

Zooming in on Interprofessional Practice Opportunities through Experiences in Service-Learning

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BACKGROUND

To prepare students to enter the occupational therapy (OT) and speech-language pathology (SLP) workforce, service-learning courses offered in graduate program curricula provide students with opportunities to engage with clientele in various settings and contexts. Ohio State's occupational therapy doctorate curriculum introduces students to the skills needed to deliver evidence-based, client-centered care to patients with diverse health and sociodemographic backgrounds. Through a partnership with the OSU Aphasia Initiative, OT students have the opportunity to learn about acquired neurogenic communication disorders through collaborations with faculty and students in speech-language pathology while also developing and implementing client-centered treatment programs.

Due to the COVID-19 crisis, OT and SLP programs have found themselves abruptly shifting to online learning and telehealth service delivery models for clinic practice. The shift to telehealth services brings opportunities to reach clients despite stay-at-home mandates but also brings challenges due to the novelty of telehealth service delivery. Telehealth in the occupational therapy and speech-language professions has been burgeoning, yet recommendations for how to effectively implement services through telehealth have yet to be established. As a result, occupational therapy and speech-language students may feel ill-prepared when attempting to implement services to patients through telehealth platforms, impacting the quality of care provided.

PURPOSE

The purpose of this project is to outline a framework for developing an online interprofessional service-learning experience and to examine occupational therapy and speech-language student's confidence for delivering telehealth services to adults with cognitive-communication disorders.

DEVELOPING the ONLINE IP SERVICE-LEARNING EXPERIENCE

Procedures	Pre-COVID	Post-COVID
Identify Faculty Partners	Alli Williams, OTD, OTR/L Lori DeMott, OTD, OTR/L, CHT Lisa Juckett, PhD, OTR/L Jennifer Brello, CCC-SLP	Unchanged
Outline Course Objectives	Apply classroom and fieldwork learning experiences to the clinic setting with clients who present with impairments that limit occupational engagement.	Exposes students to the emerging practice areas of community health services, collaborative care, and interprofessional relationships
Secure Community Partner	OSU Aphasia Initiative, Dept of Speech & Hearing Science Group treatment program for adults with Cognitive Communication disabilities. Client with communication disability ranging from severe-mild.	Unchanged
Provide Orientation and Training	Orientation/training sessions conducted collaboratively by OT & SLP faculty, LPAA, Supported Communication Articles, resources, training videos provided on learning management platform. Support during sessions provided by faculty. Group debrief at the end of each session.	Utilization of Telehealth Platform
Identify Treatment Objectives	Development of home exercise program.	unchanged
Organize Student-Client Teams	OT/SLP-client groups identified. Teams meet on same day, time, same space. 5-week rotation	Teams meet on zoom in breakout rooms. Faculty mentors rotate in and out of rooms, utilize chat and texting to provide in-session support.
Provide Mechanism for Information Sharing, Feedback, and Support	OT develops tx plan, daily activities. SLP provides communication support, helps prepare visual aids, acts as communication facilitator during session. OT/SLP Students collaborate pre/post session, email, phone.	All collaboration occurs on zoom, email, phone, and Carmen.

Table 1: Pre-Post COVID operating Procedures



Figure 1: Training in LPAA and Supported Communication Strategies is provided at the beginning of each semester.



Figure 2 & 3: Zoom Team Sessions



They are doing awesome! I decided to turn off all cameras except for the one giving instruction. Working like a charm!

Reducing distractions and simplifying instructions for the win 🏆👏

MODIFICATION of the SCQ

The Student Confidence Questionnaire (SCQ) was originally developed to assess OT students' self-efficacy towards developing practical skills during their fieldwork rotations. Given the similarities between fieldwork experiences and service learning, the SCQ was modified to examine OT and SLP students' confidence implementing telehealth services to clients with communication disorders. The modified SCQ was an 18-item instrument that assessed three main constructs:

- Communication
- Adaptability
- Innovation

OT and SLP students completed the baseline SCQ at the start of Service Learning and completed the follow-up SCQ once Service Learning concluded (post 10-weeks)

Please rate the following statements based on your level of confidence implementing

Communication: I am confident that I can...
1. Interact with clients through telehealth
2. Communicate assertively with team members through telehealth
3. Develop goals with a client through telehealth
4. Explain the role of OT to clients/families through telehealth
5. Prepare effective written reports to document telehealth services
6. Prepare and deliver effective verbal presentations through telehealth
7. Handle disagreements that may arise in the telehealth setting
8. Collaborate with other students/instructors through telehealth
Adaptability: I am confident that I can...
9. Adjust to a new telehealth setting
10. Use different assessments through telehealth
11. Use different interventions through telehealth
12. Re-organize my telehealth session when there are unexpected changes
13. Handle challenges presented in my telehealth session
Innovation: "I am confident that I can..."
14. Use my own ideas in my delivery of telehealth services
15. Use problem-solving techniques in telehealth
16. Take opportunities to use initiative in telehealth
17. Make suggestions to my instructor in the telehealth setting
18. Seek out information from appropriate telehealth resources

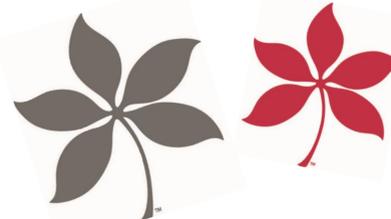
Figure 4: Student Confidence Questionnaire (Derdall, 2002) was adapted for telehealth

RESULTS

A total of 24 students completed the baseline SCQ and 20 students completed the follow-up SCQ. The average SCQ score at baseline was 60.04 (SD = 7.84) and 74.95 (SD = 6.41) at follow-up. Given that student baseline scores could not be matched to follow-up scores, one-sample t-tests were used to examine changes in confidence levels before and after the Service Learning experience. Findings indicated that Service Learning improved student confidence ($t = 10.40, p < .001$), producing a very large effect size (Cohen's $d = 2.33$).



Figure 5: Avg baseline and follow-up SCQ scores



STUDENT REFLECTIONS

Pre-Survey

"I'm nervous about telehealth and worried that it will make communication more difficult for people with aphasia."

"It is daunting."

"I am excited to get started and see how it will go!"

"I am nervous about effectively communicating through telehealth."

"I have not worked with individuals with aphasia; therefore, this will be a good learning experience."

Post-Survey

"Nicole, an MA-SLP student, helped us implement our treatment plans through providing tips as to how to best communicate with our client, such as using a PowerPoint and pictures when demonstrating each exercise. If our client was unable to understand what a direction was, Nicole was quick to jump in and explain what we were trying to say in a way that was easier for the client to understand. Having the presence and knowledge of an SLP allowed us to break down the communication barrier—each client became fully aware of what to do and how to do it. Understandably, this leads to improved patient outcomes because their home exercise program (HEP) was understood and could now be followed."

"I learned so much about how aphasia is so different from person to person. It affects everyone differently emotionally and physically. I also learned so much about using different ways to communicate like whiteboards, Alternative and Augmentative Communication Devices, and writing. Everyone that goes has adapted so much and showed me how I can adapt to communicate and in other aspects of my life, too."

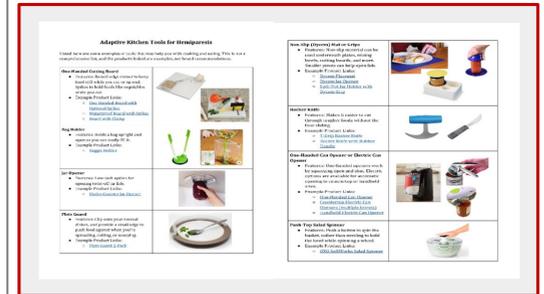


Figure 6: Aphasia Friendly resources developed by OT-SLP Team.

CONCLUSIONS

Results of this project indicate that online interprofessional service-learning experiences may be an effective teaching tool that increases student confidence in the development and implementation of practical skills in occupational therapy and speech-language pathology.

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REFERENCES

- Derdall, M., Olson, P., Janzen, W., & Warren, S. (2002). Development of a questionnaire to examine confidence of occupational therapy students during fieldwork experiences. *Canadian Journal of Occupational Therapy*, 69(1), 49–56.
- Gat, S., & Ratzon, N. Z. (2014). Comparison of Occupational Therapy Students' Perceived Skills After Traditional and Nontraditional Fieldwork. *American Journal of Occupational Therapy*, 68(2), e47–e54. <https://doi.org/10.5014/ajot.2014.007732>
- Grenier, M.-L. (2015). Facilitators and Barriers to Learning in Occupational Therapy Fieldwork Education: Student Perspectives. *American Journal of Occupational Therapy*, 69(Journal Article), 1–9. <https://doi.org/10.5014/ajot.2015.015180>
- Perlman, C., Weston, C., & Gisel, E. (2005). A web-based tutorial to enhance student learning of activity analysis. *Can.J.Occup.Ther.*, 72(3), 153–163.
- Schreiber, J. L., & Goreczny, A. (2013). Instructional Insight into Interprofessional Education (IPE). *Occupational Therapy in Health Care*, 27(2), 180–185. <https://doi.org/10.3109/07380577.2013.778443>

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