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Abstract

The purpose of this article is to provide an overview of distance education in occupational therapy. This paper defines distance education and several of its current iterations, specifically focusing on computer-mediated, online courses. It discusses the importance of evidence-based and inclusive distance education. It also reviews strategies for ensuring quality distance instruction that is evidence-based, inclusive, and in accordance with our professional mores and goals. This paper argues that by providing quality distance instruction in occupational therapy, we can contribute to building a diverse profession that can meet the occupational needs of clients locally and globally.

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Introduction

Distance education in occupational therapy is, as in many areas of education, a vibrant, growing trend. When conducted in an evidence-based, inclusive manner, distance education in occupational therapy provides opportunities for occupational therapy practitioners and future practitioners to engage in academic degree programs, professional development, continuing education, and life-long learning. Because distance education allows us to reach occupational therapy students and practitioners at any locale, we can contribute to building a diverse profession that can meet the occupational needs of people, organizations, and individuals (AOTA, 2008) globally. This paper will (1)

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define distance education and several of its most current iterations in the field, (2) discuss the importance of creating evidence-based and inclusive distance education opportunities, and (3) discuss strategies for delivering distance education that is not only evidence-based and inclusive, but also in accordance with our professional mores and goals (Hollis & Madill, 2006; Steward, 2001).

Defining distance education

Distance education is defined as any form of education where the instructors and students are separated by physical distance (Hollis & Madill, 2006). There are a variety of ways that this distance can be bridged. Historically, courses could be provided at a distance through mail or other available technology such as audio teleconferencing (Mitcham & O'Shea, 1994). As access to personal computers and web-based technology has increased, opportunities for online teaching and learning have grown as a delivery method for distance education (Hollis & Madill, 2006; Trujillo, 2007). Online technologies provide particularly connected distance learning opportunities. They allow students from across the street or around the globe to engage in the same course and with the same instructors in a dynamic community of learning.

Online instruction, as a form of distance education, may be used for continuing education (Pui, Liu, & Warren, 2005; Reed et al., 2008; Stanton, 2001), or to enable discussions during fieldwork (McLeod & Barbara, 2005; Thomas & Storr, 2005). It may also be used in formal academic programs to enhance aspects of an on-campus course (Jedlicka, Brown, Bunch, & Jaffe, 2002; Mitchell & Batorski, 2009) or for entire individual courses within an oncampus program (Penman & Lai, 2003; Simons, Baron, Knicely, & Richardson, 2002; Weiss, Schreuer, Jermais-Cohen, & Josman, 2004). Some programs provide courses or programs that combine face-to-face and distance instruction, creating what is termed a blended or hybrid curriculum. Finally, entire programs may be conducted primarily or completely online (Hollis & Madill, 2006; Richardson, 2004; Richardson, MacRae, Schwartz, Bankston, & Kosten, 2008; Rodger & Brown, 2000). Within occupational therapy, entrylevel, post-professional, continuing education, and professional development courses and programs currently utilize the spectrum of these online strategies (Hollis & Madill, 2006). As demand for distance education grows, these strategies allow students and occupational therapy practitioners to access courses in increasingly flexible ways.

Growing demand for distance education

The literature indicates that occupational therapy practitioners are increasingly demanding online course options as a form of distance education in occupational therapy (Hollis & Madill, 2006; Mitcham & O'Shea, 1994; Penman & Lai, 2003; Pui et al., 2005; Rodger & Brown, 2000; Simons, Baron, Knicely, & Richardson, 2002; Stanton, 2001; Trujillo, 2007). Many practitioners view distance learning as providing flexible scheduling; for others, it allows them to learn without relocating; and still others are seeking opportunities to connect with professionals in other locations and countries (Rodger & Brown, 2000).

Distance learning is currently listed as an emerging practice niche by the American Occupational Therapy Association (AOTA) (Yamkovenko, 2012). This means that distance learning has been identified as an area of practice that will help practitioners respond to the "changing and evolving" (Yamkovenko, 2012, p.1) occupational needs of society. One way that distance education can do this is by providing opportunities for individuals to study occupational therapy without needing to relocate to an on-campus educational program. This will enable more occupational therapy professionals to be trained, thus responding to the general demand for more practitioners (Yamkovenko, 2012).

As discussed in Dovle (2010), there is no published data on the growth of distance or online education specifically within occupational therapy. We do not have objective quantitative data reporting a growth in number of students enrolled in continuing education or academic programs that are conducted at a distance. While it appears that the number of programs and online continuing education course offerings are increasing, there is no formal tracking of this information. Instead, we can only extrapolate that online education in occupational therapy is growing based on the growth of online higher education more generally. For example, in the United States there is an overall 10% growth rate in higher education enrollments online versus 1% in traditional classroom settings (Allen & Seaman, 2011). Whereas 1.6 million students were taking at least one online course in higher education in 2002; in 2010, 6.1 million students were doing so (Allen & Seaman, 2011). This means that 31% of all students in higher education in the United States are taking at least one online course (Allen & Seaman, 2011). Due to this growth generally, we might presume that there is also a growth in numbers of occupational therapy students learning online.

Despite the paucity of actual numbers within occupational therapy, Doyle (2010) argues that online education is an important option for continuing education and academic coursework. It allows access to occupational therapy education for a variety of students and reasons, such as location, scheduling, disabilities, learning differences, and learning needs. In addition, it may provide exciting opportunities for the profession to grow increasingly more interconnected, global, and evidence-based as we learn and work together across the continents through distance education.

Call for evidence-based and inclusive OT education

Occupational therapy has embraced the need to be an evidence-based, inclusive profession. For us to meet these goals as practitioners, our professional education must also meet these criteria. This section will review the calls for evidence-based and inclusive educational opportunities, and relate this to distance education specifically.

Generally, we seek to be evidence-based in our occupational therapy practice (AOTA, 2007; Bondoc, 2005). For example, the AOTA's Centennial Vision states that "we envision that occupational therapy is a powerful, widely recognized, science-driven, and evidence-based [emphasis added] profession with a globally connected and diverse workforce meeting society's occupational needs" (AOTA, 2007, p. 614). Bondoc (2005) argues that the drive to be evidence-based must be applied not only to our clinical work and research efforts, but also to our professional education. This allows us to be accountable in all areas of practice.

Evidence-based education will foster excellence in teaching and meet national mandates for accountability, for example from the United States' federal legislation of the No Child Left Behind Act of 2001 (Public Law 107-110) and the U.S. Department of Education's What Works Clearinghouse (Bondoc, 2005). Ultimately, basing education on evidence would support a paradigm shift from a focus on instruction and teaching to learning and student outcomes (Bondoc, 2005; Fisher & Crabtree, 2009). The result would be producing the best and most diverse graduates possible, where professionals use evidence in their practice, become lifelong learners, and engage in scholarship. These achievements will help occupational therapy to maintain a professional edge in the 21st century (Bondoc, 2005; Fisher & Crabtree, 2009; Haynes & Jones, 2007). Finally, a focus on evidence will support research of pedagogical innovations (Bondoc, 2005), which are critical to face-to-face and distance education approaches.

Along with evidence base, publications from around the world call for creating a more diverse, inclusive profession and professional education (AOTA, 2007; Hansen & Hinojosa, 2009; WFOT, 2008). It is notable that several of these publications are made by professional associations, rather than individual researchers.

In the United States, the AOTA calls for diversity in the profession through its Centennial Vision (AOTA, 2007). In its paper on nondiscrimination and inclusion, AOTA also specifically commits to supporting reasonable accommodations and full participation in daily occupations, including education, of all members of society and the occupational therapy profession (Hansen & Hinojosa, 2009).

The World Federation of Occupational Therapists (WFOT) explicitly commits the profession to provide inclusive occupational therapy education in a position statement from 2008 (WFOT, 2008). This statement states that occupational therapy education should be fully inclusive, matching the United Nation's position about educational opportunities in "The Standard Rules on the Equalization of Opportunities for Persons with Disabilities" (United Nations General Assembly, 1993).

Additional publications address the issue of inclusion and provide more detail about how to achieve this in occupational therapy education. Black (2002) and Gitlow (2001) discuss how degree programs have historically addressed inclusion in occupational therapy. Abreu and Peloquin (2004) advocate the use of empathy to facilitate multiculturalism, diversity, and inclusiveness in the profession. Additional publications analyze the essential job functions of occupational therapy students and practitioners (Gupta, Gelpi, & Sain, 2005), as well as discuss methods for providing inclusive practice (Gupta et al., 2005; Mu, Franck, & Konz, 2007; Trentham, Cockburn, Cameron, & Iwama, 2007). Such ideas could be transferred to create more inclusive learning opportunities.

In summary, we are mandated to develop evidence-based and inclusive occupational therapy education. This applies to distance as well as face-to-face education. By meeting these demands, we make it possible to nurture the most diverse, powerful workforce possible and thereby meet the occupational needs of clients nationally and internationally. As such, the following section will discuss strategies for delivering evidence-based, inclusive distance education.

Strategies for delivering distance education

Distance education is at its best when it provides rigorous content, is guided by appropriate pedagogy and technology, and creates opportunities to develop a learning community among the instructor and students. Additionally, when employing distance education in occupational therapy, we must consider how to provide students with the same professional expectations and opportunities as students in the traditional classroom. Specifically, we must foster the "deep learning, professionalism, and professional autonomy" (Hollis & Madill, 2006, p. 66) that we emphasize in all forms of occupational therapy education (Richardson, 2004; Richardson et al., 2008). This section will discuss theories, technologies, and instructional strategies that can best support distance learners.

Distance education benefits from pedagogy that focuses on the needs of adult learners (Fish & Wickersham, 2009; Tallent-Runnels et al., 2006), understands the impact of distance between learners and instructor, and allows for the use of different technologies, when appropriate. Knowles' Adult Learning Principles (Knowles, 1968), also known as andragogy, provide direction in developing internally-motivated, experiential, goal-oriented, relevant, practical, and rationale-driven learning opportunities for adult learners. Constructivism is a learner-centered theory that sees individuals as actively engaged in constructing new knowledge and meaning through combining previous experiences with information from new learning experiences (Trumbull & Pacheco, 2005). The Theory of Transactional Distance (Moore, 1997; Moore, 2007) is a theory focuses on the ongoing interactions among learners, their instructors, and the course content within the context of distance learning. Specifically, it looks at how different relationships among these elements affect how the distance is bridged in distance education. Finally, the theory of Community of Inquiry (Garrison & Akyol, 2009; Garrison & Archer, 2007) also focuses on computer-mediated distance education and how a given community of learners can collaborate to engage in deep and critical thinking and learning. Theories such as these can guide the development of distance learning opportunities for occupational therapy students.

When constructing online learning opportunities specifically, it is critical that we design courses and course content that are appropriate for the webbased medium (Trujillo, 2007). Steward (2001) thoughtfully looks at the implications of technological advances in online occupational therapy

education. She cautions that the technology could allow courses to become "knowledge-based and prescriptive professional programmes [sic]" (Steward, 2001, p. 147), especially if they are taken autonomously. However, she argues that if courses are instead delivered with guidance from an occupational therapy instructor and with strong doses of collaboration among peers, opportunities for professional induction will exist, just as in traditional classroom settings. Moreover, the technology can provide some additional benefits such as allowing occupational therapy students from different locations to collaborate nationally and internationally. In short, certain technological advances can help us attain this collaboration in a computermediated and online course.

Collaborative learning opportunities can be built into an online course through features such as asynchronous discussions (Fish & Wickersham, 2009; Lewis & Abdul-Hamid, 2006; Tallent-Runnels et al., 2006). These discussions are conducted within a limited time frame (e.g., 24 or 48 hours) where each course member logs in to the course and adds to the written discussion of an instructor-led topic. Additional features include synchronous chats (Lewis & Abdul-Hamid, 2006; Tallent-Runnels et al., 2006), where students and the instructor meet in real time using web cameras and video chat technology to hold a live discussion. Finally, collaborative efforts might be built into a course through peer mentoring, study groups, peer review of assignments, and projects completed by pairs or small group of students.

What is most important about these opportunities for collaboration is that they are at both the student-student level and the student-instructor level (Fish & Wickersham, 2009). By building a community of learners within a course and developing multiple opportunities for interaction, students will become engaged in the learning process and connected to the learning experience. Such elements are keys to student satisfaction and retention (Lewis & Abdul-Hamid, 2006).

In addition to creating collaborative learning opportunities in online courses, strong content is enhanced by providing a variety of types of learning activities and assessments. In order to engage the learner in various ways, Gaytan and McEwen (2007) advocate for including opportunities such as projects, portfolios, self-assessments, peer review, and discussions in addition to the more traditional essays, weekly assignments, and quizzes. Such opportunities are further strengthened when instructors provide prompt, relevant, and personalized feedback (Fish & Wickersham, 2009; Lewis & Abdul-Hamid, 2006; Tallent-Runnels et al., 2006) throughout the course. This

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feedback, as well as frequent gestures by instructors to encourage quality work, participation in the course, and questions (Lewis & Abdul-Hamid, 2006), helps to promote student motivation (Fish & Wickersham, 2009).

Summary

Distance educators must strive to bring vibrant, meaningful learning opportunities to the forefront through appropriate use of learning theory, technology, and course design. In addition, they must work to do so in an evidence-based, inclusive manner. The results can be profound: professional learning by a diverse population of students who are better prepared to reach out and address the occupational needs and desires of clients around the globe.

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