Community Teaching Experience: A Description of the Development and Design of a Unique Teaching Experience for Occupational Therapy Doctoral Students

Laura E. Landon
Washington University School of Medicine in St. Louis

Christine Berg
Washington University School of Medicine in St. Louis

Sara S. Ulfers
UnityPoint Health-Des Moines at Iowa Methodist Medical Center

Community Teaching Experience: A Description of the Development and Design of a Unique Teaching Experience for Occupational Therapy Doctoral Students

Abstract

Entry-level occupational therapy doctorate (OTD) students receive education and training to interpret and disseminate evidenced-based literature. However, these students are often missing the clinical experience to identify clinically relevant questions that impact occupational outcomes. Conversely, occupational therapy practitioners have the clinical experience to determine clinically appropriate questions but often encounter time, budget, and setting constraints on researching and learning up-to-date evidence-based practice assessment and intervention techniques. The purpose of this paper is to describe the development and design of an exploratory educational project in which OTD students utilized clinically relevant questions identified by local occupational therapy practitioners to disseminate evidence-based literature in the form of continuing competency in-services to clinicians as it related to their clinical practice setting. Nineteen sites participated and 33 one-hour presentations were presented to clinical sites in the local area and within the occupational therapy student body. Students reflected that this was a positive learning experience and a valuable component of the course.

Keywords

Continuing competency, evidence-based practice

Creative Commons License

Community Teaching Experience: A Description of the Development and Design of a Unique Teaching Experience for Occupational Therapy Doctoral Students

Laura Landon[1], Christine Berg[1], and Sara Ulfers[2]

Washington University School of Medicine[1]

UnityPoint Health-Des Moines at Iowa Methodist Medical Center[2]

United States

ABSTRACT

Entry-level occupational therapy doctorate (OTD) students receive education and training to interpret and disseminate evidenced-based literature. However, these students are often missing the clinical experience to identify clinically relevant questions that impact occupational outcomes. Conversely, occupational therapy practitioners have the clinical experience to determine clinically appropriate questions but often encounter time, budget, and setting constraints on researching and learning up-to-date evidence-based practice assessment and intervention techniques. The purpose of this paper is to describe the development and design of an exploratory educational project in which OTD students utilized clinically relevant questions identified by local occupational therapy practitioners to disseminate evidence-based literature in the form of continuing competency in-services to clinicians as it related to their clinical practice setting. Nineteen sites participated and 33 one-hour presentations were presented to clinical sites in the local area and within the occupational therapy student body. Students reflected that this was a positive learning experience and a valuable component of the course.

Occupational therapy (OT) practitioners are faced with the challenge of incorporating up-to-date evidence-based assessment and intervention techniques specific to their setting into daily practice, while adhering to budget, time, and setting constraints on attending relevant continuing competency (CC) seminars. Currently, 46 states require OTs and occupational therapy assistants (OTAs) to obtain CC credit for licensure (American Occupational Therapy Association [AOTA], 2019). Although the specific requirements vary on the state-level, the AOTA's Occupational Therapy Code of Ethics (2015) specifies that therapists should "maintain competency by ongoing participation in

education relevant to one's practice" (p. 3) while taking appropriate and necessary steps, like continuing education courses to enhance knowledge. Occupational therapists and OTAs engage in continuing education to improve clinical skills to increase patient care through increased knowledge regarding various practice domains, such as performance skills, interpersonal abilities, clinical reasoning, and ethical reasoning (AOTA, 2019).

Although many OT practitioners have expressed positive attitudes toward CC, they often face several barriers that impede its implementation (Bennett et al., 2003; Ulfers & Berg, 2017; Upton et al., 2014). For example, there are logistical factors that deter participation in developed CC in-services, such as the high cost of attending these in-services, the lack of time to participate in developed CC in-services or a lack of time to seek and read the literature on their own (Dysart & Tomlin, 2002; Samuelsson & Wressle, 2015; Upton et al., 2014). Many practitioners have also reported barriers pertaining to accessing evidence-based literature and CC opportunities, as they face challenges with traveling to CC in-services while also reporting that they work at facilities with insufficient access to literature as it pertains to their practice setting (Penz et al., 2007; Samuelsson & Wressle, 2015; Schweitzer & Krassa, 2010).

The need to easily access current and relevant CC credits is a continually pressing need for OT practitioners. However, entry-level occupational therapy doctorate (OTD) students are trained during their education to meet this need. A recent push toward the integration of evidence-based practice (EBP) has set a precedent for the type of scholarly work produced by OTD students. Evidence-based practice, as defined by Upton et al., (2014) is "the procedure whereby clinicians incorporate best research evidence, clinical expertise, and patient values to provide best patient care" (p. 24). The use of EBP in OT practice is a requirement for every degree level, per the Accreditation Council for Occupational Therapy Education (ACOTE) Standards (2018). Additionally, both AOTA's *Centennial Vision* (AOTA, 2007) and *Vision 2025* (AOTA, 2016) iterate the use of EBP as imperative to the profession's foundational values. Therefore, educational institutions are required to prepare students in a variety of ways to search for, analyze, integrate, compile, and implement EBP into scholarly work and into clinical practices. Curriculum design integrates EBP into coursework learning objectives and activities with faculty also providing an adequate learning platform for students to realistically apply EBP principles and dissemination methods.

Not only are OTD students in a supportive learning environment to develop and disseminate EBP resources, they are also required to be granted the access and resources to discover available and up-to-date EBP literature (ACOTE, 2018). Occupational therapy doctorate students have faculty mentors and supports that can further guide students on how to access EBP literature and utilize such literature in academic and clinical settings. Brown et al. (2015) argued that practitioners at the OTD level should be equipped with the skill sets of "well-honed clinical reasoning, problem-solving, interprofessional, evidence-based practice, and leadership skills" (p.2). The acquisition of these skills requires the OTD student to learn effective communication and teaching strategies so that EBP can form the foundation of their clinical reasoning,

problem-solving, and leadership skills. While EBP research is integral to the OTD students' education, the ability to disseminate this knowledge to practicing clinicians is not well-established.

Current research suggests that a gap exists between entry-level OT education and clinical practice due to various factors, including students experiencing difficulty bridging theoretical knowledge gained during their education to the procedural knowledge required in clinical situations (Smallfield & Milton, 2020). Occupational therapy students often possess the theoretical knowledge of OT practice but lack the clinical experience that allows them to create and answer clinically relevant questions which affect clinical outcomes. The ability to identify specific and answerable clinical questions and then to initiate EBP research to address those questions is the first step in EBP procedure (Straus et al., 2018). As previously described, the current OTD curriculum emphasizes the importance of understanding evidence-based literature but does not offer guidance on how students should gather, compose, and address clinically pressing questions. Collaboration among OTD students and OT practitioners may bridge this crucial gap.

Facilitating a connection between OTD students and OT practitioners may serve a two-fold purpose: 1) facilitate the development of OTD students' teaching, communication, and EBP dissemination skills, while providing them an opportunity to gain skills in asking clinically relevant questions; 2) improve access to CC resources for OT practitioners. The purpose of this paper is to describe the development and design of an exploratory educational project in which OTD students utilize clinically relevant questions identified by local OT practitioners to disseminate evidence-based literature in the form of CC in-services to clinicians as it related to their clinical practice setting.

Description

Third year entry-level OTD students at a large university were enrolled in a two-semester course entitled Seminar in Education Strategies. The focus of this course was to equip students with knowledge of various teaching methods and learning theories underlying teaching practices. One learning activity in the course targeted the design, development, and implementation of learned strategies both within the classroom and in the community. The learning activity within this course was entitled "The Community Teaching Experience" (CTE) and is the focus of the current article.

Assignment Purpose

The CTE assignment was created with the intention of affording OTD students the opportunity to gain knowledge of clinically relevant questions prevalent in OT and to apply learned theories and teaching practices while delivering a CC in-service to clinical sites that had identified a specific learning need. Students were required to present the same CC topic to two clinical sites in the community to enhance their teaching and learning skills and to maximally benefit local area OT practitioners. To ensure a multimodal approach to teaching, within each in-service students were expected to utilize visual teaching modes, such as handouts or a PowerPoint presentation, and verbal modes, such as a question and answer component in their presentation and facilitation of group discussion.

Assignment Description and Timeline (Figure 1)
One month prior to the start of this course the course faculty and Project Coordinator contacted between 80 to 100 clinical sites via email within an approximate 30-mile range of the university using Fieldwork Coordinator contact information on file. Emails to these sites contained the assignment description and asked practitioners to provide CC topics of interest to their particular setting. Clinician responses were then compiled on a spreadsheet containing the following information: contact person for the site, the name of the site, and the topic(s) of interest. While this assignment is currently in its third year of implementation within this course, only topics and data from the 2018-2019 academic year will be presented in this paper. All topics received during the 2018-2019 academic year are located in Appendix I.

Students were given access to the spreadsheet and were asked to sign-up for a topic of interest in pairs. Forty topics were identified by clinical sites with only seventeen topics selected for in-services due to the OTD class size. Each of the seventeen topics were assigned to the clinical site that originally requested the topic, though the requirement of this assignment was that each student pair present the same topic to two clinical sites. Therefore, the Project Coordinator emailed the list of topics selected by the students to the clinical sites that had not responded to the original email or whose topic was not selected by student pairs to determine if they would like any of the available topics presented at their facility during the Spring semester. Responses were taken on a first come, first serve basis so that each topic would be presented at two different sites.

Once students knew both clinical sites at which they would be presenting they began to prepare their one-hour CC presentation (see Appendix II for full assignment description). Students emailed their clinical site inquiring whether audio-visual technology would be available for use during the presentation at the site's facility, to determine the date and time of the presentation, and to ask who would be in attendance at their in-service. All clinical sites had OTs in attendance, but some additionally had speech language pathologists and physical therapists present. Students used evidence-based literature, contacted faculty/staff with expertise in the related topic, utilized knowledge already gained in their schooling, and communicated closely with the Project Coordinator to begin creating their CC presentation. Once students had a draft presentation created, they coordinated a time to present their in-service to the Project Coordinator, an occupational therapist and staff member at the affiliated university. During this draft presentation, the Project Coordinator provided students with feedback regarding EBP, clinical perspectives, and teaching methods. Students were also issued a "tip-sheet" with professionalism expectations, technology suggestions, and what to expect during question and answer times with the clinical site. Students then revised their in-service before presenting to their two clinical sites.

Each presentation was scheduled for approximately one hour, typically during the lunch hour at the clinical site. Practitioners in attendance at the in-service received one contact hour and a certificate of attendance. Upon the completion of the CTE assignment, students were required to complete a one-page reflection paper regarding their teaching experience and receive structured feedback from the peer partner.
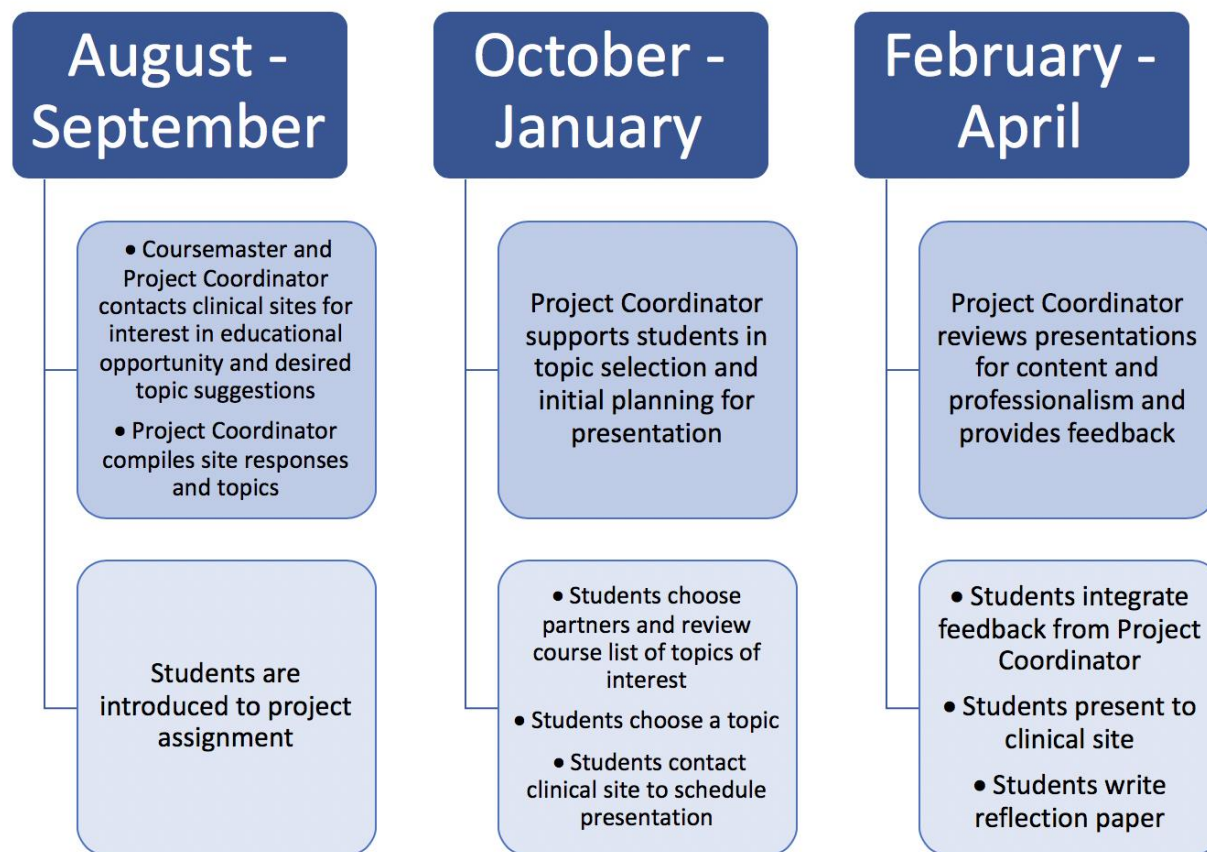
Figure 1. Assignment description overview by month.

Ethics

Institutional review board approval was not warranted for this manuscript due to the following: this manuscript is a description of the development and design of a unique teaching experience, and therefore not a research study; human subjects were not involved, as no data was collected or reported within this descriptive teaching experience, nor was private information of human subjects disclosed.

Results

After contacting between 80-100 clinical sites within an approximate 30-mile radius, 20 sites responded stating they would like to host a CTE in-service. Of these 20 sites, 19 sites were utilized. The remaining one site was not utilized due to their request to host a pediatric-related topic; unfortunately, at the time of their request all pediatric-related topics had been accounted for by other sites. Of the 19 sites that were utilized, 11 of the sites requested or agreed to host two to three different CTE in-services. Additionally, two practice in-services were provided to the OT student body at the affiliated university. In total, 33 one-hour presentations were presented to clinical sites in the local area and within the OT student body. One student pair was unable to make contact with their second site after multiple attempts, and as a solution, they were required to complete a voice-over presentation on PowerPoint and submit it to the Project Coordinator to be posted for use by faculty/staff.

Students were required to complete the CTE in-service in pairs. Sixteen of the seventeen pairs presented their presentation as a pair. One pair was unable to present at the same site together due to scheduling conflicts; therefore, each student from the pair presented to two sites independently in this situation. The remaining sixteen pairs split the 45-60-minute in-service into equal speaking parts so that both individuals had a role in presenting the material.

As part of the assignment requirements for the CTE in-service students were required to complete a one-page reflection following their in-service. The reflections were utilized by the course faculty to make improvements to the assignment description and were not intended for qualitative analysis for the purpose of this manuscript; however, general themes were identified within these reflections and are listed below.

- Students found the clinicians to be highly receptive to their in-service by posing thoughtful questions and engaging in discussion. One example of this positive site reception was that one student group was asked to return to the same site to present to a larger body of people, including parents and teachers.
- Some students expressed discomfort in presenting to experienced clinicians within a specific field.
- Many of the students reflected that this was a positive learning experience and a valuable component of the course, especially in terms of being exposed to a clinically relevant question and subsequently being required to synthesize evidence for clinical application in the form of an in-service.

As previously mentioned, the CTE is currently in its third year of implementation. The focus of this article is the second year of implementation, namely the 2018-2019 academic year. The third year of implementation, the 2019-2020 academic year, is currently underway at the time of the writing of this article. Thus far, eight out of nineteen sites from the 2018-2019 academic year have requested to host CTE in-services again. Additionally, eight new sites have confirmed their desire to host CTE in-services, indicating a positive reception from old sites and an eagerness of new sites to hear evidence-based CC in-services from OTD students.

Discussion

The purpose of this paper is to describe the development and design of an exploratory educational project in which entry-level OTD students utilized clinically relevant questions identified by local OT practitioners to disseminate evidence-based literature in the form of CC in-services to clinicians as it related to their clinical practice setting. Since there is a need within entry-level OT curriculum to facilitate student success and clinical practice, the methodology and results of this project may be particularly beneficial for other OT educators seeking to create a unique learning experience for their students by increasing student and clinician collaboration in an effort to bridge the gap between current OT curriculum and entry level clinical expectations (Smallfield & Milton, 2020).

To current knowledge, there are no other studies describing the development and benefits of connecting OT practitioners with OT students for CC courses; therefore, it may be beneficial for other educators seeking to create a similar learning experience to implement several considerations that facilitated a positive experience for OT educators, student learning, and for OT practitioners.

Considerations for Occupational Therapy Educators
As this project was only one component of a doctoral course, a Project Coordinator was used to increase the feasibility of successful implementation and student learning. The Project Coordinator was essential to assist with compilation of site responses and topic interests, provide students with presentation feedback, and general oversight of the entire project. In order to develop a list of interested sites, OT educators may want to consider utilizing their fieldwork database. This was a significant time-saving benefit for the course faculty and Project Coordinator, as contact information was already established. Additionally, students completed this project in pairs for increased collaborative learning and so that each student had the opportunity to have a significant speaking role during the in-service.

Considerations for Occupational Therapy Student Learning
Another strength of this project was that students were allowed to pick from the list of clinician-driven topics. This not only increased students' skills in seeking evidence-based literature but allowed students to gain a deeper understanding of a particular area of practice that aligns with personal interests. Additionally, students were required to leave time for question and answer portions or active learning activities in their presentation; this collectively facilitated group discussions between students and practitioners that allowed students to build their professional skills while learning from practitioners' experiences. Current research supports this notion that learning is enhanced through collaborative processes, active engagement, and active learning (Lumpkin et al., 2015).

Considerations for Occupational Therapy Practitioners
Many OT practitioners have identified an interest in implementing evidence-based literature within their clinical practice but lack the skills to examine and evaluate evidence-based practice (Bennett et al., 2003; Dysart & Tomlin, 2002). Moyers (2009) additionally identified that knowledge may be easily accessible, but it can be difficult to isolate clinically pertinent findings with the ever-expanding accessible literature, and it can be even more difficult to translate this knowledge into clinical application. To address these potential problems, several considerations were made to facilitate a positive experience with the facilities. The majority of facilities identified and selected their desired topic pertinent to their clinical practice; thereby increasing practitioners' motivation to attend and allowing practitioners to receive updated, evidence-based literature that was pertinent and focused to their clinical practice. Additionally, students presented within a 30-mile radius of the university's campus, allowing practitioners to receive the presentation in a face-to-face format. Practitioners also received a contact hour for attending the seminar at no cost.

Limitations

While this innovative learning project provided a promising opportunity for CC requirements for OT practitioners and for OTD student learning needs, challenges did arise in the process of initiating and implementing this assignment. We have separated these challenges into two different categories: challenges to clinical sites, and challenges for students.

Challenges to Clinical Sites

Student pairs were required to present their CC in-service to two different clinical sites. Typically, one of the sites was the original creator of the topic and the second site picked the topic from a list of remaining topics available. This created a challenge for some sites who wanted students to present and picked a topic from the ones available that was not completely applicable to their site. An example of this occurred when a hand therapy site requested the topic of "Positive / negative evidence of surgical outcomes for tendon repair with complete anesthesia vs WALANT (awake) procedures." The secondary site was a hospital serving adult/older adult acute patients. While all therapists within the hand therapy site were familiar with this topic, few to none of the therapists at the secondary site were familiar with the topic or had patient caseloads in which the topic would apply. The logistical challenge of students being required to present to two sites could simply be negated by only requiring one presentation to the site that originally requested the topic.

Some clinical sites had a very limited time window in which they could allow students to present to their facility due to the nature of their setting. Research has strongly indicated that OT practitioners are faced with high productivity demands, high caseloads, and difficulty balancing work demands (Gupta et al., 2012). When agreeing to have OTD students present to their facility, all sites consented to a 45-60-minute presentation; however, due to the aforementioned constrictions, some sites had to condense the students' presentations to less than 30 minutes. These sites may not have experienced the richness of the presentation paired with group discussion within this brief timeframe.

As described in the considerations for OT educators, a fieldwork database that listed either site managers or site fieldwork instructors was used when sending out the original email to gauge facility interest in hosting OTD presentations. Although this was beneficial for ease of developing a list of potentially interested sites, frequently managers or fieldwork instructors were the respondent of the email. This presented a challenge, as all practitioners within the facility may not have been consulted on appropriate or applicable topic ideas.

Challenges for Students

In reaching out by email to the fieldwork coordinators in local clinical sites within our fieldwork database, we were unable to ensure an equal response rate among practice settings or different populations or that the topics were chosen by the team of practitioners at the site. This limited the students' ability to ensure they chose a topic within their interest or preferred practice setting. For example, pediatric sites were under-represented.

As previously described, students were required to present to two clinical sites. Occasionally, the two sites were very different in the populations they served, which required the students to greatly modify their presentations to meet the needs of both sites. An example of this occurred when an adult/older adult hospital serving acute patients created the topic "Pharmacology for therapists (especially opioids)," and the second site to choose this topic after being given a list of available topics was a children's hospital. The students had to make significant changes to their presentation to make their presentation applicable for both sites. This created a challenge to the students in terms of locating population-specific research for this topic, utilizing different faculty/staff resources to understand the impact of this topic on two different populations, and increased time required of this group, compared to others, to create appropriate presentations for each setting.

Occasionally clinical sites provided a topic that was vague, beyond the scope of OT, or too specific to be applied to multiple settings. Gupta et al. (2012) documented that clinicians are faced with requests to work outside of their scope of practice, which contributes to the many challenges already encountered by OT practitioners. An example of this occurred when a site asked students to locate nephrologist recommendations and general medical treatment for patients with chronic kidney disease, which the students deemed outside of their scope of practice and not easily accessible information within the literature.

An additional challenge that arose while students were in the process of preparing or seeking clarification on their presentations was difficulty with timely communication to sites. Due to the busy nature of many clinical sites, some students sent multiple emails or made phone calls to the site to gain a response. Delayed or sparse communication with clinical sites presented a challenge to students trying to confirm their presentation time and date or receive responses pertinent to their presentation, like audio-visual technology availability at the site or clarification on the topic.

Future Directions

This paper aimed to describe an educational approach to disseminate EBP literature to OT practitioners but did not qualitatively or quantitatively examine the effectiveness of this learning project for practitioners or OTD students. One study demonstrated that an OTD student-led CC in-service is capable of increasing practitioners' short-term knowledge of a particular topic (Ulfers & Berg, 2019); however, the present project did not assess clinician knowledge either pre or post CC in-service. Therefore, a future study may examine the effectiveness of this educational experience quantitatively by including a pre and post impact measure of clinician knowledge of the topic presented by students and qualitatively gauge the level of satisfaction experienced by the practitioners throughout the process of planning, implementing, and engaging with the OTD student-led in-services. While this type of future project would seek to better understand the clinician viewpoint and learning outcomes from a CC in-service presented by an OTD student, a different future project could be directed at examining the effectiveness of the learning experience of the OTD student through the use of this assignment. Occupational therapy doctorate students have a valuable voice in helping

educators understand the benefits and areas of improvement for current or ongoing assignments as they relate to student learning needs. Additionally, the longitudinal effectiveness of planning, implementing, and delivering a CC in-service as an OTD student in preparation for clinical training and experience could be considered.

The need for these types of future works is pertinent to OT educational research. Currently, there is a paucity of literature that examines the effectiveness of a collaboration between OT students and clinicians, especially as they relate to CC needs of the clinician. Future research in this area should focus on exploring the effectiveness via quantitative and qualitative data collection on behalf of the OT clinician and OTD student.

Conclusion

This paper described the development and design of an exploratory project in which entry-level OTD students disseminated evidence-based literature in the form of a CC in-service to local OT practitioners. The description of this project is beneficial for OT educators seeking to integrate a unique learning experience for OT students into their curriculum that meets ACOTE standards, while creating an experience that benefits local practitioners. Direct implications of the CTE project implementation can be summarized as follows:

- OTD students were given the opportunity to expand their critical appraisal and communication skills by researching clinically relevant questions and presenting their findings to local clinicians.
- OTD students were able to integrate and synthesize EBP to present to clinicians and to utilize the teaching and learning process for future clinical practice.
- Clinicians were given access, information, and resources on desired current EBP specific to their area of expertise and to the area in which they currently practice.
- Clinicians were able to receive direct answers for pertinent clinical questions.
- Clinicians and OTD students were able to engage in discussion and dialogue during the CC in-service; thus, increasing the collaboration between OTD students and local OT practitioners.

Prior to the implementation of this project, several considerations were made to contribute to the success of this project for OT educators, occupational therapy students, as well as the OTs attending the CC seminars. To holistically facilitate the benefit to the OT field, it is essential that OT educators consider various learning opportunities that prepare students for developing the skills to implement EBP in future clinical practice, as well as disseminating clinically desired and relevant content to practitioners outside of the classroom.

References

Accreditation Council for Occupational Therapy Education [ACOTE®] (2018). Standards and Interpretive Guide (effective July 31, 2020). *American Journal of Occupational Therapy, 7*2(Suppl. 2). https://doi.org/10.5014/ajot.2018.72S217

American Occupational Therapy Association. (2007). AOTA's centennial vision and executive summary. *American Journal of Occupational Therapy*, *61*(6), 613–614. https://doi.org/10.5014/ajot.61.6.613

American Occupational Therapy Association. (2015). Occupational therapy code of ethics (2015). *American Journal of Occupational Therapy, 69* (Suppl. 3), 6913410030. http://dx.doi.org/10.5014/ajot.2015.696S03

American Occupational Therapy Association. (2016). *AOTA unveils vision 2025*. https://www.aota.org/AboutAOTA/%20vision-2025.aspx

American Occupational Therapy Association. (2019). *Occupational therapy profession--continuing competence requirements.* https://www.aota.org/~/media/Corporate/Files/Advocacy/Licensure/StateRegs/ContComp/Continuing-Competence-Chart-Summary.pdf

Bennett, S., Tooth, L., McKenna, K., Rodger, S., Strong, J., Ziviani, J., Mickan, S., & Gibson, L. (2003). Perceptions of evidence-based practice: A survey of Australian occupational therapists. *Australian Occupational Therapy Journal*, *50*(1), 13-22. https://doi.org/10.1046/j.1440-1630.2003.00341.x

Brown, T., Crabtree, J. L., Mu, K., & Wells, J. (2015). The next paradigm shift in occupational therapy education: The move to the entry-level clinical doctorate. *American Journal of Occupational Therapy*, *69*(Suppl. 2), 6912360020p1-6912360020p6. https://doi.org/10.5014/ajot.2015.016527

Dysart, A. M., & Tomlin, G. S. (2002). Factors related to evidence-based practice among US occupational therapy clinicians. *American Journal of Occupational Therapy*, *56*(3), 275-284. https://doi.org/10.5014/ajot.56.3.275

Gupta, S., Paterson, M. L., Lysaght, R. M., & Von Zweck, C. M. (2012). Experiences of burnout and coping strategies utilized by occupational therapists. *Canadian Journal of Occupational Therapy*, *79*(2), 86-95. https://doi.org/10.2182/cjot.2012.79.2.4

Lumpkin, A., Achen, R. M., & Dodd, R. K. (2015). Student perceptions of active learning. *College Student Journal, 49*(1), 121-133.

Moyers, P. (2009). Occupational therapy practitioners: Competence and professional development. In H.S. Willard, E.B. Crepeau, C.S. Spackman, E.S. Cohn, & B.A. Schell (Eds.), *Willard & Spackman's occupational therapy* (11 ed., pp. 240-251). Wolters Kluwer Health/Lippincott Williams & Wilkins.

Penz, K., D'Arcy, C., Stewart, N., Kosteniuk, J., Morgan, D., & Smith, B. (2007). Barriers to participation in continuing education activities among rural and remote nurses. *Journal of Continuing Education in Nursing*, *38*(2), 58-66. https://doi.org/10.3928/00220124-20070301-03

Samuelsson, K., & Wressle, E. (2015). Turning evidence into practice: Barriers to research use among occupational therapists. *British Journal of Occupational Therapy*, *78*(3), 175-181. https://doi.org/10.1177/0308022615569511

Schweitzer, D. J., & Krassa, T. J. (2010). Deterrents to nurses' participation in continuing professional development: An integrative literature review. *Journal of Continuing Education in Nursing*, *41*(10), 441-447. https://doi.org/10.3928/00220124-20100601-05

Smallfield, S., & Milton, L.E. (2020). Bridging the gap between entry-level education and the demands of clinical practice. In S.D. Taff, L.C. Grajo, & B.R. Hooper (Eds.), *Perspectives in occupational therapy education: Past, present, and future* (pp. 55-62). SLACK Incorporated.

Straus, S. E., Glasziou, P., Richardson, W. S., & Haynes, R. B. (2018). *Evidence-based medicine e-book: How to practice and teach EBM.* Elsevier Health Sciences.

Ulfers, S. S., & Berg, C. (2017). Occupational therapists with oncology exposure: Perceived needs on adults and older adults with cancer-related cognitive impairments. *OTJR: Occupation, Participation and Health*, *37*(3), 149-154. https://doi.org/10.1177%2F1539449217698105

Ulfers, S. S., & Berg, C. (2019). The development of a cancer-related cognitive impairments seminar for occupational therapy practitioners. *Journal of Occupational Therapy Education, 3*(2). https://doi.org/10.26681/jote.2019.030207

Upton, D., Stephens, D., Williams, B., & Scurlock-Evans, L. (2014). Occupational therapists' attitudes, knowledge, and implementation of evidence-based practice: A systematic review of published research. *British Journal of Occupational Therapy*, *77*(1), 24-38. https://doi.org/10.4276/030802214X13887685335544

APPENDIX I

Topic List 2018-2019 Academic School Year

Topics
1. Common visual impairments as a result of CVA/BI and screening tools for acute care setting. *
2. Management of psych/mental illness, substance abuse, anxiety as a comorbidity to physical diagnosis. *
3. Various ADL/IADL assessments, compare and contrast for outpatient clinic settings.
4. Any evidence on correlation of coordination assessments and ability to complete ADL/IADLs safely in a home environment.
5. Evidence for early splinting post CVA/SCI/TBI in management of tone related issues.
6. Positive / negative evidence of surgical outcomes for tendon repair with complete anesthesia vs walant (awake) procedures. *
7. Effects of technology/screen time for young children's brain development. *
8. Acute care: COPD/CHF/pulmonary population (also address compliance issues and posture) *
9. Acute care: Orthopedic population, address Comprehensive Joint Replacement (CJR) bundled payment implications.
10. Acute care: Cardiac population interventions.
11. Acute care treatment for Radial Nerve Palsy.
12. Occupational Therapy Role in fall prevention in the hospital environment. *
13. Occupational Therapy role in lessening length of hospital stay.
14. Kidney function affecting cognition and/or ADL performance. *
15. Pharmacology for therapists (especially opioids). *
16. Geriatric strengthening /exercise best practices and therapeutic lab values (when and when not to exercise/work with a patient). *
17. How does shoulder pain affect progress with stroke recovery? Effective management of shoulder pain in stroke patients?
18. Functional questionnaires that can be utilized to show progress with ADLs/cognition in the outpatient stroke/head injury population.
19. What are the most effective behavior modification techniques to utilize with the pediatric population? *
20. What would be a specific hierarchy or protocol utilized with food chaining in pediatrics? *
21. What are the most effective strategies for sensory re-education with the stroke population?
22. Should alternative transportation education be part of the OT training in outpatient? How would we establish a safe outing/trial with a patient?
23. Within the outpatient OT area, does Medicare allow community outings as a paid service? What would be acceptable training in that area (low vision, cognitive training, mobility issues, etc.)?

24.	Neonatal Abstinence Syndrome, best practices (non-pharmacological) to decrease length of stay. *
25.	A Galileo therapy system and plate and whole-body vibration.
26.	Patient guides for persons with arthritis, information on self-management: the use of heat, resting affected joints during flares (with splints or activity modifications), and how to protect their joints with the use of household objects and technology devices. *
27.	Peripheral nerve injury and the proper ergonomics when using electronic devices, desktop computer ergonomics, laptops, cell phones, iPads, etc., avoid prolonged flexion postures at the elbow or wrist and avoid peripheral nerve irritation, joint pain, postural issues or tendinitis. *
28.	Pediatrics: shoulder and hand strengthening for countering the use of technology. Choose any age group: (toddler (3-5 yrs), child (6-10 yr), and adolescent (10 yr to 18yr).
29.	Pediatrics: adolescents and posture: proper strengthening techniques to counter the use of technology. *
30.	Evidence based interventions for medication management.
31.	Evidence based interventions for BI with low arousal.
32.	Intervention ideas for those with vascular dementia.
33.	What are the functional outcomes of patients following warm water vs. cold water near drowning incidents? Are there any trends in outcomes of individuals with near drownings that occurred in chemically treated water vs. salt water vs. freshwater?
34.	What are the therapeutic benefits of prism glasses in various stages of recovery with patients with a brain injury? Or Does evidence exist to support the use of prism glasses in treatment of patients with a brain injury? *
35.	For clients with hemiparesis, what are the difference in outcomes for treatment programs focused on GM skills vs. FM skills?
36.	Aphasia, (for example) different types, how to best communicate with clients with these conditions.
37.	Parkinson's Disease. *
38.	Cardiac patients and cognitive concerns (for example: evidence about incidence, suggestions on how to best interact with these patients in terms of education).
39.	Rehabilitation of the UE after stroke.
40.	Trauma informed care, how to incorporate some of these principles with an OT lens in our everyday practice.

*Items denoted with an asterisk indicate topics that were presented at clinical sites.

APPENDIX II

Assignment Description, as Listed on Course Syllabus

Community Teaching Experience

The Project Coordinator will oversee this assignment and will attend class on *(insert date)* to describe the assignment and answer questions.

Clinical sites within the St. Louis region have provided a list of topics they would like more information on via a 45-60 minute in-service. For this assignment you will work in teams of two (you can select your partner) to present the in-service to the clinical site during *(insert date)*.

1. The first step is to select your partner and topic. See the Google Doc link on Canvas for the list of topics and the contact information for the sites. Please sign up on this list by *(insert date)*. You will then email your sites' contact asking for their availability on dates and times when you can present your in-service. CC the Project Coordinator on this initial communication. See email template below after the assignment description.

2. Identify parameter of topic and write learner objectives using Bloom's taxonomy (include learner objectives related to knowledge, skills, and attitudes).

3. Prepare your in-service for the clinical sites:
    a. Email the Project Coordinator by *(insert date)* to set up a meeting in which you will present your topic to him/her and receive feedback prior to presenting to your site.
    b. Determine faculty/staff that can assist with and contribute to your knowledge of the topic. Email or meet with faculty as needed to enhance your knowledge in preparation for your in-service.
    c. Create a slide presentation of your topic (Powerpoint, Prezi, etc.). Presentations should be professional quality, include graphics/visuals/charts, and have animations as needed. Tips to consider:
        - assess learner's needs initially in as feasible, effective manner as possible
        - come prepared with a relevant question to get a feel for who is in the audience (you might have more than OTs in the audience. Speech and PT are common audience members)
        - prepare questions to facilitate audience engagement (allow time for audience discussion and interaction)
        - find evidence to support content
        - have a back-up plan for presentation if the technology isn't available
    d. Create a handout to distribute to audience members. The handout can be geared toward clinicians or can be in the form of a patient handout.

Evaluate your skills using the microteach checklist and contrast with peer observer feedback. In your portfolio: one-page reflection log on how your community teaching experience went.