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Abstract

This article presents the Collaborative Design Model as a tool for developing collaboration and self-efficacy for preprofessional educators and service providers. As student populations continue to become more diverse, preprofessionals entering the classroom must be prepared to collaborate with colleagues effectively and efficiently to address the variety of needs presented in the classroom. Little research exists on the collaboration among preprofessional teachers and preprofessional occupational therapists. The proposed model provides a method for supporting preprofessionals in collaborating to meet the needs of students at risk for or with disabilities. Initial pilot findings suggest the Collaborative Design Model could potentially increase self-efficacy and collaboration skills for preprofessionals working in the classroom.

Comments

The authors report they have no conflicts of interest to disclose.

Keywords

collaboration, early childhood educators, occupational therapists, preservice teachers, teacher preparation, special education

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When the program director (Author 4) at Southwestern University Preschool (SUP) first met Chris, a 4-year-old prospective preschool student, she was not sure if she and her staff would be able to provide the support he would need to be successful in school. Chris had been diagnosed with autism spectrum disorder and dyspraxia, and even though his parents were enthusiastic about enrolling him in preschool, Chris faced many challenges that would make a traditional learning environment difficult. With a relatively small staff, the program director wondered how SUP could effectively support Chris's academic, social, emotional, and behavioral growth so that he could thrive in preschool and beyond. She pondered: How could SUP increase the efficiency and effectiveness of service delivery to meet the needs of a more diverse student population?

The program director at SUP revered the expert opinions of her teachers, but she often found these highly qualified and knowledgeable teachers were being stretched beyond their limits. Differentiating instruction to meet the diverse needs of all students, including students with varied disabilities, required time and training beyond the scope of what should be expected of a single teacher. To ensure that SUP continued to meet the needs of all students of all abilities, the program director needed to think differently about how the program delivered instructional and therapeutic services (i.e., occupational therapy, speech therapy, and school psychology). Chris's diverse set of needs mandated support services from a speech therapist, occupational therapist, and school psychologist in addition to a classroom teacher and a special education teacher. Thus, the program director decided to create a more collaborative system at the preprofessional level to address all students' needs and to improve student academic, social, emotional, and behavioral outcomes while also maintaining reasonable expectations for the teachers. She realized that collaboration was an essential component of student success and wanted to support both preprofessionals entering the field as educators and other service providers.

To address these complex issues, she drew support from her colleagues at Southwestern University and the Occupational Therapy Program at the University of the Southwest. Both universities place their students at SUP for clinical experiences. Because of the limited research of an already established model, professors and experts from both universities worked with the program director at SUP to develop a strategy, and together they devised the Collaborative Design Model. The authors created the Collaborative Design Model as a 12-week interprofessional education practice model to support the on-site clinical experiences of preprofessional early childhood special education (ECSPED) teachers and preprofessional occupational therapists. The term preprofessionals will be used throughout this article to refer to the occupational therapy and ECSPED participants. The term preprofessional is used because both groups of participants are still working toward their certifications to be either a practicing occupational therapist or a practicing ECSPED teacher. The preprofessional occupational therapy students were enrolled at the entry-level doctoral program at the University of the Southwest and the preprofessional ECSPED students were enrolled in the early childhood special education program at Southwestern University. The model allows the preprofessional students to learn with, from, and about each other to provide high-quality services to students in a classroom environment (World Health Organization [WHO], 2010). In fall 2016, the preprofessional students worked alongside clinical instructors, professional educators, and service personnel to deliver instructional and therapeutic supports to preschool students through collaboration and co-teaching using the Collaborative Design Model.

This article presents the Collaborative Design Model as a tool for developing collaboration and self-efficacy for preprofessional educators and therapy service providers. As early childhood student

populations continue to become more diverse, preprofessionals entering the classroom must be prepared to collaborate effectively and efficiently with colleagues to address the variety of needs presented in the classroom.

Fostering Effective Collaboration Practices

In the 21st century, preprofessional occupational therapists and preprofessional ECSPED teachers must be prepared to work collaboratively with various professionals in diverse environments with a range of people (Suarez-Orozco & Sattin, 2007). Interprofessional education experiences during clinical practice have proven to be an effective way to train future professionals for interprofessional collaborative practice (Interprofessional Education Collaborative, 2016). In fact, today's diverse K-12 student body necessitates that educators foster a culture of collaboration in schools to meet individual student needs (Villa, Thousand, & Nevin, 2004). Moreover, research indicates that fostering collaboration among teachers and related service-personnel cultivates effective intervention development in educational settings (Villa, Thousand, Nevin, & Malgeri, 1996). This cross-discipline collaboration often bolsters the success of students with disabilities on a variety of student outcome measures (American Occupational Therapy Association [AOTA], 2009). Previous research affirms that positive collaborative experiences during student teaching in educational settings, such as early childhood classrooms, frequently result in improved outcomes for students with disabilities (Heck, Bacharach, & Dahlberg, 2008; Ofstedal & Dahlberg, 2009).

Yet, many academic institutions for education-focused degrees do not incorporate collaboration skill development in their programs, and this is a newer requirement for occupational therapy education based on current accreditation standards (Accreditation Council for Occupational Therapy Education [ACOTE], 2011; Brownell & Walther-Thomas, 2002; Jackson, 2004; Ofstedal & Dahlberg, 2009). The authors, however, argue that academic institutions must develop programs to support preprofessional ECSPED teachers and occupational therapists in developing these essential collaborative practices based on the rise of occupational therapists working in school-based settings (AOTA, 2015). Friend (2000) agrees that collaboration skills should be explicitly taught and notes that many in the education field falsely assume that these skills develop naturally without explicit instruction. This false perception, mentioned by Friend, likely accounts for the exclusion of specific training on collaborative practices in preprofessional programming. Teacher candidates require an explicit understanding of collaboration skills upon entering the classroom (Ofstedal & Dahlberg, 2009). Thus, structured opportunities for preprofessional occupational therapists and preprofessional ECSPED teachers to learn collaboration skills through coursework and practicum experiences should be created.

Fostering Self-Efficacy

Teacher self-efficacy is a teacher's sense of his or her ability to meet the needs of students in the classroom (Velthuis, Fisser, & Pieters, 2014). Teacher self-efficacy draws on the framework put forth by Bandura (1977), which outlines self-efficacy as an individual's belief that he or she can achieve an outcome. Researchers in teacher self-efficacy suggest performance accomplishments (feelings of having reached mastery), vicarious experience (developing skills through watching others), verbal persuasion (receiving and implementing verbal suggestions), and emotional arousal (insisting emotions, such as fear, lead to performance changes) inform the development of a teacher's sense of professional efficacy (Pfitzner-Eden, 2016; Velthuis et al., 2014). Practicum experiences, such as teacher preparation programs and occupational therapy preparation programs, provide preprofessionals with opportunities to hone their skills that will hopefully lead to performance accomplishments over time. In fact, Pfitzner-

Eden's (2016) study revealed that preprofessionals' personal performance satisfaction correlated with their sense of teacher self-efficacy. In addition, Pfitzner-Eden found that the various learning that takes place during the preprofessional practicum experience correlates to increases in teacher self-efficacy. Examples of these vicarious learning experiences include teaching observations and expert modeling. However, practicum experiences do not always lead to positive changes in teacher self-efficacy. The stressfulness of student teaching, for example, can cause decreases in a preprofessional's sense of teacher self-efficacy (Pfitzner-Eden, 2016). Still, professional mentors can mitigate these stressors for preprofessionals through verbal persuasion.

Researchers propose that preprofessionals' sense of self-efficacy can be more easily shaped during preprofessional programming, such as student teaching (Henson, 2002; Woolfolk & Hoy, 1990). However, Tschannen-Moran and McMaster (2009) note that the self-efficacy of preprofessionals develops in nonlinear progression. As such, self-efficacy beliefs morph with new experiences and therefore change over time. Experiences with vicarious learning and verbal persuasion shape self-efficacy beliefs, and thus, the authors believe creating positive practicum experiences will increase preprofessionals' sense of self-efficacy. Previous studies suggest avenues to support this positive self-efficacy development. One study found that various experiences advanced the self-efficacy of preprofessionals more than professionals, and verbal persuasion from the mentor posed the greatest impact on preprofessionals' sense of self-efficacy (Pfitzner-Eden, 2016). Whereas, another study found vicariously learning from a professional mentor correlated with an increase in the self-efficacy of preprofessionals (Johnson, 2010). A preprofessional's self-efficacy beliefs impact his or her ability to be resilient in the face of challenging situations in the classroom (Tschannen-Moran & Hoy, 2001). Hence, we must create opportunities for preprofessionals to develop a strong sense of self-efficacy and uphold collaborative practicum experiences as a key factor in this development process.

Collaborative Design Model Overview

A growing body of literature presents compelling evidence for the benefits of collaboration among educators and other service providers, specifically occupational therapists. This literature documents the necessary components to support positive collaboration among educators and occupational therapists, such as scheduled time to meet and plan, time to learn about each other's discipline, and time to collaborate to design interventions connected to students' academic goals (Barnes & Turner, 2001; Bose & Hinojosa, 2008; Kemmis & Dunn, 1996; Nochajski, 2002; Trepanier-Street, 2010). Positive collaborative experiences have the potential to lead to improved self-efficacy for preprofessionals as they enter the field (Guo, Justice, Sawyer, & Tompkins, 2011). The Collaborative Design Model proposed in this article capitalizes on this previous research and supports the development of these necessary components for improving preprofessionals' collaborative practices and sense of self-efficacy. See the Appendix for an outline of the program requirements for the Collaborative Design Model.

The Collaborative Design Model consists of a 12-week interprofessional education practice model that pairs preprofessional occupational therapists and preprofessional ECSPED teachers with a practicing early childhood mentor/teacher and a licensed occupational therapist who serves as a fieldwork educator. A speech pathologist, psychologist, and other ECSPED professionals provide additional support. The model combines foundational skills and training on collaborative practices and professional responsibilities. The small group nature of the program ensures that the preprofessionals receive concentrated instruction to support their individual professional growth. Regular meetings

canonize structured time for modeling and individual and small group feedback. During these meetings, the preprofessionals target specific students, identify interventions, plan lessons, review data collected from interventions, and reflect on previously implemented lessons. To guide the agenda for these meetings, the preprofessionals complete the co-planning meeting agenda template (Barnett & O'Shaughnessy, 2015). The co-planning meeting agenda template highlights four main components: reviewing previous work, planning instructional accommodations/strategies, assigning responsibilities, and building the agenda for the next meeting. The template also breaks down the approximate percentage of time the team should expect to spend discussing each component. Taken together, the authors believe these activities will provide the preprofessionals with the tools and confidence to collaborate to design interventions to support preschool students with or at risk for disabilities. Thus, the authors hope the implementation of these practices improve the developmental and behavioral outcomes for preschool students with or at risk for disabilities.

Components

The 12-week agenda includes weekly topics and provides a framework for collaborative activities for the preprofessional occupational therapists and preprofessional ECSPED teachers to complete together (see Appendix). Each week the preprofessionals identify interventions, plan lessons, implement lessons, and collect data on the interventions. In addition, facilitators highlight specific focus components that change throughout the 12-week agenda.

First half of the program. During Week 1, the facilitator orients the preprofessionals to interprofessional education and practice and shares relevant information about the Collaborative Design Model, standards of professionalism, and the expectations for the weekly meetings. The following week, the preprofessionals learn more about how to assess, plan, and implement interventions based on data and student needs. Week 3 prepares the preprofessionals to reflect on and revise their interventions and lesson plans based on multiple data points, including assessments, observation data, and team and facilitator feedback. The preprofessionals practice developing an in-service to share with the teaching team during Week 4. Potential topics for the in-service might include relevant terminology in the field, assessment measures, accommodations, and professional roles and responsibilities. To prepare an in-service, the preprofessionals are to reflect on what they learned in Weeks 1-3 and practice identifying and communicating relevant professional information with others. For example, the preprofessionals might share misconceptions about a certain disability or example strategies that help meet the behavioral needs of certain students. In Week 5, the preprofessionals learn about different ways to report progress information to parents and staff members. Then, they practice reporting student progress to parents and staff in different forms, as appropriate. Week 6 switches the focus to co-teaching. The preprofessional occupational therapists and the preprofessional ECSPED teachers work collaboratively to create a lesson and implement co-teaching lesson plans.

Second half of the program. The preprofessionals spend the next 4 weeks (Weeks 7-10) learning how to share their professional knowledge. During these weeks, they construct a presentation for instructional and support staff designed to meet the needs of the school. Ideally, the preprofessionals then share their presentation at a staff meeting. The final 2 weeks of the program emphasize reflection. As the preprofessionals prepare to end their clinical experiences, a facilitator guides them in reflecting on their collaborative development and self-efficacy. In addition, the preprofessionals contemplate their growth in a variety of other areas, such as quality of work, time management, communication skills, team support, preparedness, problem-solving skills, interactions with others, and role flexibility.

Collaborative Design Model in Practice

Facilitators piloted the Collaborative Design Model at SUP in fall 2016. The internal review boards (IRB) from both universities reviewed and approved the pilot study. Two preprofessional occupational therapists from the Occupational Therapy Program at the University of the Southwest and two preprofessional ECSPED teachers from Southwestern University participated in the pilot. Each of their programs viewed the Collaborative Design Model as a tool for developing collaboration and self-efficacy in the preprofessionals that extended beyond their traditional program curriculum.

Southwestern University's Program

The Early Childhood Special Education program at Southwestern University is an intensive, field-based learning experience where preprofessional teachers spend four semesters in supervised clinical internships with embedded coursework. In their junior year, the students in the program intern in both a general education and a special education preschool setting, from different school partners, while taking coursework in assessment, early literacy, social-emotional development, and atypical child development. They have a multitude of projects connected to their clinical placement, including a comprehensive case study. As seniors, the ECSPED students at Southwestern University participate in a yearlong residency in a local school district with one of the universities' partner school districts. During this year, the students are in K-3 general education and K-3 special education classrooms full time, with aligned methods coursework delivered at their school site.

Southwestern University Preschool. SUP, which is funded by the university, supports 3- to 5-year-old students from a variety of cultural, linguistic, and ability backgrounds. The preschool follows the Individuals with Disabilities Education Act (2004) and actively promotes inclusion to make sure all students, no matter their backgrounds or ability levels, are included and successful. To ensure that all preschoolers continue to grow holistically, the program director encourages collaborative practices and co-teaching in the classroom. As a result of these practices, SUP hosts many preprofessional educators and service personnel for practicum experiences throughout the year. These experiences range from observations to student teaching and provide insight into effective practices for serving diverse learners. Furthermore, this preschool program incorporates all areas of development through explicit teaching and play. To support their efforts in meeting the diverse needs of all students, SUP draws on their partnerships with universities. The preschool views these partnerships as an asset to teaching and learning.

The University of the Southwest's Program

The collaborative partner university, the University of the Southwest, is the only university in its residing state to provide an accredited entry-level doctoral degree in occupational therapy. The 33-month program includes coursework to build foundational knowledge, five fieldwork rotations to develop entry-level practitioner skills, and a 16-week doctoral experiential component that prepares students for advanced roles in the profession. Throughout the curriculum, each student gains knowledge and skills in research, leadership, evaluation, intervention planning and implementation, therapeutic use of self, clinical reasoning skills, administration, and health policy (ACOTE, 2011). Through these experiences, the University of the Southwest aims to develop transformative, competent, entry-level practice scholars who innovatively and skillfully implement the professional skills addressed in the program. One key component of this process involves a Level II fieldwork placement at SUP. During the experience, the preprofessional occupational therapists experience the roles, responsibilities, and rewards of facilitating occupational therapy services (AOTA, 2009).

Professional Development in Practice

Seven collaborative meetings transpired weekly. These meetings were comprised of multiple team members, including two preprofessional ECSPED teachers, two preprofessional occupational therapists, and a rotating meeting facilitator (i.e., faculty from one of the preprofessional programs or expert educators). Each week the assigned meeting facilitator led a two-part meeting that included a professional development (PD) component and collaboration time. These collaborative meetings furnished the preprofessionals with opportunities to co-plan instruction and modify activities based on early learning standards, classroom themes, and individual needs. The facilitator designed the PD component to assist the preprofessionals in their collaborative planning work that followed. PD topics from these sessions included professional collaborative strategies, effective communication, assessment and progress monitoring, differentiated instructional strategies, core competencies for interprofessional practice, and common barriers for interprofessional communication and collaboration. During the planning portion of the meetings, the preprofessionals, and the professional educators, when available, discussed assessment practices, student information collected for case studies, observational data on students, and individual reflections on earlier completed lessons. These discussions informed lesson planning and collaboration for subsequent lessons. The preprofessionals then co-taught their joint lesson plans in the classroom.

Lessons Learned

Facilitator Reflections

Over the course of the 7-week collaborative meetings, the preprofessionals began to look to each other not only for resources in the classrooms but as valued colleagues. The preprofessional ECSPED teachers contributed strategies for classroom management and incorporating academic goals with the targeted intervention, while the preprofessional occupational therapists supplied interventions and accommodations that could be used with students and in small groups. The collaborative meetings also furnished the preprofessionals with a safe space to reflect and take time to examine their own collaborative and professional practices for working with others in the education field.

One participant confessed that previously she had always identified herself as a good collaborator because she was well-prepared with materials and lessons, but now she recognized collaboration as more than just individual preparation. She professed that actual collaboration requires more than being prepared with materials and includes co-planning and co-teaching to best meet the students' needs. Another participant shared that she now takes the time to self-reflect on her contributions as a collaborative team member, which previously she had never done. She felt developing a practice of self-reflection furthered her growth as an occupational therapist and a collaborative partner. All of the preprofessionals identified value in learning more about the terminology, expectations, assessments, and practices of the profession. However, the preprofessionals mentioned concerns about maintaining collaborative practices as they entered the profession. They feared the time to collaborate would not be built into their schedules, and therefore, holding regular collaborative meetings would be difficult. Moreover, as new professionals, they felt unsure about how to advocate for the valuable collaboration.

In sum, the Collaborative Design Model suggests that there is value in developing collaborative practices among preprofessional occupational therapists and preprofessional ECSPED teachers. However, in response to student comments, future facilitators may want to incorporate time for preprofessionals and professionals to brainstorm methods for advocating for collaboration time in their

future schools. In addition, they may supply ideas about alternative avenues for collaboration when time is a constraint. Modeling online methods of collaboration may be of value to this discussion.

Student Reflections

One student in the program, a preprofessional ECSPED teacher, shared her experiences with the Collaborative Design Model. For her, “the best part of this experience was having a first-hand account of the true importance of collaboration between professionals.” Her previous experiences involved observing professionals, such as occupational therapists, in the classroom, but she felt that the teachers and the occupational therapists often conducted “parallel operations” instead of collaborating toward the same goal. This preprofessional ECSPED teacher noticed that both parties often had the same objective, but rather than working together, the teachers and occupational therapists regularly created individual lesson plans, assessments, and interventions. Through the Collaborative Design Model, the preprofessional ECSPED teacher learned to become a better communicator with her collaborative teaching partners. During the collaborative meetings, the preprofessional ECSPED teacher became alerted to the common goals she shared with the other educators and service personnel in the room. Together, they began planning lessons that “better suited our target student, such as lessons that addressed developing emergent writing skills and fine motor control.” Moreover, the preprofessional ECSPED teacher reported multiple benefits of the collaborative experience. She conveyed benefits for both the students with whom she worked and for her professionally. As a consequence, she likened the other professional in the room to a classroom partner. They collaborated by discussing lesson plans, highlighting student progress, and directing their efforts toward the same shared target. In her closing remarks, she reflected, “The expression ‘it takes a village to raise a child’ has never rung with more truth to me. As a preservice teacher, I look forward to collaborating with any and all future professionals and educators because I now know just how beneficial that bond can be for children.”

Another student, a preprofessional occupational therapist, reflected on the collaborative process as well. She identified the benefits of working with preprofessional ECSPED teachers to decide on relevant interventions. She valued the opportunities she was given to engage in discussions with other preprofessionals and professionals about student goals. In addition, the preprofessional occupational therapist affirmed the benefits of engaging in post lesson/intervention discussions with others. This post discussion among her and her peers “recapped...how it went from [their] perspectives.” This preprofessional also appreciated the many co-teaching opportunities the program provided. In fact, she only shared one suggestion on how to improve the Collaborative Design Model: Start developing students’ collaboration skills even earlier.

Overall, the student reflection proposes the potential benefits of using the Collaborative Design Model as part of the preprofessional practicum experience. The students involved in the pilot of this model expressed a change in both their perceptions and practices. The belief about how to best service students morphed as they learned more about how to collaborate with their peers. Subsequently, they began to plan and implement lessons that used their talents to address the same goal of improving outcomes for children who are at risk for or who have disabilities.

Limitations and Future Directions

Scheduling Challenges

Like other researchers, we identified scheduling two academic professional programs from two different universities as a challenge (Sunguya, Hinthong, Jimba, & Yasuoka, 2014). The preprofessional ECSPED teachers began their placements toward the end of August 2016, which corresponded with the

start of the university academic calendar. However, the preprofessional occupational therapists who participated in the program began their second Level II fieldwork placements toward the end of September, one month later. The different timelines were a contributing factor to the 7-week initial program design.

Length of Program

The length of the program was a setback during the implementation of the Collaborative Design Model. The 7 weeks did not provide enough time for the preprofessionals to collaborate, co-teach, implement interventions together, and analyze the data. One goal of the program was to improve outcomes for early childhood students who are at risk for or who have disabilities, and the length of the program did not provide enough time for the students to collect and analyze data collaboratively. The preprofessional occupational therapists analyzed the data they had collected on interventions earlier in the rotation, prior to when the preprofessional ECSPED teachers started, and identified outcomes for students. Also, the preprofessional ECSPED teachers collected and analyzed data after the occupational therapists completed their rotations to chart student outcomes over a longer period in the classroom. The problem, therefore, was that most of the data collection and analysis of student interventions needed to happen outside of the 7 weeks. This was also the case for collecting data on the implementation of interventions and self-efficacy beliefs of the preprofessional ECSPED teachers and occupational therapists.

Small Sample and Data Analysis

A second goal of the program was to support increased self-efficacy beliefs, collaboration skills, and practices in the ECSPED classroom. A variety of measures were completed and analyzed, but because of the small sample of four participants, the results were not statistically relevant. Instruments that were used for all participants were the Teacher Efficacy-*TES* and the Collaboration Self-Assessment Tool (*CSAT*). The *TES* is a well-established, validated 24-item measure used to obtain self-reported teacher self-efficacy levels (Tschannen-Moran & Hoy, 2001). The *CSAT* is a validated measurement tool (Ofstedal & Dahlberg, 2009) that identifies individual views on collaboration in an education setting in the following areas: contribution, motivation/participation, quality of work, time management, team support, preparedness, problem-solving, team dynamics, interactions with others, role flexibility, and reflections.

Preprofessional ECSPED teaching was measured using the Classroom Assessment Scoring System (*CLASS*) to assess teacher and child interactions in the preschool classroom. However, the data collection using this measure for pre and post extended beyond the 7-week Collaborative Design Model. The *CLASS* tool measures preprofessional ECSPED teachers' performances during their placements in the early childhood classrooms at the early childhood center in the following domain areas: emotional support, classroom organization, and instructional support. The *CLASS* is a validated and reliable structured observation system (Pianta, La Paro, & Hamre, 2008) where trained observers make standardized judgments and attach those to a 1- to 7-Likert scale based on careful review of the age-appropriate statements of high-quality practice indicators linked to the dimensions in each domain. It provides a consistent approach to measuring teacher-student interactions during critical development periods.

The AOTA Fieldwork Performance Evaluation for the Occupational Therapy Student (2002) was used to measure the preprofessional occupational therapists in Weeks 6 and 12 of their fieldwork rotations. Again, the period required for this instrument extended outside of the 7-week Collaborative

Design Model to measure improvement during critical periods of their responsibilities in the early childhood classroom. The evaluation tool measures preprofessional occupational therapists' performance during their field placements in the following areas: fundamentals of practice, basic tenets of occupational therapy, evaluation and screening, intervention, management of occupational therapy services, communication, and professional behaviors. The AOTA Fieldwork Performance Evaluation for the Occupational Therapy Student is a validated and reliable observation tool (AOTA, 2002) where trained observers make judgments and attach those to a 1-4 rating scale to assess fieldwork performance at the midterm and for final evaluation.

The Collaborative Design Model Duration

The research team identified that an additional 5 weeks were needed to provide enough time for the participants to collaborate on activities in the ECSPED classroom, implement interventions, analyze data, and reflect on the experience. One possible solution to the differing timelines for university programs was to recruit preservice ECSPED students to be a part of the Collaborative Design Model during the summer prior to their junior year experience. To incentivize students to participate, grant funding would be needed to provide scholarships or stipends for preprofessional ECSPED teachers to participate.

Conclusion

The initial pilot of the Collaborative Design Model demonstrates the potential benefits of this interprofessional education and practice model for preprofessionals. When preprofessionals collaborate, reflect, and discuss the needs of the students with whom they work, they gain a sense of self-efficacy in their abilities to support students. Through the Collaborative Design Model, teachers and support personnel learn that they need not do everything alone. The old adage "two heads are better than one" applies here. When preparation programs seek to explicitly develop preprofessional collaboration skills, preprofessionals learn the benefits of seeking support from other professionals in different professions. In addition, preprofessionals gain exposure to the roles, responsibilities, and language of these professions. Through this model, all students, including Chris, who sparked the idea, can be effectively and efficiently supported in the inclusive early childhood classroom. By using the Collaborative Design Model, the preprofessional ECSPED teachers, preprofessional occupational therapists, and their professional counterparts embedded academic, social, emotional, and behavioral supports into their daily lessons, interventions, and assessments. The model guided the preprofessionals in this process of reciprocal learning through collaboration and afforded them opportunities to better support the preschool staff and students. The executive director, the facilitators, and the preprofessionals involved in this pilot postulate that the Collaborative Design Model helped them to collaborate with others, reflect on their professional practice, and thus improve the skills of children in the preschool classrooms. To support preprofessional and practicing occupational therapists and ECSPED teachers in the 21st century, we must commit to providing not only a culture of collaboration but a commitment to including collaboration time and resources in our education environments. Collaboration across educational professionals and related staff will strengthen their self-efficacy and lead to increased student outcomes for students with disabilities.

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Appendix

Program Requirements for the 12-Week Collaborative Design Model

Week 1

| Topic: Orientation to the Interprofessional Practice | Task |
|---|--|
| Orientation to program | Identify one preschooler or group to work with in Week 2 |
| Decide on team weekly meetings | Identify assessments common to disciplines |
| Interview a student from a different discipline | Orientation to interprofessional practice |

Week 2

| Topic: Assess, Plan, and Implement Intervention | Task |
|--|---|
| Implement intervention developed during Week 1 with one or two identified preschooler(s) | Collaborate on assessment of selected preschoolers |
| Implement lessons planned during Week 1 with selected preschoolers | Plan Week 3 intervention for selected preschoolers with goals |
| Administer assessments and/or screeners for selected preschoolers | Identify one or two preschoolers for intervention in Week 3 |
| Develop intervention plan based on assessments | Identify two team interprofessional goals for completion by Week 11 |
| Attend staff meetings | |

Week 3

| Topic: Reflect and Revise Intervention Plan | Task |
|---|---|
| Implement intervention developed during Week 2 with one or two identified preschooler/s | Report on selected preschoolers at team meeting |
| Implement lessons planned during Week 2 with selected preschoolers | Collaborate on assessment of selected preschoolers |
| Administer assessments and/or screeners for selected preschoolers | Plan Week 4 intervention for selected preschoolers with goals |
| Develop intervention plan based on assessments | Identify one or two preschoolers for intervention in Week 4 |

Week 4

| Topic: Preparing an In-service | Task |
|---|--|
| Implement intervention developed during Week 3 with one or two identified preschooler(s) | Report on selected preschoolers at team meeting |
| Implement lessons planned during Week 3 with selected preschoolers | Implement intervention for selected groups |
| Administer assessments and/or screeners for selected preschoolers, gradually increasing caseload when appropriate | Collaborate on assessment of selected preschoolers |
| Plan Week 5 intervention for selected preschoolers with goals | Prepare an in-service for teaching team |
| Identify one or two preschoolers for intervention in Week 5 | |

Week 5

| Topic: Reporting on Progress | Task |
|---|---|
| Implement intervention developed during Week 4 with identified preschooler(s) with one or two identified preschooler(s) | Progress or discharge notes on one or two selected preschoolers |
| Implement lessons planned during Week 4 for selected preschoolers and document interventions | Implement intervention for selected groups |
| Administer assessments and/or screeners for selected preschoolers, gradually increasing caseload when appropriate | Collaborate on assessment of selected preschoolers |
| Report results to parents and preschool staff | Plan Week 6 intervention for selected preschoolers with goals |
| Report on selected preschoolers at team meeting | Identify two or more preschoolers for intervention in Week 6 |

Week 6

| Topic: Co-teaching | Task |
|---|--|
| Implement intervention developed during Week 5 with identified preschooler(s), gradually increasing caseload when appropriate | Implement intervention for selected groups |
| Implement lessons planned during Week 5 for selected preschoolers and document interventions | Progress or discharge notes on two or more selected preschoolers |

| | |
|---|---|
| Administer assessments and/or screeners for selected preschoolers, gradually increasing caseload when appropriate | Co-teach with another pre-professional partner |
| Report results to parents and preschool staff | Collaborate on assessment of selected preschoolers |
| Report on selected preschoolers at team meeting | Plan Week 7 intervention for selected preschoolers with goals |

Weeks 7-10

| Topic: Sharing Professional Knowledge | Task |
|---|--|
| Implement intervention developed during the previous week with identified preschooler(s) gradually increasing caseload when appropriate | Report results to parents and preschool staff |
| Implement lessons planned during the previous week for selected preschoolers and document interventions | Report on selected preschoolers at team meeting |
| Administer assessments and/or screeners and develop plans, gradually increasing caseload when appropriate | Progress or discharge notes of caseload as appropriate |
| Implement intervention for selected groups | Create a presentation for instructional and support staff to share at a staff meeting based-on the needs of the school |

Weeks 11-12

| Topic: Reflecting on the Process | Task |
|---|---|
| Implement intervention with identified preschooler/s as typical for an entry-level caseload when appropriate | Progress or discharge notes of caseload as appropriate |
| Administer assessments and/or screeners and develop plans as typical for an entry-level caseload when appropriate | Implement intervention for selected groups |
| Report results to parents and preschool staff | Team will transition and complete interventions by the end of Week 11 |
| Report on selected preschoolers at team meeting | Complete collaboration survey |