//CYSIS, Aug. 2018, 1 figure, 0 tables, 2201 wds., 10 pgs.

**Implementing Contextually Based Services: Where Do We Begin?**

Francine M. Seruya, PhD, OTR/L; and Mindy Garfinkel, OTD, OTR/L, ATP

School-based intervention is most effective when it is contextually based and integrated within the student’s natural settings (Handley-More et al., 2013; Polichino & Jackson, 2014). When practitioners implement service delivery models that are integrated and contextually based in the natural and least restrictive environment (LRE), they support legislative mandates (Individuals with Disabilities Education Improvement Act [IDEA], 2004) and guidelines for best practice (American Occupational Therapy Association [AOTA], 2014; Handley-More et al., 2013). Providing services within natural settings allows for increased collaboration with other team members, thereby facilitating child-centered, occupation-based evaluation and intervention (Handley-More et al., 2013; Polichino & Jackson, 2014).

Providing services within the environment where a student is expected to perform also increases the likelihood that learned skills will be generalized (O’Brien & Lewin, 2008; Watt & Gage Richards, 2016). To support generalization, practitioners must consider all environmental contexts a student encounters in a typical day. Occupations within the school setting encompass not only academic tasks, but also the social aspects. Students must be able to interact with peers in various settings such as the lunch room and the bus (AOTA, 2017).

Despite legal mandates for service delivery in the LRE (IDEA), and evidence demonstrating the benefits of contextually based practice, many occupational therapy practitioners continue to provide services outside the classroom or other natural settings (Seruya & Garfinkel, 2018). These practitioners typically create schedules based on frequencies and group size indicated in the Individualized Education Plan (IEP) that are provided primarily in separate settings (Rodrigues & Seruya, 2017; Spencer et al., 2006).

Practitioners report time constraints, lack of administrative support, and high caseloads as barriers to implementing contextually based practice (Gardner & Lisbona, 2014; Garfinkel & Seruya, 2018). However, providing contextually based services may allow practitioners to reframe a caseload model of service delivery to a workload model (Garfinkel & Seruya, 2017). Practitioners can model modifications, accommodations, and interventions to facilitate carry over by classroom staff (Silverman, 2011). Additionally by learning the classroom curriculum and routines, practitioners can develop more effective interventions (Bazyk & Cahill, 2014) in the LRE.

The ability to develop an integrated service delivery model depends in part on effective collaboration and planning between teachers and practitioners (Casillas, 2010). Studies exploring collaboration have indicated teachers would like practitioners to engage in reciprocal and planned communication to facilitate sharing ideas and better understanding the students through shared points of view (Casillas, 2010; Seruya et al., 2015, 2016). Integrated services allow teachers to directly observe interventions, thus increasing their understanding of the occupational therapy scope of practice and helping them to more readily implement practitioners’ suggestions (Casillas, 2010; Seruya et al., 2015).

The Contextually Based and Integrated Service (CBIS) Model was developed by us (the authors) to create a systematic means to effectively collaborate and implement services in students’ natural, least restrictive settings. It offers practical steps for practitioners to consider when providing contextually based services (see Figure 1).

**Figure 1.** The Contextually Based and Integrated Service Model

Feedback

Information Exchange

Explore Context

Problem Solving & Planning

* Establish relationships of mutual respect.
* Be an active listener and engage, striving to understand team members’ perspectives.
* Use clear, concise, jargon-free language to provide a clear understanding of the student’s strengths, challenges, and occupational expectations.
* Understand how the context influences occupational performance.
* Conduct multiple meetings and sessions across contexts to appreciate the needs of the student in various settings.
* Provide intervention(s) within the context where difficulties are occurring.
* Intentionally plan integrated interventions that are least intrusive, yet supportive.
* Assure the needs of the student, environment, and task and/or occupation are met through collaborative, creative problem solving.
* Schedule time to discuss the planned, integrated intervention.
* Problem solve to address issues that both positively and negatively affect performance and outcomes.
* Consider how to make the interventions more effective.

**Case Example: Craig**

Craig is an occupational therapist (OT) in an elementary school who wants to provide contextually based services, but he doesn’t know where to begin. He uses the CBIS Model to get started.

*Information Exchange:* Craig scheduled a time to collaborate with Ms. Lewis, a teacher, working with a student that Craig has been working with for the past 4 weeks. Daniel is a third-grader with dyslexia and developmental coordination disorder. Craig told Ms. Lewis that Daniel’s occupational therapy evaluation showed Daniel has difficulty visually following a line of print; Craig had been using a colored index card during his occupational therapy sessions to helpDaniel follow along in a book. Craig added he has been highlighting spaces on worksheets to help Daniel adjust the size and spacing of his responses, another area identified through the evaluation to be challenging for Daniel. Craig indicated that Daniel was independent using these strategies when he comes to the occupational therapy room, and asked Ms. Lewis if Daniel had been using these strategies in class. Ms. Lewis reported he was not. Clearly, Daniel was not generalizing the skills acquired outside of the classroom, into his natural environment.

*Explore Context*: Craig used the Person–Environment–Occupation Model (Law et al., 1996) to guide his practice. He observed Daniel several times in the classroom and computer lab, noting behavior and function skills. When the teacher asked for volunteers to read, Daniel avoided eye contact. He would not allow anyone to see his written work. Daniel did not use the strategies he had been taught in the therapy room. In the computer lab, Daniel was able to use a mouse effectively; however, he typed very slowly, with multiple errors.

*Problem Solve and Plan:* Craig shared his observations with Ms. Lewis, and suggested he begin working with Daniel in the classroom to help with skill generalization, addressing challenges Daniel faced when they occurred naturally. Ms. Lewis was worried that Craig’s presence might distract the other students. Craig understood her concern; however, he indicated that he would also be able to collaborate with her to help other students with challenges while in the classroom. Ms. Lewis liked the idea, and Craig rearranged his schedule.

*Ongoing Feedback:* At the next meeting, they discussed feedback on the integrated service delivery model. Craig reported he had learned a lot about the pace of instruction and demands of the curriculum in the classroom. As a result, he decided to introduce text-to-speech and speech-to-text software in the computer lab; this was also installed on a laptop for Daniel’s use in the classroom. Ms. Lewis said Daniel was more available for learning, and he liked using the technology in the classroom. Several other students started using it as well.

Ms. Lewis reported that not only had Craig offered solutions to help Daniel access the curriculum, but she was able to collaborate with Daniel in “real time” while he was in the classroom.

**Case Example: Allison**

Allison is an OT working in a Life Skills Program in a high school. She wanted to implement the CBIS Model but was challenged by scheduling and teacher apprehension.

*Information Exchange:* Allison approached Barbara, the Life Skills Program teacher, and shared her idea to implement a CBIS delivery model. Barbara stated she was uncertain what that would look like and how it would benefit the students on Allison’s caseload. She also wasn’t sure how this approach would meet the IEP service mandates. Barbara thought Allison would distract the other children. Allison explained she would still provide occupational therapy services but she would do so by working with Barbara in class to facilitate learning, while working toward attaining mutual IEP goals. Allison discussed ways to develop lesson plans collaboratively and augment lessons to incorporate both of their areas of professional expertise.

*Explore Context:* Allison came to class and observed the Job Skills Block. She used the *Occupational Therapy Practice Framework: Domain and Process* (3rd ed.; *Framework*; AOTA, 2014) to guide her observations, particularly contexts and performance skills. Allison noted that while Barbara was teaching, many of the students lost their place, needed more assistance, and raised their hand to ask questions, which distracted Barbara from the lesson. Allison used activity analysis to notice places in the lesson where accommodations could be provided, such as breaking skills into smaller components and using visuals.

*Problem Solve and Plan:* After the lesson, Allison shared her observations with Barbara. She suggested providing a visual schedule of the lesson to help students stay on track, additional visual aids for the sorting task Barbara had demonstrated, and ways to break the task into smaller components. Barbara liked the ideas and was willing to try them during the next class. They agreed to collaborate to plan the next lesson and to take turns providing class instruction and individual support.

*Ongoing Feedback:* After the lesson, Barbara shared that she was surprised the students were not distracted by Allison, and that they benefited from her suggestions. Barbara appreciated Allison’s willingness to both lead and provide individual student support. Barbara confirmed her interest in continuing to work with Allison during the Job Skills Block and invited her to collaborate on the lesson plan for the Cooking Block.

**Conclusion**

While simplified, these case examples explored the ability to implement contextually based, integrated services in a school setting where this model does not already exist. Combining occupation-based models, the *Framework*, activity analysis, and the CBIS Model, has led to positive outcomes for students and teachers. Providing contextualized services allows practitioners to work with students in their natural settings to successfully complete the occupational tasks inherent throughout the school day.

**References**

American Occupational Therapy Association. (2014). Occupational therapy practice framework: Domain and process (3rd ed.). *American Journal of Occupational Therapy, 68*(Suppl. 1)*,* S1–S48. https://doi.org/10.5014/ajot.2014.682006

American Occupational Therapy Association. (2017). Guidelines for occupational therapy services in early intervention and schools. *American Journal of Occupational Therapy, 71*(Suppl. 2), 7112410010p1–7112410010p10. <https://doi.org/10.5014/ajot.2017.716S01>

Bazyk, S., & Cahill, S. (2014). School-based occupational therapy. In J. Case-Smith & J. C. O’Brien (Eds.), Occupational therapy for children and adolescents (7th ed.; pp. 664–703). St Louis: Mosby.

Casillas, D. (2010). Teachers’ perceptions of school-based occupational therapy consultation: Part II. *Early Intervention & School Special Interest Section Quarterly, 17*(2)*,* 1–4.

Gardner, C., & Lisbona, B. (2014, April). *Getting it all done in schools: The 3:1 model.* Presentation at the American Occupational Therapy Association Annual Conference & Expo, Baltimore. Retrieved from <https://docs.google.com/gview?url=http://www.njota.org/associations/11734/files/SC%2010%203in1model.ppt>

Garfinkel, M., & Seruya. F. M. (2017, March). *Workload toolbox: Practical tools to help you build a case for and maintain a workload model in your school-based practice.* Presentation at the American Occupational Therapy Association Annual Conference & Centennial Celebration, Philadelphia. Retrieved from <https://www.garfinkelseruya.com>

Garfinkel, M., & Seruya, F. M. (2018). Therapists’ perceptions of the 3:1 Service Delivery Model: A workload approach to school-based practice. *Journal of Occupational Therapy, Schools, & Early Intervention.* Advance online publication. <https://doi.org/10.1080/19411243.2018.1455551>

Handley-More, D., Wall, E., Orentilcher, M. L., & Hollenbeck, J. (2013). Working in early intervention and school settings: Current views of best practice. *Early Intervention & School Special Interest Section Quarterly, 20*(2), 1–4.

Individuals with Disabilities Education Improvement Act of 2004, Pub. L. 108-446, 20 U.S.C. §1400 et seq.

Law, M., Cooper, B., Strong, S., Stewart, D., Rigby, P., Letts, L. (1996). The Person–Environment–Occupation Model: A transactive approach to occupational performance. *Canadian Journal of Occupational Therapy*, *63*, 9–23.

O’Brien, J., & Lewin, J. E. (2008). Part 1: Translating motor control and motor learning theory into occupational therapy practice for children and youth. *OT Practice*, *13*(21), CE-1–CE-8.

Polichino, J. E., & Jackson, L. (2014). *Frequently asked questions: Transforming caseload to workload in school-based occupational therapy services.* Retrieved from<http://www.aota.org/-/media/Corporate/Files/Secure/Practice/Children/Workload-fact.pdf>

Rodrigues, S., & Seruya, F. M. (2017). *Occupational therapy in the United States middle schools: A needs assessment of occupational therapy practitioners*. Unpublished Doctoral Capstone Project, Quinnipiac University, Hamden, CT.

Seruya, F. M., & Garfinkel, M. (2018, April). *What is a reasonable caseload? Current trends in school-based practice.* Poster session presented at the American Occupational Therapy Association Annual Conference & Expo, Salt Lake City, UT.

Seruya, F. M., Breen, M., Molinari, A., Hurley, K., Merrill, M., Romeo, G., & Kuo, P. (2016, April). *Teachers’ perceptions of occupational therapy in the school-based setting.* Poster session presented at the American Occupational Therapy Association Annual Conference & Expo, Chicago.

Seruya, F. M., Hastie, M., Milano, D., Serrante, N., Suchy, K., & Walsh, L. (2015, April). *Teachers’ perceptions of occupational therapy in middle school settings.* Poster session presented at the American Occupational Therapy Association Annual Conference & Expo, Nashville, TN.

Silverman, F. (2011). Promoting inclusion with occupational therapy: A co-teaching model. *Journal of Occupational Therapy, Schools, & Early Intervention*, *4*(2), 100–107. <https://doi.org/10.1080/19411243.2011.595308>

Spencer, K. C., Turkett, A., Vaughan, R., & Koenig, S. (2006). School-based practice patterns: A survey of occupational therapists in Colorado. *American Journal of Occupational Therapy,* *60,* 81–91. <https://doi.org/10.5014/ajot.60.1.81>

Watt, H., & Gage Richards, L. (2016). Factors influencing occupational therapy practitioners’ use of push-in and pull-out service delivery models in the school system. *American Journal of Occupational Therapy, 70,* 7011510205p1. <https://doi.org/10.5014/ajot.2016.70S1-PO3068>

**Francine M. Seruya**, PhD, OTR/L, is a School-Based Therapist in Westchester County, New York, and Program Director and Professor of Occupational Therapy at Mercy College in New York. She can be reached at [FSeruya@mercy.edu](mailto:FSeruya@mercy.edu).

**Mindy Garfinkel**, OTD, OTR/L, ATP, is a School-Based Occupational Therapist in Williston Park, New York, and a part-time faculty member in the Post-Professional Doctoral Program at Quinnipiac University in Hamden, Connecticut.