Wood, Mirza, & Shaw, 2018).

In the 21st century, with the enhancement of technology and the use of digital tools, the focus has been placed on teaching and learning by using computers and technology. The web-based instruction (WBI) has changed the face of education and the use of WBI has significantly enhanced instruction. Due to the popularity of WBI, more than 500 qualifying studies have been conducted between August 2000 and July 2002 (Olson & Wisher, 2002). WBI is used by traditional counselor preparation programs based on the students’ needs as well as the goals and objectives of the instructor (Hayes, 2008a).

There are many reasons why students engage in digital learning. In a study conducted by Allen and Seaman (2007) to identify reasons why students prefer to access digital learning, they found that the driving force that caused institutions to provide digital learning because students preferred to access learning online. In order to diversify the places of learning, some institutions sought to use digital learning as an opportunity to attract prospective students who are out of the traditional service areas. Moreover, prospective students, as well as institutions, see digital learning as an avenue to continue growing and advancing in their education (Allen & Seaman, 2007).

Digital learning has been demonstrated to be an effective means for the delivery of education to students. The purpose of this paper is three-fold: First, this paper gives a comprehensive analysis of teaching methods and tools that have been used generally across the educational spectrum. Second, this paper provides a comprehensive analysis of technology-assisted teaching and supervision that is utilized in the delivery of counselor education courses and training. Finally, the paper discusses the legal and ethical considerations that must be addressed when using technology in counseling courses and supervision, and the importance of infusing technology in counseling courses.

Teaching Methods

Graduate programs have been offering master’s level and doctoral level courses online for quite some time, and more recently they have become popular in the field of education (Allen & Seaman, 2006; Simmons, Shumack, & Carpenter, 2011). Numerous institutions are trying to exploit the advantages of distributed learning by using technology to increase accessibility and improve learning (Olson & Wisher, 2002). As counselor educators begin to think about the appropriate teaching methods and tools that would be the most beneficial for student learning, the next step would be to initially examine components of a traditional classroom environment that would adapt to technology-assisted learning. Components of the traditional classroom that can be adapted may include assignments, delivery of exams, lectures, student group activities and discussions, videotapes, and other digital components that maintain positive interactions between students and faculty (Stevens, Dobrovolny, Kent, & Shulman, 2003). After completion of these tasks, a counseling course may be ready for student delivery.

However, a few questions need to be answered before the initial course development. What are some of the challenges educators and administrators need to consider when preparing to develop digital learning courses for counseling? What steps are needed to begin the process of providing coursework online for counseling students? For example: Does the college or university provide training and workshops for faculty to learn how to provide digital learning? Are there individuals at the institution who can assist with technological support and course development? These are some questions that each counselor educator should consider in the pre-planning stage of the course development process.

Once the pondering questions are answered, it is time for the planning stage. The first step for counselor educators is to develop a team of professionals who can assist in the course selection and design, selection of teaching tools, examination and navigation through technological software, and determine overall university support for digital learning (Stevens et al., 2003). When selecting individuals to be part of the team, it is beneficial to examine the skills and assets each individual can contribute,
in addition to the role each individual will play. According to Hixon (2008), a course development team should include at least the following roles:

a faculty member, an instructional designer (provides pedagogical support and guidance, and also plays the role of project manager), an instructional technologist (helps determine possible technology options to support project objectives), an information resource consultant (assists in locating and incorporating library and other resources), a digital media services consultant (produces technical elements according to faculty specifications), and a copyright consultant (assists in obtaining copyright permissions and addresses intellectual property issues) (p. 7).

For example, Stevens et al. (2003) created an online marriage and family course. A faculty member developed a team that aligned with their mission to provide online courses. The same team met consistently to develop their course, creating a layout of their mission, incorporating an outline of the roles and responsibilities of the involved individuals. By setting the ground rules early in the process, it not only eliminates ambiguity among team members, but it also increases collaboration among faculty and other disciplines involved. In addition to improved collaboration, ground rules provide a sense of accountability amongst the team members.

**Teaching Tools**

The goal of creating a quality learning experience in the field of counseling is to find effective teaching methods to create a technology-assisted learning environment that will contribute to student learning. Therefore, the selections of teaching tools are essential to technology-assisted learning and represent the main part of the course development (Kurthen & Smith, 2005/2006).

**Hybrid Teaching**

Hybrid teaching is defined in literature as the combination of an online course with face-to-face activities and instruction for student learning. However, for this combination style of teaching to be categorized as a hybrid model of teaching, exercises and assignments must replace face-to-face instructional time by more than 40%, but less than 80% (Kurthen & Smith, 2005/2006). Through this teaching method, instructors must be able to effectively use this model to develop a framework that will enable student learning through the dissemination of information while at the same time creating an atmosphere that fosters the human interaction needed between the educator and students.

The hybrid teaching model includes traditional teaching methods of transmitting knowledge to students enrolled in a counseling course, but also includes opportunities to create assignments and discussions among peers in a digital environment. The most commonly used methods were chat rooms, emails, instant messaging, and online discussion forums (Kurthen & Smith, 2005/2006). Each of these commonly used methods can be implemented to teach various counseling courses. For instance, in counseling theories and techniques course, the instructor can use case studies to generate a discussion forum among students and discuss theories and techniques that may be best suited for assisting the clients' needs after covering certain theories in class and showing essential counseling techniques via role-playing or video modeling. The instructor would create a discussion forum through the usage of a web-based virtual learning environment, such as Blackboard, which is an educational platform that is used to deliver course content. Using discussion boards would be a way of engaging students to learn, as well as measuring progress throughout the course (Benshoff & Gibbons, 2011). By creating a forum, a case study can be uploaded and numerous threads could be available with prompting questions for discussion among peers. The following are example discussion questions:

Albert Ellis feels that therapists can accept clients as well as criticize their behaviors. What behaviors are the client presenting in the session and what criticism would you have for the client?

Carl Rogers and Albert Ellis have different views of how warmth and unconditional positive regard assist with producing client change. Compare both of these approaches. How can both of these approaches be integrated into a session with this client?

The discussion forum and the case study approach can be utilized as a teaching/learning tool, and serve as a place for students to reflect on their learning experience as well as gain a deeper understanding of the embedded content in the course.

**Digital Learning**

Digital learning has been defined in the literature, where a distant and reciprocal interaction occurs between students and the instructor in a digital environment (Barr & Miller, 2013; Kearsley & Moore, 2012). Similarly, Kurthen and Smith (2005/2006) state that digital learning replaces face-to-face class meetings and is categorized as any course that is beyond 80% in digital format. Although digital learning dwindles face-to-face meetings, there are advantages when utilizing this teaching modality. For example, technology is a source of convenience for students, especially if they have other obligations that they must adhere to, such as employment, family, and children (Radford, 2011). Besides, digital learning can occur anywhere at any time (Crozier, 2012). This indicates that knowledge and skill attainment can occur beyond the traditional brick and mortar of university campuses. This approach also enables a reduction in various restrictions that may occur when pursuing an education in the traditional way, such as parking and time. This increase in flexibility may allow more students to become drawn to the usage of technology for pursuing an education, specifically a degree in counseling (Crozier, 2012).
Another advantage of providing learning online for counseling students is that it establishes an opportunity for students to not only become familiar with the various existing technological advances, but also prepares them for how they may be able to integrate this into practice once they have entered the field (Coursol & Lewis, 2004). As technology increases and continues to advance, counseling students can become competent in the use of technological mediums, and successfully transfer knowledge and skills when working with clients in the future. Both the Council for Accreditation of Counseling and Related Educational Programs (CACREP) and the Association for Counselor Education and Supervision (ACES) have expressed how imperative it is for counselors and counseling students to become technologically competent by infusing a variety of technology into the curriculum (ACES, 1999; CACREP, 2016; Coursol & Lewis, 2004).

**Discussion Board**

The Discussion Board is a text-based forum in which students can provide feedback in both peer to peer and teacher to student interaction (Kupczynski, Mundy, & Maxwell, 2012). Students are often posed with questions in which they are to respond to and respond to a thread of other questions that may be presented by others. This type of digital environment allows students to learn not only from their own answer to a question, but also allows for the student to engage their critical thinking skills in response to another student in the discussion board (Cox & Cox, 2008; Ku, Lohr, & Cheng, 2004; Kupczynski et al., 2012; Wuensch, Aziz, Ozan, Kishore, & Tabrizi, 2008). An additional benefit of using a discussion board is that it allows students to have social interaction with others and creates the chance to engage in scholarly discussions that can enhance educational growth. Bliss and Lawrence (2009) indicate that the use of discussion boards has shown improvement in levels of peer-to-peer interaction and the development of small group discussions which have resulted in a richer understanding of the course material.

When deciding to implement a discussion board, student participation is crucial. The question for counselor educators is: How can I get my students to engage in effective discussion board dialogue? According to the University of Oregon’s Teaching Effectiveness Program (n.d.), it is vital to inform students of the value of their participation and to discuss the expectations of the instructor and the students (p. 4). Also, having students take the lead in discussing a topic that is applicable to the course will assist students in participating (Teaching Effectiveness Program, p. 4). For example, in a counselor supervision course, a student led a discussion on applying Stoltenberg’s Integrated Developmental Model to improve the spiritual competence of the supervisee where the student leading the discussion is able to ask questions such as: When using this model, what strategies can be used to assist the supervisee to move from one domain of the model to the next? or what do you think could be some challenges for you as the supervisor in assisting the supervisee to move from one domain of the model to the next? These sample questions provide students an opportunity to reflect but to also take a lead role in their learning.

**Web 2.0 Technologies**

O’Reilly (2005) defines Web 2.0 as the second generation of web-based experience, one more interactive and less reliant on “static” pages to provide information than the previous version had the capacity for. Web 2.0 provides a more interactive environment in which the user can modify the digital space as in Facebook, blogs, and wikis.

Web 2.0 uses the web as a space to promote collective intelligence, group contributions, and collaboration from others by implementing various technological devices (O’Reilly, 2005; Rockinson-Szapkiw & Walker, 2009). To apply this to counselor education, skills such as counseling interviewing and clinical counseling as the focal point for counseling student learning, implementing Web 2.0 Technologies can assist with skill acquisition when providing an online counseling course. The technological components that are integrated into Web 2.0 are content management systems, Podcasts, Vodcasts, 3-D virtual reality simulations, collaborative conferencing software, wikis, and blogs that are essential to deliver most of the course content (Rockinson-Szapkiw & Walker, 2009, p. 176). Through the use of these technologies, the students’ learning can be enriched through their interactions with digital learning, in both real-time and their time of use of the materials.

Each of the technologies that are classified as Web 2.0 serves a different role and can augment student learning and skill development. For instance, course management systems are computer software programs that provide course information and information delivery (Comeaux & McKenna-Byington, 2003). Components that are part of the Course Management Systems include a learning management system, such as Blackboard and Google Classroom, the location where instructors place the syllabus, grades, assignments, discussion board, and other valuable learning materials for students to access online from anywhere and anytime. The Course Management System’s role is to serve as a channel for interaction between the instructor, student, and the content embedded within the course (Rockinson-Szapkiw & Walker, 2009).

Podcasts (audio) and Vodcasts (video) are also part of Web 2.0. They allow students to access course learning material in the form of audio and video recordings (Rockinson-Szapkiw & Walker, 2009). This form of technology would be an asset to the learning of students in many college programs. For example, a professor who teaches a social sciences course could use Podcasts and Vodcasts for classroom lectures and supporting materials in order to engage with students who have different learning styles. The literature also suggests that the usage of Podcasts and Vodcasts as an effective tool to personalize course content for students with different learning styles (Kantharia, 2007; Ohei, 2019; Schnackenberg, Vega, & Relation, 2009). The Podcasts or Vodcasts could also be a learning tool that could be used as a catalyst to provide intense case studies and interviews with experts (Rockinson-Szapkiw & Walker, 2009).
Using Web 2.0 technologies, a digital classroom can be created to imitate a traditional classroom setting. This is known as a Multiuser Virtual Environment and it uses both asynchronous and synchronous interaction between the instructor and the students (Rockinson-Szapkiw & Walker, 2009). Second Life is the most popular type of Multiuser Virtual Environment and it holds an array of features to enhance student learning. For example, in the Second Life environment, students would design a digital person (avatar) that would be used to navigate through 3-D digital learning. Using this digital environment, the instructor could create a classroom setting, with stimulated counseling labs and one-way mirrors. This could provide students with a sense of peer and teacher presence that simulates a traditional classroom (Rockinson-Szapkiw & Walker, 2009, p.182).

For instance, a professor at Regent University that offers traditional and distance education in the USA taught an online counseling skills course using Second Life. While integrating role play exercises, the instructor created counseling labs and classroom settings that focused on teaching students basic counseling skills that required active listening and attentive training through a digital environment. This pilot study presented through its data that students found Second Life beneficial (Walker, 2009). Students indicated in the study that the most beneficial aspect of using Second Life was being able to have a visual example of a counseling setting and people when practicing counseling skills (Walker, 2009). Other universities, such as Cornell University, Duke, Ohio State, University of California, Virginia Tech, and MIT have adopted the use of Second Life (Foster, 2006; Walker, 2009). Second Life is not solely used in counseling programs. For instance, Harvard University has developed a law course using Second Life (Foster, 2006). These examples show that using a variety of technologies enhances students’ learning that not only benefits students’ knowledge, but also helps skill development across different fields.

Utilizing Technology in Counselor Education

As network computing and its tools have become an important part of the instruction and administration process, integrating technology into education has become a major thrust for most educational institutions. Instructors decide whether to use technology in course delivery based on course goals, students’ readiness, sensitive and confidential course material, and disciplinary values (Svinicki & McKeachie, 2014). Resistance to the use of technology in counselor education programs is understandable because of the confidentiality of content. However, in order to enhance student learning and deliver current and quality materials outside of traditional learning settings, counselor education programs need to integrate technology within their curriculum (Quinn, Hohenshil, & Fortune, 2002).

Use of Technology in Teaching

One of the digital technology tools that has been used in education is video technology. The use of video technology provides a visual approach for counseling skills training. In order to enrich teaching and learning, educators should use video technology to help students analyze the therapeutic relationships between counselor and client (Hayes, 2008a). For instance, one of the most used academic video websites is “Vast: Academic Online Video” that offers videos in many different areas including counseling with demonstrated and real educational counseling sessions (Alexander Street Press, n.d.). As part of the learning process, counseling students could watch real or demonstrated counseling sessions. Thus, students could be able to answer questions about the counseling process, such as verbal and nonverbal communications, behaviors of the counselors and clients, the relationship between them, and the skills used by the counselors. Also, this modality would help students evaluate the counselor’s skills demonstrated in the session (Hayes, 2008a). Moreover, this method might help students see the process from the outside of the session as a 3rd person in order to evaluate counselor’s empathic understanding of the client’ issues and feelings because empathy is a fundamental element of the counseling process; hence, counselor educators use numerous strategies to develop counseling skills among counseling students (Ohrt, Foster, Hutchinson, & Ieva, 2009; Young, 2009). Researchers recommend strategies and tools to teach empathy among students, such as perspective-taking exercises and case conceptualization (Ohrt et al., 2009; Young, 2009), by using written and visual media. For example, students can discuss what they felt as they relate to the character’s story in that media. These are some examples of the strategies and tools that counselor educators use in order to help students understand client’s perspective (Ohrt et al., 2009). Moreover, Ohrt et al. (2009) suggest using expressive arts (music and video) to elicit emotion and empathic responses (p. 329). Therefore, counselor educators may use visual media as a medium for evoking emotional responses to a character that may represent future clients because the use of media may benefit counseling students’ skill development (Ohrt et al., 2009).

Counselor educators also use movies to assist students in identifying specific behavior patterns illustrated by the actors in the movies, such as “Fatal Attraction” in which borderline personality disorder is intensely demonstrated. Therefore, movies are a very useful tool for teaching counseling courses because counselor educators examine human emotions, thoughts, and human relations in movie scenes as educational tools (Armstrong & Berg, 2005; Hayes, 2008a). Additionally, the use of video technology not only helps students learn demonstrated skills and differentiate unhealthy behavioral patterns, but also assists educators to assess counseling students’ skill development via using students’ recorded sessions. Hence, since the welfare of the clients is counselors’ main responsibility, students’ training sessions should be recorded in order to give feedback, evaluate their skills and techniques to ensure that they provide effective service to their clients (Hayes, 2008a).

Another assisted tool is a text-based application. The vast majority of education systems use online course management systems that are mainly text-based, such as learning management systems, email, online chat rooms, and discussion boards are a few (Wuensch et al., 2008, p. 525). For example, in class blogs, discussion boards, and wikis, students can pose questions, share...
and exchange ideas, work collaboratively on assignments, and reflect on their learning process to create a better understanding of course content (Svinicki & McKeachie, 2014, p. 233). In addition to this, online education will continue to shape the way courses are delivered and people learn in the 21st century. Lectures are no longer restricted to classrooms since the students can easily attend live lectures through their laptops. As a result, students and faculty in online and hybrid learning courses can work together from multiple geographical locations in real-time that was simply impossible in the past due to unavailable technology. Therefore, not only instructors but also students need to be knowledgeable about the educational tools being used and follow the latest technological gadgets (Wuensch et al., 2008).

**Use of Technology in Supervision**

Evaluation of practical counseling skills of students is very critical in the field of counseling. Bernard and Goodyear (2014) define supervision as an intervention provided by a more senior member of a profession to a more junior member or members of that same profession (p. 9). Therefore, counseling supervision is a crucial aspect to evaluate students' practical skills in order to provide helpful and constructive feedback that given an opportunity to grow professionally (Hayes, 2008a). Owing to technological advancement, computer-assisted supervision is becoming popular among supervisors (Hayes, 2008b, p. 246). Watson (2003) describes computer-assisted supervision as placing a screen in the counseling room where it can be viewed by only the counselor and the supervisor, but not the client (p. 3). The supervisors can stand behind a two-way mirror and observe the counseling session when it is taking place. When supervisors need to interject, they can type their suggestions. This allows supervisees to view this feedback and have the time to utilize this and respond accordingly (Watson, 2003, p. 3). Moreover, with the advancement of technology, this method of supervision also takes place online and has allowed many professionals to receive supervision who cannot attend in-person supervision to receive feedback due to areas where they live (Hayes, 2008b). Another technology-assisted supervision technique, bug-in-the-ear where the supervisor provides feedback through an earphone, also showed improvement in the therapeutic alliance that helps the client’s wellbeing (Weck et al., 2016). Compared to live supervision, in computer-assisted supervision, supervisors can intervene, help supervisee, and provide immediate feedback with the help of computer-assisted supervision tools during or after the counseling session, but in order to do this, the counselor has to have client's consent.

As literature shows that technology enhances learning and provides alternative delivery methods for educators. However, students’ attitudes and knowledge toward computer-assisted instruction need to be considered before counselor educators integrate these approaches into the course delivery models (Hayes, 2008b, p. 249). The decision to use technology and its tools in teaching or supervision should be based on the needs and demands of the students and their different learning modalities. Moreover, educators need to consider students' knowledge of technology, their developmental levels and skills when integrating computers and multimedia tools (Hayes, 2008b, p. 250).

**Legal and Ethical Considerations**

Ethical considerations must be reviewed at the initial stage of integrating any approach in the field of counseling. Technology-assisted and computer-based approaches are not any different than traditional methods (Watson, 2003). Concerns regarding the use of technology in teaching counseling courses and training counselors have been raised (Hayes, 2008b). Hence, the National Board of Certified Counselors (NBCC) and the American Counseling Association (ACA) have developed ethical guidelines for web-based counseling (Watson, 2003). Also, CACREP (2016) standards state that counselor educators infuse ethical considerations throughout the curriculum. Turkish Psychological Counseling and Guidance Association also has ethical codes and states that counselors who provide counseling online inform their clients of the service, risks, and confidentiality (Türk Psikolojik Danışma ve Rehberlik Derneği, 2011 p. 22), but there is no ethical guideline for online or technology-assisted counseling in Turkey.

Ethical issues in regard to the use of technology in the field of counseling range from confidentiality and informed consent to the emergency contact. It is very essential for counseling professionals to obtain clients' permission to use technological modalities, such as audiotaling or videotaping counseling sessions. Also, counselors must always inform their clients of certain aspects of the counseling processes, such as risks and benefits of counseling, the limits of confidentiality, and access to the client's information online (Hayes, 2008b, p. 250). Therefore, counselor educators and supervisors have to know the ethical codes of the profession and the guidelines in regard to these approaches. They are also responsible in terms of informing their students and supervisees of the ethics involved (Watson, 2003, p. 7).

In terms of roles and responsibilities, it is counselor educators’ responsibility to provide the best training to their students. Before new methods are implemented, counselor educators must determine whether traditional, face-to-face delivery is more effective than technology-assisted course work. This is a relevant question given that issues of counselor training efficacy should be one of the foremost concerns to counselor educators, regardless of delivery method. One of the first studies in this subject by Hayes, Taub, Robinson, and Sivo (2003) found that there were no significant differences between student’s semester-end counseling skill ratings in two beginner level classes, one taught online and the other in the traditional manner. The results of Hayes et al. (2003) suggested that the introduction of multimedia technology did not negatively or positively affect outcomes related to counselor training. However, since the advancement of technology and its’ occupation in our daily lives, security gaps of online software use, and the increased use of technological tools in education, these antecedent researches are appreciated. However, research lacks in Turkey in regards to technology use in the field counseling, both at the educational and the practical level. It is hard to address the benefits, legal, and ethical issues of using technology without referencing a scholarly work or an ethical guideline.
It would seem that no matter what delivery method of instruction is used in class, the fundamental purpose of any training program is the development of competent counselors. The issue of competency is central to many of the principles of professional counseling. It has been recognized by the ACA's ethical code that it is the responsibility of the counselor to work competently, or not provide treatment techniques for which the counselor has not been adequately trained for (ACA, 2014). But, more importantly for this discussion, the ACA (2014) acknowledges “distance counseling” (section H, p.17). In any training program, students are assessed with exams and research papers testing their cognitive understanding of counseling, but there are limited methods of assessing skills that measure competency (Erikson & McAuliffe, 2003). Also, there is no practicum or assessment of distance counseling during counselors’ preparation. Therefore, counselor educators need to consider altering their practicum courses and use reliable and valid assessment instruments or develop their own rubrics or assessment tools based on required skill development of practical courses.

Regardless of the field of expertise, training and support have to be received from the experts in order to use technology as a teaching strategy. It is not expected from all educators to know computer programming, but counselor educators need to be comfortable with and able to use technology in order to help their students to receive the best education and training (Hayes, 2008b) and to avoid any ethical issues in relation to technology use in teaching and supervising.

DISCUSSION

The use of computers and multimedia tools to deliver course content has significantly increased in the last two decades and many educators are integrating these tools into the delivery of their courses and training to enhance students’ learning. The use of technology in counseling programs has also extended from theory to practice and has helped educators use various teaching methods. The use of technology and media tools is an ongoing effort to improve teaching, learning, services provided, and research conducted in the field of counseling (Hayes, 2008b, p. 251). It is an essential role and responsibility of researchers to conduct research to identify the most useful and effective teaching and training approaches in order to train competent counselors (Hayes et al., 2003).

Teaching strategies are important to student learning and skill development; however, the selection of the appropriate teaching strategies is the key. There are a variety of teaching tools that are available for educators to use in regards to technology. A few of those are wikis, blogs, discussion boards, course management systems, learning management systems, Podcasts and Vodcasts, and so forth. There has been some existing literature that has focused on the perception of using technology and how technology contributes to student learning. Nevertheless, this is not enough. Literature continues to be lacking, regarding the effect of technology on skill acquisition in relation to counseling students. Also, more research needs to be conducted in order to identify the most effective teaching modalities since technology is infused in counselor preparation programs. Owing to continuous technological inventions and advancement in technology use in schools, there needs to be a continued exploration of teaching tools and their effectiveness on student learning and skill development. Moreover, senior educators need to enhance their use of technology in order to provide the best learning environment for their students.

In Turkey, higher education institutes are accredited by the Council of Higher Education (CoHE). Also, all faculty of education curriculums are designed by CoHE. Therefore, we could say that there is a national curriculum for the counseling programs. However, the curriculum does not explain much in terms of practical courses’ delivery and requirements, and lacks in regards to standards (e.g. CACREP). Moreover, the curriculum does not give any information in regards to the use of technological or media tools, not only in required but also in elective courses, in order to train students to become more competent in using and integrating technology into their practice after graduation. A study conducted with school counselors in Turkey found that counselors thought that online counseling is necessary in Turkey and an online counseling course should be offered in counseling programs. Their results also showed that online counseling would be beneficial to those who are financially disadvantaged, disabled, and could easily open up online compared to face-to-face counseling (Bastemur & Bastemur, 2015, p. 437). Moreover, Yerin Güneri et al.’s (2018) pilot study results show that the use of technology and video modeling in counseling courses have a positive effect on students’ efficacy. Therefore, the traditional counseling curriculum needs to be altered and supported with technology, not only to train competent counselors, but also provide better and accessible service to people who are in need of professional help.

With the increasing number of CACREP accredited online counseling programs in the USA, this topic requires comparative studies between the course delivery methods of traditional on-campus counseling programs and online programs, and further investigation to expand on the best ways to provide course delivery in the field of counseling. Furthermore, Turkey has 66 public and 16 private counseling undergraduate programs (Yükseköğretim Program Atlası, n.d.) that are traditional, on-campus, and mainly train school counselors. However, there are no online counseling programs in Turkey. Moreover, we do not know to what extent technology is used at the counseling programs in Turkey. Therefore, further research needs to be conducted in order to identify what technological tools and modalities are being used, and how in the counseling programs. Hence, we will have an idea of what needs to be done in terms of integrating technology in the programs in order to train competent counselors. Use of technology in education delivery and providing technology infused curriculum allow those who live in distant locations where he or she cannot receive on-campus education. Therefore, infusing technology in counseling programs not only provides an equal opportunity to receive education, but also helps those who take responsibility to serve people in distant locations, to access postgraduate education in order to empower themselves as professionals.
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