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Interprofessional Collaboration in Schools: A Review of Current Evidence

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Interprofessional collaboration was identified by the American Occupational Therapy Association's Special Interest Sections (SIS) Council as an important element in all areas of practice. This month, articles published in the SIS *Quarterly* newsletters are addressing different elements of collaboration in their respective practice areas. According to the World Health Organization (2010), "collaborative practice strengthens health systems and improves health outcomes" (p. 7). Collaboration was also identified as a best practice in school settings (Handley-More, Wall, Orentlicher, & Hollenbeck, 2013). The purpose of this article is to review current evidence on interprofessional collaboration in schools. It reviews tenets of collaboration; professionals' perceptions; and collaboration implementation, barriers, and outcomes.

Tenets of Collaboration

Interprofessional collaboration is mandated by the Individuals with Disabilities Education Improvement Act (IDEA; 2004) in many areas including evaluating, implementing, and developing individualized education programs (IEPs), and providing education in the least restrictive environment. Collaboration is an interactive team process that involves the student, family members, educators, and related service providers, including occupational therapy practitioners, who join together to improve the student's performance in school (Hanft & Shepherd, 2008). It is implemented through the combined practices of hands-on services, team supports, and system supports. Shepherd and Hanft (2008a) identify three essentials of the collaboration process: the team members, their routines, and the school environment, with the student and his or her family at the center of the process. Successful collaboration involves considering the routines and schedules within the natural contexts of the school. Indeed, in a case study by Ritzman, Sanger, and Coufal (2006), a speech-language pathologist observed that her treatment was more meaningful to the students when she listened to teachers and designed interventions based on the class' routines and curriculum. Similarly, occupational therapists reported that their inclusion within the classroom setting helped teachers improve the classroom environment for the class as a whole (Campbell, Missiuna, Rivard, & Pollock, 2012).

Evidence shows support for collaborating in all stages of service provision, including evaluation, goal development, intervention, and reevaluation (Frolek-Clark, 2008). For example, Dupaul, Weyandt, and Janusis (2011) observed that students with atten-

tion deficit hyperactivity disorder benefit more from a teacher and school psychologist working together to define academic problems and acting as partners, as opposed to one designing intervention based on the other's observations. Murata and Tan (2009) reported that preschoolers with motor delays are more successful when teachers guide a team of professionals to plan goals, activities, and each member's role for classroom sessions. This collaboration allows team members to share knowledge and discuss possible interventions together, choosing ones that are doable and effective.

Shepherd and Hanft (2008b) identified six team characteristics that promote and sustain collaborative efforts: (a) voluntary participation: commitment to and recognition of the benefits of working together; (b) equality and mutual respect: acting as an expert is avoided; (c) common purpose: cohesiveness in developing goals for students; (d) joint responsibility: equal responsibility for treatment effectiveness; (e) resource sharing: knowledge and expertise shared among team members; and (f) collective decision making.

According to Eccleston (2010), an individual must be thoughtful, knowledgeable, compassionate, and an effective leader to be successful at collaborating. As Missiuna et al. (2012) found, relationship building and partnership development resulted in teachers' increased use of occupational therapy recommendations.

Degree of Collaboration

Evidence suggests varying degrees of collaboration among different groups of education professionals, with limited collaboration among related service providers. For example, educational psychologists in 17 of 20 schools reported that a certain percentage of their students were not receiving additional related services. However, when researchers compared these responses to actual data on referral forms, they found that 33% of students who were reported as having no other related service were actually affiliated with speech-language pathologists, highlighting a lack of communication between the two service providers (McConnellogue, 2011).

In a survey by Berzin et al. (2011), 90% of the participating 1,639 social workers reported collaboration with teachers in their schools. The study divided social workers into four categories: those who did not collaborate (10% of participants), those who implemented system-level interventions (21% of participants), those who reported using consultation frequently (41% of participants), and those who reported collaborating through consultation and system-level work and following up with parents and within their community (28% of participants).

Evidence suggests limited collaboration between teachers and occupational therapists (Spencer, Turkett, Vaughan, & Koenig, 2006; Vincent, Stewart, & Harrison, 2008; Weintraub & Kovshi, 2004). In a qualitative descriptive study, four South Australian teachers reported that they did not find notes written by the occupational therapists useful. They argued that the occupational therapists suggested ideas that teachers already had in place and that the notes were written from a clinical perspective, leaving out

the teacher's point of view (Vincent et al., 2008). In a survey of 105 occupational therapy practitioners in Colorado, therapists reported to have written 74% of the goals on their own, with only 18% of the goals written by the educational team, and 8% copied from education standards (Spencer et al., 2006).

Evidence suggests that when occupational therapists use indirect and consultative service delivery models, they spend more time inside the classroom, and consequently collaborate more with teachers (Weintraub & Kovshi, 2004). Unfortunately, the direct, pull-out models are more prevalent, resulting in less collaboration. Specifically, occupational therapists in Colorado reported spending an average of 15.56 hours a week providing hands-on services and only 4.22 hours a week providing team and systems-level supports. They also reported providing services outside the classroom 61% of the time (Spencer et al., 2006). Occupational therapists in Israel reported using hands-on services 76.9% of the time, while using team and systems-level supports 16.1% of the time, with services provided in the occupational therapy room 72% of the time (Weintraub & Kovshi, 2004).

Perceptions of Collaboration

School professionals report a positive attitude toward collaboration (Carter, Prater, Jackson, & Marchant, 2009). South Australian teachers reported a desire to increase collaboration with the occupational therapists because they recognized a need for guidance to implement the occupational therapy suggestions (Vincent et al., 2008). Teachers also reported satisfaction with the time, commitment, care, and concern of the occupational therapist toward the student. They felt that the collaborative process facilitated student success (Reid, Chiu, Sinclair, Wehrmann, & Naseer, 2006). Occupational therapists who collaborated with general education teachers in Canada within a framework called Partnering for Change reported positive experiences and becoming more confident both personally and professionally (Campbell et al., 2012).

In some instances, evidence suggests that collaboration is not actually implemented in practice. Occupational therapists in both South Australia and New York City explained that they did not collaborate because of numerous barriers (Bose & Hinojosa, 2008; Kennedy & Stewart, 2012).

Collaboration Barriers

Collaboration barriers can be classified into systemic, interpersonal, and personal challenges (Hanft & Shepherd, 2008). System-level barriers involve limited opportunities because of district policies, procedures, and workload assignments. Examples of system-level challenges include extra administrative work such as paperwork (McConnellogue, 2011) and lack of time (Bose & Hinojosa, 2008; Carter et al., 2009; Gallagher, Malone, & Ladner, 2009; Kennedy & Stewart, 2012). Berzin et al. (2011) suggested that social workers collaborated less when they provided services for more schools. Occupational therapists in Canada reported that a key factor for the success of the Partnering for Change model was time to collaborate (Campbell et al., 2012).

Interpersonal challenges include a general lack of access between professionals. For example, occupational therapists have reported teachers to be unwilling to collaborate (Bose & Hinojosa, 2008; Gallagher et al., 2009; Kennedy & Stewart, 2012). In South Australia, teachers reported that occupational therapists did not

meet with them in person, nor did they follow up by phone to discuss occupational therapy reports (Vincent et al., 2008).

Personal challenges include differing beliefs about collaboration (Hanft & Shepherd, 2008) and lack of communication skills (Bose & Hinojosa, 2008; Hanft & Shepherd, 2008). Collaboration difficulties were observed when occupational therapists viewed themselves as experts, rather than as equal partners with teachers (Bose & Hinojosa, 2008) and when regular and special education teachers had differing views about students' needs (Carter et al., 2009). Collaboration failed when occupational therapists did not adapt their interventions to better fit within classroom activities (Kennedy & Stewart, 2012). Lastly, occupational therapists who graduated before the IDEA amendments concerning collaboration were passed tended to provide team supports less often (Spencer et al., 2006).

Collaboration Outcomes

Hanft and Shepherd (2008) identified collaboration outcomes, including improved communication skills and cultural competencies of all members of the collaborative team, the inclusion of children with disabilities in the least restrictive environment, more support to meet children's needs, and increased opportunities for children by allowing them to interact in various environments. Reid et al. (2006) found that when indirect services were used in the classroom, teachers observed an increase in student performance.

Conclusion

Interprofessional collaboration is an important component of occupational therapy service delivery in schools. Evidence reviewed in this article suggests that occupational therapy practitioners may need to expand their level of collaboration by spending more time in the classroom, taking time to understand the teacher's perspective, and infusing team supports along with hands-on services. It is also important for occupational therapy practitioners to explain their services to other disciplines by citing evidence that supports their practice.

References

Berzin, S., O'Brien, K., Frey, A., Kelly, M. S., Alvarez, M. E., & Shaffer, G. L. (2011). Meeting the social and behavioral health needs of students: Rethinking the relationship between teachers and school social workers. *Journal of School Health*, 81, 493–501.

Bose, P., & Hinojosa, J. (2008). Reported experiences from occupational therapists interacting with teachers in inclusive early childhood classrooms. *American Journal of Occupational Therapy*, 62, 289–297. doi:10.5014/ajot.62.3.289

Campbell, W. N., Missiuna, C. A., Rivard, L. M., & Pollock, N. A. (2012). "Support for everyone": Experiences of occupational therapists delivering a new model of school-based service. *Canadian Journal of Occupational Therapy*, 79, 51–59. doi: 10.2182/cjot.2012.79.1.7

Carter, N., Prater, M. A., Jackson, A., & Marchant, M. (2009). Educators' perceptions of collaborative planning processes for students with disabilities. *Preventing School Failure*, 54, 60–70.

Dupaul, G. J., Weyandt, L. L., & Janusis, G. M. (2011). ADHD in the classroom: Effective intervention strategies. *Theory Into Practice*, 50, 35–42. doi:10.1080/00405841.2011.534935

Eccleston, S. T. (2010). Successful collaboration: Four essential traits of effective special education. *Journal of the International Association of Special Education*, 11, 40–47.

Frolek-Clark, G. (2008). Getting into a collaborative school routine. In B. Hanft & J. Shepherd (Eds.), *Collaborating for student success: A guide for school-based occupational therapy* (pp. 105–137). Bethesda, MD: AOTA Press.

Gallagher, P. A., Malone, D. M., & Ladner, J. R. (2009). Social-psychological support personnel: Attitudes and perceptions of teamwork supporting children with disabilities. *Journal of Social Work in Disability & Rehabilitation*, 8, 1–20. doi: 10.1080/15367100802665540

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- Handley-More, D., Wall, E., Orentlicher, M. L., & Hollenbeck, J. (2013, June). Working in early intervention and school settings: Current views of best practice. *Early Intervention & School Special Interest Section Quarterly*, 20(2), 1–4.
- Hanft, B., & Shepherd, J. (2008). 2...4...6...8...How do you collaborate? In B. Hanft & J. Shepherd (Eds.), *Collaborating for school success: A guide for school-based occupational therapy* (pp. 1–33). Bethesda, MD: AOTA Press.
- Individuals With Disabilities Education Improvement Act of 2004. Pub. L. 108-446, 20 U.S.C. § 1400 et seq.
- Kennedy, S., & Stewart, H. (2012). Collaboration with teachers: A survey of South Australian occupational therapists' perceptions and experiences. *Australian Occupational Therapy Journal*, *59*, 147–155. doi:10.1111/j.1440-1630.2012.00999.x
- McConnellogue, S. (2011). Professional roles and responsibilities in meeting the needs of children with speech, language and communication needs: Joint working between educational psychologists and speech and language therapists. *Educational Psychology in Practice*, 27, 53–64. doi:10.1080/02667363.2011.549354
- Missiuna, C., Pollock, N., Levac, D., Campbell, W., Whalen, S. D. S., Bennett, S. M., . . . Russell, D. J. (2012). Partnering for change: An innovative school-based occupational therapy service delivery model for children with developmental coordination disorder. *Canadian Journal of Occupational Therapy*, 79, 41–50.
- Murata, N. M., & Tan, C. A. (2009). Collaborative teaching of motor skills for preschoolers with developmental delays. *Early Childhood Education Journal*, *36*, 483–489. doi: 10.1007/s10643-007-0212-5
- Reid, D., Chiu, T., Sinclair, G., Wehrmann, S., & Naseer, Z. (2006). Outcomes of an occupational therapy school-based consultation service for students with fine motor difficulties. *Canadian Journal of Occupational Therapy*, 73, 215–224.
- Ritzman, M. J., Sanger, D., & Coufal, K. L. (2006). A case study of a collaborative speech-language pathologist. *Communication Disorders Quarterly*, 27, 221–231.
- Shepherd, J., & Hanft, B. (2008a). Team faces and spaces. In B. Hanft & J. Shepherd (Eds.), *Collaborating for student success: A guide for school-based occupational therapy* (pp. 35–72). Bethesda, MD: AOTA Press.
- Shepherd, J., & Hanft, B. (2008b). Teamwork vs. the lone ranger. In B. Hanft & J. Shepherd (Eds.), *Collaborating for student success: A guide for school-based occupational therapy* (pp. 73–104). Bethesda, MD: AOTA Press.
- 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. doi:10.5014/ajot.60.1.81
- Vincent, R., Stewart, H., & Harrison, J. (2008). South Australian school teachers' perceptions of occupational therapy reports. *Australian Occupational Therapy Journal*, *55*, 163–171.
- Weintraub, N., & Kovshi, M. (2004). Changing practice patterns of school-based occupational therapists in Israel. *Occupational Therapy International*, 11, 40–51.
- World Health Organization. (2010). Framework for action on interprofessional education and collaborative practice. Geneva, Switzerland: Author.
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- Orentlicher, M. L., Handley-More, D., Ehrenberg, R., Frenkel, M., & Markowitz, L. (2014, June). Interprofessional collaboration in schools: A review of current evidence. *Early Intervention & School Special Interest Section Quarterly*, 21(2), 1–3.

Ten Reasons Why Classroom Collaboration is Worth the Time: A Teacher's Perspective

Debra E. Wilson, MA

- 1. **Infuses fresh ideas.** Sharing resources and exchanging ideas creates an atmosphere of mutual respect and understanding of roles and responsibilities. Everyone is equally valued for the expertise they bring to the table (Senior, 2011).
- Expands resources. Strategies learned from a variety of disciplines expand the population of students who benefit, with or

- without disabilities (Worthen, 2012). For every child with an individualized education program (IEP), there are numerous others who do not qualify for special education services but would benefit from strategies and support (Wilson & Heiniger-White, 2008).
- 3. Increases effectiveness. Modeling strategies and accommodations increases the effectiveness of interventions when therapists work side-by-side with classroom teachers (Silverman, 2011). Teachers and therapists bridge vocabulary differences and deepen their understanding of one another's talents. The teacher can successfully continue strategies after the therapist leaves the room.
- 4. **Reduces barriers.** Working as a team with other professionals aligns with federal education mandates of the Individuals with Disabilities Education Improvement Act (IDEA) by helping children be successful in the least restrictive environment (Shasby & Schneck, 2011). The barriers to academic success are reduced while success is increased (Pugach & Winn, 2011).
- 5. **Keeps things real**. Increasing understanding of academic standards and curricula supports teachers in the classroom and creates a way for interventions to be immediately practical and useful (Hargreaves, Nakhooda, Mottay, & Subramoney, 2012). Every minute counts within the reality of classrooms serving diverse student populations.
- 6. **Spreads the wealth**. Response to Intervention (RtI) whole classroom instruction requires teachers to provide instruction for all students before children are diagnosed as needing special services (Murawski & Hughes, 2009). General education teachers receive limited or no training in sensory-based techniques that could improve their abilities to provide intervention for children who may have sensory processing difficulties (Wilson, 2009). With class sizes rising, sharing one's wealth of knowledge is more important than ever.
- 7. **Forges good relationships.** Collaboration creates an environment where there is parity, trust, respect, and an improved school climate (Cook & Friend, 2010). Begin by asking, "How can we support each other?"
- 8. **Boosts self-esteem**. Students with special needs feel better about themselves when they participate to their fullest potential in the classroom (Murata & Tan, 2009). Students with IEPs can teach strategies they have learned in pull-out sessions to their peers in the classroom. They quickly go from the "child with special needs" to the classroom leader.
- 9. **Lowers anxiety**. General education teachers often have limited knowledge about teaching or accommodating children with special needs. They may experience anxiety due to limited training (Wells, 2009). By providing assistance in the classroom, the teacher becomes more confident and increases his or her understanding of occupational therapists' unique skill sets.
- 10. Increases excitement and fun. Putting oneself into a situation that is new can be exciting and fun, provided the individuals value one another, neither takes the role of expert, and the focus is on weaving collaborative nets of support for all who are involved with children in the school setting (Campbell, Missiuna, Rivard, & Pollock, 2012). ●

References

- Campbell, W. N., Missiuna, C. A., Rivard, L. M., & Pollock, N. A. (2012). "Support for everyone": Experiences of occupational therapists delivering a new model of school-based service. *Canadian Journal of Occupational Therapy*, 79, 51–59.
- Cook, L., & Friend, M. (2010). The state of the art of collaboration on behalf of students with disabilities. *Journal of Educational and Psychological Consultation*, 20, 1–8.
- Hargreaves, A. T., Nakhooda, R., Mottay, N., & Subramoney, S. (2012). The collaborative relationship between teachers and occupational therapists in





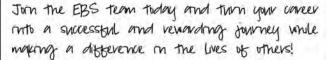


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- junior primary mainstream schools. *South African Journal of Occupational Therapy*, 42(1), 7–10.
- Individuals with Disabilites Education Improvement Act of 2004, Pub. L. 108-446, 20 U.S.C. § 1400 *et seq.*
- Murata, N. M., & Tan, C. A. (2009). Collaborative teaching of motor skills for preschoolers with developmental delays. *Early Childhood Education Journal*, 36, 483–489.
- Murawski, W. W., & Hughes, C. E. (2009). Response to Intervention, collaboration, and co-teaching: a logical combination for successful systemic change. *Preventing School Failure*, 53, 267–277.
- Pugach, M. C., & Winn, J. A. (2011). Research on co-teaching and teaming: An untapped resource for induction. *Journal of Special Education Leadership*, 24. 36–46.
- Senior, R. (2011). A model of OT-teacher collaboration: Together everyone achieves more. Advance for Occupational Therapy Practitioners, 27(21), 12–16.
- Shasby, S., & Schneck, C. (2011). Commentary on collaboration in school-based practice: Positives and pitfalls. *Journal of Occupational Therapy, Schools, & Early Intervention, 4,* 22–33.
- Silverman, F. L. (2011). Promoting inclusion with occupational therapy: A coteaching model. *Journal of Occupational Therapy, Schools, & Early Intervention, 4*, 100–107.
- Wells, R. A. (2009). Easing anxiety through increasing knowledge: Supporting educators in inclusive settings. *International Journal of Learning*, 16, 663–670.
- Wilson, D. E. (2009). *Minute moves for the classroom*. Shasta: Integrated Learner Press.
- Wilson, D. E., & Heiniger-White, M. (2008). S'cool moves for learning. Shasta: Integrated Learner Press.
- Worthen, E. (2012). Sensory-based interventions in the general education classroom: A critical appraisal of the topic. *Journal of Occupational Therapy, Schools, & Early Intervention, 3,* 76–94.
- **Debra E. Wilson**, MA, is Founder, S'cool Moves, Inc., PO Box 614, Shasta, CA 96087; wilson@schoolmoves.com.
- Wilson, D. E. (2014). Ten reasons why classroom collaboration is worth the time: A teacher's perspective. *Early Intervention & School Special Interest Section Quarterly*, 21(2), 3–4.

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