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A Note from the Conference Chair and Proceedings Editor

The annual TED Conference in Long Beach California this year was fantastic! There were so many exceptional presentations, posters, roundtables, networking opportunities, and more. We hope you were able to carry that sunny California/TED energy home to your colleagues and students. As we enter 2024, I hope you found time to relax and recharge. The TED publications and communications committee is pleased to present the TED 2023 Conference Proceedings!

This year, all sessions at TED were invited to submit for the proceedings, including roundtables, posters, and Kaleidoscope presenters. In total, 31 sessions were submitted for the proceedings. Please note that individual authors are responsible for content accuracy.

We appreciate the time and effort submitting authors and the editorial team dedicated to these proceedings. Our mission is to facilitate the sharing of research, best-practices, and innovative ideas. The TED Conference Proceedings is one small way to foster collaboration and communication among TED members and build community.

We hope you find the TED Conference Proceedings to be a valuable contribution to the publication of all the important work we are doing.

See you all in Pittsburg, PA, November 5th – 8th for TED 2024!

Brannan Meyers   Andrew M. Markelz
Conference Chair   Conference Proceedings Editor

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'SEAS' THE MESSAGE: UNDERSTANDING ECHOLALIA THROUGH EDUCATOR AND SPEECH THERAPIST PARTNERSHIPS

Abstract

Echolalia, the repetition of one's own utterances, that of others, or those from audio/media, is a common characteristic of children and youth with autism spectrum disorder. Prior research has suggested children use these repetitions in language to engage in functional communication, as they often lack self-generated speech. While educators are the natural audience for many types of echoed utterances across contexts, there is limited literature to guide the practice of classroom teachers, who may be unfamiliar with the language processing style of children with ASD. In this presentation, the functions of echolalia will be described, along with research-based recommendations to guide educators on how to intervene effectively with their students who use it. We also describe strategies for helping children who use echolalia to support their communicative interactions with peers and others, emphasizing the importance of collaboration between educators and speech language pathologists (SLPs).

Problem/Issue: The Need to Support Learners who Use Echolalia

Echolalia is the immediate or delayed repetition of previously heard utterances from sources such as songs, TV shows, movies, or communication partners. It is a common characteristic of children and youth with autism spectrum disorder (Cohn et al., 2022). Historically, researchers estimated that echolalia occurred in up to 85% of individuals with ASD who develop speech (Rydell & Prizant, 1995). However, more recent perspectives, such as that of Roberts (2014), argue that this estimate likely encompasses nearly all children with ASD, suggesting that echolalia can be considered a defining characteristic of ASD. Research indicates that echolalia can manifest during interactions with various communication partners and across different contexts during the school day (Charlop, 1986).

Despite the crucial role played by teachers, SLPs, and paraprofessionals in fostering meaningful communication experiences and expanding students' verbal skills, they often receive insufficient training in responding to echolalia (Steigler, 2015). Therefore, it is imperative that school professionals, who spend substantial time with these children, possess the knowledge and resources to support learners who use echolalia and comprehend their role and influence as communication partners (Cohn et al., 2022).

Research supports the idea that echolalia serves as a valuable communicative tool with a specific function for the user (Marom et al., 2018). Echolalia is typically categorized into four types: pure immediate, pure delayed, mitigated immediate, and mitigated delayed (Gladfelter & VanZuiden, 2020). Immediate echolalia involves the immediate repetition of words, while delayed echolalia occurs when individuals repeat words later. A pure echoed utterance is an

exact repetition, while a mitigated utterance indicates modifications from the original utterance (e.g., changing "Let's go outside" to "let's go over there"). In this context, 'mitigated' refers to the modification or alteration of the echoed expression. Mitigated echolalia represents a developmental stage in children with ASD, where they transition from mere repetition of words to adapting language for communication. This stage involves understanding and modifying echoed phrases to convey needs or thoughts more effectively, signifying improved language comprehension and functional use (Neely et al., 2016).

Due to the time delay, delayed echolalia may seem unusual as these utterances are used out of context. For instance, a child might enjoy a song their teacher sang at circle time and later ask to sing it at home by stating, "Circle time!" instead of saying the name of the song. Recognizing the purpose behind echolalia and its potential communicative function can help teachers better respond to and engage with children who exhibit this linguistic behavior. In this context, we provide tips for educators and speech language pathologists as they collaborate to help children who use echolalia to enhance their communicative interactions with peers and others.

Tip #1: Understand Children with ASD Learn Language Differently

Children with autism often follow a distinct language learning trajectory compared to typically developing children (Prizant, 1983; Stiegler, 2015). Initially, they tend to use longer language chunks without grasping the individual words. These grammatically complex chunks lack comprehension of word meanings. For instance, a child with ASD might consistently utter a phrase like "It's time for your dinner" to indicate dinnertime without comprehending each word separately. However, researchers examining echolalia in children with ASD have observed a developmental progression (Prizant, 1983; Blanc, 2012). Initially, children echo language chunks without full comprehension. As they mature, they adapt these echoes, resulting in shorter sentences and increased language flexibility. Although echolalia may persist in specific situations, the child's understanding improves, enabling the appropriate use of words and phrases. For more in-depth information on the language development of many children with ASD and the role of echolalia, refer to https://www.asha.org/practice-portal/clinical-topics/autism/echolalia-and-its-role-in-gestalt-language-acquisition/.

Tip #2: Understand Communicative Functions Associated with Echolalia

Echolalia serves various purposes for children. On certain occasions, they may employ it for self-soothing or self-regulation when feeling upset, or to practice and rehearse specific phrases (Sterponi & Shankey, 2014). In such instances, the use of echolalia may not necessarily be directed at conveying a message to someone else. However, it is crucial for teachers and speech therapists to recognize that echolalia frequently functions as a form of communication. A growing body of research indicates multiple communicative functions associated with echolalia, including turn-taking, labeling, providing information, gaining attention, requesting, affirming, directing others' actions, and protesting, among others (Marom et al., 2018; Prizant & Rydell, 1984; Stiegler, 2015). For an in-depth examination of the communicative functions of echolalia, refer to Cohn et al., 2022.

Tip #3: Understand the Importance of Responding to Echolalia

Instead of disregarding echolalic utterances as intrusive and meaningless repetitions, it is crucial to recognize their potential communicative intent, offering valuable insights into the child's thoughts and needs (Sterponi & Shankey, 2014). Teachers and SLPs should also be aware that many echolalic expressions are presented with an expectation of a response from a conversation partner (Cohn et al., 2022). Thus, educators are encouraged to provide responsive interactions to echoed utterances, fostering dialogue, and improving comprehension. Context is key, as elements from the environment and individuals present often feature in echoed expressions, providing clues to intent (Prizant & Rydell, 1984).

Practically, teachers and SLPs should acknowledge communication attempts by responding with a smile, nod, or repetition to convey that the child has been heard. Instead of offering "replacement language," teachers should embrace these communication attempts, utilizing teachable moments to model clear language (Marom et al., 2018). Additionally, the use of high-constraint or restricted language, such as commands and specific questions, may contribute to immediate echolalia (Gladfelter & Van Zuiden, 2020). To minimize immediate echolalic responses, educators can adopt an open-ended questioning style and break down lengthy instructions into shorter segments.

To monitor echolalia, classroom educators and SLPs should regularly record snippets of echoed utterances at frequent intervals (Cohn et al., 2022). This practice allows for collaborative analysis of the ascribed meanings with other professionals and parents. Finally, teachers and SLPs can make efforts to untangle and interpret echoed utterances to better support the communicative attempts of students. Understanding the true meaning behind echolalia enables teachers to target ways to encourage self-generated language by modeling their own speech accordingly (Cohn et al., 2022). See a list of actionable strategies for educators in Table 1.

Table 1

Effective Responses to Echolalia

Strategies	Description
Respond!	Acknowledge echolalia as a communication attempt by responding in some way.
Don't take it too seriously	Understand that echolalia may not always carry the same meaning as the original phrase.
Avoid "replacement language"	Embrace the child's attempts at communication and model language during teaching moments.
Be a detective	Try to understand the meaning behind echoed utterances to provide appropriate responses.

Record echoed utterances	Capture and analyze echoed speech snippets to track progress and discuss meanings.
Unravel and decipher	Work to decode echoed utterances to support the communicative efforts of the child.

Conclusion

In conclusion, establishing effective communication is vital for individuals with ASD displaying echolalia. To achieve consistent identification, analysis, and response to communicative attempts conveyed through echolalia, it is imperative for teachers, paraprofessionals, psychologists, and SLPs to cultivate a shared understanding. Facilitating collaboration and knowledge exchange among these professionals can enhance the support provided to students with echolalic communication patterns.

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INSPECTING AND CONNECTING COMPUTATIONAL THINKING CONCEPTS IN PRE-SERVICE SPECIAL EDUCATION TEACHER PROGRAMS

Abstract

These proceedings explain a multi-year, multi-faceted project focused on incorporating computational thinking (CT) into pre-service special education teacher (PSET) coursework. The research activities included professional development for special education (SPED) faculty in higher education, CT integration into PSET coursework, and opportunities for PSETs to teach students with disabilities in a CT summer camp pilot. We studied how deliberate integration of CT content and pedagogies into PSET coursework increases knowledge and understanding of how to teach CT to students with disabilities. Overall, SPED faculty increased their understanding and ability to locate CT resources to include in their coursework, and PSETs were able to develop accessible lessons for students with disabilities and had opportunities to teach students with disabilities in a camp held in June 2023.

Background/Rationale

Computational thinking (CT) refers to the thinking required to express concepts as steps that a computer can execute (Wing, 2006). CT is included in computer science (CS) standards and courses, and CS is a high school requirement in at least 27 states and is expected to increase (Ofgang, 2022). CT is a required skill and prerequisite skill for CS coursework.

In pre-service special education teacher (PSET) programs, there is little to no focus on CT and CS, while core academic areas such as reading, writing, mathematics, science, and social sciences are emphasized. Teachers of students with disabilities (SWDs) are often unprepared to teach or reinforce CT concepts in their future classrooms of SWDs. This leads to an increase in disparities between students with and without disabilities in terms of accessing a full academic curriculum that includes CT.

As CT is a 21st-century skill and considered the "5th C" to the traditional 4 C's: critical thinking, creativity, collaboration, and communication (Battelle for kids, n.d.; Grover, 2018), it is imperative that CT concepts are accessible to all students, including SWDs. By including CT as a requirement in PSET coursework, it is anticipated that PSETs will include CT in their future classrooms. This will only lead to increased equity and accessibility to CT skills. However, just as in other content areas in education, it is essential that PSETs both increase their knowledge of CT and their ability to teach CT. In special education, the first step to making CT and CS accessible is through the UDL framework (Israel et al., 2015). In PSET coursework, using

practice-based teacher education (PBTE) opportunities helps to reinforce CT knowledge and application of this content as PSETs practice to teach future SWDs (Brownell et al., 2019). Finally, providing PSETs with real-world teaching opportunities to teach CT in authentic settings provides PSETs with opportunities to plan, enact, and reflect on teaching CT skills to students with disabilities.

Research Questions

This comprehensive, multi-year, multi-faceted project aims to increase exposure and knowledge of CT in special education faculty, PSETs, and SWDs through a deep inspection of CT concepts in our PSET coursework and making connections amongst stakeholders involved in educating SWDs. Our guiding questions throughout our project's lifespan are:
1. Does CT professional development (PD) for special education faculty increase their knowledge and confidence in including CT concepts in their PSET coursework?
2. Does including CT concepts in PSET coursework increase PSET knowledge of CT skills and pedagogy?
3. To what extent do PBTE opportunities and real-world teaching opportunities increase PSET knowledge of CT and confidence in teaching CT? What is the impact on SWDs?

Methods

SPED Faculty

Pretest surveys were given to SPED faculty in the Fall of 2021. PD occurred monthly and focused on introducing CT and its importance in preK-12 grade curricula, teaching CT, and including CT in SPED coursework. In the Spring of 2022, SPED faculty were given a posttest. The pretest and posttest consisted of Likert scale questions (5 equals Strongly Agree, 4 equals Agree, 3 equals Neither Agree nor Disagree, 2 equals Disagree, and 1 equals Strongly Disagree) and open-ended, free-response questions.

PSET Coursework

Faculty of two required junior year courses (a class on UDL and assistive technology and a course on curriculum and methods for teaching in SPED) for all PSETs purposefully integrated CT concepts and teaching opportunities into their coursework. The same presentation given to SPED faculty was provided to PSETs in their courses. PSETs were provided with the PBTE learning cycle, and the faculty provided opportunities for PSETs to rehearse teaching CT in their classes. PSETs were given a pretest and posttest at the beginning and end of the semester to gauge their understanding of CT and their confidence in teaching CT to their future students The pretest and posttest consisted of Likert scale questions (5 equals Strongly Agree, 4 equals Agree, 3 equals Neither Agree nor Disagree, 2 equals Disagree, and 1 equals Strongly Disagree) and open-ended, free-response questions.

Camp InSpECT

In addition to the rehearsal that PSETs were expected to complete to reinforce teaching CT, an extracurricular opportunity was provided to selected PSETs in the summer of 2023. Camp InSpECT (*Including Special Education in Computational Thinking*) was an accessible, one-day pilot CT camp for SWDs in rising grades first through seventh. Ten PSETs were trained to teach in this camp after completing the required courses described above and in a two-day summer workshop focused on planning to teach CT concepts in an engaging and accessible way to students with various disabilities. PSETs for the camp were given a pretest at the start of the summer workshop and a posttest at the end of the camp. The pretest and posttest consisted of Likert scale questions (5 equals Strongly Agree, 4 equals Agree, 3 equals Neither Agree nor Disagree, 2 equals Disagree, and 1 equals Strongly Disagree) and open-ended, free-response questions.

Additionally, caregivers of the eight SWDs that attended the camp were given a pretest and posttest that consisted of open-ended questions related to the SWD's experience with CT, the caregivers' experiences with CT, and feedback on the camp. The SWDs that attended the camp ranged in grade level, with the majority in third grade, and the disabilities represented at the camp included Autism, learning disabilities, emotional and behavioral disabilities, and attention deficit/hyperactive disorder.

Results

SPED Faculty

Of the 30 SPED faculty members included in the department, 24 consented to participate in the pretest, and 11 in the posttest. Before the SPED Faculty monthly PD sessions, most (58%) strongly disagreed or disagreed with the statement, "I am confident in my ability to teach computational thinking to pre-service and in-service teachers." In the posttest, 33% responded "disagree" to that statement, and the remaining 67% responded "neither agree nor disagree," indicating incremental change but an ongoing need for PD in this area. Additionally, in the pretest, 50% indicated that they did not know where to find inclusive CT activities, but in the posttest, 33% indicated that they did not know where to find inclusive CT activities.

PSETs Coursework

Over 175 PSETs consented to participate in the pretest and 55 in the posttest. Overall, there are significant differences from pre-to-post ($p < .05$) in self-efficacy and confidence. More specifically, significant differences were found in the questions that assessed PSET required SPED coursework and the inclusion of CT concepts in those courses from pre-survey ($M=3.35$, $SD=1.01$) to post-survey ($M= 3.89$, $SD= .83$) ($t(83) = -2.46$, $p =.02$) and in confidence in teaching CT skills to students with disabilities from pre-survey ($M=2.81$, $SD=.95$) to post-survey ($M= 3.27$, $SD= .78$) ($t (78) = -2.11$, $p = .04$). Additionally, PSETs responses suggest that they increased their capabilities for locating resources for teaching CT to learners with disabilities from pre-survey ($M= 3.17$, $SD= .97$) to post-survey ($M= 3.73$, $SD= .83$) ($t (78) = -2.56$, $p = .01$).

Camp InSpECT

PSETs. Of the 10 PSETs that participated as Camp InSpECT teachers, five participated in the pretest. In the pretest, PSETs largely indicated "disagree" or "neither agree nor disagree" to the statement, "I have inclusive lessons or activities for teaching computational thinking." In the posttest, all (n =3) that responded indicated "agree" or "strongly agree" to that statement.

In the open-ended questions, PSETs indicated in the posttest that the most engaging activities for SWDs were "giving directions to robots," "hands-on activities," and "robots that were designed with sequencing in mind." PSETs also witnessed and reported on multiple barriers that SWDs seemed to experience, including "communication," "opening up to share with others," "attention span," and PSETs expressed challenges with "explicitly teaching computational thinking in a way campers would remember."

Caregivers of SWDs. Caregivers of the SWDs who attended Camp InSpECT provided feedback on the camp and the experiences of their child from the caregiver's point of view. Caregivers shared multiple points of feedback, including that the camp was an opportunity that their child has not had in the past, that the camp was accessible, and that the camp allowed for their child to learn new things. When discussing the importance of a summer camp opportunity and learning CT, caregivers commented, "I feel that it is crucial for children with learning difficulties to work with individuals who can work [with] and understand some of the difficulties the children might encounter." A caregiver also shared:

"My son couldn't stop talking about his day. He adored working with the robots and programming them to complete tasks."

Discussion

Preliminary results of the above research activities suggest that the multi-faceted project has increased CT knowledge and confidence in teaching CT content to SWDs for both SPED faculty and PSETs. While there is much more to study, embedding CT content into PSET coursework appears to be beneficial to PSETs' understanding of CT, and could potentially increase their self-efficacy in teaching CT to their future students. Additionally, the practice-based activities that have been embedded into coursework for PSETs, and the extended opportunities to teach SWDs in authentic contexts through the camp seem to be of benefit to PSETs.

SPED faculty require ongoing PD in CT, as the changes from the pretest to the posttest were not significant but did show some promising changes. We intend to provide SPED faculty with access to materials that have been developed by faculty to show how CT can be seamlessly integrated into other content areas and how to use the UDL framework to support CT in instruction for SWDs.

PSETs at our institution have been exposed to CT in their junior year for four semesters as of the fall of 2023. Preliminary results indicate significant changes from pretest to posttest in several areas, namely PSET confidence in teaching CT to future learners and PSETs' abilities in locating materials to reinforce CT skills in their future classrooms. We intend to refine our discussion in future courses by reflecting on this research, and providing PSETs with access to

materials, specific ways to integrate CT into various content areas, and how to use the UDL framework to support CT in instructional activities for SWDs.

Caregiver feedback indicates an ongoing need for accessible opportunities for SWDs to participate in summer camps, and to engage in CT and CS skills. While few caregivers participated in the posttest, those that did discussed specific CT skills that are both required for an understanding of CS, and that are logical thinking skills. Caregivers specifically cited "sequencing" in their feedback; a skill that is a focus in traditional CT curriculum, but also is reinforced in other areas of the preK-12 curriculum such as mathematics. Overall, their feedback is encouraging for providing future CT camp opportunities to SWDs.

Implications

The preliminary results are encouraging but are still preliminary. We intend to lean heavily on practice-based teacher education experiences in our required PSET coursework, to both reinforce understanding of CT terminology and pedagogy, and to give PSETs an opportunity to practice teaching in simulated contexts. Due to several barriers inherent to collaborating with preK-12 school districts, we are limited in the number of face-to-face opportunities PSETs have in the junior year of their PSET programs. By providing a summer camp opportunity, we can create an authentic and accessible learning experience for SWDs and an opportunity for PSETs to implement the skills they were taught in their required junior-year PSET courses.

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UNDERSTANDING BEHAVIOR AND SOCIAL-EMOTIONAL NEEDS OF DIVERSE YOUNG CHILDREN IN EARLY EDUCATION ENVIRONMENTS

Abstract

This paper focuses on the challenges of distinguishing developmentally appropriate from disruptive behaviors in diverse young children within early education settings. This study sought to define a continuum of behavior from developmentally appropriate to disruptive in the classroom to help teachers better identify when prevention and intervention can occur. Data was gathered from a selected expert panel using a three-round Delphi survey process. The results indicated that there seems to be consistent agreement among the expert list regarding characteristics of problem behaviors across the domains; however, there continues to be difficulties in differentiating between developmental appropriateness and disruptive behaviors while they are occurring.

Background/Rationale

Differentiating between developmentally appropriate and disruptive behaviors is complex and crucial for effective support in child development and behavior management. Developmentally appropriate behaviors align with typical expectations for a child's age and stage, often characterized by curiosity, exploration, and skill acquisition. In contrast, disruptive behaviors, such as persistent aggression or extreme withdrawal, tend to fall outside of typical developmental ranges and can hinder a child's functioning (Wakschlag et al., 2005; Yoder & Williford, 2019). Young children ages three and older who display disruptive behaviors in early childhood programs, particularly African American males, face a higher likelihood of being suspended or expelled (Chow et al., 2021). Such disciplinary actions not only lead to a loss of instructional time but also tend to limit opportunities for social-emotional development. Prolonged behavioral issues are a strong indicator of poor academic performance and early withdrawal from school (Breitenstein et al., 2009).

Early Educator's Knowledge, Skills and Differentiating Between Behaviors

There is a gap in early childhood teacher education and professional development where educators often lack skills to identify at-risk behaviors and create tailored interventions (Yumus & Bayhan, 2016). This shortcoming is reflected in the studies of Wakschlag et al. (2005 and 2012) and Soares et al. (2022). They observe that numerous teacher education programs do not sufficiently equip teachers for early intervention and management of behaviors in culturally

diverse classrooms, even though frameworks like the pyramid model are implemented and encouraged. Distinguishing between behaviors remains difficult, underscoring the need for proactive monitoring, assessment, and communication with parents to support diverse young learners and reduce disciplinary actions (Yoder & Williford, 2019). These programs often overlook the importance of addressing biases towards students of color and those from low-socioeconomic backgrounds. Such measures are essential to supporting diverse young learners so that educators can address concerns early and effectively, which can mitigate suspension and expulsion rates (Chow et al., 2021). Inadequate comprehensive training can contribute to lower levels of reported confidence among educators in managing classroom behaviors and fulfilling the demands of modern educational environments.

Early Educator's Role in Intervention

Teachers often seek assistance or make behavior referrals in cases where problems in the classroom become chronic or severe, when educators feel a sense of hopelessness, and when persistent disruptive behaviors impact the student and their peers (Chow et al., 2021). The need for professional development to prevent and manage challenging behaviors is widely recognized, with an emphasis on increased collaboration among school staff and strong partnerships with families to reduce suspension and expulsion rates (Chow et al., 2021). There is a need for more training for teachers in early childhood education. It is important for teachers to better understand and differentiate between developmentally appropriate and disruptive behaviors and consider contextual factors (i.e., family background, race/ethnicity, socioeconomic status) to be more effective in supporting all students in their classrooms.

Purpose of Study

This study sought to ***define a continuum of behavior*** from developmentally appropriate to disruptive in the classroom to help teachers better identify when prevention and intervention can occur. The research questions were:
  (1) How do educational professionals in early childhood distinguish between developmentally appropriate and disruptive behaviors in classroom environments?
  (2) How do educational professionals in early childhood define behaviors within the developmental domains of Wakschlag's model of behavior dimensions?

Method

To investigate the early educators' differentiation between developmentally appropriate and disruptive behaviors in young children, a three-round Delphi survey study was conducted with an expert panel of seven early educators who were experienced in supporting behavioral and social-emotional development in young children. Seven consented to participate in the first round of the survey, eight completed the second round, and six finished the final round. This retention rate was considered high, as Delphi surveys typically anticipate up to a 33% dropout rate from the first to subsequent rounds. We used both quantitative and qualitative data analysis procedures for each round of our Delphi survey to work toward consensus among our panel of experts. Round 1

consisted of qualitative data analysis with some descriptive data reporting (e.g., frequency of responses). Rounds 2 and 3 integrated mixed methods analysis procedures, with descriptive statistical analysis for Likert-style and ranking questions and qualitative coding for open-ended questions. We utilized a combination of quantitative and qualitative data analysis across all rounds to achieve expert consensus. The first round focused on qualitative analysis and descriptive data reporting, while the subsequent rounds employed mixed methods including statistical analysis for structured questions and qualitative coding for open-ended responses, with each round's analysis tailored to its unique role in building consensus.

Results

Most of the panel (71.4%) agreed to the definition of disruptive behavior as behaviors that impede the learning of the student and others. When asked about identifying behaviors through consideration of culture, ability, and environment, 100% somewhat or completely agreed but a smaller percentage (i.e., 57.1%) completely agreed. Table 1 presents the frequency of specific behaviors identified in Round 1 and the mean scores from Rounds 2 and 3. The behaviors that maintained high mean scores across Rounds 2 and 3, such as "Throwing chairs or other objects" and "Physical aggression to self, others, or adults," were considered among the most disruptive by the expert panel. The decrease in mean scores for some behaviors, such as "Isolation" and "Rejects any adult support consistently" indicate that the panel, through consensus building, deemed these behaviors to be less disruptive between Round 2 and Round 3. In qualitative responses, some experts noted that these behaviors might be more characteristic of developmentally appropriate behaviors for young children. Table 2 includes data from the priority ranking of behaviors in each domain and represents the consensus of the expert panel. Behaviors are listed in descending order from the most developmentally appropriate at the top to the least developmentally appropriate at the bottom.

Table 1: Descriptive Statistics for Each Round and Domain of Behavior

Domain	Operationalized Behavior of Concern	Round 1 Frequency	Round 2 Mean/SD	Round 3 Mean/SD
Emotional Regulation	Throwing chairs or other objects	2	4.75	4.33
	Sudden outbursts that result in harming others	2	4.71	4.50
	Flipping over desks	1	4.63	4.33
	Hitting self or others	5	4.38	4.00
Internalization of Rules	Isolation	1	3.57	2.67
	Rejects any adult support consistently	2	3.29	2.83

	Not processing social cues to follow rules	1	3.00	2.67
Aggression Modulation	Physical aggression to self, others, or adults	2	4.43	4.33
	Throwing objects on purpose to hurt someone	2	4.29	4.17
	Pushes down desks	1	4.14	3.17
	Hitting	2	3.86	3.67
	Kicking	2	3.86	3.83
Empathy and Conscience	Repeatedly hurts others	1	4.43	3.83
	Laughs when others are hurt	1	3.86	2.67
	No concerns for others feeling	3	3.00	2.50

Table 2: Priority Ranking of Behaviors from Most Developmentally Appropriate to Least Developmentally Appropriate

Emotional Regulation	Internalization of Rules	Aggression Modulation	Empathy and Conscience
Ask adult for help	Understands and follows the rules	Physical aggression to self, others, or adults	Shows kindness
Can co-regulate with an adult	Can participate in group situations	Pushes down desks	Begins to identify basic emotional reactions of others
Cries for a short period of time	Is cooperative in group situations	Tears up paper	Demonstrates concern for others feelings
Takes a deep breath when frustrated	Can follow through on classroom rules and procedures	Throwing objects on purpose to hurt someone	Cries when they see someone cry
Requests a break when agitated	Makes better choices after teacher redirection	Hitting	Empathizes with teacher if they tell the last they are sad/happy/proud
Crumples up a paper	Waits their turn to wash their hands	Kicking	Acknowledges feelings of self/others
Talks through emotions with teacher or peer	Able to negotiate with minimal frustration and/or adult support	Runs around classroom	Thinks about how their actions affect others
Self-soothes by getting a toy and moving on	Stays in assigned seat	Consistently refuses to accept others solutions	Apologizes without being told
Utilizes classroom tools	Flexible to new experiences	Depends on adult to solve problems	Reflects on their actions

Can identify emotions and cause		Hides under tables when upset	
Makes a waiting list			

Discussion

Overall, the expert panel agreed on the definition of disruptive behavior. They tended to focus on overt problem behaviors across various domains, but there was less clarity on differentiating between maladaptive and typical developmental behaviors in young children. While they acknowledge the importance of context and assessment, specific guidelines for interpreting these factors are lacking. This suggests that while there is a general understanding of what constitutes disruptive behavior, there remains a need for more nuanced criteria to effectively discern between developmental and disruptive behaviors in young children. The primary distinction made is based on the behavior's duration and intensity, suggesting a need for more detailed criteria to discern between developmental and disruptive behaviors effectively.

Implications

Based on the results of our research we suggest:
1. Research into more precise and detailed guidelines to help educators differentiate between developmentally appropriate and disruptive behaviors.
2. Enhanced training programs to provide educators with skills to assess and interpret behaviors contextually, and to understand the nuances between different types of behaviors.
3. A more individualized approach in early childhood education, where educators are equipped to understand and respond to the unique backgrounds and needs of each child.
4. Policies directed towards creating supportive environments that are conducive to the healthy social-emotional development of young children.

Conclusion

In conclusion, this study highlights the intricate challenge of defining and differentiating developmental and disruptive behaviors in young children within early education environments. This research not only highlights the necessity for improved training and professional development for educators but also opens avenues for further research aimed at developing effective assessment tools and strategies. Ultimately, this study serves as a critical step towards enhancing our understanding and management of children's behavior, ensuring a supportive and conducive learning environment for their holistic development.

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PRACTITIONER WELL-BEING AND VIRTUAL INSTRUCTION

Abstract

Following data collection in the spring of 2020, phenomenological reductions revealed that many factors contributing to special educator well-being are most apparent in face-to-face instructional delivery models. When preparing and supporting educators teaching in virtual climates, opportunities targeting teachers' positive emotions, engagement, relationships, meaning, and accomplishment (PERMA) must be prepared for, as virtual learning environments remain a viable learning-access option for students nationwide. Theoretically, this study was framed within Martin Seligman's well-being theory (WBT).

Background/Rationale

Special education teacher (SET) shortages are a prevalent challenge for public schools across the United States (Bettini et al., 2017; Cancio et al., 2018; Carver-Thomas & Darling-Hammond, 2019; Lesh et al., 2017). This challenge was documented before the onset of COVID-19 and was amplified by the change in instructional delivery that hallmarked K-12 education from March 2020 onwards. In response to the broadly impactful issue of teacher attrition and in consideration of the critical need for equipped SETs to fill vacant teaching positions, a transcendental phenomenology study, framed within Seligman's (2011) well-being theory, was designed to capture the well-being of experienced special education teachers in the mid-Atlantic region of the United States. Although this study's design preceded the onset of COVID-19, data was collected following school closures in a mid-Atlantic state. The timing of data collection provided qualitative insight into the workplace actuality of experienced SETs during typical pre-pandemic workdays and their experiences teaching at the onset of and during COVID-19.

The data collected represents SETs who have remained in the field beyond their novice teaching years, representing the perspectives of experienced and retained teachers. The data revealed the following five themes. First, positive and negative emotions, accomplishment, and meaning were primarily derived from working with students. Second, engagement was derived from creating and delivering instruction. Third, relationships were integral to SET workplace well-being. Fourth, there were common barriers to well-being that the SETs navigated within their roles. Lastly, relationships and meaning were enhanced by the participants' involvement in developing novice and pre-service teachers. The timely relevance of additional future research centralized on teacher well-being during and following societal stress and uncertainty was also permeating from the data.

Due to the long-reaching impacts of the special education teacher shortage and the impacts of virtual instruction on special educator well-being, the results of this study and the applicability inherent within the data could empower school leaders to inventory their teachers'

well-being. School leaders could also choose to frame their leadership within a new mindset centric to the well-being of professional teachers.

Research Questions

CQ: How do experienced special education teachers describe their well-being within their professional roles?

SQ1: What role-related experiences generate positive emotions for SETs?
SQ2: What role-related experiences are engaging for SETs?
SQ3: How do SETs describe their role-related relationships?
SQ4: What role-related experiences are meaningful for SETs?
SQ5: What role-related experiences generate a sense of accomplishment for SETs?

Methods

A transcendental phenomenological design best aligned with the purpose of this study and was used to capture raw data from the participants. Multiple methods of data collection were used to support the triangulation of data. A Workplace PERMA Profiler was initially used to develop a description of participants. After completing this profiler, data collection commenced with individual semi-structured interviews of participants, focus group discussions, and audio diary recordings. Data was analyzed using Moustakas' (1994) modification of the Stevick-Colazzi-Keen method. The use of Nvivo aided the analysis.

Results

Five conclusive themes emerged from the analysis, each representative of one or more pillars of well-being. From this thematic analysis, additional consideration was given to the data related to virtual teaching. Each pillar of well-being provided an organization for the data to describe the sources of well-being for teachers during virtual instruction during the spring of 2020.

First, positive emotions were derived from interactions with students and student successes during virtual instruction. Second, engagement was indicated from activities related to creating and designing instructional materials for students while working and teaching from home. Third, relationships were supported by opportunities to connect with colleagues within the virtual environment, either socially or through professional tasks. Fourth, many teachers described deriving meaning through the support of novice teachers during typical face-to-face teaching circumstances. However, the virtual environment offered minimal opportunities to support novices fruitfully, but access to these relationships and opportunities generated a sense of meaning. Lastly, teachers experienced a sense of accomplishment by realizing student successes. Also, completing tasks yielded a sense of accomplishment in the virtual environment.

Discussion

When comparing the data related to face-to-face instruction and the data points related to COVID-19, there were some notable shifts in the frequency of data related to either setting. When reviewing data points related to positive emotions, there were 21 data points detectable in relation to COVID-19. However, there were 19 data points related to face-to-face instruction. For this pillar of well-being, data related to positive emotions were more commonly noted within the data for COVID-19, which leaves a residual inquiry as to why the data appeared in this way. Perhaps, the real-time virtual teaching experience during COVID-19 triggered more responses related to pandemic experiences than reflective comments related to face-to-face instruction. When reviewing data points related to the other elements of well-being, all data points relative to the other elements presented with more frequency during face-to-face instruction. The element of meaning was minimally detectable among the data related to COVID-19. There was one data point present and relevant to COVID-19, as opposed to six data points apparent within the data related to face-to-face instruction. This could be due to the decreased access to novice teachers during the earliest days of pandemic teaching, as mentoring and supporting novices was a notable source for SETs during face-to-face instruction and typical teaching times. However, additional inquiry would be necessary to determine the causal reasons.

Implications

The data revealed through this study indicated that sources of well-being were present during face-to-face and virtual instruction in the spring of 2020. However, threats to teacher well-being were persistent within both instructional models, which yielded a residual necessity for further research on teacher well-being. These inquiries could target the replication of this study, the development of a new study activating a mixed methods approach and objective biomarkers for health and well-being, or the trialing of interventional methods to support the enhancement of teacher well-being. With teacher shortages persistent across the country, the emphasis and criticality of prioritizing teacher well-being in research should remain necessarily palpable.

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HOW PRESERVICE TEACHERS LEARN TO COLLABORATE: A PRELIMINARY GROUNDED THEORY

Abstract

Utilizing grounded theory methodology, the researcher aimed to examine undergraduate teacher candidates' learning of collaboration in three certification programs at a large Midwestern university. The grounded theory can be described as teacher candidates learning about collaboration under learning conditions such as their university courses, fieldwork experiences and spaces in-between such as their homes. What they learned about teacher collaboration was through spontaneous opportunities mostly from informal sources such as peers, roommates, family members, and formal sources such as methods instructors and cooperating teachers. Their learning about teacher collaboration was categorized as theoretical, experiential, and aspirational. The primary implication for teacher preparation personnel is the necessity of intentionally teaching about collaboration and offering scaffolded practice opportunities in the methods classroom and during fieldwork settings.

Research Rationale and Question

Despite attempts to fill the gaps, challenges in adequately preparing high-quality teachers to work with all students toward ensuring achievement and success across various classroom field experiences remain (Weiss et al., 2016). While prior literature on Teacher Preparation Programs provides critical insights into how collaboration is characterized and structured, gaps in learning about collaboration remain. Limited information is available on the literature and underpinning theories of the pedagogy and the application of collaboration preparation. Furthermore, the connection between how theory and methods courses are used to study preservice teachers' preparation and learning to collaborate across three programs (i.e., general education, special education, and dual licensure) is understudied. Thus, the study aim was to understand how preservice teachers experience learning to collaborate for inclusion within their preparation of special education, general education, and dual certification streams and was guided by the research question: How do preservice students experience and learn collaboration for inclusion in their teacher preparation programs?

Literature Review

The quality of student teaching experiences and field placements significantly impacts teacher effectiveness and student outcomes (Bastian et al., 2020; Brownell et al., 2020). These experiences are vital for developing pedagogical skills, including collaboration. However, many candidates receive insufficient instruction in collaborative pedagogy during coursework and fieldwork. This gap may lead to candidates graduating without adequate knowledge of

collaborative practices or requisite skills (Weiss et al., 2016). Collaboration is essential for enhancing teacher and student performance, fostering positive learning environments, and supporting inclusive education (Leko et al., 2014; McLeskey et al., 2022). The absence of proper training may impede educator effectiveness and student outcomes. Candidates often encounter inconsistent, infrequent, and outdated collaboration opportunities, which exacerbates the gap in understanding and applying collaborative practices, necessitating a greater focus on collaboration in teacher preparation programs (McLeskey et al., 2022; Ricci et al., 2017). To address these concerns, teacher education should incorporate comprehensive approaches to teaching collaboration skills, including relevant theoretical frameworks, hands-on experiences, and opportunities for reflection and feedback (Blanton et al., 2018). This approach equips future educators to foster collaborative learning environments and improve student outcomes (Cook et al., 2020).

Methodology

Grounded Theory is a qualitative research methodology characterized by its core tenets, which have evolved through different generations of scholars. First-generation grounded theory, pioneered by Strauss, Corbin, and Glaser, emphasizes social processes, iterative data collection and analysis, theoretical sampling, and theoretical saturation (Glaser & Strauss, 1967). Social processes refer to the focus on understanding how individuals and groups interact and create meaning within their social contexts. Iterative data collection and analysis involve an ongoing and cyclical process of collecting and analyzing data to develop theories. Theoretical sampling is the deliberate selection of data sources that are most relevant to the emerging theory, while theoretical saturation indicates the point at which new data no longer contributes to theory development. In contrast, second-generation grounded theory, advanced by scholars like Charmaz, Thornberg, and Mills, introduces the idea that researchers co-construct knowledge with participants and emphasizes a specific nomenclature of data analysis stages. Grounded Theory, as a methodology, has evolved over time and offers a robust framework for conducting qualitative research (Charmaz, 2006). In this empirical study, Grounded Theory was adopted as the research methodology to explore and understand the intricate social processes within the research context.

This empirical study was conducted at a large public university in the Midwest, with the Institutional Review Board's (IRB) approval. Participants were recruited through a flyer distributed by program managers, resulting in a total of seven participants. Among these participants, three were from special education, three from elementary education, and one from dual certification. The data collection process spanned from Summer 2021 to Spring 2022, utilizing semi-structured interviews conducted via Zoom. Each interview lasted between 40 to 60 minutes, guided by an initial set of 13 questions. These questions were designed to gather demographic information, understand the participants' experiences in methods classes and field experiences, and explore their perceptions about collaboration for inclusion. Over time, some of these questions were modified better to understand the conceptual aspects within and between participants.

The data analysis process was conducted in three phases: initial, axial, and theoretical coding (Charmaz, 2006). The approach was iterative and centered on inductive analysis methods,

with codes being developed into categories. This iterative comparison process uncovered patterns of learning and how participants made sense of their interactions in methods courses and fieldwork experiences. The theoretical analysis transitioned from inductive to abductive reasoning, which is the process of forming an explanation to understand unexpected emergent findings (Starks & Trinidad, 2007). Both inductive and abductive reasoning played crucial roles in guiding the initial theory of how participants were learning about collaboration and further theorizing their perceptions and experiences about collaboration. The trustworthiness of the data was ensured through several measures, including member checks, peer reviews, and adherence to a quality-assured interview protocol. The process also involved careful participant selection and representation, clearly worded interview questions, and strict recording and data storage confidentiality.

Findings

The theory (see Figure 1) revealed that the participants' learning experiences about collaboration were more spontaneous than planned, occurring organically across their university coursework and fieldwork placements. This spontaneity was complemented by a degree of self-mediation as they navigated various learning contexts through myriad interactions, active involvement in activities such as meetings, and using practical tools like lesson plans to facilitate collaboration. Interestingly, the preliminary theory unearthed unexpected concepts, suggesting that participants drew knowledge from sources beyond their methods courses and fieldwork. Furthermore, the learning outcomes were not one-dimensional but rather fell into three broad categories: theoretical, experiential, and aspirational. This tripartite categorization underscores the comprehensive nature of the learning process, encompassing not just acquired knowledge but also lived experiences and future aspirations.

Figure 1.
Grounded Theory: How Teacher Candidates Learn about Collaboration and Make Meaning of their Learnings.
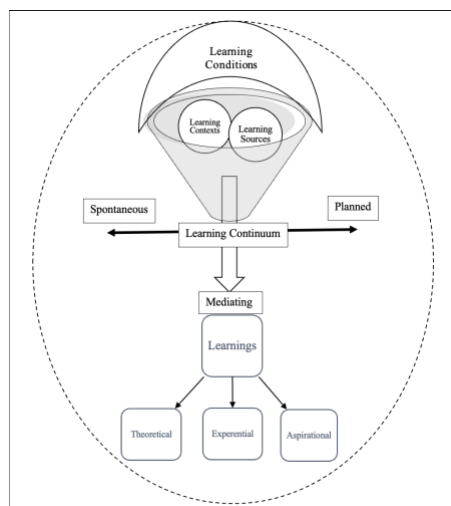
Discussion

In the realm of teacher education, the findings related to the connections between methods courses and fieldwork experiences reveal crucial insights. Several researchers (Pinter et al., 2022; Weiss et al., 2016) underscore the significance of the methods course as a pivotal component in teacher preparation, emphasizing that it represents a common point of engagement for all participants. However, an underlying issue highlighted by other researchers (Bastian et al., 2020; Darling-Hammond & Hyler, 2020; Ricci et al., 2017) reveals a persistent gap between the methods courses and the practical realities of fieldwork. These gaps in teacher preparation programs raise concerns about the effectiveness of such programs in adequately preparing aspiring teachers for the challenges they will face in actual classroom settings. The need to strengthen connections between methods courses and fieldwork experiences is further reinforced by studies conducted by eminent scholars who highlight the importance of bridging the divide between theory and practice (Leko et al., 2014). Their research emphasizes that this integration is crucial for teacher candidates to develop the necessary skills and knowledge for successful teaching careers.

Furthermore, this study extends the existing body of literature by delving into the extensions of these findings, and a range of unexpected discoveries emerge. Surprising findings include instances where the presence of supervisors, typically considered a fundamental component of teacher preparation, was notably absent from the learning process. Additionally, a continuum of learning has been observed, spanning from spontaneous and unplanned experiences to deliberately structured learning opportunities. Teacher candidates were found to draw knowledge and insights from various sources beyond the traditional methods courses and fieldwork, such as roommates and family members. This self-mediated learning suggests that teacher candidates actively seek opportunities for growth and development beyond the formal curriculum. Moreover, the learning outcomes identified encompass theoretical knowledge, experiential learning, and aspirational growth, underscoring the multifaceted nature of teacher preparation. These unexpected extensions of the findings shed light on the complex and dynamic nature of teacher education, suggesting that it goes beyond conventional boundaries and can be influenced by myriad factors and sources.

Implications

The research findings underscore the need for a paradigm shift in teacher education programs. A focus on theoretical understanding in methods courses is insufficient to prepare prospective teachers for real-world classrooms. Instead, these courses should emphasize the practical application of collaboration skills and their underlying rationale. Field experiences should be curated to provide diverse and meaningful experiences, encompassing philosophical underpinnings of education, service delivery methods, and best teaching practices. To ensure coherence and integration between methods courses and field experiences, a framework based on high leverage practices (HLPs) should be adopted. HLPs bridge the gap between theoretical knowledge and practical application, emphasizing deliberate practice and real-world application. Even though this research offers valuable insights into the connections between methods courses and field experiences in teacher education, it is essential to consider the limitations associated

with the COVID-19 context, the absence of theoretical saturation and sampling, and the time gaps between participant interviews. These limitations allow future researchers to build upon this study and further investigate the complex learning systems of teacher candidates learning about teacher collaboration within teacher preparation programs.

Conclusion

Despite no universal policy on collaboration and inclusion, teacher programs are preparing prospective teachers for inclusive practices. Teacher candidates self-mediate their learning across contexts, with collaboration opportunities often being spontaneous, which highlights the irony of learning collaboration in isolation. To address this, learning experiences should be intentionally designed to encourage mutual learning and collaboration, necessitating a cohesive, curated, and intentional connection between coursework and fieldwork. The complexity of learning to collaborate accentuates the need for a scaffolded learning approach.

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IS AWARENESS ENOUGH? EDUCATORS' SELF-REPORTED TRAINING IN THE CHARACTERISTICS OF AUTISM SPECTRUM DISORDER

Abstract

With ever-increasing numbers of children/youth being diagnosed with Autism Spectrum Disorder (ASD), the number of students receiving special education services has surged. Because teachers often function as the gatekeepers for special education referrals in school settings, they must remain current in ASD symptomatology. This study sought to determine the self-reported type and level of training provided to general and special educators regarding the early warning signs and symptoms of ASD.

Background/Rationale

Within the field of education, many issues pertaining to the identification and education of students with ASD intersect. With the rapid increase of prevalence rates for this population, accurate identification procedures must be in place. Of primary concern is the lack of consistency across diagnostic definitions, tools, and resources used within and across disciplines (Gerber & Semmel, 1984). More specifically, discrepancies existing between prior and current editions of the DSM (APA, 2013) pose confusion for clinical practitioners and service providers. Ongoing divergence in professional practices surrounding the identification and diagnosis of students with ASD contributes to issues surrounding over-identification and false positives (Wakefield, 2016).

Paralleling the inconsistencies in diagnostic criteria, teacher preparation programs have failed to establish cohesive competencies concerning ASD. Minimal components of fieldwork and incomprehensive coursework have resulted in misconceptions surrounding the characteristics, needs, and instructional practices used with students with ASD (Rakap et al., 2016). Even more concerning is the lack of confidence educators feel in their ability to effectively identify and support the academic, socio-emotional, communicative, and behavioral needs of this population of students (Busby et al., 2012).

To further complicate the accuracy of identification, interactions between teacher and student characteristics continue to perpetuate biases in the recognition and provision of services to students with ASD. Teachers are likely to evaluate students from diverse cultural backgrounds according to the values and belief systems of their own. As a result, biases and assumptions are typically corroborated as a result of self-fulfilling prophecies and confirmation bias (Darley & Gross,1983). Students with ASD and behavioral issues in particular are much more likely to receive special education referrals (Ysseldyke & Algozzine, 1981). Student characteristics such as economic status and ethnicity have also historically demonstrated inconsistencies in ASD (CDC, 2006). In particular, data in the U.S. have suggested a significant underrepresentation of Latinx children compared to both white and black non-Latinx children (CDC, 2006). Similarly,

African-American children receive diagnoses on an average of 1.4 years later than White children (Mandell et al., 2002). These student characteristics have been shown to influence rates of referral and diagnosis. The intersectionality of biases, lack of consistency in diagnostic criteria, and poor pre-service and in-service teacher preparation create a composite that may hinder the appropriate identification and provision of services to students with ASD.

Purpose of the Study

With the increasing identification of students with ASD, it is important to identify misconceptions or adherence to outdated or misinformed diagnostic criteria to understand if discrepancies in identification exist. Due to the increasing number of students with ASD being included in both the general and special education settings, educators often are an integral component of the referral process. To provide appropriate educational and ancillary support services, referrals made by educators must be well-informed. The purpose of this study was to evaluate the type and level of instruction provided to pre-and in-service educators surrounding the identification of students with ASD. Self-reported data assessed whether characteristics of ASD were taught directly, incidentally, or not at all. With appropriate teacher training programs, students' over and/or under-identification may be limited. This study addressed the following research question:

1. Is there a statistically significant difference between general and special education teachers' pre-service and in-service training on the DSM-V (APA, 2013) criteria as it pertains to ASD?

Method

This study investigated the self-reported levels of pre-service and in-service training provided to general and special educators concerning the most recent version of the diagnostic criteria, DSM-V (APA, 2013), for students with Autism Spectrum Disorder (ASD). The ASD Diagnostic Criteria Questionnaire (ASD-DCQ; Desnoyer, 2019) was developed through a systematic analysis and segmentation of the DSM-V (APA, 2013) criteria as it pertained to Autism Spectrum Disorder. More specifically, it assessed whether the instruction received was direct or incidental, as well as the context in which it was taught (pre-service education or in-service training). For each item on the questionnaire, participants indicated on a 5-item Likert scale whether instruction in their pre-service education or their in-service training, focused on the specific diagnostic criteria for Autism Spectrum Disorder, was: (1) never mentioned or discussed, (2) mentioned incidentally and not discussed, (3) mentioned incidentally and discussed, (4) explicitly mentioned and discussed, (5) explicitly mentioned and taught through direct instruction. Convenience sampling of pre-service and in-service special and general educators was obtained at a diverse, four-year university located in the Southwest region of the United States. Respondents were representative of educators maintaining employment in a large, urban, school District. To analyze the data, a Mann-Whitney U was conducted to ascertain if a significant relationship existed between the type of educator (e.g., general education and special

education) and type of instruction (e.g., pre-service and in-service) provided on DSM-V (APA, 2013) criteria as it pertains to ASD. The alpha level was set at .05.

Results

The descriptive statistics for general and special education teacher training across
The components of the DSM-V (APA, 2013) indicated that special educators self-reported higher levels of training in both pre-service and in-service programming than their general education counterparts.

A Mann-Whitney U test was conducted to determine if there were differences in pre-service scores on the DSM-V (APA, 2013) between general and special education teachers. Pre-service scores on the DSM-V (APA, 2000) for general education teachers (mean rank=35.87) were statistically significantly lower than for special education teachers (mean rank=52.20), U= 803.500, z= 3.331, p=.001, using an exact sampling distribution for U. For reference, the lowest possible score across DSM-V (APA, 2013) questionnaire items was 16, with the highest possible score being 80. These results indicate that special educators, as compared to general educators, reported statistically significantly higher levels of training on components of the DSM-V (APA, 2013) in their teacher preparation programs.

A Mann-Whitney U test was conducted to determine if there were differences in in-service scores on the DSM-V (APA, 2013) between general and special education teachers. In-service scores on the DSM-V (APA, 2013) for general education teachers (mean rank=28.93) were statistically significantly lower than for special education teachers (mean rank=40.85), U= 731, z= 2.405, p=.016, using an exact sampling distribution for U. For reference, the lowest possible score across DSM-V (APA, 2013) questionnaire items was 16, with the highest possible score being 80. These results indicate that special educators, as compared to general educators, reported significantly higher levels of training on components of the DSM-V (APA, 2013) in their in-service training.

Discussion

Results from the Mann-Whitney U indicated that special educators reported receiving statistically significantly more pre-service and in-service training than general educators. This aligns with prior research that found that general educators possess significantly lower levels of ASD knowledge than do special educators (Segall & Campbell, 2012). Concerning pre-service instruction, this supports the findings of Talib and Paulson (2015) who found that pre-service special educators were more likely to report higher levels of direct field experience and confidence in their ability to teach students with ASD. As a result of minimal field experience, general educators were more likely to hold inaccurate perceptions of symptoms associated with the disorder, citing inadequate training and preparation as cause for concern (Talib & Paulson, 2015). Concerning in-service instruction, this supports the findings of Able et al. (2014) who found that in-service educators documented the need for ongoing training and professional development. Specifically, educators in the Able et al. (2014) study expressed a need for training in the components comprising ASD as a categorical disability area and strategies to promote collaboration across disciplines.

Conclusion

Overall, this study suggests a lack of perceived training and biases in the conceptualization, identification, and subsequent referral of students with ASDs. Due to the subjectivity in the referral and identification process, it is imperative that pre-service programs directly and explicitly provide instruction in ASD symptomatology. Further, it is the responsibility of school districts to provide ongoing in-service training surrounding current and contemporary practice. In place of standardized practices in identification, principles of pseudoscience (e.g. confirmation bias, anecdotal evidence, correlation fallacy) have become commonplace and impact our provision of services to students with disabilities (Travers, 2017). Given the ongoing evolution of the field of ASD, the use of present-day criteria across multiple disciplines would better position educators to make informed diagnostic predictions. The inconsistent criteria across multiple disciplines may be contributing factors that influence the over-identification of children/youth as having ASD. In alignment with the results of numerous other studies, these data suggest a need for more extensive and cohesive training opportunities.

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AN INCLUSIVE NETWORK FOR SOCIAL JUSTICE: SUPPORTIVE PILLARS
FOR EDUCATORS OF COLOR

Abstract

Preparing, recruiting, and retaining educators of Color is a priority for addressing the experiences of students of Color in schools. Preparation must also address the experience of preservice educators of color. Programs can instill commitment and resiliency and provide strategies for addressing barriers and inequities they encounter in the field. Through an intentionally designed mentoring program in one school of education, program creators completed a self-study to examine the development and data from the program. They identified key pillars of support (leadership, network development, career exploration and research, and community outreach and engagement) incorporated in a social justice focused inclusive mentoring network for future educators of color. Thematic analysis of participants perspectives identified impact along three themes: a sense of belonging and identity integration, social justice and its impact on youth they would work with, and access to information about and support for career pathways.

Background/Rationale

Creating a specialized mentoring program for teachers of Color and future teachers of Color to share experiences in the context of mentoring support can improve recruitment and preparation experiences of pre-service teachers of color. Connection and a network for future educators of Color has the potential to provide a sounding board and support, transformative preparation experiences that extend support and resiliency across a career.

Encouraging and supporting the development of new special educators of Color is critical due to the impact of these teachers on the outcomes for students of Color. According to research, race matching students to teachers, particularly for Black males has positive impacts (Dee, 2004; Gershenson et al., 2022) including some evidence of boosts to academic performance (Redding, 2019) and social and emotional impact such as feeling more cared for, more motivated, and better able to communicate (Egalite & Kisida, 2018). Further, teachers of Color even have influence in the efficacy and effectiveness of their white peers who teach alongside them (Gershenson, et al., 2023). An enduring inequity exists in the parity of educators of Color and students of Color (Scott & Alexander, 2018). These factors and an awareness of the need to prepare educators of color for the institutional inequities they might encounter and have encountered across schooling were a major impetus in the development of a scholarship and mentorship program for future educators of Color in our university. Based on focus groups with previous graduate students, we knew that there was a disconnect between the demographically ethnoracially diverse undergraduate programs and the common nearly all White cohort of future educators in educator preparation programs. We learned that support: financial, social/career related, and academic were all lacking, and this deficiency negatively impacted the experience of

students of color in these programs. We created the mentoring network program to provide support to students as they applied to graduate school with some ongoing support once enrolled. The potential to impact outcomes for students of Color in p-12 schools and mitigate inequities in the schooling experiences of preservice educators of Color were central.

To engage in transformative learning, educators bring awareness and purposeful attention to building community with social awareness of power differentials (hooks, 1994; Freire, 2000 Mezirow, 1991). To support and encourage future educators of color we developed a network of future educators enrolled in programs and professionals and a space for career exploration, social justice advocacy, financial, academic, and social support. Culturally responsive/sustaining practices to improve outcomes for students of color in k-12 schools, improves experiences and outcomes for young people with attention to racial and social identity and value and knowledge evident in cultural, linguistic, and other aspects of identity (Gay, 2002; Paris &Alim, 2017). Similarly, culturally sustaining practice is beneficial for supporting future educators of Color (Gardner et al., 2020). Attention to a context for transformation and reflective interpretations of future educator of Color's schooling experiences became a shared nexus for belonging and inspired the adaptation of a model of networked mentorship (Montgomery, 2017). A sense of belonging as a motivating force (Allen et al., 2022) and factors of support through thoughtful layers of mentorship became tools for developing engagement experiences. Awareness and management of networks of support provided opportunities for future educator's agency and belonging along the pathway and in the redressing of bias experienced across schooling experiences (Gardner et al, 2020).

The program was designed to address inequities in the education system and facilitate the integration of racialized and teacher identities (Boveda & Weinberg, 2022). In our examination of program data, we sought to answer the following questions.

(1) Which program structures do participants name as impactful in improving their educational experience?
(2) What factors do participants say created a sense of belonging to the teaching profession and educator preparation program?

Method

We examined data from four cohorts of undergraduate and graduate students of Color across a four-year period enrolled in or planning to apply to educator preparation programs. A total of sixty-three different undergraduates and graduate students representing a range of racialized identities participated in the program. The majority identified as Black and Latine or Afro-Latine. The program included an intentionally developed network of layered mentorship with monthly engagements and study sessions among graduate mentors, undergraduate fellows and frequent connections to k-12 community educators and faculty mentors as well. Goals of the program included social justice advocacy, anti-racist pedagogy, and pathway support to serve future educators of Color. Intentionally designed to provide responsive support in the face of complex sociocultural identities, amplifying the perspectives and perceptions of participants helped uncover the essential elements responsible for a successful program.

To understand the efficacy of the mentoring network program and its impact on future educators of Color, we examined written artifacts and notes on conversation created at the

monthly engagement sessions and study sessions across the four-year program. Through a process of thematic analysis (Braun & Clarke, 2012) we were able to identify the most impactful and salient elements of the program as identified by participants.

Findings

Through an examination of findings from engagements with comments and written artifacts of undergraduates, graduate student mentors, and community educators, it was clear that enrollments, experiences, and a desire for specific outcomes were important motivational factors to program development, but within that space, additional factors were important for future educators of Color. Each of these factored into the shared experience and connection among them.

Our work together led us to see culturally sustaining pillars of support that we paired with financial, academic, and career/social support. These pillars worked together to support identity integration of the teaching profession and racialized identities previously at odds with the idea of education (Boveda & Weinberg, 2022). Pillars included leadership development and opportunity, which meant being "heard" and designing messages, network development, career exploration, research opportunities, and community outreach and engagement. Together these five pillars met the needs of these educators of Color to sustain them along their journey to become educators. Through pathway planning within a personalized mentorship context, participants felt free to identify their own preferred outcomes for schooling and to explore multiple possible pathways to these goals. Through Vision boarding, goal setting, shared writing and community and school explorations at engagement sessions and at schools and community settings, individuals stayed focused on future goals and a clear plan for future thinking.

The combination of a liberation lens, social justice advocacy and reflection paired with exposure to culturally sustaining practices and community engagement created both an affinity space and a supportive framework for future educators of Color to thrive. Together we built community and both experienced and designed transformative learning opportunities. This was achieved through a synergistic matching of faculty, community-based educators in schools, community organizations and committed future educators. Future educators at the undergraduate and graduate level reflected on their experiences and among them they found radical imaginings about justice (Kelley, 2002) as motivation and fodder for personal and societal future mapping, the importance of narratives of experience, residual self-doubt as a shared phenomenon fueled by bias in the process of becoming an educator, along with frustrations with systemic inequities. Through the artifacts, themes that resonated and were focal for participants included *a sense of belonging and identity integration*, *social justice, and its impact on youth* they would work with, and *access to information and support about career pathways*.

Sense of belonging and identity integration

Participation in a mentoring network with other preservice educators instilled a sense of belonging to the field and helped teachers see their racialized and educator identities and congruent possibilities for their future. One Black future special educator said, "It was so refreshing to be surrounded by such powerful people who looked like me." This statement

showed the impact of an affinity space on her sense of belonging to the institution. This helped her see the possibilities for being an educator despite a lack of models or representation in her own schooling experience. "It helped remind me that my goals are possible and with a powerful support system, I can do whatever I put my mind to." Again, this participant saw where she fit in and recognized the supports that belonging that would be important across her career. Another undergraduate future educator found the space a safe place to learn, "I was treated very warmly, like a family in the community…" The sense of belonging pervaded, as nearly all the participants echoed this sentiment.

Social Justice and Impact on youth

Another Latine future educator, undergraduate in the group, talked about the understanding of lived experiences and how that fueled her motivation for social justice through an educator career path as well as the potential impact on youth. "[I]hear about the experiences…and glean diverse journeys, where it was being treated unfairly in life or by institutions. It's something I need to hear to support individuals properly in my future career." The importance of social justice advocacy awareness and application to work with students was highlighted.

Access and support for steps on career pathway

The most powerful impact that was evident in the words of program participants spoke to the access to career pathway information and support in pursuing educator pathways. One future educator of Color identifying as bi-racial said, "It has given me a network of people that I can fall on for resources, support and to guide me." Another Latine future teacher spoke about her graduate student mentor, "She helped me with my application process. She also offered a listening ear and advice." Every other participant spoke about the importance of their relationships with graduate student mentors, program or other faculty and community educators. In each of these comments, the opportunity to hear about options and choices along career pathways as well as the connection and network for exploring careers were lauded as the most beneficial components of the program.

       An understanding of the perspectives of future educators of Color and practicing k-12 educators of Color facilitated a bridging connection and showed the impact of the pillars of support provided in the mentoring program. These pillars and related strategies are helpful for the development of mentor networks to serve mentees and mentors across careers and across settings in the education field. Critical connections across university departments and programs as well as professional contexts added layers to the mentorship and impacted persistence and a sense of belonging, career decisions, and induction support for future teaching.

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LITERARY BRAILLE INSTRUCTION IN TODAY'S UNIVERSITY PROGRAMS:
A REPLICATION STUDY'S CONTRIBUTION TO THE FIELD

Abstract

In this paper we describe the third survey study of the state of teacher preparation programs in literary braille instruction, or the second replication study (Farrand et al., 2022). The purpose of the study was to ascertain the current practices of university programs for literary braille instruction and to assess how the adoption of UEB and changes in technology have affected programmatic practices. Participant feedback from instructors representing 24 university programs that taught literary braille were examined to identify consistencies and changes overtime in literary braille instruction. Below we will unpack the development of the replication survey study, findings, the use of replication survey studies in teacher preparation programs, and how replication studies contribute to the field.

Background

The first survey study to determine the state of teacher preparation programs in braille instruction was conducted by Amato (2002). Findings indicated inconsistencies with instructional format, content, proficiency criteria, and student outcomes across programs in the United States and Canada. A replication study was published almost a decade later by Rosenblum and colleagues (2010). Findings indicated that the initial inconsistencies had persisted over time. A later study found that teacher educators and teachers could use the Delphi method to come to consensus on several braille literacy competencies which could lead to standardizing the field (Lewis et al., 2012). Since these studies, teacher preparation programs that teach literary braille persisted, but continued to adapt, especially with the 2012 adoption of Unified English Braille (UEB) to replace English Braille American Edition (EBAE) as the standard braille code in North America and with changes in braille technology.

The study referenced in this paper serves as the third survey study of the state of teacher preparation programs in literary braille instruction, or the second replication study (Farrand et al., 2022). The purpose of this study was to ascertain the current practices of university programs for literary braille instruction and to assess how the adoption of UEB and changes in technology have affected programmatic practices. Although many of the procedures from the first two studies were followed as much as possible, several changes to the survey had to be made to effectively assess current practices. Because it has not been common practice to use multiple replication survey studies to understand the state of teacher education programming across time,

this paper focuses on replication as a method and considers how replication survey studies might benefit the field of teacher preparation.

Replication studies are valued in educational research, yet they are rarely conducted (Perry et al., 2022; Schwab et al., 2023; Travers et al., 2016). When conducted, their purpose is usually to verify claims of education practice effectiveness and to assess the reliability and accuracy of the original study (Travers et al., 2016). In this study, we considered what other kinds of insights replication survey studies might offer the field, especially when the focus is on teacher education programming.

Because of the complex nature of educational settings, most replication studies are not direct or exact. Participants, settings, and technological and pedagogical shifts occur over time (Christensen et al., 2022; Travers et al., 2016). Technology especially undergoes rapid change over time which means that even survey questions can become obsolete within ten years (Christensen et al., 2022). Literary braille technologies have changed substantially in the last ten years. For these reasons, this replication study was not a direct, but a constructive replication that spring-boarded from the first and second survey studies on teacher preparation for literary braille instruction. Moreover, since literary braille teacher preparation is a small subset of teacher education, the study of programmatic aspects was limited to descriptive statistical data. Therefore, the following methodological questions comprise the focus of this paper.

Research Questions

1. How does the replication of survey studies about teacher preparation programs in literary braille instruction contribute to the field?
2. What are the benefits and drawbacks of implementing a survey study replication for teacher preparation programming?

Methods

Survey Development

The authors developed the survey by first contacting one of the authors from the second replication study (Rosenblum et al., 2010). After receiving a copy of the questions from the second replication study, the authors identified additional questions to add to the survey to examine the change to UEB, instructional formats, and requirements for braille proficiency for programs/states (Farrand et al., 2022).

Participant Recruitment

The authors used online searches to identify all university programs in the United States and Canada that taught braille. First the authors looked at online websites, Texas School for the Blind and Visually Impaired, list from 2016, and Teaching Visually Impaired (n.d.), updated in 2019, that contained lists of university programs for visual impairments. After reviewing both websites, the authors then cross-referenced the list by going to each university program website to confirm

if the program was still listed and to identify a contact person for each program. Of the 47 programs that were initially identified, 41 programs were confirmed, and contacts were invited to participate in the replication study. One of the universities emailed that they no longer taught braille. The authors used the same eligibility criteria for participants as was used in the previous replication study (Farrand et al., 2022; see also Rosenblum et al., 2020). Twenty four of the 40 institutions that teach braille, participated in the survey.

Descriptive Statistics

Descriptive statistics were used to describe the responses to the replication survey study. The authors wanted to be consistent with how the previous two studies had chosen to describe the data. Percentages were used to describe the number of participants that answered questions on the survey. Data description in tables were also replicated to show data set comparisons on literary braille code across the three studies (see Farrand et al., 2022). Information about literary braille errors by instructors was also shared in percentages to replicate the previous study. In addition, data was unpacked and organized to replicate the previous study to make it easier to identify changes and consistencies. For example, the text description of braille proficiency questions were organized by university program requirements and state requirements.

Survey Findings

The findings of the study have identified some consistencies, such as demographics of instructors has remained consistent, mostly white females over the age of 45, and agreement on erasures and what constitutes a braille error (Farrand et al., 2022). There has been a noticeable decrease in the number of tenured or tenured eligible instructors, with more than a 10% decrease. Overall, there was evidence of updated teaching resources, methods of delivery, especially related to technology, and braille code (UEB) across programs. In comparison with the previous studies (Amato, 2002; Rosenblum et al., 2010), face-to-face instruction is being replaced by hybrid and online learning as the preferred instructional format. There continues to be no minimum competency of standards in literary braille across programs.

Methodological Discussion

This replication study contributed to the field in three ways. First, it gathered updated information that reflected changes in the field since the last study was conducted. This included questions to ascertain online and hybrid instruction and changes in the official braille code. Second, it provided a third snapshot of the field, adding to the first two, and creating a sequence of data from multiple points in time. This made it possible to notice trends, such as the sharp decrease in highly experienced teacher educators of braille. There was an almost 20% decrease per decade of braille teacher educators with more than 11 years of experience. The changes in technology use were also indicated in the increase of hybrid instruction. These possible trends could affect not only the way braille is taught to teachers, but how proficient they become in teaching braille to their own students. Third, this replication indicated areas of possible stagnation. Although concerns about standard proficiency expectations have been raised since

the first study (Amato, 2002), there has been no movement towards ensuring consistency across U.S. programs.

There were both benefits and drawbacks to implementing this survey study replication for teacher preparation programming. Many of the benefits were listed above as updating data collection based on changes in the field as well as the highlighting of trends and plateaus. The drawbacks included questions about timing, possible limitations on participant eligibility, and the need to omit some of the original survey questions. Identifying the "right" time to complete a replication study can be tricky. The use of technology and the adoption and change to UEB for braille since the previous two studies seemed like an opportune time to complete a replication study. However, the eligibility criteria, which remained the same between the Amato (2002) and Farrand et al. (2022), may have limited some programs from having a participant who could participate in the study. Some programs may not have had educators that had taught a literary braille course for a minimum of three semesters or quarters. Also, some questions were not included in the replication study, such as questions about braille interlining and proofreading (Farrand et al., 2022). It is important to consider if all questions should be asked from previous replication studies to examine changes and consistencies overtime.

Implications

Based on the results of our replication survey study we recommend:
1. Try to include all questions from previous studies to ensure consistency.
2. Add additional questions, as needed, to address changes in the field.
3. Conduct another replication study in 5-10 years, with at least one of the same authors.
4. Add participant incentives for participating in a future replication study in hopes of increasing the number of programs represented.

Conclusion

Replication survey studies in teacher preparation programs could help maintain the pulse of the field, identify overall commonalities, differences, strengths, needs between programs, and gather updated data related to changes in technology and policies. This extends the purpose of replications beyond verifying claims of education practice effectiveness and assessing the reliability and accuracy of original studies. Replication studies also provide a larger picture of instructional methods across university programs, which goes beyond the information gained in individual program evaluations to give teacher educators a broad perspective of literary braille instruction in North America.

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SOCIAL-EMOTIONAL STRATEGIES TO SUPPORT CULTURALLY AND LINGUISTICALLY DIVERSE STUDENTS

Abstract

Educators across the country have been reporting significant gaps in students' academic and social-emotional skills since the COVID-19 pandemic. Over 80% of public schools reported that the pandemic negatively impacted students' social-emotional learning and behavioral development during the 2021–22 school year (School Pulse Panel, 2022). Culturally and linguistically diverse (CLD) students and students with disabilities are among the largest groups of students negatively impacted (School Pulse Panel, 2022). It is important that educator preparation programs (EPPs) prepare preservice teachers to appropriately support CLD students with disabilities academic and social-emotional needs. This pilot study identified specific areas that (N= 98) preservice teachers from two southern states related to their current preparedness to meet the social-emotional needs of CLD students with and without disabilities.

Problem/Issue

Today, teachers are addressing and remediating significant gaps from the COVID-19 pandemic. In addition to an academic gap, students have also experienced a decline in social-emotional skills. According to the School Pulse Panel (2022), 69% of public schools report an increase in the number of students requesting mental health services, and 56% have seen an increase in classroom disruptions from student behaviors. Moreover, 2021-2022 data indicate that today's schools serve approximately 7.3 million (15 percent) students receiving special education and/or related services under the Individuals with Disabilities Education Act (IDEA), of which 41% are CLD students with disabilities (NCES, 2023). Novice teachers may not be adequately prepared to support students' academic and social-emotional needs, particularly for students with disabilities from CLD backgrounds. Research has documented that a lack of appropriate support leads to negative outcomes for CLD students (Gay, 2013). This trend requires EPPs to better prepare preservice teachers for the realities of their future classrooms, as social-emotional well-being and academic achievement go hand in hand in that a deficit in one area can result in a deficit in the other (Jones & Khan, 2017). Preservice teachers must learn how to integrate culturally responsive, social-emotional learning practices into their classrooms, which can improve both the academic achievement and social-emotional well-being of _all_ students in their classrooms and EPPs must be cognizant of how teacher candidates are prepared to address these factors.

Literature Review

Every student thrives in a classroom that provides a safe and supportive learning environment, and this is especially important for CLD students. A student's social and emotional well-being has a significant impact on their academic achievement as their social-emotional and cognitive abilities are intertwined (Jones & Khan, 2017). Healthy social-emotional skills are not something that just 'happens' for children; it is something that is cultivated and developed over time and across settings. In the classroom, the teacher is responsible for creating this environment, ensuring that it supports the development of academic and social-emotional skills for all students.

To assist educators in developing student's social-emotional needs, the *Collaborative for Academic, Social, and Emotional Learning (CASEL)* has developed a framework for social-emotional learning (SEL) that encompasses five core competencies that work together to develop healthy social-emotional skills in individuals. SEL can be described as the process of understanding and managing essential life skills such as emotional regulation, goal setting, showing empathy for others, establishing positive relationships, and making responsible decisions (CASEL, 2021). The SEL core competencies include (1) self-awareness, self-management, social awareness, relationship skills, and responsible decision-making, which align with the characteristics of culturally responsive teaching. This is particularly important because evidence shows that disparities in the cultural backgrounds of teachers and students have contributed to inequitable educational experiences and lower academic achievement for students who are CLD (Gay, 2013; Ladson-Billings, 1995). Incorporating SEL and culturally responsive practices (CRP) can be an effective way to address the educational inequities and individualized needs of CLD students with and without disabilities.

Culturally responsive practices refer to pedagogy that incorporates the diverse backgrounds and lived experiences of all students in the classroom into instruction and the classroom community (Gay, 2013; Ladson-Billings, 1995). Culturally responsive practices have been shown to improve students' academic and behavioral achievement and strengthen students' identities which contributes to positive outcomes for all students (Gay, 2018). Allowing students to share aspects of their culture with their classmates supports the self-awareness of that student, the social awareness of the rest of the students, and the relationship skills of everyone. When the competencies of CASEL's SEL are viewed and implemented through the lens of CRP, all students are given the opportunity to learn and thrive in a safe and inclusive learning environment.

Professional Tips for Implementation

Preparing preservice teacher candidates to work with CLD students with and without disabilities can be accomplished through the integration of CRP and HLPs which can be embedded into EPPs curriculum. High leverage practices (HLPs) can support teachers in using strategies that support the social-emotional wellbeing of CLD students with and without disabilities (Table 1).

Table 1
Social/Emotional/Behavioral High Leverage Practices

HLP 7- *Establish a consistent, organized, and respectful learning environment*
HLP 8- *Provide positive and constructive feedback to guide students' learning and behavior*
HLP 9- *Teach social behaviors*

Learning how to use and implement these HLPs will empower preservice teachers to become advocates for their students while providing high quality instruction that meets the needs of *all* students in the classroom. EPPs must consider ways to integrate CRP and HLP pedagogy into their coursework. Preservice teachers must learn how HLPs can be differentiated based on the specific content and the cultural composition and social-emotional needs of their classrooms (Brownell et al., 2019). When HLPs are utilized with a focus on cultural responsiveness on a daily basis, preservice teachers will not only improve their teaching practice but support the individualized needs of all students in the classroom (McLeskey et al., 2019; Klingner et al., 2016; Lane et al., 2016) through a culturally competent, social-emotional lens.

Preservice teacher candidates must be able to create a classroom environment that supports students' social-emotional development and well-being. This environment can be fostered by a school environment that is welcoming to a wide variety of backgrounds and cultures (McLeskey et al., 2019; State et al., 2019). The importance of recognizing diverse cultures and how they contribute to a student's success in the classroom, has been supported through the use of culturally responsive practices which integrate the unique underpinnings of a student's cultural lens into daily learning experiences (Ladson-Billings, 1995; Gay, 2018). Teachers must also understand the varied cultural and social norms so that the learning environment maintains a respectful and supportive academic and behavioral structure (McLeskey, et al., 2019).

"Culturally responsive classroom practices that support the social-emotional well-being of culturally and linguistically diverse students with disabilities requires teachers to become aware of extenuating cultural factors that could potentially impact 'teacher-perceived' adherence to classroom expectations, rules, and procedures (e.g., eye contact, addressing the teacher, personal space)" (Franklin & Peterson-Ahmad, 2023, p. 42). Teachers can support the social emotional well-being of students in the classroom by establishing a consistent, organized, and respectful learning environment (HLP 7). Teachers must also provide specific feedback to guide students' learning and behavior (HLP 8) in tandem with teaching social skills/behaviors (HLP 9), recognizing that social-emotional support will be more effective in a classroom environment that is consistent, organized, respectful (Lewis, 2019). When creating a classroom that provides this type of organization and consistency, it is important that teachers take time to explicitly teach the expectations, rules, and procedures by providing examples and non-examples, modeling, and providing students with opportunities for practice (Franklin & Peterson-Ahmad, 2023).

EPPs can accomplish this by personalizing preservice teacher learning activities that teach them how to validate students' unique life experiences, while "maintaining high expectations, promotion of cultural competence, and critical consciousness" (Franklin &

Peterson-Ahmad, 2023, p. 39) and building simultaneous trusting and caring relationships between the teacher and the student (Gay, 2013; Ladson-Billings, 1995). Preservice teachers must continuously fine tune their own cultural competency to effectively validate their students. This process can be started while still enrolled in a preparation through coursework and assignments that include the development of self-awareness, awareness of others, and a lifelong commitment to action as shown. The HLPs mentioned above can provide preservice teachers a framework to learn about, practice, and further develop in these areas so that they are better prepared to provide strategies that enhance culturally and linguistically diverse students' individualized social-emotional needs.

Conclusion

It is extremely important for students in today's EC-12 classrooms to have authentic, culturally responsive learning experiences that address what they need socially, emotionally and academically (Darling-Hammond & Edgerton, 2021). Preparing preservice teachers to provide such experiences for the students in their future classrooms is something that can be easily integrating teacher preparation programs. Including content related to culturally responsive practices throughout courses that focus on creating safe and inclusive learning environments can help preservice teachers be prepared to meet the educational and social-emotional needs of the diverse group of students that will be in their future classrooms. Preparing preservice teachers for the classroom by integrating CRP with HLPs helps empower teacher candidates to become advocates for their students while providing high quality instruction that meets the needs of all students in the classroom.

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NAVIGATING CRITICAL INFUSION OF HIGH LEVERAGE PRACTICES AS A COHERENT COMPASS FOR TEACHER PREPARATION

Abstract

This project was aimed at enhancing special education teacher preparation programs through the critical infusion of HLPs and professional special education standards. We emphasize the importance of engaging in a collaborative process to strengthen cohesion across faculty, supervisors, mentor teachers, students, and university leaders. We also outline our process for developing a tool for measuring coherence within and across special education preparation programs and discuss future directions for assessment across stakeholders.

Background

The special education teacher shortage is a prominent issue affecting the United States and is largely in part due to high attrition rates (Billingsley & Bettini, 2019). Attrition rates are especially high for early career special education teachers (Boe et al., 2008), with data to suggest that nearly 40% leave the field within their first five years (Leukens et al., 2004). It has been suggested that teachers who are more well-prepared may be more effective in the classroom and may have longer careers (Darling-Hammond, 1999). Preparation of special educators is particularly important to consider, given that attempts to offset the overall shortage, often result in the hiring of special educators who have limited qualifications and/or preparation (Boe & Cook, 2006). According to data from the 2003-2004 school year, less than 80% of special educators had completed extensive preparation within their first five years of teaching (Boe et al., 2014). Boe (2014) highlights the need for more *qualified* and *effective* special educators.

The extensiveness of preparation has been identified as a strong predictor of special educators' perceived preparedness (Boe et al., 2007). Extensiveness in this study was characterized by the number of weeks of "practice teaching" and the number of core teacher preparation components completed. These components included coursework in selecting and adapting instructional materials, coursework in educational psychology, observation of others' classroom teaching, and feedback received on teaching (Boe et al., 2007). When compared to special educators with some or little to no preparation, those with extensive preparation rated themselves as better prepared to teach assigned subject matter, select curricular materials, plan lessons effectively, and use a variety of instructional methods.

Improving special educator preparation is important not only to address the teacher shortage but also to ensure that the students and families who are served by these teachers are receiving a high-quality education and experience. Unfortunately, research on special education teacher education is limited and "unfocused" (Sindelar et al., 2010, p. 8). Although studying teacher education may be difficult in part due to its high variability, Sindelar et al. (2010) make several suggestions for growing this body of research, some of which relate to initial preparation. They recommend studying the elements of preparation programs in ways that can inform research, policies, and practices that relate to content, pedagogy, and the structure of preparation programs. Sindelar et al. (2010) suggested that researchers aim to better understand special education teacher preparation across several key areas of focus, including, a) essential content that special educators should learn, b) effective teacher education pedagogy, c) features and sequencing of field experiences, and d) technology's role in teacher education. Sindelar et al. (2010) also make mention of infusing professional teaching standards in preparation programs, which include those from the Council of Exceptional Children (CEC). However, heterogeneity across standards and teacher education programs may impede efforts for studying and improving special educator preparation programs, which Feiman-Nemser (2001) refers to as fragmentation.

Project Aim

The efficiency and effectiveness of our programs are impacted by the coherence of design and messaging. Competing or contradictory messaging across courses can erode self-efficacy and clarity of preferred practice for new teachers. Similarly, a range of standards, mission statements and elements to align can provide fragmented messaging and experience. Using the theoretical and practical consideration of a cohesive and coherent program design and implementation help us navigate the fragmentation and maintain and authentic commitment to values aligned with equity and field driven standards of excellence in special education teaching and service provision.

The overarching goal of this project was to work towards reducing fragmentation and enhancing coherence in special education preparation programs, beginning with our own. We also sought to develop an instrument that could be used for assessing coherence across any institution's special education teacher education program. We intended for this instrument to serve as a tool for 1) identifying gaps, redundancies, or fragmentation across program components and stakeholders, 2) informing program development and improvement efforts at the institutional level, and 3) measuring factors contributing to and outcomes resulting from program coherence to contribute the scope of literature on the education of special education teachers.

Enhancing Our Program's Conceptual Coherence

In a recent special issue (Floden et al., 2021) examining teacher education quality, program coherence surfaced as a broad measure and goal of teacher preparation programs. Conceptual coherence emerges when a shared view of teaching and learning is woven throughout and emphasized across a program's courses (Cavanna et al., 2021). Achieving this coherence requires a concerted effort to unify the explicit vision and views of teaching and must include frequent and ongoing evaluation through program quality measures, assessment of teacher

outcomes, and frequent communication and collaborative agreement among faculty, administrators, and cooperating teachers in the field (Darling-Hammond, 2006; Floden et al., 2021).

To develop conceptual coherence within our program, we examined the values and beliefs of professional special education organizations and experts and re-examined those already existing within our program. Our mission statement included specific language we could track across program elements. Further, our handbook acknowledged the collaboration across program faculty in two departments (Special Education and Literacy) working in cooperation with local schools. The program had been revised in 2010 with attention to building coherence through assessment tools and connections across courses. These connections were further developed in 2017 as faculty worked to find connections within courses that would align to the final assessment of the clinical assessment. Previously, our program was unified by a set of seven attributes and seven dispositional characteristics, respectively anchored in the professional preparation standards for special educators by the CEC and the Danielson Framework (2009). Re-examining conceptual cohesion required us to merge and condense values and beliefs derived from the CEC including their HLPs and professional preparation standards for special educators, our existing attributes, and dispositions.

We began by identifying the 29 indicators that comprised the seven attributes existing in our program. Each of the 22 HLPs, categorized into one of four HLP areas of practice, was then examined. Our next step was to identify instances where each HLP overlapped with any of our existing attribute indicators. We organized these overlapping concepts and values by creating a matrix where dispositions, HLPs, and CEC professional standards were aligned to our program's attribute domains and indicators. Creating this matrix allowed us to clarify our attributes and re-consider the main values and beliefs that guide each attribute domain, which provide a clear and unifying vision to inform decisions and practices across all program components.

Assessing Program Coherence

Structural coherence is developed by aligning the shared vision across instruction and practicum experiences and connecting it to the assessment that occurs within each of these types of learning opportunities (Cavanna et al., 2021). Student perceptions of the connections between theory and practice in addition to coherence across their preparation programs impacts teacher outcomes including identity development and transfer of knowledge (Goh et al., 2020).

Structural coherence may be seen as the application of conceptual coherence. Structural coherence may be exemplified by integrating values across both methods and content courses (Cavanna et al., 2021). Additionally, to achieve structural coherence, instructional methods from courses should be reflected in students' practicum experiences, reinforced by cooperating teachers, and embedded within assessments (Cavanna et al., 2021). A program can foster structural coherence when the program's mission is adopted by program administrators, instructors, university supervisors, and cooperating teachers. This promotes structural coherence as the mission is woven throughout all program components and guides the design of learning and assessment opportunities within, across, and between courses and field placements.

We utilized several frameworks and instruments, drawing from general and special education research, to inform our development of the Coherence Assessment for Special

Educator Preparation Programs (CASEPP). To develop a structure for this assessment, we first examined the existing research and assessment tools related to understanding and measuring coherence in general education teacher programs. These included the Teacher Education Survey (Hammerness et al., 2014) as well as items adapted from it by Goh et al. (2020), and the five central tasks of teacher preparation identified by Feiman-Nemser (2001). The five central tasks by Feiman-Nemser (2001) served as an organizing structure to help us adapt, create, and categorize our items, being 1) analyzing beliefs and forming new visions, 2) developing subject matter knowledge for teaching, 3) developing understandings of learners and learning, 4) developing a beginning repertoire, and 5) developing the tools to study teaching.

During this process, we reviewed the CEC professional teaching standards and HLPs to identify instances where language needed to be changed to include students with disabilities and to fill in any gaps caused by the differences between general and special education preparation. Although we started with five categories, we found the need to adapt those five by combining categories and forming new ones to cater to the needs of special education teacher education programs. This process resulted in 35 items distributed across six categories, or proposed factors being 1) analyzing values, beliefs, and forming new visions, 2) developing subject matter and curricular content knowledge for teaching students with exceptionalities, 3) developing understanding of learners and individual learning differences, 4) developing a toolkit of instructional planning, resources, and strategies, 5) cultivating safe and supportive learning environments to foster social-emotional competencies and prosocial behaviors, and 6) collaboration, leadership, and advocacy. We then transferred our items to Qualtrics and ensured that our instrument could be utilized by students, cooperating teachers, faculty, program administrators, and field experience supervisors, by customizing the items or survey options as needed.

Next Steps of the Project

Recently, we piloted this instrument with our pre-service special education teachers, faculty members, and supervisors. We also gathered feedback about the instrument's items and factors from colleagues and content experts across the country, including faculty members, doctoral students, field supervisors, program directors, and program administrators. Our next steps are to analyze the results of our pilot survey, gather additional validity evidence, and assess the psychometric properties of the instrument.

Discussion

This project highlights the need for a coherence instrument that is specifically designed for special education teacher education programs. The development of this instrument will contribute to the coherence, depth, and breadth of the literature and help to advance understanding related to special education teacher preparedness its relationship to teacher outcomes including attrition and retention, as well as student outcomes. Our instrument also helps to address some of the research gaps raised by the literature, in part by identifying the essential content that special educators should learn.

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MAPPING ASSISTIVE TECHNOLOGY NEEDS (MATN):
A TOOL FOR SPECIAL EDUCATION TEACHER CANDIDATES

Abstract

The Mapping Assistive Technology Needs (MATN) online tool, designed for special education teacher candidates, offers an extensive set of assistive technology (AT) recommendations. These recommendations encompass 49 crucial tasks undertaken by students with disabilities in seven academic and functional areas: academic skills, communication, daily living skills, mobility, and leisure/recreation. By utilizing MATN guidelines, special education teacher candidates can screen whether universal digital tools are sufficient for a student's needs or if specialized AT evaluations and interventions are required. Integration of this tool into teacher education programs enhances candidates' understanding of AT screening and referral strategies. It assists in making informed decisions about using universal digital tools versus specialized AT devices/services across multiple domains.

Background/Rationale

Special education teachers, regardless of their years of experience, often feel unprepared and overwhelmed when dealing with assistive technology (AT) to adequately support students with special needs. Many do not consider or request AT evaluation when planning a student's IEP due to their limited knowledge and competency in technology (Coleman et al., 2015). The Individuals with Disabilities Education Act (IDEA) requires Individualized Education Program (IEP) teams to consider the need for AT devices and services to improve the functional capabilities of students with disabilities (20 U.S.C. 1401(11)). However, only a small percentage of students with disabilities have access to and use AT (Bouck & Flanagan, 2016). A commonly identified barrier to AT utilization is the perceived lack of knowledge and expertise among special education teachers in its application (Zhou et al., 2011). While Van Laarhoven and Conderman (2011) identified a lack of AT preparation in teacher training programs, the diverse needs of students and rapid AT advancements make it challenging for educators to stay updated on all facets of AT (Zhou et al., 2011; Ghanouni et al., 2020).

As digital tools become more prevalent, schools are now prioritizing accessible and readily available tools over costly, traditional AT devices for students with disabilities (Wu, 2019). Notably, Kim and Kimm (2017) highlighted the transition from specialized augmentative and alternative communication (AAC) systems to handheld mobile devices for students with intellectual disabilities. For effective inclusive education, special education teachers must understand the principles of Universal Design for Learning (UDL) and how digital tools realize these principles. Special education teachers need to discern the difference between UDL guidelines and the specific AT needs of their students. When pinpointing AT needs for students

with disabilities, a comprehensive evaluation by the individualized education program (IEP) team is essential. This assessment starts with the special education teacher, who, equipped with a foundational knowledge of AT, determines whether standard digital tools suffice or if there's a need for specialized AT solutions. Such insights can subsequently guide more specialized AT evaluations.

Table 1

Domains and Tasks of MATN

Writing/ Spelling	Reading	Math	Study & Pre-vocational Skills	Communication	Daily living & Mobility	Leisure/ Recreation
Draw/illustrate Write legibly Copy information/write from dictation/take notes/write sentences, paraphrase or narratives Outline/organize thoughts Conventions of writing/syntax/quantity of writing Complete written worksheets, tests/Writes within time frames	Positioning reading materials Decode words/read common high-frequency words by sight Read words, sentences, and/or longer passages/Reading with fluency Comprehend age/grade appropriate reading materials	Identify numbers/Use number concepts Complete basic calculations Complete complex calculations Complete math word problems Use time concepts Use money concepts Use measurement concepts Use and interpret data Explaining knowledge of mathematical process/ Communicate mathematics ideas/ Understanding and solving math problems	Pay attention to instruction Have necessary materials/supplies/ organizational system Maintain and follow a 'to-do' list Stay on task, with/without supervision Self-advocate to get needs met and request assistance when needed Identify and organize import points from various resources Track, manage, and complete assignments with designated timelines Use tools, equipment, and accessible instructional materials effectively Carry out single and multiple-step tasks.	Follow verbal directions Listening and comprehension Media interaction Environmental responses Communication skills o Gain attention of peers/adults within the environment. o Express wants/needs. o Request assistance as needed. o Provide appropriate greetings. o Inform others. o Request clarification. Conversational skills o Participate in collaborative conversations o Terminate conversation. o Ask and answer questions.	Personal care Feeding Household Responsibilities: o Perform simple household chores o Perform medically necessary procedures Transfers and Positioning: o Maintains appropriate seating/position for participation in relevant activities o Transferring self Manipulates educational materials as required in assigned activities Moves about/ambulates around the classroom, school, and/or community	Participate in games and play activities Participate in art activities Participate in sports/exercise activities Listen to music Read a book Watch TV/Movie Play with toys Participate in social media/online communities Use the computer/internet

Guidelines for Assessing Assistive Technology Needs: Mapping Assistive Technology Needs (MATN)

The Mapping Assistive Technology Needs (MATN) tool aims to enhance special education teacher candidates' understanding of AT devices and services, thereby improving accessibility for students with disabilities. It offers examples of accommodations and AT solutions for various tasks and domains. By utilizing the MATN guidelines, candidates can ascertain whether universal digital tools suffice for a student's needs or if there's a necessity for more specialized AT evaluations and interventions. Drawing inspiration from the AT Consideration Resource Guide by the Georgia Project for Assistive Technology, the MATN covers seven domains:

writing/spelling, reading, math, study/pre-vocational skills, communication, daily living/mobility, and leisure/recreation. It offers over 49 specific tasks for special education teacher candidates to consider (Table 1). Integrating MATN into special education teacher education programs enables teacher candidates to learn how to assess and refer students for suitable AT solutions. This creates more inclusive learning environments, boosting engagement and participation for students with disabilities.

Figure 1

AT Options for Writing/Spelling Tasks
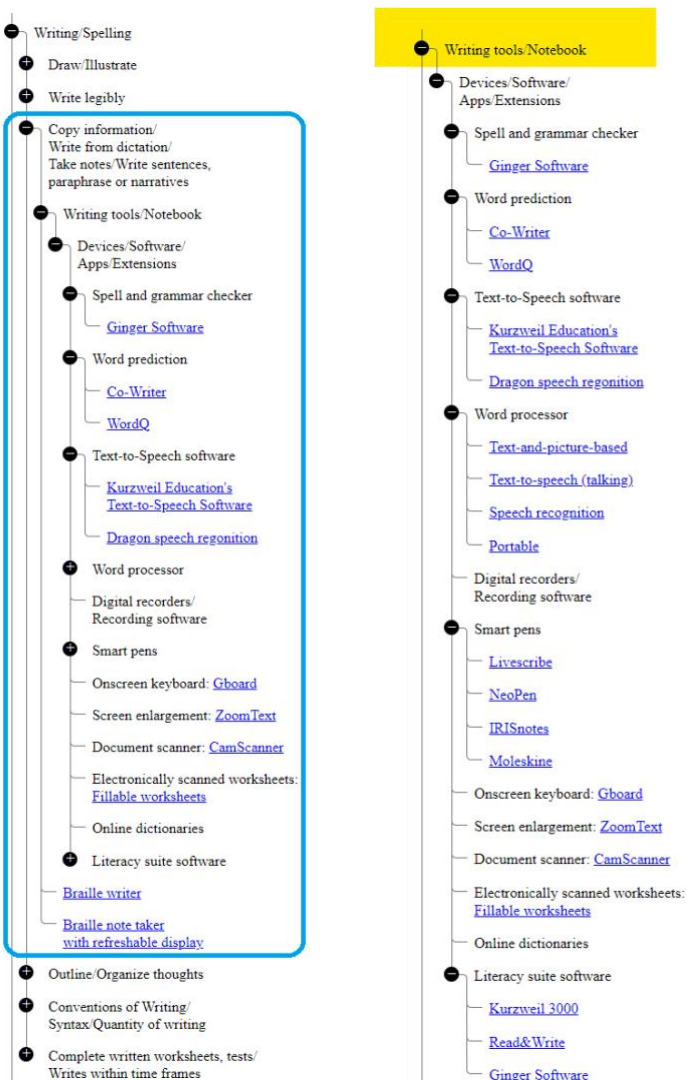
Note. The left screen capture displays AT guidelines for "Copy information/Write from dictation…" tasks. The right screen capture presents the complete list of AT options for "Writing tools/Notebook," which falls under the "Copy information/Write from dictation…" tasks.

Figure 1 illustrates the different writing and spelling tasks and the tools available for students in general classroom settings versus those available as AT. This tree serves as a resourceful guide, assisting special education teacher candidates in matching the specific needs of their students with appropriate tools, either from standard classroom materials or more specialized assistive technology options. Tasks progress from basic to advanced levels that demand a variety of skills. Candidates should determine the essential skills for each task and provide the right support. For instance, if a student aims to master sentence writing, candidates can explore suitable AT options. Here, the main objective is not necessarily legibility. Therefore, instead of tools for legibility, using a word processing program with a word prediction feature is more beneficial. If universally accessible tools, like Google Document, meet the student's needs, specialized AT devices are not required. But if standard digital tools fall short, teachers might need to consult AT specialists for software like Co:Write or WordQ. If an assessment is required during this phase, the teacher should initiate it.

Figure 2

No/Low-Tech and High-Tech AT Tools for Math Tasks
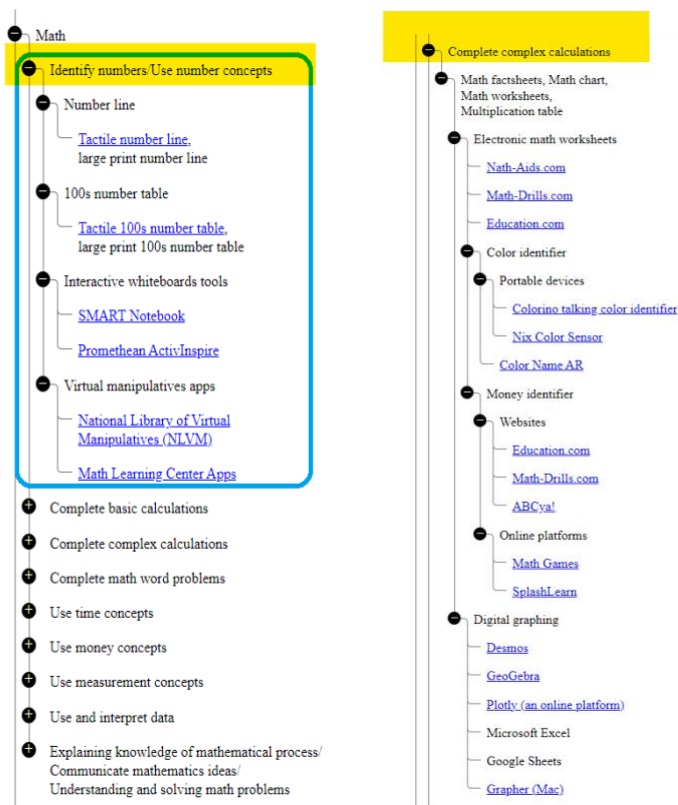
The MATN provides solutions ranging from no-tech/low-tech to high-tech for each task. For instance, Figure 2 illustrates the use of multiple means of representations (verbal descriptions, visual drawings, equations, tangible objects) under the UDL framework, enhancing students' understanding of mathematical concepts. Physical manipulatives are especially beneficial for students with learning disabilities (LD) across various mathematical areas and educational levels, aiding in visual conceptualization and representation (Park et al., 2022). As learners progress, they move from tangible aids to illustrations and abstract understanding, eventually solving problems using symbolic representations. Therefore, in math education, both low-tech and high-tech AT tools are essential. Low-tech devices, such as tactile number lines or measuring instruments, are crucial for basic math principles. However, for more advanced concepts, high-tech devices with accessibility features become more appropriate. These include interactive whiteboards, digital resources, talking calculators, and Virtual Manipulatives (VMs). VMs, which offer dynamic visual representations of mathematical concepts, are particularly beneficial for students with LD, reducing cognitive demands and avoiding stigma in inclusive educational settings (Park et al., 2022). Research underscores VMs' effectiveness, particularly when traditional physical tools are inaccessible, enhancing math instruction quality (Ok & Rao, 2019). Resources like the National Library of Virtual Manipulatives and the Math Learning Center provide a range of VM options, with the latter offering Math Apps adaptable for various topics across devices and web browsers.

Additional Benefits

The MATN presents multiple benefits for special education teacher candidates. Firstly, it connects AT options with additional resources using hyperlinks, enabling candidates to gather extensive information about each option. Secondly, its tree-structured layout ensures user-friendly navigation, accessible via smartphones, tablets, or PCs. Thirdly, the MATN identifies potential barriers to student access for specific tasks, aiding candidates in applying UDL principles effectively. For instance, in the Reading domain, the task "Decode words/Read common high-frequency words by sight" includes options like picture dictionaries, text-to-

speech software, reading pens, digital flashcards, and reading software. These tools help candidates address access challenges, ensuring all students can participate in learning activities.

Further Development

Incorporating the MATN into special education teacher education programs brings significant benefits to teacher educators, candidates, and students with disabilities. It not only deepens their understanding of AT devices and services but also enhances their ability to assess and recommend appropriate AT solutions. This leads to improved academic success, engagement, and overall well-being for students with disabilities. MATN plays a crucial role in promoting accessibility and inclusivity, contributing to a more equitable learning environment.

To make the MATN even more effective for special education teacher candidates, two enhancements are suggested. First, expanding the range of hyperlinked AT resources would provide more in-depth information on various Assistive Technology tools, including instructional videos and case studies. This would offer a more comprehensive understanding of these resources. Second, adding an interactive feature to build personalized AT needs profiles would enable candidates to identify and track the most suitable AT options for diverse student needs. These proposed improvements aim to make the MATN a more dynamic and invaluable tool in the realm of special education teaching.

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STANDING AT A CROSSROAD: RE-IMAGINING SOCIAL EMOTIONAL LEARNING CONSIDERING COVID 19

Abstract

Educators in K-12 settings have only begun to make sense of the many consequences the pandemic has had for students. Children experienced substantial reductions in social contact with peers while attending school remotely. After months of remote teaching and learning, it is clear the academic, physical, and mental health benefits of in-person schooling are difficult to replicate through online learning. Given the profound impact on children's social emotional health, it has never been more important for educators, parents, and caregivers to support student's social emotional learning (SEL). While it may be tempting to put students' social emotional well-being on the back burner as we scramble to make up for lost learning; we stand at a crossroad. We can radically weave SEL into the school day to ensure students continue to develop critical social-emotional skills in a socially distanced world or we can fall back on business as usual.

Background/Rationale

The world underwent the most extensive school closure ever witnessed to combat the spread of the COVID-19 virus (Azevedo et al., 2021). Strategies such as isolation, social distancing, and school lockdowns have impacted the lives of children and adolescents in an unprecedented manner. Children who are confined to their homes are physically less active, depressed, bored, and experience less engagement with their classmates, friends, and teachers (Brazendale et al., 2017). The joint effect between lifestyle changes and psychosocial stress caused by the pandemic has had a detrimental effect on children's behavior (Wang et al., 2020). Children who have highly stressful experiences in their lives can have difficulty taking advantage of what schools have to offer. Learning, remembering, trusting, or managing your own feelings and actions can be painful for a child who has experienced adversity. Yet, schools too often fail such children by misreading their behavior as laziness, apathy, or intentional misbehavior (Cole et al., 2013). Given the long-term consequences of this pandemic, it is imperative for educators to utilize strategies that will enhance children's social emotional health.

During the past decade, there has been an increasing interest in how children come to understand, describe, and regulate their emotions (Kelly et al., 2004). Healthy social-emotional development is particularly important because it impacts the whole child. Students with good social-emotional skills perform better academically, exhibit socially appropriate behaviors at school, demonstrate fewer behavior problems, maintain positive relationships with peers and family, and experience fewer mental health issues (Roll et al., 2012). Students who have difficulty navigating the social developmental shifts of school are more likely to experience

academic underachievement, behavior problems, and emotional difficulties (Parker et al., 2006). In fact, poor social skills place students at heightened risk for bullying, teasing, and social isolation (Solberg et al., 2007). Consequently, if social emotional challenges go unaddressed and peer problems become more chronic, the likelihood of serious negative outcomes in adolescence, including academic failure and school dropout significantly increase.

Social Emotional Learning

Social Emotional Learning (SEL) is the process through which children and adults acquire the knowledge, attitudes, and skills associated with social and emotional competencies. These competencies are believed to facilitate students' academic performance, positive social behaviors, and social relationships during the school years and help young people prepare to succeed in college, work, family, and society. Researchers have examined more than 700 studies that promote social emotional skills in children and adolescents between the ages of 5 and 18. The studies were divided into three main areas: (a) school-based interventions, (b) after-school programs, and (c) programs for families. Findings revealed that students who participated showed significantly positive outcomes with respect to attitudes, positive social behavior, and academic performance. Students showed significantly lower levels of conduct problems and feelings of emotional distress, such as anxiety and depression decreased (Durlak et al., 2011).

      The Collaborative for Academic, Social, and Emotional Learning (CASEL) framework creates a foundation for applying evidence based Social Emotional Learning (SEL) strategies within a school community. The CASEL framework includes five broad and interrelated areas (CASEL, 2017). Caring teacher-student relationships are the center of a positive learning environment. Such environments provide social and emotional instruction for their students that leads to increased student connectedness, academic achievement, and perceived levels of social support.

Figure 1

Framework of Social Emotional Learning
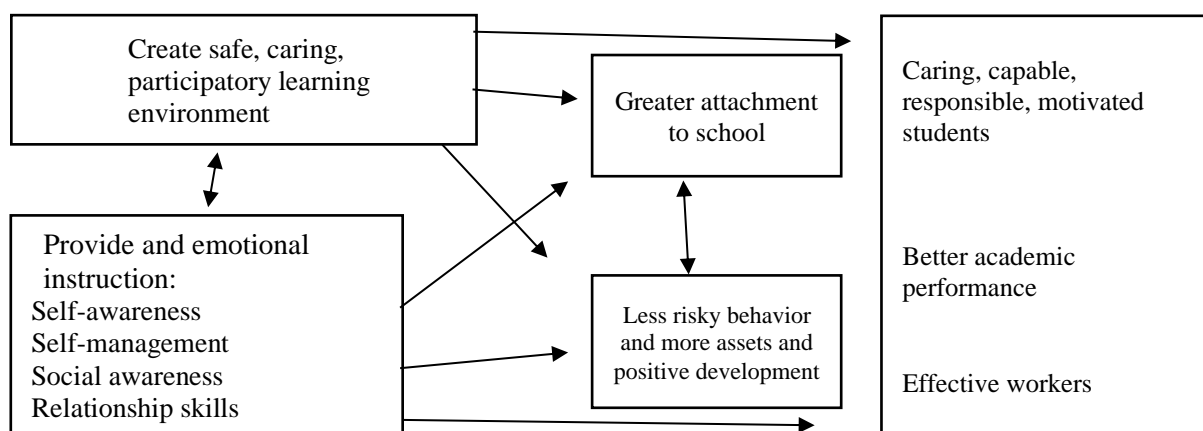
Note: Adapted from Collaborative for Academic, Social, and Emotional Learning. (n.d.)

Social Emotional Learning Programs

Between the ages of 5 to 10, children undergo a major developmental transformation between that increases core skills the brain uses to think, read, learn, remember, reason, and sustain attention while also allowing them to undertake major changes in responsibilities, independence, and social roles. Promoting Alternative Thinking Strategies (PATHS) is a SEL curriculum that teaches children how to develop self-control, emotional awareness, understanding, and social problem solving. For example, the *Self-Control* unit focuses on teaching the *Turtle Technique*. The unit contains a series of structured lessons and is accompanied by a reinforcement program that teachers can adapt. Students are told a metaphorical story about a young turtle who has both interpersonal and academic difficulties that arise because she or he does "not stop to think." With the assistance of a wise old turtle, the young turtle learns to develop better self-control (which involves going into his or her shell). Student's practice "doing turtle" by folding their arms and following three steps for calming down. The teacher leads a discussion about the problems and feelings to increase self-control, improve group processing, and attention. The teacher initiates a short-term reinforcement system that provides both social praise and reinforcement ("turtle stamps") for correctly "doing turtle" whenever students have a problem during the day. The reinforcement is gradually faded from a continual scheduled to an intermittent schedule and finally to a back-up reinforcer. As the curriculum continues, students are encouraged to use the Turtle Technique as one way to stop and think.

Mixed Reality Simulations

Mixed Reality Simulations (MRS) allow students to interact with in a safe, learning-oriented space and receive guidance and feedback from a teacher. MRS are categorized under a situated learning model which posits that learning is social in nature and occurs amongst and between individuals and materials in authentic contexts (Murphy et al., 2021). Two commonly used MRS platforms in education are *Mursion* and *TeachLivE*, which allow learners to interact in real time with racially diverse avatars who might represent school professionals, families, or students in simulated school environments, such as classrooms and offices. The avatars are operated through a blend of human and artificial intelligence. The human, known as the simulation specialist, works behind the scenes to control the avatars' movements and speech. The simulation specialist controls the avatars in each scenario and can see the student via a web camera, which allows him or her to react, in real time, to the student's speech, facial expressions, and body language. During an MRS, the learner sits or stands in front of a large screen television monitor that displays the avatars and environment while classmates sit behind the screen as observers. A group of students may participate together in collaborative team-based simulation as well. During an MRS, learner(s) closely focus on one or two discrete skill(s) for 7 to 10 minutes. For example, a teacher can introduce a skill during the introductory part of the lesson and attempt to engage each student. On the first simulation, students can be attentive and compliant, which demonstrates that the teacher is fully able to focus on delivering instruction. In a second session, the simulation can be set to demonstrate students who are off-task and less complaint. The experience can be made more-or-less complex based on the learner's current skills and needs. Students have opportunities to practice by interacting with avatars alongside real people. If

students make a mistake or are unsure how to demonstrate a skill, they can have unlimited practice opportunities. Further, if the learner engaging in the simulation is unsure what to do or an adult observer realizes the learner needs explicit instruction, the simulation can be paused, and the student can receive feedback before returning to the simulation. In this way, engaging in MRS to practice social emotional skills allows learners to experience less frustration and reduces fear of making a mistake (Murphy & Cook, 2020).

Technology Based Interventions

Social emotional learning interventions can be delivered using technology and game-based programs. Such programs can be implemented on a flexible schedule and increases opportunities for exposure to the program, ultimately, maximizing the number of students who can benefit. *Adventures* is a technology-based online game that was specifically designed around the social emotional competencies and cognitive behavioral strategies (Li et al., 2021). The program encompasses self-awareness, self-management, social awareness, relationships skills, and responsible decision making. *Adventures* has a very low burden on teachers because it is (a) short in duration (nine 30 to 45-minute episodes), (b) does not require intensive coaching or professional development (one-hour webinar), and (c) is supplemental so it does not require a major change in practice (Li et al.). *Adventures* is intended to be implemented in typically third, fourth, and fifth grade classes during nine weeks of instruction through interactive episodes. The instructional episodes are set within a story narrative. The player is a recruit on a sailing ship who joins the crew and travels around an island interacting with a host of characters and engaging in social problem solving to address conflicts and save friendships. The social problems that the player encounters in the game are true to life (e.g., entering group social situations, cooperating, and compromising with peers) to increase ease of skill transfer to real life. The authors of the game use mystery and "cliff hangers" throughout the story to maintain engagement across the episodes. Students can practice these skills until they are comfortable using them. As students master such skills, their self-efficacy with social interactions will increase.

Conclusion

The past year has been an unprecedented time for education. There is no doubt that this generation of learners will be coping with loss of academic and social emotional skills for the foreseeable future. Given the importance of the educational well-being of students, one major goal should include attending to students' social and emotional health. The strategies provide examples of programs that promote prosocial and reduce behavior problems while simultaneously enhancing learning in the classroom. The human brain is largely evolved for processing emotional and social information. When we teach children how to utilize these parts of the brain, learning becomes easier, more enjoyable, and more effective. In other words, SEL programs should be a core aspect of classroom instruction and is far more effective in helping students achieve their educational goals.

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PRACTICE-BASED INSTRUCTIONAL ACTIVITIES EXAMINING MTSS TARGETED INTERVENTIONS: EXAMPLES FOR DUAL CERTIFICATION PROGRAMS

Abstract

The facilitation of practice-based instructional activities, in special education methods courses, aim to build on effective teacher education practices to support teacher candidates' (TC) development of knowledge for utilizing the Council for Exceptional Children's High Leverage Practices (HLPs). This presentation focuses on a variety of practice-based instructional facilitated though a university-school partnership, which includes Mediated Field Experiences (MFEs), in a MTSS tier II targeted intervention course for undergraduate dual certification majors. The goals of this presentation are to: (1) share research foundations that support the use of the practice-based instructional model of MFEs to directly address HLPs and prepare TCs to enact high-quality instruction, and (2) introduce different practice-based instructional activities that prepare TCs to facilitate targeted tier II interventions, specifically ones that leverage university-school partnerships.

Problem/Issue

Over the past decade there have been multiple calls by numerous teacher education organizations to transform the paradigm of teacher education (CEC, 2020; NCATE, 2010). Teacher education programs must equip teacher candidates (TCs) for the challenges of modern classrooms, by departing from traditional models fixated solely on academic theories and embracing models deeply rooted in practice-based learning opportunities that engage teacher TCs in reflective and responsive practices. To address this challenge by bridging teacher preparation coursework and the experiences TCs have in the field, some teacher educators have situated teacher preparation coursework within the context of purposefully observing, planning, rehearsing, enacting and reflecting on field-based experiences with PK-12 students in local school settings, proving TCs with the most authentic experiences to support their development of ambitus teaching practices(Grossman, Hammerness, & McDonald, 2009; McDonald, Kazemi, & Schneider-Kavanagh, 2013; Sharpe et al., 2022).

"The move from discussing what one might do as a teacher to actually taking on the role of the teacher is a critical one, allowing novices to assume the role and persona of the teacher while receiving feedback on their early efforts to enact a practice" is a crucial, and often missing, piece in a teacher candidate's development of ambitious teaching practices (Grossman et al., 2009, p. 283). Additionally, embedding teacher preparation coursework in local classrooms affords teacher educators unparalleled opportunities to engage their TCs in authentic situations for enacting theoretical ideas from the teacher education classroom with actual students while providing real-time feedback and debriefing opportunities on experiences (Swartz, Lynch, & Lynch, 2017). Horn and Campbell (2015) describe a hybrid space situating coursework and field

work together as "mediated field experiences" (MFEs). MFEs provide TCs structure and support to apply knowledge of teaching as they confront specific situations in authentic classrooms and offer opportunities to integrate realities of the classroom with teaching ideals. Despite continued calls and standards (e.g., CEC 2020) for institutions of teacher education to incorporate practice-based teacher education principles, the challenge of design remains. In what ways should special education teacher educators and teacher education program leaders redesign their existing programs to align to these principles? For individual teacher educators to transform field-related courses and eventually programs into practice-based opportunities for teacher learning, they will need more accessible models and clear guidance for how to do so. This discussion will address this need directly by sharing models-in-progress MFEs and research grounded in CEC's High-Leverage Practices for Students with Disabilities on these models.

The ideas and instructional activities presented originate from an ongoing collaboration initially formed at a 2015 NSF-funded conference focused on bringing together mathematics teacher educators who were focused on practice-based learning opportunities for their TCs. Fast forward to 2021, and I started to shift my practice-based learning opportunity work to intervention settings. My initial work in this area focused on intensive mathematics interventions (Lynch, 2022) and in 2023 broadened to include targeted interventions. This shifted focused on preparing future special educators to be responsive and reflective tier II interventionists. I connect my current work, what is shared in this presentation, to the following topics and CEC HLPs: HLP 1-Collaboration, HLP 3-Communication with families, HLP 4-Use multiple sources of information to develop a comprehensive understanding of a students' strengths and needs, HLP 7-Learning environment, HLP 13-Adapt curriculum task and materials for specific learning goals, HLP 15-Provide scaffolded supports, HLP 18-Use strategies to promote active student engagement, HLP 22-Provide positive and constructive feedback to guide students' learning and behavior.

Course Context

Since 2020, Special Education 360 Targeted Interventions for Neurodiverse Learners is an undergraduate course offered at Slippery Rock University, a mid-size public university that is a leader in the number of initial teacher certifications in the state of Pennsylvania. The course is blocked with other 300-level senior coursework in general early childhood education methods courses, is offered once a week for three hours, is a 12-week course, and the class size is typically 25-40 students per section. It is offered every semester and serves undergraduate students who are enrolled in a dual certification (Early Childhood Education PK-4th and Special Education PK-12th) or special education (PK-12th) program. The course includes two phases: (1) *HLP and Collaborative, "co-teaching, "partner-based instructional activities* that focus on MTSS Tier II structures and routines, MTSS Tier II behavior interventions and building class community, MTSS Tier II math interventions, and MTSS ELA interventions; and (2) *Mediated Field Experience* with "Buddies" from a partnering PK-12 school to work with students in an intervention setting over 3-4 visits. Figure 1 shares the 2 phases and key instructional activities at each phase.

Figure 1

SPED 360 Targeted Interventions Course Phases with Instructional Activities (IAs)

Phase 1: HLP and Collaborative Focus	Phase 2: Mediated Field Experience (MFE)
• Modified IAs from Intensive Intervention materials and IRIS Module resources that focuses on EBP, explicit instruction, assessment, observational data collection, small group instruction, differentiation, purposeful technology use, and questioning • Introduction of HLPs using HLP videos • Micro-teaching for teacher directed group section of Intervention Module assignments • CEC articles focused on targeted interventions in Math, ELA, and Behavior • Ways to make student thinking visible	• *Mediated Field Experience* with "Buddies" from a partnering PK-12 school to work with students in an intervention setting over 4 visits. During MTSS TII time. Students work with 1 to 2 students and lead data driven ELA and math interventions. Core Practice within the LEARNING CYCLE (Adapted from McDonald, Kazemi, & Kavanagh, 2013, p. 382 to demonstrate example with single core practice)

Each phase has specific foci and for phase 1 they are collaboratively interventions grounded in the CEC HLPs. During this phase they are investigating the CEC HLPs, learning how to productively utilize data when facilitating interventions, learning how to make student thinking visible, identifying students' strengths while simultaneously noticing their areas of improvement, and practicing intervention instruction via micro-teaching. The use of *module assignments* encompasses many of these topics in phase 1 and Figure 2 is an example of the Math Module. These module assignments are grounded in CEC HLPs and utilize multiple data sets provided from specialists and classroom teachers, from our university-school partner.

Figure 2

Sample Math Module Assignment for SPED 360

Using the class-wide student data provided to you, develop a structure and routine for using small group instruction to provide targeted mathematics interventions with a focus on a small group teacher led instructional activity. • *You are a 4th grade mathematics teacher, and your principal requires each teacher to develop an intervention routine that includes small group targeted instruction. Below is additional information about your class.* • *Students=18* • *1 paraprofessional for 30 minutes 5 x per week during your first 30 minutes of class* • *75-minute instructional block* • *A minimum of 30 minutes dedicated to intervention time*
Your plan must include the following: 1. A list of the students in each group and a justification as to why.

2. The model you will use to provide small group instruction and a justification for why.
3. Your structure for managing the groups (i.e., how long the stations will last and how you are transitioning).
4. Self-Guided Learning Activities: What each group in your model is doing during independent learning and why. *NOTE: I'm not looking for a lesson plan, just an overall description (e.g., group A is working on, group B is working on...)
5. Teacher Led Learning Activities: What specifically is happening during the small group teacher lead (T2) intervention learning activity. *NOTE: The topic must specifically be connected to what the data indicate you should address and include a component of CRA. Components of your mini-lesson plan:
   1. PDE SAS standard
   2. Objective/Goal written in ABCD format
   3. Instructional sequence
6. What each adult is doing.
7. How you will collect data using at least two different methods to make instructional decisions (aka progress monitoring) during small group interventions. At least one method should include the use of technology.
8. When (and why) you plan to change group configurations (who receives T2 interventions).
9. A letter, email, Google Classroom announcement, etc. to families/guardians explaining what you are doing and why.

Phase 2 includes a 2-week (3-4 visit) Mediated Field Experience that includes: 1) School check-in routine, observation of the classroom, and meet buddy, and overview of class-wide data, (2) On-campus class session to plan to further analyze the data and intervention planning, and (3) 2 visits to conduct interventions. Following both intervention sessions, the TCs complete a Show Me Narrative (SMN) assignment (found in Figure 3). This assignment is an analysis tool, to develop TCs' abilities to attend to and analyze their math buddy's thinking during the MFE. Instead of reflecting over the entire intervention experience, TCs chose one component on which to focus: a short interval of time or one element of the interaction. I am currently analyzing TC's responses on these assignments using priori codes (Miles et al., 2020), grounded in the HLPs to answer the research question, "In what ways did TCs' report eliciting, attending to, responding to, and/or interpreting students' thinking during their MFE experiences, as noted in the SMN?"

Figure 3

Show Me Narrative

Professional Tips for Implementation

Here are a few additional tips teachers should consider to successfully implement practice-based learning opportunities in their methods coursework:

- Collaboration needs to be a foundation of the course, which can be obtained by including partner/small group "co-teaching" instructional activities and an MFE collaboration with a PK-12th grade collaborator.
- Utilize data examples from the PK-12 school collaborators in both university classroom and MFE practice-based learning opportunities.
- TCs should use data to justify instructional decisions and intervention plans.
- TCs should practice how they will communicate with a variety of stakeholders, including but not limited to:PK-12 students, peers (colleagues), families, and support staff.
- Make explicit connections and focus on the connection among standards(NCTM, NCTE, PBIS, etc.) that drive targeted interventions and CEC's HLPs.
- Start small…then continue adding components and invite colleagues to engage in this work with you.

Conclusion

Effective knowledge development for TCs is situated in the act of teaching, and the use of practice-based learning opportunities through university-school partnerships facilitates this development. These opportunities are essential for teacher educators to utilize as they prove a holistic and experiential approach to preparing future teachers, ensuring they are not only well-equipped with knowledge but also possess the practical skills and adaptive mindset necessary for success in today's diverse and ever-changing educational landscape.

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NAVIGATING THE PBL SEAS: CRITICAL THINKING, CONNECTION, AND
ENGAGEMENT IN HIGHER ED

Abstract

Traditionally designed educator preparation programs (EPPs) often teach skills in isolation. This can lack scaffolded, practice-based opportunities essential for building teacher candidate confidence across a variety of skills, do not allow the authentic application of skills, and are void of real-life situations which require critical thinking and problem-solving abilities needed as candidates transition into the field as novice special education teachers. Using the principles of Knowles' andragogy (1980) and Merriam & Bierema's adult learning (2014), this article will highlight how one Small Special Education Program (SSEP) team used a project-based learning (PBL) process to design course curriculum which led to increased critical thinking using authentic assessments aligned with the Council for Exceptional Children initial preparation standards (2020) and special education job descriptions.

Background

Preparing teacher candidates for life beyond the college classroom requires an understanding of what employers expect from graduates entering the workforce. In a 2008 survey administered by the Association of American Colleges and Universities, 73 percent of employers indicated colleges needed to "place more emphasis on critical thinking and analytic reasoning" (Gaston & Gaff, 2008, p. 16). Critical thinking is central to teacher candidates' decision making and problem-solving abilities (Butler, 2012; Halpern, 2003), leaving higher education faculty continually searching for the best ways to increase these skills in authentic and measurable ways. When faculty are equipped to meet adult learner needs through strategies, structured classroom environments, and the utilization of evidence-based engagement and assessment maximization of teacher candidates' learning outcomes will occur.

Through program evaluations, feedback provided by program graduates, and analysis of current practices, the faculty team found in previous traditional methods-based courses, teacher candidates were taught a variety of knowledge and skills in isolation, including but not limited to, the individualized education program (IEP), the special education process, various types of assessment, and making accommodations. Additionally, teacher candidates practiced how to write IEP goals, how to administer assessments, data collection techniques, and how to write lesson plans based on student needs in isolation. Because this traditional design lacked sequential connections and some practice-based opportunities, including field experiences with real students, feedback from graduates noted a lack of confidence in said skills, questions as to

whether a skill had been previously learned, and confusion surrounding how to apply skills in practice. Furthermore, novice teachers expressed concerns about the ability to problem solve student concerns, navigate challenging behavior, and implement evidence based instructional strategies. As a response, the faculty team created the project-based learning (PBL) course curriculum which led to increased critical thinking and the use of scaffolded, authentic assessments aligned with the Council for Exceptional Children initial preparation standards (2020) and special education job descriptions. Starting with the special educators' job description, this article will guide readers through the process of leveraging learning outcomes by creating engaging and authentic assessments to assist teacher candidates in navigating through profession-based learning opportunities.

Practitioner Implementation – The Process

Helping teacher candidates find employment upon graduation is the ultimate measure of program success, and ongoing evaluation of learning is necessary to ensure teacher candidates are prepared as the special education field evolves. As faculty members, focus on teaching adult learners should use Knowles' (1980) andragogy principles considering the self-directed nature of adult learners, because "At the heart of adult learning is engaging in, reflecting upon and making meaning of our experiences" (Merriam & Bierema, 2014, p. 104). Faculty make meaning for teacher candidates by infusing training with real-life critical thinking opportunities and authentic assessment afforded through project-based learning (Blumenfeld et al., 1991). Through this redesign, the team wanted to create experiences in which teacher candidates would engage in, reflect upon, and be able to make meaning. Furthermore, Covey's (2004) *Begin with the End in Mind* mindset led to the use of a special education teacher job description to determine learning outcomes, practical application, and discussion surrounding authentic assessment, which also created meaning in the assignments given to the teacher candidates. As faculty began the design process the following steps were taken (see Figure 1):

1. The evaluation of several local school district special education job descriptions to determine big ideas guiding the course curriculum design.
2. The design of authentic assessments from the identified big ideas, as well as, the creation of the essential question, "How do we successfully navigate the Special Education process to improve outcomes for students with disabilities?"
3. Essential learning outcomes were determined to ensure alignment to the assessments and program outcomes.
4. Learning was scaffolded as course objectives were written and additional PBL activities were created to assist in answering all parts of the essential question.
5. Assessment criteria and directions were written, which included rubric designs. Furthermore, materials and resources were compiled to assist in the teacher candidates' completion of the activities.

Figure 1
Project Based Learning Design Process

The big ideas taken from the special education job description included:
- Assessment of students' skills to determine educational needs.
- Adapting lessons to meet students' needs.
- Developing Individualized Education Programs (IEPs) for students.
- Planning activities that are specific to students' abilities.
- Implementing IEPs, assessing students' performance, and tracking progress.
- Updating IEPs throughout the school year to reflect students' progress and goals.

Additionally, notable course curriculum design components included:
- The research behind PBL and the essential question shared during the first class.
- Teacher candidates practiced answering job interview questions throughout the course.
- The course strictly used open education resources (OER).
- The faculty facilitated meaningful classroom discussions with open-ended questions which were connected to each of the designed learning experiences.
- The faculty provided various types of feedback throughout the course.
- Teacher candidates used web-based IEP program in the course. A demo site was procured through a company representative.

Practitioner Implementation – The Assessment

The final assessment was the culminating IEP creation and mock IEP meeting with community partners. Faculty embarking on PBL design need to keep in mind the assessment drives the learning process. Teacher candidates had to be prepared to complete all parts of the IEP process, but more importantly, understand why each of the parts were necessary for true learning to occur. The why in this process was created through the course curriculum design, so the IEP served as the final measurement of all the learning which occurred throughout the semester. The final assessment consisted of the following parts:

1. *Assigned facilitator roles*. For example, one Sped teacher took the lead during the meeting to review the needs, present level section, and goals for each area of concern: Math, reading, attention, and/or behavior.
2. *Group IEP design*. Teacher candidates were required to write the IEP together.
3. *IEP facilitation practice*. To prepare for the IEP meeting, teacher candidates viewed an IEP meeting video to learn more about the facilitation process. Moreover, all teams conferenced with a faculty member to receive feedback to ensure readiness.

4. *Notice of meeting*. Each teacher candidate created a written meeting notice before the meeting.
5. *Reflection*. Following the mock IEP meeting, each teacher candidate wrote a reflection aligned to the state educator standards.

This news release highlights the IEP simulation and feedback from prior teacher candidates.

Practitioner Implementation – The Learning Activities

Learning activities were designed around a variety of peer groupings including partners and triads. Completion of the PBL components in peer groups enhanced the learning discussion and problem solving throughout each step of the special education process. The faculty found groups of four or more were often too large to ensure equal accountability, thus larger groupings should be avoided. Learning activities woven throughout included the following:

- Creation of Pecha Kucha Multi-tiered Systems of Support (MTSS) and special education process review presentations. This presentation type is particularly important because it requires teacher candidates to demonstrate mastery of content and the verbal ability to share knowledge.
- Creation of a parent friendly procedural safeguard component infographic. Infographics are specifically valuable for understanding rules, ethical, or legal requirements.
- Practice administering, scoring, and using results from a curriculum-based measurement (CBM) to plan instruction. The results were later used in a review of existing data.
- Writing a prior written notice of action before starting the evaluation process.
- Practice administering and scoring a normed assessment, with results later used in an evaluation report.
- Structured observations in each of the high-incidence disability category areas.
- Collaboration field experiences and instruction using evidence-based practices (EBPs).
- Use of technical manuals to increase comprehension of profession-based language and resource navigation.
- Frequency, latency, duration, and interval data collection practice using case study videos and data calculation as a part of the functional behavior assessment process, which culminated in intervention planning to design a behavior intervention plan.
- Writing of eligibility determination statements for the evaluation report based on a collection of faculty-provided data sources, while also using real-data collected during the teacher candidates' previous observations.

Furthermore, teacher candidates had numerous opportunities to collaborate with professionals in the field and hear from guest speakers who shared on various topics such as the use of RtI and the Discrepancy Method for determining Specific Learning Disability eligibility. Each of the learning activities culminated in the creation of the written IEP. Teacher candidates then worked as teams to facilitate a mock IEP meeting. Faculty invited various community partners: Parents of students with disabilities, administrators, and regular education teachers to participate in the mock IEP meetings. Once teacher candidates facilitated the IEP meeting, the community partners were able to provide feedback based on personal experience within each of the roles.

Conclusion

Higher education faculty must continue to focus on increased, authentic engagement and assessment to create opportunities for teacher candidates to transfer knowledge and skills to professional practice upon program completion. Faculty can amplify andragogy principles to become both artists of their craft and scientists of their content by abandoning traditionally designed methods which teach skills in isolation. Through the utilization of PBL opportunities aligned to special education job descriptions, educator preparation faculty can build practice-based knowledge and skills leading to critical thinking and problem-solving abilities in teacher candidates. With a better understanding of PBL and andragogy principles and by implementing a PBL designed process with authentic assessments, faculty will leverage learning to increase critical thinking, connection, and engagement in higher education classrooms.

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FLOURISHING WITH YOUR FLEET ON ROUGH SEAS: THE COLLABORATIVE
WRITING TEAM APPROACH

Abstract

Producing scholarly work in higher education is required to achieve promotion and tenure. Often neglected is the journey and enjoyment derived from reaching one's scholarship goals. In response, higher education faculty can learn to flourish in the "publish or perish" world. This article aims to improve academia by introducing a writing approach using easily implemented methods for effective collaborative scholarly writing. The collaborative writing team approach consists of 1) critical collaborative conversations, 2) established writing time and norms, 3) a timeline and accountability, and 4) organizational components. This approach can serve as the instruction needed to improve the scholarly writing process and to create a more supportive writing environment.

Background/Rationale

"Rightly or wrongly, the measure of our professional worth continues to be our ability to write and get published" (Jensen, 2017, p. 7). However, Pololi et al. (2004) noted that faculty receive limited instruction on how to produce scholarly work. Moreover, scholarly writing is met with barriers which hinder faculty success. Thus, the team proposes a collaborative approach higher education faculty can employ to improve the scholarly writing process thereby creating a more supportive writing environment within academia.

Driving Factors

Driving factors which enhanced the team's scholarly writing were collaboration, accountability, and authenticity. These factors allowed the team to view this writing endeavor as a weekly professional development mentorship time leading to enhanced motivation and the belief that the

writing goals were achievable. C*ollaboration* – working as a team on an intellectual endeavor allowed for leveraging expertise while maintaining individualization (Oliver et al., 2018). The varied intellectual knowledge, writing styles, and approaches to scholarship reinforced the accountability provided through a collaborative approach. *Accountability* – The process of developing norms and behaviors led to collective accountability for the group. This accountability encouraged a beneficial social pressure and led to the exhibition of desired behaviors (Silvia, 2019). *Authenticity* – Scholarship leads to promotion and tenure, but the process can be riddled with competition, dread, worry, and stress, and as a result, many early career faculty may struggle with the writing myth of "imposter syndrome" (Jensen, 2017, p. 52). This approach established trust, common goals, support, and accountability and allowed "participants to show up authentically and be together in the common enterprise of making progress on their work" (Ahern-Dodson & Dufour, 2021, p. 214).

The Process

The collaborative writing approach created structure and enhanced the efficiency of the team. The fluidity of conversation and dedication to each other allowed for transparency in the discussion of norms and group goals and were foundational to creating a structure for success. The collaborative writing approach structure consists of 1) critical collaborative conversations, 2) established writing time and norms, 3) a timeline and accountability, and 4) organizational components (see Figure 1).

1. *Critical Collaborative Conversations:* Transparency amongst the team led to the emergence of two themes. First, critical conversations resulted in working to members' strengths. Some members were better suited to organize, manage, and lead the team. The lead author tracked the agenda, goal setting documents, sent reminders about the meeting times, and ensured all voices were heard, while others offered examples from previous publishing experience. The second theme to emerge was commitment to one another's professional and personal well-being because all team members viewed success for one as success for all. Members started the meeting with "catch up" time which eliminated conversations unrelated to the current manuscript and the success of the project. The collaboration, trust, mutual respect, and shared interest in each other's careers allowed the team to foster goodwill and recognize one another as valued members of the team.

2. *Established Writing Times and Norms:* Establishing writing times and norms was a vital component, and within the discussion, the issue of time was mentioned as a barrier each individual experienced. The time barrier led to establishing a common writing time. A survey meeting tool (e.g., Doodle Poll) was used to determine a weekly meeting time of one and a half hours. A calendar invitation for the virtual weekly video-conference meeting (e.g., Zoom) was sent to the team. This weekly writing time was used for writing the manuscript with a strict "no homework" norm. Team members found the writing time efficiency did not add additional burden to their current workload.

3. *Timeline and Accountability:* The Workday Agenda, a timeline and accountability document, was created. The agenda included: Team norms, prompts for personal check-ins, the manuscript purpose/target audience/target journal, and a calendar for meeting

work goals. The last 10 minutes of each meeting was used to reassess the work plan and adjust to stay true to the no homework norm.

4. *Organizational Components:* A shared Google folder with documents for the collaborative writing time was included within the calendar invite. Within the Google folder was an advanced organizer used for brainstorming ideas (Brain Dump), articles referenced, publication submission guidelines, other articles from the target journal, and original notes. This organization provided a sense of security to members so no one was left searching for essential elements needed for writing the manuscript.

Figure 1.

Collaborative Writing Team Approach Components

Critical Conversations
- Identify like-minded, yet diverse professionals for collaborative writing
- Commit to one another and to team member transparency throughout the writing process
- Discuss and determine lead author and team member roles (revisit regularly)
- Create team safety and focus on members' well-being through personal "catch-up" discussion time
- Allow for team member flexibility by discussing attendance expectations, common goals, and work style preferences
- Determine distribution of tasks on a regular basis
- Have difficult conversations when necessary
- Discuss team members' strengths and weaknesses to leverage expertise

Established Writing Time and Norms
- Utilize a survey meeting tool to determine common, regularly occurring writing time
- Create a calendar invite with link to shared Google folder and virtual meeting platform
- Establish a sacred regularly occurring writing time
- Schedule a regularly occurring video conference meeting
- Document group norms in a frequently visited location
- Adhere to a no homework group norm

Timeline and Accountability
- Determine a target submission date
- Design a work day agenda with dates and anticipated work tasks
- Start each meeting with a personal check-in and connection time
- Revisit norms, project goal, and work tasks during each session prior to individual work time
- Outline time commitment and norms for establishing flexibility within work day agenda
- Maximize worktime through the utilization of time management tools (i.e.- Do not disturb on phone and sign on office door, closing emails, etc.)
- Facilitate a discussion at the end of each session to clarify questions, revise upcoming work tasks within the work day agenda, and provide closure

Organizational Components
- Create a shared Google folder to store all documents, tables, figures, author guidelines, and articles referenced
- Add link to shared Google folder to the reoccurring calendar invite
- Implement the utilization of a work day agenda to support organization and commitment to on-task work sessions
- Document brainstorm, organizational ideas, and submission guidelines, etc. within a brain dump document to ensure vital pieces do not get left out or ignored as the manuscript develops

Conclusion

Collaborative writing teams are an effective way to move scientific knowledge forward (Kaye et al., 2019; Oliver et al., 2018). Recommendations for applying the collaborative writing approach include:

1. *Changing the Narrative:* Although the focus on writing and getting published does not disappear through this collaborative writing team approach, the perception of it has moved to one of support, instruction, and learning through this process rather than existing as a measure of professional worth. Having critical conversations around scholarly challenges (e.g., Feelings of intimidation, leadership issues, and lack of understanding the scholarly writing process) allowed for the development of a collaborative writing plan, which focused on mentorship and authentic support of one another.

2. *Going Beyond Promotion:* Pressure to publish scholarly work is deeply rooted in higher education, but the motivation to form a consistent writing team went well beyond securing promotion and tenure. The team found comradery, professional support, and enjoyment in sharing with the broader research community through collaboration, accountability, and authenticity.

The collaborative writing approach provided frequent, low-stress contact with scholarly work, which previously caused stress amongst team members. These relevant and easily implemented methods moved the team closer to their scholarly goals both individually and as a team. Using the collaborative writing team process, recommendations, and successes faculty can change the narrative to see beyond promotion and tenure and find a team to hone the craft of scholarly writing.

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REAL-WORLD STRATEGIES FOR TEACHING SELF-ADVOCACY

Abstract

Self-advocacy is important across the lifespan. The importance of practicing self-advocacy skills is generally known. Still, the development and delivery of its instruction can be unclear, as it needs to be individualized for each student, starting with what goals are set and how each goal is measured. This paper will empower others with the knowledge and resources to help students practice and apply self-advocacy skills by explaining the importance of self-advocacy, providing sample Individualized Education Program goals that can be used across ages and settings, and providing examples of applications of goals.

Background/Rationale

There are many different definitions of self-advocacy, with each focusing on what is deemed appropriate for the individual for whom it is being used (Test et al., 2005). Self-advocacy is a person's ability to effectively communicate and assert one's needs and desires (Calkins et al., 2011). It is a part of everything we aspire to do, both personally and professionally. It is vital for individuals with disabilities to understand their unique needs, be able to request accommodations, and interact appropriately with others. The traditional approach to teaching self-advocacy in special education links it to the transition process, which begins at age 16 at the latest (DeVos & Schultz, 2020). However, this is a skill that needs to be developed over time. Children are capable of making choices as soon as they are able to communicate. It is critical that we begin teaching children how to make good choices as early as possible, which will lead to a more independent and well-rounded adult (Graves & Larkin, 2006).

Literature Review

Transition planning is a part of Individualized Education Program (IEP) goals. However, teachers and parents often struggle with how to include their self-advocacy component of such skills with all the academic requirements (Murawaski & Hughes, 2021). It is often simpler to make choices for students rather than teach them how to participate in their own decision-making. Examples of practical ways that self-advocacy training can be incorporated into daily classroom instruction, as well as activities for home and the community, are necessary. Fiedler & Danneker (2007) stated that teachers are eager to provide students with these skills, but it is challenging due to a lack of time and professional development.

Common Barriers to Teaching Self-Advocacy

The self-advocacy movement began in Sweden in the 1960's with an emphasis on giving individuals with mental disabilities their own decision-making power (Williams & Shoultz, 1984). Since that time, the movement has grown exponentially and spread to all disability groups. Adults with disabilities and their advocates understand the importance of having their voices heard (Brunk, 1991).

Strong self-advocacy skills have been linked to improved school retention rates and more successful adult outcomes (Roberts & Zhang, 2016). Yet, most educational programs do not include self-advocacy in the IEP until high school, if at all. Many factors contribute to this predicament. The development of the action plan or the IEP is only the beginning. Once goals are developed, they need to be effectively delivered.

There is a need, for example IEP goals and methods to effectively incorporate strategies, activities, and progress monitoring to develop even the youngest self-advocate. At the heart of teaching is one's desire to improve the knowledge of others through given knowledge and experiences. As these experiences are learned, independent application of them can be accomplished by the learner. The practice and application of self-advocacy skills is no different. Thus, the concepts of self-advocacy through the lens of choice can be taught, guided, and authentically practiced across the lifespan while presenting them in developmentally appropriate ways for each age group (Stancliffe, et al. 2020).

Teachers are often overwhelmed with the number of academic IEP goals they are tasked with adding to their already full workload (Masten, 2023). The thought of including soft skills and seemingly intangible behavioral modifications may not feel like an effective use of their time.

Parents may not want to empower their child with self-advocacy skills (Zhang, 2005). Some parents struggle with letting their child grow up and become independent. The feelings of protectiveness can be compounded when that child has a disability.

Teaching a child independence is time-consuming and can be challenging. It is often simpler to make choices for students rather than teach the students how to participate in their own decision making (Zhang, 2005). Because of these and many other reasons, self-advocacy is often ignored in the early years. As students near exit from the K-12 system, educators begin to recognize how critical self-advocacy skills will be for the student. However, many students have developed a sense of dependency and learned helplessness by this time.

Professional Tips for Implementation

Children begin communicating their wants and needs in infancy. Babies cry to express themselves when they are hungry or need a diaper change. Toddlers clearly show preferences for their favorite food, toys, and even clothing. These are all ways children are self-advocating. Parents and later teachers simply need to capitalize on these natural tendencies to teach children appropriate methods of requesting and satisfying their wants and needs.

Here are a few general self-advocacy goals from the website A Day in Our Shoes with Lisa Lighter (2023).

1. Co-lead annual review and help develop IEP goals.
2. Communicate academic strategies or compensation skills that work best for him/her.
3. Demonstrate appropriate skills in asking for modification independently.
4. Demonstrate an understanding of his/her disability and be able to communicate to others how he/she learns best.
5. Describe personal strengths accurately.
6. Identify specific environmental modifications and tell why they are needed.
7. Make decisions between two or more choices.
8. Initiate or participate in goal-setting conferences and help set goals.
9. Self-identify that they need assistance and know the appropriate time and person to ask for help.
10. Share with the classroom teacher that the IEP is a legal document and what kinds of information can be found on the IEP.

Each of these can be adapted for various ages. Table 1 shows an example with three goals.

Table 1

Age-Appropriate Self-Advocacy IEP Goals

Age Range	IEP Goals
3 to 7 years	1. Asks for help when needed.
	2. Can tell others that he/she has a disability.
	3. Attend IEP meetings.
8 to 11 years	1. Understands his/her accommodation needs and can ask a teacher for help when an accommodation isn't being provided.
	2. Demonstrate an understanding of his/her disability and being able to communicate to others how he/she learns best.
	3. Co-lead IEP meetings and help develop IEP goals.
12 – 17 years	1. Understands accommodations needs. Can explain how he/she learns best and what alterations and devices he/she needs to meet his/her goals successfully.
	2. Has a full understanding of his/her disability and can clearly define limitations and needs.
	3. Lead IEP meetings and develop transition goals.

Conclusion

Self-advocacy is an important skill that everyone needs. It is especially important for individuals with disabilities, as they are often denied autonomy and independence. Self-advocacy can be learned at any age but will develop more naturally and fully if a child begins practicing self-advocacy when they are young. Children who are taught self-advocacy tend to do better in school and will be more successful throughout their lives. While self-advocacy is not an easy skill to teach or master, it is worth the effort.

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EFFECT OF DRUG-FREE INTERVENTION STRATEGY ON IMPULSIVITY OF STUDENTS WITH ADHD

Abstract

Attention Deficit Hyperactivity Disorder (ADHD) is a neurological condition that involves problems with inattention and hyperactivity-impulsivity that are developmentally inconsistent with the age of the child. ADHD affects almost 5 to 10 percent of school-aged children (DSM-IV, 2000). Due to very little awareness about ADHD, there is an acute need for knowledge and information about the condition, but the service is not even available to mainstream schoolteachers and parents rearing ADHD child. By adopting drug-free educational strategies their attention can be enhanced. In the present study, an Experimental method was employed to see the impact of intervention strategy on impulsivity of Attention Deficit Hyperactivity Disorder (ADHD) school students. In the study, pretest- posttest experimental and control group design was used.

Introduction

Education is the fundamental right of every child. Improvements in education are not only expected to enhance effectiveness but also enhance the overall quality of human life. We speak of education for all; but a majority of the students remain academically backward. There are some children in the schools who seem normal, but they face difficulties in learning, reading, recalling, copying, writing, listening, understanding, communicating and attention (Alberta, 2006). It is important that the child receives a thorough examination and appropriate diagnosis by a well-qualified professional. One of the challenging and hidden disorders these days is called attention deficit hyperactivity disorder.

Attention Deficit Hyperactivity Disorder (ADHD) is a neurological condition that involves problems with inattention and hyperactivity-impulsivity that are developmentally inconsistent with the age of the child (Ayllon et al, 1972).

Objectives
- To identify students having attention deficit hyperactivity disorder with the help of teachers and parents.
- To study the Attention Span of students diagnosed to have attention deficit hyperactivity disorder.
- To assess the impact of Visual Concentration Attention Technique (VCAT) on impulsivity of students with attention deficit hyperactivity disorder.

Hypotheses

> ❖ There will be no significant impact Visual Concentration Attention Technique (VCAT) on impulsivity of students with Attention Deficit Hyperactivity Disorder.

Design of the Study

An experimental method was employed in the present study to see the impact of intervention strategy on attention of Attention Deficit Hyperactivity Disorder (ADHD) school students. In the study, pretest- posttest experimental and control group design was used. There was one experimental group and one control group, each group comprising of 20 students with symptoms of ADHD. The intervention was given only to the subjects of experimental group and no treatment was provided to the subjects of control group. In the present study, the impact of intervention strategy (Independent variables) on attention of ADHD students was studied and compared.

Sample

A true sample is a small group, which represents all the traits and characteristics of a population. It was impossible to include all the schools of Tricity, therefore, school were randomly selected out of various private schools of the Tricity. Thus, the technique of selecting students with ADHD was random in nature. Thus, a total of 40 students who showed the symptom of Attention Deficit Hyperactivity Disorder (ADHD) was taken up from these schools for data collection. Total 40 Students were selected between the age group of 8 to 11 years, who were identified with ADHD and included in the final sample. These children (40 in number) were divided into to one experimental and one control groups randomly or 20 students in each group.

Tools used for data collection.

To test the above-mentioned hypotheses, the following tools were used:
> ➢ Diagnostic test Vanderbilt ADHD Teacher Rating Scale by Wolraich (2012).
> ➢ Diagnostic test Vanderbilt ADHD Parent Rating Scale by Wolraich (2012).
> ➢ Test of Variables of Attention (TOVA) by Lawrence Greenberg (2007).

Hypothesis

There will be no significant impact of Visual Concentration Attention Techniques (VCAT) on impulsivity of students with Attention Deficit Hyperactivity Disorder.

Table

Mean Differentials of Commission Errors (Impulsivity) as an impact of VCAT about EG1 and CG

Groups	Mean (n=20)		SD		t-value	p-value
	Pre-test	Post-test	Pre-test	Post-test		
EG$_1$	10.42	5.72	±7.49	±2.74	3.231	.004*
CG	12.52	13.31	±4.35	±4.40	-2.758	.013*

**p-value<0.01= highly significant

*p-value≤0.05= significant

ns p-value>0.05= non-significant

Table represents the mean differentials (t-value) between pre-test and post-test scores of commission errors of EG$_1$ whose subjects were treated with Visual Concentration Attention Techniques and CG, whose subjects were not given any treatment.

The t-value of EG$_1$ worked out between the means value of pre and post-test scores of Commission Errors (impulsivity) was 3.231 with regard to commission errors (impulsivity) which is significant at .05 level. The significant t-value indicates that intervention provided through Visual Concentration Attention Techniques has reduced the impulsivity of ADHD children. This suggests that commission errors of subjects who were provided training through Visual Concentration Attention Techniques has been reduced significantly.

This table also shows that the calculated t-value between means value of pre- and post-test scores of control group regarding commission errors was also significant. This suggests that the commission errors of subjects of control group, who were not provided any training, increased significantly which may be due to continued imbalance of dopamine-synthesizing enzymes in brains of subjects with ADHD.

The figure also reveals the significant decline in commission errors in subjects of EG1, in contrast to the subjects of CG, whose means scores of commission error increased significantly.
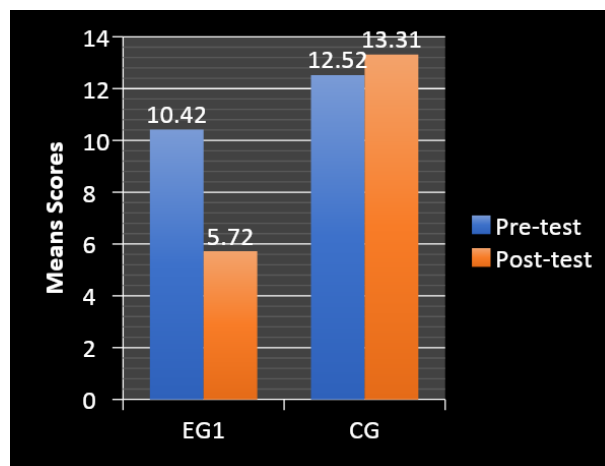
Discussion of the results

Being impulsive is often one of the challenging symptoms in subjects with Attention Deficit Hyperactivity Disorder (ADHD). This may lead them to act inappropriately, sometimes even aggressively towards other children and adults. Children with impulsivity act spontaneously before thinking. Their lack of impulse control or being impulsive problems leads to troubles in class and in other situations.

In the Visual Concentration Attention Techniques, Visual Attention stimulus affects the neural activities in the visual and Pre-Frontal Cortex. These areas are responsible for cerebral and psychological functioning, including impulse regulation, problem-solving, self-consciousness, and self-control (Barkley, 2002; Barkley, 2007). These areas also regulate the release of neurotransmitters involving dopamine, norepinephrine, and serotonin (Arnstein, 1999).

There are several waves in the brain responsible for attention and impulsive behavior. The brain waves associated with focused attention are called Beta waves. The brain waves associated with disorganized thinking are called Theta waves. The brain waves associated with hyperactivity and impulsivity is Alpha waves.

In the present study, the probable reasons for significant decrease in impulsivity of subjects of EG_1 could be fact that VCAT trains the brain by increasing Beta waves to improve focused attention and decreasing Alpha waves and Theta waves to reduce disorganized thinking, Impulsivity, and hyperactivity. These changes are eventually sustained, even after treatment has ended (Siahdohoni, 2011). That could be the reason the commission errors (Impulsivity) were reduced, and correct responses were increased as an impact of VCAT on subjects of EG_1.

However, in the case of subjects of CG, who were not treated with any intervention and no Psychostimulants were presented to them, their level Alpha waves, and Theta waves remain imbalanced and subjects of control group showed more impulsive behavior. Indirect evidence suggests that this increase in impulsivity may be related to Alpha waves and Theta waves, as the subjects of control group were not treated with any intervention.

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CONSULTING ON INCLUSIVE EDUCATION: MOVING THE NEEDLE IN CALIFORNIA

Abstract

Many special education faculty consult with school districts to support systemic expansion of inclusive practices. Common trends, barriers, and issues are identified, as well as actions that special education consultants and teacher educators can take to "move the needle" in terms of positively impacting equity and justice-oriented outcomes through increased, intentional, and systematic inclusive approaches.

Background/Rationale

For those in the field of special education, the terms "mainstreaming," "inclusion," and "inclusive education" have profound significance. Historically, students from underserved and marginalized groups, including those identified as having disabilities, have been segregated, institutionalized, ignored, and generally seen as second-class citizens. As international policies such as the Salamanca Statement (1994) and national laws such as the Individuals with Disabilities Education Improvement Act (IDEA, 2004) clearly continue to prioritize more inclusive (or in the case of IDEA, less restrictive) settings, university programs and teacher educators need to prepare special education teachers and those in similar fields to be able to meet the needs of students in a wide range of settings.

Black, Latino/x, and other underserved groups continue to be overrepresented in both special education, and in separate special education settings (Doutre et al., 2021). In California, district, state, and national oversight bodies are no longer complacent regarding this

overrepresentation. As such, schools and districts are seeking support in addressing the systemic barriers facing students within their organizations. Addressing these equity barriers is urgent. By continuing to train pre-service teachers in segregated settings without support for districts in their efforts towards more inclusive practices we are contributing to the continuation of a broken system. Thus, a critical need emerges: How do we as teacher educators work collaboratively with school districts to move the needle on inclusive education in such a way that students with and without disabilities, the TK-12 teachers who work with them, the families, the administrators, related service providers, *and* the teacher educators all feel supported, heard, effective, efficient, and valued in these efforts? How do we negotiate barriers at a systems-level, to include racism, ableism, and practices that have simply been in place "forever"? Offering high-quality, coordinated professional development helps to empower local school districts as they design an Inclusion Action Plan that involves multiple stakeholders and can be rolled out in an intentional and transparent way that respects individual school cultures and demonstrates a true commitment to inclusive education for all.

Research Support

Solone and colleagues (2020) found that in a large California district, "Students identified as Black, Latinx, English Language learners, and eligible for free and reduced meals were less likely to be included in general education classrooms. District region and neighborhood income were also factors associated with lower odds of being included in general education classrooms." In addition, the likelihood that a student with extensive and pervasive support needs will have access to an inclusive education differs based on where the student resides (e.g., region of the country; suburban, urban, or rural setting; specific school district) (Brock & Schaefer, 2015). This means that district factors, not those inherent within a student, are the greatest predictors of inclusive placement.

Inclusive education may not be easy and often requires adaptations, assistance, and modifications to the setting, materials, or content, among other factors. Faculty need to know how to collaborate, co-teach, differentiate, and adapt to help students (Murawski & Lochner, 2018). We believe that these adaptations are both doable and, above all, *worth it*. Clearly, much is required for "inclusion" to become a reality. Collaboration, one of the four identified high-leverage practice areas for special educators (Jenkins & Murawski, 2023; McLeskey et al., 2017), can support individuals and teams in transforming inclusive philosophy into inclusive practice. But how do we get an entire district to collaborate around inclusion?

Hedegaard Hansen and colleagues (2020) state that, "inclusive school development involves a process of transforming general and special education into inclusive education, which requires changes in content, teaching methods, approaches, structures, and strategies in education. In order to succeed, classroom practice is only one sub-practice among many sub-practices in a school practice that needs to be transformed" (p.47). TED members who want to successfully consult and make an impact need to know how to systematically support districts in

making change – often in the face of resistance, logistical issues, financial barriers, unions, conflicting policies, and numerous other priority areas!

Barriers, Trends and Issues

In working with school districts across California, a number of barriers, trends and issues were identified by researchers. In no particular order, these included: a lack of data-driven decision-making; a lack of consistency in professional development and implementation; inconsistencies with instruction; lack of differentiation, Universal Design for Learning and Specially Designed Instruction; numerous issues with co-teaching to include a lack of stakeholder input, training, scheduling, planning time, and use of collaborative models; support by administration; lack of vision; no systemic focus or systems in place; inadequate numbers of substitute teachers; and an overall dearth of large-scale buy-in. Expectations were not communicated in many situations and numerous school districts struggled even to have consistent language for the supports they were offering students with identified needs. The impetus for a large number of these districts to seek the support of the educational consultancy organization were the feedback and reports received from the California Department of Education (CDE), citing them for being out of compliance. While much of the work of consultants ended up being large-scale professional development (e.g., presentations on Co-Teaching, UDL, and SDI), some districts sought to make actual change. The following section identifies many of the suggestions we offer when collaborating for systemic change.

Actions Taken for Justice-Oriented Systemic Change

Justice-oriented systemic change recognizes the entrenched racism, linguicism, and ableism upon which current educational institutions are founded (Connor et al., 2016) and places emphasis on examining current practices through this lens. Engaging in this work requires trust and authentic partnership with stakeholders to unveil assumptions and stereotypes embedded in current systems, and thus extends beyond mere professional development and coaching. As an external team member, consultants can provide accountability for district colleagues to plan strategically, to engage with difficult questions, and to consider actions beyond the status quo within the system. The following actions can provide a starting point for this work:

Explore equity gaps using existing data. Districts are already required to collect data on the race/ethnicity, and language status of all students, and this data can be analyzed to determine a) are students within certain minoritized groups more likely to be identified as needing special education services? And b) how does race/ethnicity/home language relate to the percentage of time students spend in general education settings? Sharing this data back with stakeholders via

school board meetings and/or school site staff or parent meetings can help teams to prioritize goals with equity in mind.

Seek voices of students, staff, aides, families, teachers. Stakeholder surveys and focus groups can be developed using quality indicators for inclusive practices (e.g., Maryland Coalition for Inclusive Education). Include race/ethnicity/language status in order to disaggregate and check for themes within the data and solicit input from groups most likely to be marginalized. For example, some families may be less inclined to take an online survey but can be interviewed in their home language at pickup time. As above, share findings back with stakeholders.

Identify ableist practices. For example, are there systems that "track" students with certain eligibilities into certain classes? Do all students, regardless of eligibility, have the same opportunities for full membership in general education classes at their home school? Is 'othering' language pervasive when talking about students receiving special education services?

Don't reinvent the wheel! Several national technical assistance centers provide free resources (and often professional development) focused on district and schoolwide change for inclusion. These materials are already well-supported by research in the field. Current technical assistance centers focused on inclusive practices include SWIFT, the Maryland Coalition for Inclusive Education, and TIES.

Be clear on goals. Engage in strategic planning at the district and school site level. The SWIFT-FIA and the TIES Inclusive Education Roadmap processes are both tools that build on quality indicators and utilize a team-based approach to prioritizing goals. Educational consultants who focus on inclusive practices, such as 2Teach Global, can also support district personnel in crafting a three-to-five year vision and roll-out process.

Include voices from disability and other marginalized communities. Ensure you are speaking to all potential stakeholders in this process, including current and former students with disabilities. They know their needs better than any service provider! Do an audit of potential professional development providers/coaches to ensure they represent marginalized community members whenever possible.

Move toward a framework of rightful presence. A rightful presence framework aims to end segregation in schools and ensure that students currently "missing" from the general education classroom, most often students with the most extensive support needs, are rightfully included in meaningful and rigorous education alongside their peers. The National Center on Inclusion Toward Rightful Presence provides technical assistance and open-access resources for educators.

Establish structures to support sustainability and ownership. Do co–teachers have adequate time to co-plan each week? Are pull-out services done at consistent and strategic times so students can maximize learning in their classroom? Are both general education and special education teachers sent to disability-related professional developments? Does the district have a plan to develop internal leaders to support inclusive systems?

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FIRST YEAR SPECIAL EDUCATION TEACHER MENTORING AND CONTINUOUS DEVELOPMENT CYCLES OF MENTORS

Abstract

The teacher shortage around the nation is well documented, especially in the field of special education. Teacher attrition plays a key role in the shortage of special educators. This project implements a continuous cycle of the development of special education mentors as they transition from the role of first year teacher to the role of mentor. The purpose of the project is to provide focused support resulting in the participants renewing their contract for a second year of teaching while moving into a supportive role from first year teacher to mentor. Findings include changes in self-efficacy through the first year of teaching and factors that positively or negatively impacted ratings of job satisfaction at the conclusion of the first year are reported.

Background

Nearly half of all new teachers leave the profession within their first five years of teaching. According to Podolsky et al. (2016), new teachers who do not receive mentoring leave the profession at a rate that is twice as high as those who receive mentoring. Whitaker (2000) found that mentoring was enhanced when the mentor and mentee had a close personal and professional relationship. Faculty who have worked with students for many years are in a unique position to provide effective mentoring based on the close relationships that are forged during an undergraduate special education teacher training program. Additionally, teachers who have just completed their first year of teaching are in a unique position to provide mentoring to new first year teachers.

Beginning special education teachers take on many new roles that they do not fully experience as student teachers: such as case manager, sole provider of intensive individualized instruction, and collaborator with other educators, support personnel, administrators, and parents (Struyven & Vanthournout, 2014). Special educators work with diverse groups of learners and those who have often been marginalized in the educational environment. The unique responsibilities of special educators can be addressed through new teacher induction programs and early career mentoring experiences tailored to specifically address the unique job responsibilities of special educators (GaDOE, 2020).

Teacher attrition contributes to the shortage of special education teachers. Few studies have examined both specific reasons why special educators leave the field or change school districts. First year teachers who change positions, schools, or districts at the conclusion of their first year of teaching contribute to the continuous cycle of positions being filled by less experienced teachers which can negatively impact student achievement and resource allocation through the continuous need to support first year teachers in classrooms for students with disabilities (McLeskey & Billingsley, 2008).

Purpose of the Study

The program is designed to build the bridge between undergraduate student and professional educator by continuing to foster the relationships that were built during an undergraduate program, continuing to provide focused professional development based on the identified needs of the early career special educators, and transitioning first year teachers into the role of mentor of the next year of special educators resulting in the retention of special education teachers.

The provision of mentoring and professional development provided by professionals with whom a new teacher has an established trusting relationship has the potential to positively impact the teaching profession particularly in the area of special education through increased job satisfaction, the continued development of additional teaching skills, and retention of highly qualified special educators. This approach is optimal since the special education majors in the project have participated in a two-year special education cohort program in which the students took all classes together with a strong cadre of professors within the special education program. The cohort and professors developed trusting relationships based on the common goals of providing future educators with the skills and habits of mind to enable them to be effective teachers. Additionally, second year teachers are in a unique position to provide needed mentoring and support to new teachers entering the profession.

Method

The current project used a mixed methods design and triangulation of data from multiple sources and approaches to provide a comprehensive understanding of the research questions. Data was coded individually by each researcher and then compared to reduce project results bias.

1. Will participants in the project report positive job satisfaction and remain in the profession beyond their first year of teaching?
2. What changes occur in reported self-efficacy as teachers develop through the first year of teaching.
3. What key factors impacted ratings of job satisfaction and continuation in the same position during the second year of teaching?

Data Sources

1. Teachers' Sense of Efficacy Scale. Overall teacher efficacy and three sub-categories of teacher efficacy including Efficacy in Student Engagement, Efficacy in Instructional

Practices, Efficacy in Classroom Management following each professional development session.

2. Job satisfaction survey completed at the end of the first year of teaching measuring the level of satisfaction with their first teaching position.
3. Open-ended surveys were completed following each professional development training session to measure the effectiveness of the provided training.

Results

The project participants are employed in districts that range from rural to urban and are socioeconomically and culturally diverse. A group of ten first year teachers consistently participated in all components of the program. Results from the self-efficacy scales demonstrated that prior to the beginning of the first year of teaching, the first-year teachers rated themselves highly in overall efficacy and the three subcategories of efficacy.

At the end of the fall semester, the overall efficacy score dropped slightly with the efficacy in classroom management dropping greater than any other area. The professional development session on behavioral de-escalation techniques allowed opportunities for the cohort members to share their management challenges in their classrooms. Participants shared that management concerns were greater than anticipated. One participant was physically struck by a student in the face and was involved in a difficult meeting with parents and an advocate. Others shared various management situations that they had not experienced as a student teacher. One teacher shared that "I wish that as undergraduates we were told that these strategies only work some of the time for some of the students." Additionally, another shared that "making all of the decisions is very different from field placements" emphasizing the level of responsibility had now shifted from shared responsibility to individual responsibility and accountability. A minority shared positive classroom management outcomes with students.

At the conclusion of the first year of teaching participants completed a job satisfaction survey (Spectre, 1994). The mean scores in each category are as follows ranked from highest to lowest mean scores: supervision (M=21.375), the nature of the work (M=20.625), coworkers (M=18.75), benefits (M=18.25), pay (M=16.5), communication (M=16.5), contingent rewards (M=16.125), operating conditions (M=13.75), and promotion (M=13.25).

The categories with the highest ratings from the ten participants included supervision, coworkers, and the nature of the work. The first-year teachers reported being supported by their supervisor, liked the people with whom they worked, and liked the work itself. They reported the lowest ratings in the areas of promotion, contingent rewards, and operating conditions. The first-year teachers reported that there was little opportunity for promotion, that rewards were not based on job performance, and that working conditions were difficult, especially the special education paperwork load.

Participants were then categorized into groups of either satisfied or ambivalent based on their job satisfaction ratings. Table two provides a comparison of mean scores between participants who were categorized as satisfied or ambivalent. Seven teachers rated themselves as

satisfied with their jobs and all signed contracts to return to their positions for the following school year. Three teachers rated themselves as ambivalent about their positions and all changed school districts at the end of their first year of teaching, although they all accepted positions as special education teachers in different school districts. The satisfied teachers rated supervision (M=23), coworkers (M=21.6), the nature of the work (M=21.8), and communication (M=20.4) highly. The ambivalent teachers rated supervision (M=18.667), benefits (17.667), and the nature of the work (M=18.667) highly with low ratings in the categories of communication (M=10), promotion (M=10.667), and contingent rewards (M=11.667). These teachers reported that the lack of communication made their job difficult to complete successfully and they perceived a lack of opportunity for promotion or being rewarded based on job performance.

Implications for Implementation

A critical issue in special education is the retention of highly qualified special educators who are able to provide continuity to the children and families that they serve. Five participants in the project agreed to serve as mentors to a new cohort of first year teachers. Interestingly, one of the new mentors rated herself as ambivalent as far as job satisfaction and changed to a new school district, yet she has become an active mentor. Recruiting second year teachers to mentor first year teachers provides an opportunity for the mentors to share their experiences and expertise as a first-year teacher with the next first year teachers thus creating a continuous cycle of special education mentors and mentees who support each other through their first years of teaching thus reducing teacher attrition. Creating a continuous cycle of mentees to mentors facilitated by faculty provides support to all participants, mentees and new mentors.

It is important to look at factors that resulted in feelings of job satisfaction such as support from a teacher's supervisor, positive relationships with coworkers, and the positive aspects of the nature of the work. Teachers reported that their job held meaning for them and that it promoted a sense of pride. These positive aspects of teaching in special education need to be publicized to prospective students, current undergraduates, and the public.

Identified problems also need to be addressed so that districts can retain effective special educators thus providing the continuity of instruction and the development of expertise in the field which will positively impact student achievement. An examination of the workload, including required paperwork, and resources and supports that could be provided to assist with that workload need to be put into place to elevate teacher retention.

Conclusions

It is impossible to positively impact outcomes for diverse groups of learners without addressing the needs of the adults providing those services. The mentoring and professional development provided to first-year special education teachers by university faculty and second year teachers provides both instructional and emotional support which can translate directly into more effective instructional practices and classrooms better equipped to meet the emotional and

instructional demands of a diverse group of learners. This project has the potential to positively impact the teaching profession particularly in the area of special education by retaining highly qualified teachers in the profession who demonstrate positive job satisfaction.

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DEVELOPING TEACHER PREPARATION COURSEWORK IN THE SCIENCE OF READING

Abstract

This brief discusses course development focused on alignment to the Science of Reading (SOR). The brief reviews the background on the SOR and suggestions for coursework that includes theory, use of assessment, and targeted instruction and intervention. Teacher educator observation and feedback strategies are also discussed. My aim is to aid higher education faculty new to the SOR and those developing reading coursework. This is a primer and like good science, will need revisions when new research arises.

Background/Rationale

Today's educational issues revolve around a teacher shortage, teacher attrition, and declining reading scores among students in the U.S. However, teachers who possess instructional expertise and deep pedagogical content knowledge not only enter the teaching profession more prepared but remain in their teaching positions (Brownell & Sindelar, 2016). Additionally, the National Center for Teacher Quality (NCTQ) has reported that and increasing number of EPPs are incorporating the Science of Reading (SOR) theories and methodologies into their programs (2021). While it is incumbent upon EPPs to provide precise reading assessment and instruction coursework there has been confusion over the SOR term (Schwartz, 2023).

The SOR spans 50 years of research from varied sciences such as psycholinguistics, psychology, education, and neuroscience that culminate in a burgeoning understanding of how the brain acquires spoken and written language (The Reading League [TRL], 2022). The science of reading and its requisite educational theories and methodologies have been championed for decades by educational scholars such as Jeanne Chall (1976), Marilyn Adams (1990), and Loisa Moats (1994) along with neuroscientist Sally Shaywitz (1996).

Explicit and systematic reading instruction is the basis of the educational instruction components of the SOR. While special education has a distinct history in preparing teachers in these evidence-based methodologies, special education students continue to be among the lowest performing in reading achievement according to the National Assessment of Education Progress (Duffy et al., 1986; Hughes et al., 2017; NCES, 2023). Additionally, reading scores for all students has laggard for decades.

In 2000, a panel of reading experts revealed five essential components of evidenced-based reading instruction: phonemic awareness, phonics, fluency, vocabulary, and comprehension (National Reading Panel [NRP], 2000). NAEP reading scores, however, have changed very little since this report (NCES, 2023). Experts suggest that the NRP recommendations were not fully integrated into EPPs in such a way that national reading scores were influenced (Moats, 2014; Seidenberg, 2013).

The NCTQ has stated an increase in SOR aligned coursework since 2013, however, their reporting is based on voluntary participation. In 2020, NCTQ reported only 51% of participating EPPs adequately addressed phonemic awareness and 68% adequately addressed phonics (Drake & Walsh). Furthermore, research within the last decade has shown in-service teachers lack basic English language knowledge (Ehri & Flugman, 2018; Hudson et al., 2021; Pittman et al., 2020; Washburn et al., 2014; Washburn & Mulcahy, 2014).

Suggestions for Coursework

Lane and Contesse (2023) suggest five steps to increase EPPs reading programs.

First, they suggest that reading faculty are current in research on reading development and instruction. I suggest reading seminal works by Anita Archer, Marilyn Adams, Louise Spear-Swerling, S. Jay Samuels, Louisa Moats, Phillip Gough, William Tunmer, Sally and Bennett Shaywitz, Hugh Catts, Maryanne Wolf, Margaret J. Snowling, Stanislas Dehaene, Keith Stanovich, Holly Lane, Michael McKenna, Kristin Sayeski, Sharon Vaughn, David Kilpatrick, Timothy Shanahan, Mark Seidenberg, Catherine E. Snow, Joseph K Torgesen, John Hattie, Lynn S. Fuchs, Jack Fletcher, Linnea Ehri, Jan Hasbrouck, R. Malatesha Joshi, and Daniel Willingham.

       This is not an exhaustive nor finite list. This holds for all lists in this brief. I recognize this list is long. If new to the SOR, I suggest you begin with Shaywitz, Wolf, Dehaene, and Willingham for a dive into how the brain learns to read. Then move to Moats, Archer, and Spear-Swerling for the content and pedagogical content in how to teach a student to read. Supplement with the others as you continue to teach.

       I suggest following the current research and work of Valentina Contesse, Nell Duke, Matthew Burns, Emily Binks-Cantrell, Fumiko Hoeft, Nathan Clemens, Tiffany Hogan, Devin Kearns, Colby Hall, Nadine Gaab, Holly Lane, Esther Lindström, Shayne B. Piasta, Yaacov Petscher, Tiffany Peltier, Jessica Toste, Timothy Odegard, and Erin Washburn.

       I suggest using documents and learning modules from Vanderbilt University's IRIS Center, the University of Florida's CEEDAR Center, the Florida Center for Reading Research, and www.ReadingRockets.com.

       I suggest podcasts such as *Sold A Story*, *Science of Reading: The Podcast*, *Melissa and Lori Love Literacy,* and *Knowledge Matters Podcast*. I suggest following the educational reporting of Natalie Wexler and Emily Hanford.

Second, Lane and Contesse (2023) urge EPPs to ensure teacher candidates are well verse in reading content knowledge. I suggest the following textbooks for consideration. These books could be used to build course upon or they can supplement each other to build a well-rounded course or set of courses as candidates progress within a program.

Birsh, J. R., & Carreker, S. (2018). *Multisensory teaching of Basic language skills*. Paul H.
      Brookes Publishing Co.

Diamond, L., & Thorsnes, B. J. (2018). *Assessing reading: Multiple measures*. Arena Press.

Hagan, C. E. (2020). *Literacy foundations for english learners: A comprehensive guide to
      evidence-based instruction*. Paul H. Brookes Publishing Co.

Honig, B., Diamond, L., Gutlohn, L., & Cole, C. L. (2018). *Teaching reading sourcebook*. CORE.

Hougen, M. C. (2015). *Fundamentals of literacy instruction and assessment, 6-12*. Paul H. Brooks Publishing Co.

Hougen, M. C., & Smartt, S. M. (2020). *Fundamentals of Literacy Instruction & Assessment, pre-K-6*. Paul H. Brookes Publishing Co.

Moats, L. C. (2020). *Speech to print: Language Essentials for Teachers*. Paul H. Brookes Publishing Co.

Spear-Swerling, L. (2022). *Structured literacy interventions: Teaching students with reading difficulties, grades K-6*. The Guilford Press.

I suggest a deep understanding of the following theories and frameworks which can be sourced from the several textbooks mentioned above.

- National Reading Panel's 5 Pillars
- The Simple View of Reading
- Scarborough's Reading Rope
- The Active View of Reading
- Ehri's Phases of Word Learning

Third, Lane and Contesse (2023) contend that teacher candidates should have deep knowledge of pedagogical content knowledge. I suggest a deep understanding of explicit and systematic instruction to address this component. Within explicit instruction, candidates will learn how to task analyze a skill, teach easy to complex tasks, use concise verbiage, give specific academic feedback, among other essential teaching skills. I recommend the textbook Explicit Instruction, Effective and Efficient Teaching by Anita Archer and Charles Hughes.

Fourth, Land and Contesse (2023), suggest providing ample opportunities to practice reading instructional moves under the guidance of a skilled instructor. I suggest that this begins within courses through microteaching with peers. Skills such as correct vowel and consonant sound production are especially important components which can be practiced in pairs. If possible, 1:1 tutoring, or small group tutoring (2-3 students) would also aid in establishing pedagogical routines such as daily phonemic awareness practice. Instructors should supply feedback and coaching in real time, if possible, but video feedback is also an established practice with solid research evidence of effectiveness. Online software such as GoReact has preset mechanisms for timestamping and noting specific teaching moves. I believe that feedback should be verbal as well as written and can occur over zoom or other online platforms if teaching segments are videoed.

Fifth, Lane and Contesse (2023) suggest that teacher candidates understand the specific policies that impact reading assessment, instruction, and intervention for their specific teaching placement. Federal, state, and district laws impact how assessments are given and results disseminated and what curriculums can be used for instruction and intervention. Literacy laws have changed a great deal in the last decade and will likely continue to shift. EPP faculty should also be aware of the changing laws as many impacts for standard requirements for coursework.

I suggest teacher candidates be armed with assessment batteries that are informally and easily deliverable. Additionally, my suggested assessments are easily if not freely attained and provide candidates the ability to apply their theoretical concepts to reader profiles. I suggest the CORE Phonic Survey from the assessment textbook mentioned above. This survey is appropriate for learners beginning in kindergarten. Next, I suggest the Dynamic Indicators of Basic Early Language Screener, 8th edition. This freely available assessment has both benchmark and progress monitoring tools to aid teacher candidates in monitoring student progress over time. I specifically suggest the Oral Reading Fluency assessments for passage reading. This one-minute passage reading task is a quick measure of how a student is reading in connected text and can alert the assessor if fluency seems to be a risk factor for reading difficulty. I also suggest the Phonological Awareness Screening Test to gain insight into a leaner's phonological skills. I believe that the suggested levels within the assessment should be taken with a grain of salt, I do see this assessment as a screener for determining if further, more formalized assessments of phonological abilities is needed.

Lastly, I suggest the Informal Decoding Inventory found in Differentiated Reading Instruction by McKenna and Walpole. This assessment is broken into two parts, single and multisyllabic words. The inventory allows the assessor to find the syllable types that are easily read and those that need moderate to intense remediation. Together, this small battery of informal assessments addresses letter knowledge, grapheme-phoneme matching, phonological awareness, fluency, and syllable knowledge. The assessments are easily administered and interpreted.

For intervention knowledge I suggest the use of UFLI Foundations by Holly Lane and Valentina Contesse for elementary level candidates and Word Connects by Jessica Toste for upper and secondary level teacher candidates. UFLI Foundations is an affordable curriculum with supplementary materials freely available from the UFLI Foundations website. Word Connection is freely available from an online download. Both programs have well designed scope and sequences that follow explicit instruction guidelines. They incorporate teaching that is delivered from the easiest to more difficult concepts, daily review of past knowledge and skills, and continuous student engagement. Both programs also have evidenced based research to support their impact on student learning.

Lastly, when creating coursework for reading instruction I believe that real world practice with direct and supportive feedback from expert instructors is ideal. However, case studies and microteaching are good stand-ins when in person tutoring is not logically possible. Video case studies are great assets for modeling and scoring assessment data. EPP instructors are encouraged to find willing student participants, garnering parent permission to video, and share recorded assessment administrations within courses. Anecdotally, I have found that teacher candidates enjoy this practice and feel better prepared when they are set to give this assessment battery to their own students.

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SEASING A NEW OPPORTUNITY TO USE COACHED IN A NOVEL WAY

Abstract

The Capturing Observations and Collaboratively sHaring Educational Data (COACHED), a web-based application, provides users with evidence-based coaching tools and professional learning materials. In COACHED, teachers upload a recorded lesson and receive feedback from observers and can self-assess. The Classroom Teaching Scan observation tool provides data from which the candidate and university supervisors can develop goals and assess growth. A regional university in the Midwest piloted the use of COACHED in a novel manner with special education student teachers in a variety of placements across K -12 classrooms. Candidates engaged in peer review, which had not been done before the fall 2023 semester. Procedures and lessons learned are provided.

Background/Rationale

Student teacher supervision is a key component of teacher development. During the student teaching semester, university supervisors frequently meet with candidates to provide key information for end-of-program details and events, such as completing requirements for licensure, applying for jobs, and interviewing. Another aspect of the role is to evaluate lessons, typically between three and five, per candidate, per semester. These observations with subsequent evaluation provide opportunities for specific feedback on the student teacher's performance. This feedback allows the student teacher to see their teaching from the university supervisor's perspective, one who is well versed in best practices and with many years of experience. This feedback allows the student teacher to grow in their skills. The opportunity to observe themselves can be a requirement for the student teaching semester to allow them to evaluate their teaching and observe what others see when they are teaching. This provides an opportunity for self-reflection and goal setting. Sometimes candidates are required to observe peers and provide feedback, but that practice is not as common.

A pilot study was conducted at a regional university in the Midwest that used the Capturing Observations and Collaboratively sHaring Educational Data (COACHED) web app which includes evidence-based tools to allow for practice-based feedback by anyone with access to the video and has a COACHED account (Kunemund et al., 2022b). Candidates in field placements record their lessons and upload them to COACHED. This upload becomes available to relevant individuals who have system permissions to view the video and provide feedback on the lesson. To date, COACHED has been used by university supervisors and cooperating teachers to provide feedback on the candidate's lesson and for the candidate to self-evaluate.

However, for this pilot study, peer evaluations were conducted, combined with typical evaluation by the university supervisor and a self-reflection by the candidate, providing a form of triangulation to give candidates data from an additional perspective.

Purpose

Supervision of both field experiences and student teaching is a key component of pre- and in-service teacher development and growth. Therefore, identifying an effective and efficient method for providing instructional feedback is crucial to candidate growth. University supervisors and teacher candidates piloted COACHED in the spring semester of 2023 to evaluate its effectiveness for both university supervisors to identify a potentially more effective and efficient method for student teacher lesson evaluation than the previously used system. Additionally, it provided an opportunity to use COACHED in a novel way by requiring teacher candidates to evaluate their peers who were also student teaching while meeting in small groups over the semester to debrief each of three lesson evaluation cycles. Additionally, this pilot study can add to the literature base by testing the use of COACHED in a new way as a means of enhancing feedback to student teachers by providing triangulated feedback from three perspectives.

About COACHED

COACHED is rooted in evidence-based instructional practices in special education, best practices in classroom observation, and effective feedback and coaching strategies for pre- and in-service teachers (Kunemund et al., 2022a). COACHED includes an extensive menu of evidence-based practices which include operationalized definitions with several implementation markers, making terms easily understandable for observers and focusing the observations on effective teaching practices. It allows observers to record the frequency of discrete teaching behaviors; for example, opportunities for students to respond and providing general and specific feedback can be tallied. The recording of these teaching behaviors occurs simultaneously with viewing the lesson video using the Classroom Teaching (CT) Scan observation tool. In addition to quantitative data, COACHED provides the opportunity for observers to record qualitative observational notes on the customizable feedback template. COACHED feedback reports provide a detailed account of the practices they used during their observation, displayed in graphs and short narratives. Included with COACHED feedback reports are links to brief online modules where candidates can review the practices targeted in their observations. The modules use Content Acquisition Podcasts (CAPs), which have been found effective for improving teachers' knowledge about evidence-based practices (Ely et al., 2015; Kennedy et al., 2018). Other elements of COACHED, for example, the observation tool and feedback report, also have demonstrated effectiveness, feasibility, and acceptability for use with teachers (Peeples et al., 2018; Kennedy et al., 2017).

Procedures

The project took place during the student teaching semester in which eleven candidates were assigned in small groups (learning communities) with one of two faculty members to

demonstrate and improve their instruction and classroom/behavior management skills. The candidates and faculty members engaged in COACHED training with modeling and guided practice at the beginning of the semester. Throughout the semester, each candidate uploaded a teaching video to COACHED. Everyone in the learning community used COACHED to provide feedback on lessons, which generated three feedback reports per video observation (self, peer, faculty). The learning communities used the COACHED reports to guide their discussions about candidates' instruction and classroom/behavior management. Faculty kept notes on successes and challenges related to using COACHED and the feedback procedures within the learning communities. Each candidate participated in an interview to learn more about their experiences in the pilot project.

Outcomes/Results

Researchers are currently analyzing the COACHED feedback reports, interview data, and qualitative data from the university supervisors for quantitative data and more in-depth qualitative data. Initial findings suggest improvements in COACHED use and candidate performance throughout the semester. Faculty and candidates used an increasing number of COACHED components and became more comfortable with the system with each observation cycle. Agreement among faculty, peer, and self-observations improved during the semester. COACHED reports indicate that candidates' instructional and behavior management practices improved from the beginning to the end of the semester due to analysis of the feedback from their three observation reports and follow-up discussions at the end of each cycle.

Both university supervisors and candidates recommend continued exploration of COACHED for feedback in the triad manner as used during the spring 2023 semester. Recommendations for improvement, such as more practice using COACHED for observations before cycle one, as well as one-on-one meetings with the university supervisor to determine goals for the next cycle. Candidates reported added value in receiving feedback from their peers as a further source of information from a different perspective which they reported benefit to their growth. The authors anticipate these qualitative and quantitative data will add to the evidence base supporting the use of COACHED for both pre- and in-service teacher growth and development.

Discussion

This pilot study, conducted across one semester, with COACHED implemented across three lessons for student teacher feedback and evaluations completed by the candidate in a self-evaluation, the university supervisor, and a peer, proved to be beneficial to candidates. However, as with any pilot, mistakes were made and areas for improvement were identified. Four specific areas are currently being evaluated and discussed among participating faculty to improve the implementation for future semesters.

The first area for consideration is to ensure adequate training and practice to use COACHED effectively and with fidelity. The training provided by the COACHED team was in-depth, well-designed, and included in-training practice. However, the delay between training and the first cycle of lessons was too long for retention of the process. Candidates and university

supervisors reported challenges in remembering how to use the system and remembering specific terms. In the future, candidates should meet within one or two weeks of the COACHED training to practice an observation with the university supervisor and compare results to support proficiency with using the system. Practice to demonstrate proficiency is key in ensuring the appropriate use of COACHED for meaningful feedback for candidates to grow.

The second area for improvement is to train COACHED users in how to provide specific qualitative feedback on the CT scan observation form. Observers may need additional practice and guidance on providing specific qualitative feedback with the form. The CT scan observation form provides default feedback to the candidate based on observer input during the scanned observation. However, there is an opportunity for editing those default statements and providing one's own feedback both during the scan and after the scan has ended. Practice coupled with guidance on what type of feedback to provide both during and after the observation will likely improve the quality of feedback provided.

A third area for consideration is the variety of environments in which candidates may teach and their unique features. Frequently candidates teach in a variety of settings such as in a push-in situation in a general education classroom or a pull-out situation in a special education classroom. In the special education classroom, small group sizes can vary. Additionally, some candidates may work with one student during a lesson or with moderate-severe needs in a self-contained classroom with multiple paraeducators also supporting students. Identifying methods within COACHED for measuring candidate growth across a variety of environments will enhance the depth of information candidates derive from their feedback.

Finally, to ensure all learning communities address key points of the observations in each cycle meeting, it quickly became apparent that a standardized debrief protocol should be designed to ensure focus and consistency across groups. This protocol should be followed by all university supervisors leading cycle meetings. Essentially, a protocol would be a meeting agenda for each meeting cycle to guide discussion of strengths and areas for growth across observation data from the whole group and within individual lessons for each participant to consider when developing goals to work on for the next cycle.

Conclusion

The use of COACHED is a valuable tool for use when teacher candidates and their university supervisors are spread across a large state, thus making in-person observations challenging. Additionally, a web-based system allows for multiple observers. In this case, university supervisors observed lessons and gave feedback while candidates also observed themselves for self-reflection using the same observation tool. Finally, peers provided feedback which was a novel method for using COACHED. This triangulated method provided three varying perspectives of input to help candidates hone skills and identify areas of strength during their student teaching semester. COACHED is a valid method for providing observation feedback and for candidates to demonstrate growth throughout their student teaching semester and may be further enhanced with peer review.

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PROJECT FLICS: SPECIAL EDUCATORS AND COUNSELORS *SEA*SING THE OPPORTUNITY FOR MEANINGFUL COLLABORATION

Abstract

Project FLICS is an Office of Special Education Programs personnel preparation grant (#H325K210074) funded as an interdisciplinary effort to prepare special educators/educational diagnosticians and school counselors to lead interdisciplinary programs that employ individualized interventions via collaborative efforts centered on Multi-Tiered Systems of Supports, evidence-based practices, technology-based supports, and data-based decision making. This summary will briefly describe Project FLICS' mission and will provide information and data related to the progress and effectiveness of the Project as of Year Two.

Background/Rationale

Personnel shortages and high rates of attrition continue among special educators (Billingsley, 2019), educational diagnosticians (Guerra, 2017; Todd, 2019), and school counselors (Cumpton & Giana, 2014; Mabry, 2022). Personnel shortages are consistently reported nationally and across the state of Texas (United States Department of Education, Office of Postsecondary Education, 2017).

Students with extensive support needs (SESN) experience poorer postschool outcomes as compared to same age peers without disabilities (Lipscomb et al., 2017). In school settings, SESN may experience limited access to a free and appropriate public education, a least restrictive environment, and the general curriculum due to a variety of factors, including underprepared personnel and high rates of attrition (Billingsley & Bettini, 2019). School personnel are often underprepared to serve youth with high intensity needs although research indicates that SESN respond best to evidence-based practices implemented by highly trained personnel, but a research-to-practice gap persists (Cook et al., 2012; McLeskey et al., 2018; Slavin, 2002).

## About Project FLICS: Description and Mission

Project *FLICS* at Texas A&M University-Corpus Christi (TAMU-CC) aims to increase the number of highly qualified personnel fully credentialed to serve SESN, including low-

incidence disabilities (e.g., students receiving special education services under the disability categories involving extensive and pervasive support needs including some students with intellectual disabilities, multiple disabilities, and autism; see Figure 1). The primary goal of the project is to prepare 16 master's-level special educators pursing educational diagnostician certification alongside 12 school counselors to collaboratively serve students with SESN using (a) discipline-specific evidence-based practices (EBPs), (b) Multi-Tiered Systems of Support (MTSS), (c) data-based decision-making (DBDM), (e) Universal Design for Learning (UDL), and (f) technology-based supports including assistive technology (AT) by providing interdisciplinary coursework, group assignments, and shared clinical field experiences.

Enrolled scholars either receive a master's plus educational diagnostician certification in 46 hours of coursework (15-16 courses) or master's with school counseling certification in 66 hours (22 courses). Project FLICS also involves enrolled scholars in 18 hours of shared coursework, 9 hours of which are designated for the Low-Incidence Disabilities (LIDs) transcripted certificate, a 3-hour counseling psychometrics course, a 3-hour course in research, and a 3-hour overlapping clinical field experience with shared seminar. Scholarships in the amount of $1,250 per course are provided. Following program completion, scholars must complete a service obligation requiring them to work in the roles for which they were trained for at least two years for every year of funding received.

Figure 1

Project FLICS
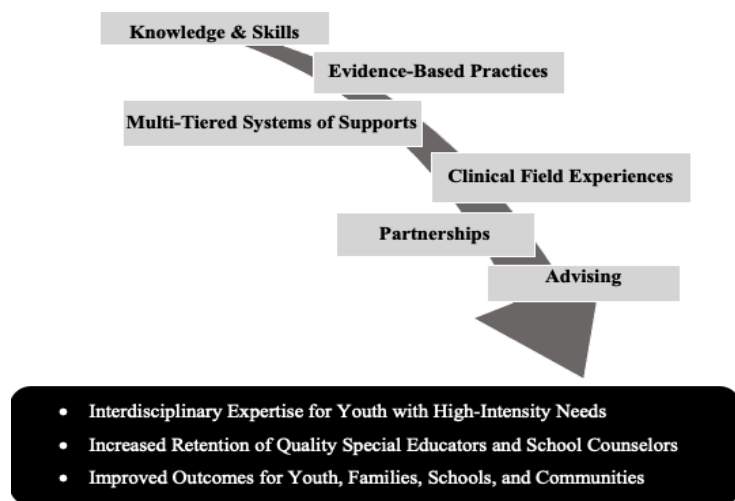
To date, FLICS has enrolled 15 scholars. All identify as female from the South Texas region. The first cohort of ten students included four individuals who identify as Latina and six who identify as white; eight seeking degrees in special education and two seeking degrees in school counseling. The second cohort of five students included three individuals who identify as Latina and two who identify as white; all seeking degrees in special education.

Implementation of Progress across the First Two Years of Project FLICS

In Years 1 and 2, program development was shaped by input and feedback from three Content Experts, 10 Local Advisory Board members, one External Evaluator, and 15 participating scholars. The following sections provide details of data obtained during the first two years of Project FLICS implementation.

To adequately prepare the scholars with quality interdisciplinary coursework, the team elected to use the first year for strategic planning and program development. We spent significant time ensuring coursework was aligned with and syllabi reflected best practices to support adult learning (Ball, 2000; Bransford et al., 2005) and technology learning theories (Mayer, 2011). Next, a master matrix was created that aligned with accrediting agencies and disciplinary content standards including the Texas Education Agency (TEA), Council for Exceptional Children (CEC), and Council for Accreditation of Counseling and Related Educational Programs (CACREP). Additional best practices for clinical supervision were considered (TEA, CEC, CACREP, and Collaboration for Effective Educator Development, Accountability, and Reform [CEEDAR]), along with Montana Effective Practices, and Center for Applied Special Technology's UDL matrix.

At the end of Year 1, Content Experts reviewed the three syllabi for courses that constitute the Low-Incidence Disabilities Transcripted Certificate evaluating the degree to which the syllabi incorporated scientifically or evidence-based practices, aligned with disciplinary-specific standards and competencies, and would accomplish project-specified goals (collaboration, MTSS, DBDM, EBPs, UDL, and AT). Syllabi were rated on a 3-point scale (3 = *strong evidence observed;* 0 = *no evidence observed)*. Results indicated project syllabi incorporated scientifically or evidence-based practices (2.66/3); were aligned with disciplinary-specific standards and competencies (2/3); and would accomplish project-specified goals (collaboration, MTSS, DBDM, EBPs, UDL, and AT) (2.66/3). Content experts also recommended including more focused content on inclusion and application-based learning activities. Syllabi were subsequently revised and enhanced prior to scholars enrolling in the program. During Year 2, the syllabi were reviewed again by the Content Experts, and results indicated successful revision with all syllabi scoring 3/3 in all areas.

In Year 1, we met with 10 members of a Local Advisory Board (LAB), primarily comprised of university faculty and school district and other community partners. The LAB members explained that their observations of novice school personnel involved two primary concerns: (a) struggles to effectively use DBDM to influence instructional decisions; and (b) struggles to implement UDL and MTSS frameworks and apply EBPs appropriately; areas which are targeted by the grant. Our next LAB meeting, planned for January 2024 will use the Self-Determined Learning Model of Instruction to set intentional goals focused on increasing inclusion and determining ways to highlight the school counseling perspective more effectively by including more school counseling community partners.

The External Evaluator consulted with project staff during the first two years to ensure that project and program evaluation measures were valid. In Year 1, basic evaluation measures were designed to determine project impact (e.g., data collection mechanisms such as portfolio documents, reflection logs, university/school supervisor evaluations, interdisciplinary planning

documents, methods to examine recruitment efforts targeted primarily at the district level or upcoming undergraduates, scholar grades, course evaluations, and licensure passage rates).

In Year Two, as measures and data were reviewed, the team, with input from the External Evaluator, devised additional opportunities to obtain scholar feedback. Additional surveys, knowledge assessments, interviews, and focus group measures were developed and will be administered in Summer 2024. For example, to determine scholar knowledge and experience after completing the LIDs sequence courses, a knowledge assessment and interviews will be conducted to reflect the impact of the shared coursework that is focused to support SESN. To get feedback from scholars, surveys and focus groups will examine the extent to which scholars are learning about and the extent to which their practice is impacted by FLICS core goals (collaboration, MTSS, DBDM, EBPs, UDL, and AT). In Fall and Summer of Year 3 (2024), scholars will complete a survey to retrospectively compare scholar knowledge of standards and confidence related to FLICS core goals before program entry and after program completion. To target the learning community and collaborative nature of this program and link to the collaboration core goal, a capstone collaboration project will be completed in the final semester before graduation as a requirement of the FLICS seminar. Additionally, surveys and focus groups will be used to examine scholar knowledge, confidence, and the extent to which their professional practice is impacted by FLICS core goals.

A pre-program survey was piloted to the first cohort of seven FLICS scholars (four special education and three school counseling) enrolled during Fall of Year 2. Scholars reported feeling "*somewhat confident*" in FLICS emphasis areas with lowest confidence in discipline-specific EBPs and AT/UDL. After completing the LIDS Transcripted Certificate, the same seven scholars indicated improved confidence in all areas with most improvement in confidence related to discipline-specific EBPs and AT/UDL. School counselors and educational diagnosticians with limited experience in schools rated confidence lower than practitioners with experience.

Next Steps

Project FLICS has structures in place to continue intentional recruitment efforts, specifically leaning on LAB members and connections with district partners to facilitate recruitment. FLICS faculty will continue to meet with consultants to make iterative improvements to coursework with application-based activities and provide content extensions and access to varied scholarly works through modules that will enhance the learning experience for FLICS scholars (e.g., emergent bilingual assessment). Finally, we aim to continuously improve seminars to capitalize on interdisciplinary work on collaboration and action research.

In conclusion, overall, Project FLICS has demonstrated promising impact as an interdisciplinary personnel preparation grant. The forthcoming measures are devised to quantitatively and qualitatively reveal evidence of the extent to which Project FLICS impacts educational diagnosticians and school counselors in their discipline-specific practice, while collaborating to support SESN, with the overarching goal of improving post-school outcomes for SESN.

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SEAS THE DAY! BY SUPPORTING NON-TRADITIONAL STUDENTS IN DISTANCE
TEACHER PREPARATION

Abstract

The persistent shortage of special education teachers, as well as increased demand for distance education, has led to an increase in online teacher preparation programs (Bonk et al., 2006; McLeskey et al., 2004; Rosenberg et al., 2007). Students who enroll in online distance teacher preparation programs tend to be non-traditional; they often work, have family responsibilities, and are older than traditional students (Childre, 2014). The *Online Practical Teacher Training (OPTT)* program is an online teacher preparation program resulting in a bachelor's degree and licensure in special education. In this presentation, I describe *OPTT,* discuss strategies for supporting distance students in courses and field experiences and for developing meaningful partnerships with local education agencies, and share program outcomes.

Background/Rationale

The persistent shortage of certified special educators (McLeskey et al., 2004) and growing demand for distance education (Bonk et al., 2006) has led to an increase in online teacher preparation programs, including alternative teacher preparation programs (Rosenberg et al., 2007). Many students who enroll in online distance education programs, including alternative teacher preparation programs, are non-traditional. They are often older than students enrolled in traditional on-campus programs, work while enrolled, and are responsible for caring for family members (Childre, 2014). Additionally, they are often geographically distanced from traditional on-campus teacher preparation programs. Although online programs may be more convenient and accessible, students enrolled in online, distance programs may feel that they lack connection with university faculty and peers. As a result, online programs may experience high rates of student attrition. Yorke (2004) calls for focusing on developing a sense of community to better support students and increase retention. A sense of community may be developed by proactively providing supports to students in the context of coursework and practica, in addition to more general program advising. Additionally, Rosenburg and Sindelar (2005) identified three indicators of effective alternative teacher preparation programs: meaningful collaboration between the university and the local education agency, rigorous coursework, and site-based mentorship combined with university supervision.

In this presentation, my co-presenter and I first described an online special education teacher preparation program designed for students who are currently working as special education teachers or paraeducators. We then discussed the cultural assets the students possess (e.g., prior experience with special education as a paraeducator or family member, history with the community they serve), as well as barriers they face (e.g., working full- or part-time, caring for family members), and described strategies we have found effective for providing supervision

and support to non-traditional students. We concluded by sharing outcomes of our online special education teacher preparation program.

Program Overview

The *Online Practical Teacher Training (OPTT)* program is an online, five-semester program designed for working paraeducators to earn a bachelor's degree and licensure in special education with a specialization in severe disabilities, mild/moderate disabilities and/or birth to five special education. Students enrolled in *OPTT* are required to work at least half-time in a local education agency (LEA), and LEAs agree to partner closely with *OPTT*. All *OPTT* students are assigned an LEA-provided coach who serves as a mentor and completes required teaching observations. Practica and student teaching are usually completed in the *OPTT* student's classroom during work hours. Courses are taught by the same university faculty as the on-campus program, and most classes are delivered via weekly Zoom sessions.

   OPTT students tend to be females between the ages of 25 and 60 pursuing teaching as a first or second career, have prior experience with higher education, be first-generation students, have family and community responsibilities, and represent more diverse backgrounds than traditional students. Since its inception five years ago, approximately two-thirds have been individuals without licensure hired in a teacher role, and one-third have been paraeducators. Due to the requirement that *OPTT* students work while enrolled, most enter the program with experience with special education, have a personal connection with an individual with a disability, and are committed to teaching. Most *OPTT* students receive $10,000.00 in funding from the Utah State Board of Education in exchange for agreeing to work in a Utah LEA for two years after graduating.

Alignment of Course Requirements and Field Experiences

OPTT provides students rigorous coursework aligned with field experiences that take place in their current employment settings. In their first semester, all students are required to take one course focused on topics critical to the success of special education teachers (e.g., explicit instruction, scheduling, developing goals and objectives, collaborating with families and other professionals) and one course addressing basic behavior management and instructional strategies. Students complete additional coursework based on their specialization. Students in the mild/moderate specialization complete a course on reading and language arts instruction for K-12 students with high-incidence disabilities. Students in the severe specialization complete a course focused on effective instruction for K-12+ students with low-incidence disabilities. Students in the birth to five specialization complete courses addressing approaches to instruction for preschoolers. All students complete a practicum related to their specialization that takes place in the student's current employment setting. Knowledge and skills acquired in coursework can be immediately applied to student's current instructional context, and assignments require students to implement strategies learned in courses.

   In their second semester, all *OPTT* students complete a course focused on assessment. Students in the mild/moderate specialization also complete a course on effective mathematics instruction for students with high-incidence disabilities. Students in the severe specialization

build on knowledge and skills gained during the first semester and complete a course on effective instruction for students with low-incidence disabilities. Students in the birth to five specialization build on coursework from the first semester and complete an additional course on instructional strategies for preschoolers and one course on early childhood development. Similarly to the first semester, all students complete a practicum aligned with courses in their classrooms.

During the third academic term, all students complete a course on special education law, policies, and procedures. Students in the birth to five specialization also complete a course on early intervention. In the fourth semester, all students complete courses in advanced behavior management, collaboration and technology, and eligibility assessment. Although *OPTT* students maintain their employment with an LEA throughout the program and course assignments require implementation in their own classrooms or small groups, a formal practicum is not required during this semester.

All *OPTT* students complete student teaching during their fifth semester. The state of Utah allows students to student teach in their employment setting, resulting in few students needing a change of placement. Students are observed at least three times by their coach, complete the Praxis→ Performance Assessment for Teachers (PPAT), and fulfill university student teaching assignments. Additionally, students in the mild/moderate and severe specializations complete a course in transition planning. *OPTT* students who meet the state of Utah requirements for the PPAT and successfully complete other student teaching requirements are recommended for licensure.

Supports and Supervision

Course Supports

OPTT is an online program comprised of synchronous and asynchronous courses. In alignment with Yorke's (2004) recommendation to foster community among students enrolled in distance programs, most courses are synchronous with weekly meetings via Zoom. Each class session lasts 60-90 minutes and employs a hybrid or flipped classroom model. In this model, students complete recorded lectures independently in preparation for the class session and use the weekly class time to engage in application activities. A small number of courses are asynchronous. These courses were selected purposefully with the intention of acknowledging that distance students tend to also be non-traditional students with many demands on their time (Childre, 2014). Providing some asynchronous courses gives students more flexibility and may reduce attrition. All course materials may be accessed via Canvas, and most instructors follow a template for organizing course material. The predictability of course design in Canvas across courses supports students by reducing the time and effort they may otherwise spend learning to navigate each instructor's Canvas. One final support provided by instructors is reasonable flexibility. In recognition of the additional commitments held by many non-traditional students, *OPTT* instructors are flexible with due dates when students communicate proactively.

Supervision Strategies

All *OPTT* students are assigned an LEA-based coach. The coach completes teaching observations and provides feedback to the students and *OPTT* faculty using online observation forms during two practica and student teaching. Prior to completing the observations, *OPTT* faculty train the coaches to use the *OPTT* observation forms. *OPTT* faculty regularly review the observation data and collaborate with the coaches to engage in data-based decision making.

Meaningful Partnerships

The *OPTT* program depends on a symbiotic relationship with LEAs. *OPTT* agrees to provide meaningful instruction, train *OPTT* students to implement empirically-supported practices, train coaches in program expectations, and seek and use LEA feedback related to program development. LEAs agree to partner with *OPTT* by supporting enrolled students, providing an LEA-based coach, completing observations and related training, attending regularly scheduled *OPTT* meetings via Zoom, and providing feedback. The collaborative relationship between LEAs and *OPTT* results in "real world" experience for *OPTT* students, immediate practice of course content, and bolstered local paraeducator to teacher pipelines.

Outcomes

Presently, 76 students are enrolled in *OPTT* in 21 school districts and two charter schools across the state of Utah in urban, suburban, and rural areas. As a result of being a distance program that develops close partnerships with LEAs, *OPTT* serves as a "grow your own" pathway that fills a need for qualified special education teachers.

Since 2019, a mean of 45.4 ($SD = 9.40$) students have enrolled in *OPTT*. Although *OPTT* was designed to provide licensure and a bachelor's degree to paraeducators, a mean of 65.6% ($SD = 2.51$) of students have been unlicensed teachers at the time of enrollment. Upon starting their second year in *OPTT,* a mean of 81.67% ($SD = 5.80$) of students have been unlicensed teachers, indicating that LEAs move *OPTT* students from paraeducator to teacher positions as they gain skills and knowledge and teaching positions remain unfilled. Over 98% of students reported having employment for the upcoming school year after graduating. Those who did not indicated that they were voluntarily looking for employment in a different LEA.

For the three years that data is available, a mean of 83.3% ($SD = 9.50$) of students who enrolled in *OPTT* graduated on-time. Reasons for not graduating on-time include taking a leave of absence due to personal health issues or those of a family member and needing to retake courses. The vast majority of students who enroll in *OPTT* graduate with a bachelor's degree and licensure in special education.

Summary

Growing demand for distance education has led to an increase in online teacher preparation programs (Bonk et al., 2006; Rosenberg et al., 2007). Students who enroll in distance education

programs, including online programs, tend to be non-traditional. Many have family responsibilities, work while attending school, and are older than traditional students. *OPTT* is a two-year online program designed to support working paraeducators to earn a bachelor's degree with licensure in special education. We partner closely with 23 LEAs across the state of Utah to provide site-based mentorship and close alignment between coursework and field experiences. Presently, 76 students are enrolled, and over 120 have graduated since the program's inception in the fall of 2019. Over 98% of graduating students have reported obtaining employment in an LEA for the upcoming school year.

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SEAS THE DAY FOR STUDENTS WITH DYSLEXIA: A RESOURCE FOR TEACHER EDUCATORS

Abstract

This paper describes a series of e-Learning modules that explore the complexities of identifying, assessing, and teaching diverse learners with, or at-risk of dyslexia. Developed by a collaborative of neuroscientists, researchers, and teacher educators from across multiple universities, the modules are an engaging, interactive, and dynamic tool designed to support the incorporation of current reading research on dyslexia and other reading difficulties in professional preparation programs.

Background/Rationale

Nearly all states have passed legislation focused on dyslexia and most states mandate screening for students at risk of dyslexia. Recognizing that integral to the success of these policies is high-quality professional preparation, approximately one-third of states also require that aspects of dyslexia, including evidence-based reading instruction and training related requirements, be addressed in pre-service preparation programs. Implementing these requirements may be challenging for the many teachers who still consider "balanced literacy" as their instructional philosophy, teach the "three cueing system" for word recognition, and put some, but not a lot of emphasis on phonics.

To support teacher preparation programs in meeting this challenge, we offer a series of freely accessible e-Learning modules based on an interdisciplinary body of research and developed by a collaborative of neuroscientists, reading researchers and educators, including early childhood, general education, special education, and bi-lingual teacher educators (UC/CSU Collaborative for Neurodiversity and Learning, 2023).The modules address the knowledge and skills all teachers need to provide effective educational supports for students with dyslexia within

the context of a class wide comprehensive, systematic, and evidence-based reading instruction program. Critical given today's diverse communities, families, and student populations, the modules view literacy as a fundamental civil right and the gap between reading outcomes of privileged and underserved populations, a social justice issue.

Research Base of Current Modules

Module content is grounded in a research base from across multiple disciplines, including neuroscience, cognitive psychology, linguistics, and education.

Introduction to Dyslexia

The first and introductory module in the series presents the existing definition of the International Dyslexia Association (IDA, 2002) and posits that future directions for a more comprehensive definition of dyslexia include the following considerations: (a) eliminate "exclusionary statements" which disproportionately exclude students of color; (b) acknowledge the importance of high-quality, core reading instruction for all students (Cardenas-Hagan, 2019); and (c) recognize the multifaceted causes and heterogeneous manifestations of dyslexia and their implications for instruction and intervention. The module presents dyslexia as a developmental disability which exists on a continuum, with characteristics ranging from mild to severe and often co-occurring with other disabilities (Snowling et al., 2020).

Dyslexia and the Brain

The *Dyslexia and the Brain* module opens with a discussion of neurodiversity, how dyslexia contributes to neurodiversity, and the role of neurodiversity in informing and improving education. The module discusses the differences in the brains of individuals with and without dyslexia as one example of this variability, and the dyslexic brain's response to intervention as one example of its plasticity (Wolf, 2007). The module offers neurological evidence that our brains have not evolved to read and that reading brains are "built" through neuronal recycling induced by reading instruction (Dehaene, 2009). It also shows that learning to read is a social and affective process. Thus, better reading results occur when students are emotionally engaged through developmentally, culturally, and linguistically appropriate instruction that capitalizes on the assets that all youth possess (Gotlieb et al., 2022).

Screening and Assessment for Dyslexia

The *Screening and Assessment for Dyslexia* module describes assessment for identifying and designing instruction for students with dyslexia, or at risk of dyslexia, through a Multi-tiered Systems of Support (MTSS) framework (Jackson, 2021) with attention to social justice. The module begins by proposing that the purpose of assessment is gathering data in order to answer an educational question. Each section is prefaced with a key question that guides the reader through a variety of uses of assessment. The module addresses the benefits and limitations of

common assessment tools and provides an overview of how early assessments and screeners can be used to inform intervention and targeted instruction for students with dyslexia.

In the first section, a broad definition of assessment frames different ways these tools are used by educators. This is followed by discussion of MTSS as a framework for developing educational questions, and selection of appropriate tools to answer those questions. The second section reviews uses and limitations of universal screening. Section three discusses assessment used to design instruction and monitor progress for classroom teachers. Section four introduces assessment to determine eligibility for services, such as students with a 504 Plan or Individualized Education Program (IEP). Finally, the module discusses how educators might best support families of students with, or at risk for dyslexia.

Early Childhood and Dyslexia

The *Early Childhood and Dyslexia* module extends educators' understanding of pre-literacy and early literacy behaviors and learning profiles of the youngest culturally and linguistically diverse (CLD) children at risk for dyslexia in preschool, transitional kindergarten, and kindergarten settings, as well as in home environments. Building on *the Cumulative Risk and Resilience Model of Dyslexia* (Catts & Petscher, 2022), the module discusses not only multiple risks but also several resilience factors, the mastery of which can help teachers and families of CLD learners scaffold early literacy activities and create a firm foundation for consequent literacy development.

In the context of counteracting language and literacy challenges with resilience factors, the module showcases effective evidence-based literacy practices, culturally responsive literacy instruction that centers on diverse children's linguistic capital, development of a growth mindset, coping strategies and task-focused behavior (Catts & Petscher, 2022). It provides examples of rigorous early childhood integrated intervention approaches in all language domains (i.e., phonology, morphology, syntax, semantics, and pragmatics) that can be implemented in preschool-kindergarten (Piasta & Hudson, 2022). It also offers examples of family-centered activities that fit well within familiar routines and can be carried out in home settings in children's home language and in English (Puranik et al., 2018). The module features activities bolstering students' phonological skills, including within-the-word unit (i.e., phoneme, morpheme, syllable) manipulation, while emphasizing the need to combine those with instruction and exercises in letter-sound identification, concepts of print, reading comprehension, and vocabulary in the context of promoting young children's linguistic and literacy growth.

Multilingual Learners and Literacy

This module is focused on multilingual learners and literacy skills. California is home to approximately 6.2 million Kindergarten through 12th grade (K-12) students, of which 40 percent enter school with a dominant language, other than English (California Department of Education, DataQuest, 2022). As language and learning are deeply embedded in culture, educational practitioners who work with children and families from different language backgrounds other than English need to develop both linguistic and cultural knowledge. Nowhere is this more evident than in the misidentification of English learners (ELs) in special education or other

remedial programs. There is a real need to better understand how multilingual learners may exhibit cross-linguistic transfer and influence between their languages which often is misinterpreted as a language-based learning disability (Kangas, 2021).

This module clarifies the broad range of terminology and classifications used for school-age students who speak more than one language. Other lessons in this module provide an overview of language domains: form (phonology, morphology, syntax), content (semantics) and use (pragmatics) along with information on how to conduct a cross-linguistic analysis of oral narrative language samples from multilingual students (Valentini & Serratrice, 2021). Additional information considers the importance of language testing in languages other than English along with the use of other reliable informal assessment measures such as family interviews, observation, and dynamic assessment (Peña et al., 2021). Supplemental and valuable resources are provided so that educational practitioners will obtain a better understanding of multilingual students' speech-language-communication skills from early spoken language to the onset of formal reading literacy skills.

Conclusion

Organizations worldwide argue that literacy is a fundamental human right and yet, according to the most recent National Assessment of Educational Progress (NAEP) (2022), 37% of all 4th graders read below the NAEP basic level. The intersectionality of literacy and social justice emerges when we look at the disparities in scores by student groups. While 27% of White 4th graders score below the NAEP basic level, comparable numbers for students who are Black or Hispanic are 56% and 50% respectively. Research suggests that learning disabilities, such as dyslexia are often underdiagnosed in specific populations, including racially and ethnically diverse students (Washington & Lee-James, 2020). Without appropriate reading instruction and intervention these students are at greater risk for unemployment, mental health issues, and involvement with the juvenile justice system.

As teacher educators we are accountable for preparing professionals who can support the acquisition of literacy in all students, including those with reading difficulties such as dyslexia. Integral to this challenge is the responsibility of translating current reading research into practice. Our work provides the knowledge and skills all teachers need to support students with dyslexia within the context of classrooms that provide evidence-based reading instruction and schools that embrace MTSS, early identification and intervention, and culturally and linguistically non-biased assessment and instruction. While the focus is on teacher educators, the modules are appropriate for in-service training. If we are to improve reading outcomes for all students, we must build coherence among ourselves, PK-12 teachers, and curriculum and professional development efforts.

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I WANT MY SPARK BACK:
USING MOTIVATIONAL INTERVIEWING WITH PRE-SERVICE TEACHERS

Abstract

Teacher shortages and attrition rates are at an all-time high and teacher preparation programs are seeing decreases in enrollment. A need exists to further understand what motivates pre-service teachers to enter the field. One way to do this is using motivational interviewing (MI). COMMIT uses MI with pre-service teachers to understand their supports and barriers and enhance their motivation to enter the field of teaching. Using a pre-post survey, audio recordings, and focus groups, findings suggested that the use of MI in teacher preparation programs was useful, increased their confidence, and allowed students to strengthen their connections as they entered student teaching. Detailed findings and limitations are presented.

Background/Rationale

The United States is experiencing a significant and ongoing teacher shortage (Nguyen et al., 2022). Reasons for high rates of teacher attrition include burnout, challenging working conditions, stress, and low job satisfaction (Billingsley & Bettini, 2019; Madigan & Kim, 2021; Robinson et al., 2019). In addition to shortages, enrollment in teacher preparation programs (TPP) are continuously decreasing with drastic drops from 2008 to 2020 (Will, 2023). To address the issue of teacher recruitment and retention, studies have examined the role of motivation in these processes. Exiting studies suggests that teacher retention is positively influenced by (1) teaching profession as the focus of career development, (2) belief that teaching is valued by society, (3) personal ability beliefs, and (4) intrinsic motivation to pursue a career in teaching (McLean et al., 2019; Van den Borre et al., 2021). However, few scholars have investigated pre-service teacher (PST) motivation to enter the field. Thus, there is a need to understand what motivates PSTs to enter the field and what supports or impedes their career development.

To address this need, the first author developed and implemented a motivational interviewing (MI-) informed curriculum titled *Career, Outcome, Meaning, Motivation in Teaching* (COMMIT). MI is focused on increasing individuals' *autonomous/intrinsic* motivation to change or pursue a valued goal (Miller & Rollnick, 2023). MI has a strong empirical base that demonstrates its positive impact on motivation across disciplines (Lindson et al., 2019; Sheftel et al., 2014; Stormshak et al., 2021). While there is an increased interest in applying MI to career

counseling (Rochat & Rossier, 2016), there is a dearth of studies using MI to impact PST motivation to enter the field. COMMIT consists of four hour-long MI-informed sessions focused on increasing PSTs' motivation to enter the profession. COMMIT sessions include conversations with PSTs about: (1) early career aspirations and how they informed their decision to be teachers, (2) personal values and strengths and how they informed decisions to enter the profession, (3) importance and confidence of teaching, and (4) strength-based planning for student teaching. All of the sessions utilize MI skills to evoke and reinforce PST motivation to enter the profession.

Purpose of the Project

During the Spring 2023 semester, the authors piloted COMMIT as part of a secondary general education course focused on classroom management and inclusive practices at a large university in the Pacific Northwest. The purpose of the project was to evaluate the feasibility of embedding COMMIT within teacher preparation programs and to further understand PSTs' career development and motivation to enter the profession. This project was guided by the following guiding questions:
1. What is the feasibility of using COMMIT in a secondary general education course?
2. What are the changes in participants' motivation to teach pre- and post- COMMIT?
3. What influences PSTs' career development and motivation to enter the profession?

Methods

We utilized a convergent parallel mixed methods design to evaluate the feasibility of embedding motivational interviewing into a PST preparation course (Creswell & Clark, 2017). Students were invited to participate by completing an electronic consent form and completed a brief pre- and post-survey, followed by the four audio-recorded COMMIT sessions. At the end of the semester, students could elect to participate in post-COMMIT focus groups and were offered an incentive of a $25 Amazon gift card. COMMIT was designed and facilitated by the first author who is a member of the international Motivational Interviewing Network of Trainers and has used MI extensively as a counseling modality. COMMIT was facilitated four times during the Spring 2023 semester; the timing of the sessions was determined based on the content of the course and availability of the facilitator. All of the students ($n = 21$) enrolled in the course consented to participate in this project. The participants were in their last semester of on-campus coursework and were going to student teach during Fall 2023.

Pre- and Post-COMMIT Survey

A pre- and post-COMMIT survey was used to evaluate participant motivation to teach. We obtained permission, adapted, and used the Autonomous Motivation for Teaching Scale – an instrument with acceptable psychometric properties (Abós et al., 2018). We adapted this measure by collapsing items into autonomous, controlled, and amotivation categories and rewording the items to reflect the content and scope of COMMIT, while staying within the bounds of each motivation category (Ryan & Deci, 2017). At the end, the number of items was reduced from 19

to 15 questions. Participants were asked to rate their responses on a scale from 1 to 7, where 1 = Strongly Disagree and 7 = Strongly Agree (see Figure 1). Project participants completed the pre-COMMIT survey immediately before the first COMMIT session and the post-COMMIT survey immediately after the final COMMIT session. Twenty out of 21 (95%) participants completed the pre-COMMIT survey. The majority of respondents were female (65%), white (80%), and had a concentration area in humanities or social sciences. Eighteen participants (72%) completed the post-COMMIT survey. The quantitative data were analyzed using a paired samples t-test.

Figure 1

QR Code to Access Commit Survey

Scan QR Code to Access COMMIT Survey
Questions and Types of Motivation Measured
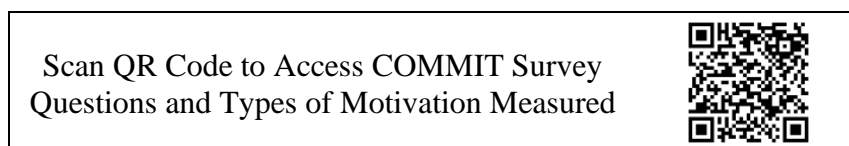
Audio Recordings and Focus Groups

We used audio recordings of COMMIT sessions and post-COMMIT focus groups to further understand why PSTs enter the field and their motivation to teach. Audio recordings of COMMIT sessions were used to analyze the themes that emerged regarding participants' career development and experiences during COMMIT. Post-COMMIT focus groups assessed COMMIT's social validity, feasibility of embedding COMMIT into a TPP, and participants' experiences during COMMIT sessions. Focus groups used a standardized protocol and were facilitated by the second author who did not have previous interactions with project participants, thus reducing confounding factors. COMMIT data were transcribed verbatim and deidentified by the second author. The first and second authors used an inductive coding approach to identify common themes and patterns in the responses (Miles et al., 2014). Additionally, they used two cycle coding. During the first cycle, they coded participant responses using in vivo coding strategies; in the second cycle, they used pattern coding identify common themes across groups (Saldaña, 2021). To ensure interrater reliability, the first and second authors engaged in all steps of the coding and analysis process together and coded to consensus.

Findings

Pre-Post Survey

A total of 20 out of 21 participants (95%) completed pre-survey and 18 completed post-survey. There were 16 matched responses between two timepoints. Survey questions were grouped into three categories: (1) autonomous motivation, (2) controlled motivation, and (3) amotivation. For each category, a composite score was created by calculating the mean of the responses with each category. At the end, there were three composite scores for pre-COMMIT survey responses: Pre-Autonomous Motivation ($M = 6.02$, $SD = 0.84$); Pre-Controlled Motivation ($M = 4.41$, $SD =$

1.15), and Pre-Amotivation ($M = 1.81$; $SD = 0.86$). Similarly, there were three composite scores for post-COMMIT survey responses: Post-Autonomous Motivation ($M = 5.92$, $SD = 0.89$), Post-Controlled Motivation ($M = 4.86$, $SD = 0.99$), and Post-Amotivation ($M = 2.01$, $SD = 0.76$). To examine the differences between the means on the pre- and post-COMMIT scores across three composite scores, we conducted a paired samples t-test. The results of the analysis indicated that there was a statistically significant increase in controlled motivation from pre- to post-COMMIT, $t(15) = -2.33$, $p = .034$, $d = -.58$. The results of paired samples t-test for remaining composite scores were not significant ($p > .05$).

Session Audio Recording and Focus Group Findings

A total of 15 unique participants were audio recorded during COMMIT sessions and 9 participants were recorded during focus groups. Two overarching constructs were identified during analysis: Social Validity of COMMIT and Factors Impacting PST Career Development.
    Social Validity theme included the following subthemes: (1) *Positives of COMMIT*, (2) *Juxtaposing COMMIT to the TPP*, and (3) *Recommendations for the Future*. When discussing *Positives of COMMIT*, participants spoke about valuing the MI-informed facilitation style as it fostered feelings of safety and conversations about their motivation to teach. Additionally, participants shared that the structure of COMMIT supported them in building a stronger sense of community among each other, which was particularly valuable as they were going into student teaching. Finally, they reported a positive impact of COMMIT on their teacher preparation, such as increased confidence. The *Juxtaposing COMMIT to the TPP* included statements about the value of having conversations in COMMIT that were not discussed in other courses. Finally, the *Recommendations for the Future* theme included statements about embedding COMMIT conversations throughout the TPP.
    Factors Impacting PST Career Development theme included the following subthemes: (1) *Contextual Factors*, (2) *Individual Factors*, (3) *Affective Factors*, and (4) *Future Planning*. *Contextual Factors* included statements about how broader contexts, such as positive teaching role models or negative narratives about teaching and burnout impacted participants' experiences with and expectancies of teaching. *Individual Factors* included statements about how participants' individual characteristics, such as past career aspirations, and personal strengths and values informed their decision to enter the field. Participants shared about wanting to make a positive impact on others and the appropriateness of fit between their strengths and values and the teaching profession. *Affective Factors* included statements about how participants' confidence and motivation related to their expectancies of student teaching and motivation to enter the field. Participants discussed an increase in confidence when thinking about improving their own teaching skills as a process rather than an immediate expectation. They also discussed how internal pressures such as knowing how much time and money was invested in their teacher preparation influenced their motivation to complete their degree and enter the field. Finally, *Future Planning* included participants' statements about expectancies of and goals for student teaching and plans to enter the field. Participants also discussed reducing the anxiety of teaching by focusing on the joy of teaching, and prioritizing balance and self-care during student teaching.

Discussion and Implications

The purpose of this project was to evaluate the feasibility of embedding COMMIT within TPPs and to assess how COMMIT participation is related to PSTs' career development and motivation to enter the profession. The results indicated that participants found COMMIT to be beneficial and recommended embedding it throughout their TPP. Pre/Post survey results indicated that after participation in COMMIT there was an increase in participants' controlled motivation to teach. This was supported by qualitative findings that suggested that discussions of external and internal pressures during COMMIT influenced participants' motivation to enter the field. Qualitative results demonstrated that participants' career development was informed by individual characteristics and affective factors such as confidence and motivation. These results are consistent with teacher motivation literature (e.g., Kwok et al., 2022). Limitations of this project include using a small convenience sample which is not a fully representative sample of PSTs. Additionally, the project did not have a control group, thus it is inconclusive whether the results of the project were influenced by COMMIT participation or were confounded by other factors. In conclusion, the use of COMMIT shows promising results in regard to embedding MI-informed practices into TPPs.

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INSIGHTS INTO IEP TEAM COLLABORATION FROM FAMILIES LIVING THEIR WORK

Abstract

Individualized Educational Program (IEP) teams are expected to collaborate to plan for optimal student outcomes and families are key members of these teams (Staples & Diliberto, 2010). To ensure that families' voices are heard, school personnel must create opportunities for their input before, during, and after IEP meetings. In order to better understand family member participation and how to improve collaboration, I present results from interviewing family members who also serve on IEP teams as professionals. The experiences of people who participate in IEP meetings in different ways offer insight into building collaborative relationships because they have the opportunity to serve in the family member role, but they also often set the tone to improve the way school professionals include families during the IEP process. How do these experiences interact and intersect in participants' work on IEP teams and what types of interactions have helped and hindered their children's educational outcomes?

Background/Rationale

Barriers to meaningful family participation in IEP teams include a lack of resources to support families (Rossetti et al., 2017) and confusion about the IEP process and how to advocate for their children (Carlson et al., 2020; Fish, 2008). Family voices are often ignored or disregarded (Angelov & Anderson, 2013; Lo, 2008; Salas, 2004) and even when family members are present in meetings, they do not report meaningful participation (e.g., Cavendish & Connor, 2018; Fish, 2008). Instead of a productive, collaborative conversation, IEP meetings are often focused on legal procedures and reading assessment reports (Salembier & Furney, 1997). As family members learn more about law and disability, they are more involved in the IEP process and report more positive experiences (Kurth, et al., 2020).

Purpose

Listening to family members' voices will allow IEP teams to improve the way they include family input during the IEP process. This presentation discusses results from ten interviews of family members who are also professionals on IEP teams to determine the following:
- What are their experiences with the IEP process as family members and professionals?
- How do their roles interact and affect their own decisions as IEP team members?
- What are some ideas they have to improve IEP team collaboration?

Method

Participants

For this study, I interviewed ten family members (100% female, 90% mothers) who are also school psychologists (20%), a social worker (10%), special education teachers (20%), and special education administrators and supervisors (50%). The recruitment procedure involved snowball sampling, with a post in the Council for Exceptional Children community, Facebook recruitment, and word of mouth.

Procedure

Interviews were semi-structured and occurred through Zoom meetings. They averaged 49 minutes and I asked the following questions:
- Please describe your experiences as a family member of a child who went through the IEP process.
- Describe your professional experiences and your experiences working with families through the IEP process.
- What is some advice you have for future teachers for how to create more meaningful partnerships with families?

Follow-up questions depended on how participants answered the general prompts. After each interview, I created a transcript and reviewed all of the transcripts for accuracy and to identify preliminary themes. Then I summarized the main ideas of each story to learn from individual experiences. Finally, I reviewed the transcripts for suggestions for how to improve school-family collaboration in the IEP meeting process.

Results and Discussion

Common Themes

One common theme that arose in the interviews was the idea of trust and how that affected interactions with IEP teams. One participant reported that she trusted the team and then did not expand on her experiences as a parent, preferring to talk about her experiences as a professional for the remainder of the interview. Eighty percent of family members reported issues with trust that in some cases led them to disassociate with the school district altogether, preferring to homeschool their children or moving them to a different district. Another theme involved the participants' professional experiences; they all reported increased empathy for families who navigate the IEP process.

Stories from Participants

The interviews fit into two main categories: a) special education administrators (4), school psychologists (2) and a school social worker (1) who had their children after working in the field

for many years and b) family members who started working in special education because they were motivated to improve families' experiences with school professionals (3).

Professionals First. Several participants had to seek outside evaluations for their struggling children. One mother lamented, ""Oh my gosh. I know the language to use. I'm in the business. If I can't get my own kid to qualify, what is another parent going to [do]?" Another mother was told by her colleagues that she was overly concerned and misguided for wanting to refer her son for services. After bringing in the outside evaluation, her son qualified for services and during meetings, she reported that, ""[The teacher] really made it sound like he was socially inept. Like he couldn't engage socially when that's one of his strengths." Most of the participants talked about the difference of being on the IEP team as a parent and as a school professional. She said, ""as somebody who's been in the world of special education for 20 years… I have read the state Special Education Manual. I've read parts of IDEA. I've been through the process with so many families. There's just absolutely nothing that can prepare you fully for going through it when it's your own child." A grandmother stressed the importance of listening to all voices at the table after she felt dismissed even though she considered herself the most knowledgeable person at her grandchild's IEP meeting. The social worker had a different perspective, reporting that her experiences on her child's IEP were fairly smooth, but her experiences with other families highlighted the importance of supporting families, especially those who do not speak English, navigate an incomprehensible system.

Mothers First. Participants who started their special education journey as parents reported extremely difficult experiences as they were learning about the IEP process. One mother's child's initial IEP was out of compliance, but no one helped her understand the law or procedures so she did not realize that until years later. She said, "There needs to be more kindness. There needs to be more answering the question as to what it means for the parent." This participant builds trust with families by explaining resources and services; she stated she would have appreciated the same treatment when she was starting out as a parent in the IEP process. A second mother talked about early meetings as a form of torture because the meetings were focused on professionals telling her all the ways her son was not typical in his development, with no discussion of strengths. She suggested that school professionals treat families as experts in the process because they are the experts of their children. A third mother had such a negative experience with her son who is on the autism spectrum that she pulled him from school. They moved to a different state and she began the process of becoming a special education teacher. She now works with students with the most significant behavioral needs in the district. She said that she focuses on the strengths and abilities of her students, "and I want for them the best that can be, which means that you have to be the best." She talked a lot about her work with families and reported that her role as a teacher grew from her roots as a mother. She seeks to be the most trusted special educator that she can be for her students and their families.

Opportunities to Build Partnerships

In the words of one of the participants, "Sometimes it is difficult to hear your child's needs, but…they will also be talking about joys and successes in the future." IEP teams must build

trusting relationships with families by focusing on strengths and goals. Fialka and Fialka-Feldman (2017) suggest structuring the meeting to "honor the concerns and needs of the family" (p. 49). As family members of a student receiving special services, they communicate with every member of the IEP team before the meeting to compile a list of skills the student can do, those they can almost do, and those that they would like to be able to do in the future. The meeting unfolds as a conversation, which can also be supported by including a presentation and visuals that support the discussion. Professionals should reach out to families to learn about their goals prior to meetings (Diliberto & Brewer, 2012). and ask about values, dreams, and worries (Fialka & Fialka-Feldman, 2017). Communication must be ongoing to build trust and transparency throughout the IEP process.

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A DEEP DIVE INTO DISPOSITIONS: NATIONAL EXAMINATION OF EDUCATOR
PREPARATION ASSESSMENTS

Abstract

Effective inclusive educators possess knowledge, skills, and abilities and they must also possess
professional attitudes, beliefs, and characteristics that go beyond discrete skills. These ways of
being, or dispositions, are sought out by educator preparation programs (EPPs) in numerous
institutions of higher education (IHEs) within the United States and they are measured through
instruments such as rubrics and institutionally developed assessments aligned with conceptual
frameworks. The researchers present findings from a mixed-methods investigation of 43 open-
source disposition assessments used by EPPs across the United States that examined
commonalities among domains named on the instruments. Minor and major themes were
analyzed resulting in 16 major themes with implications for alignment of IHE dispositional
assessments.

Background/Rationale

Educator dispositions are essential for special education professionals such as those defined in
the Council for Exceptional Children's (CEC's) Special Education Professional Ethical
Principles/Code of Ethics document (Council for Exceptional Children, 2015). Many IHEs align
their dispositions to their conceptual frameworks (Conderman et. al, 2015) and they include the
explicit teaching of dispositions through the curriculum such as Murray and Mereoiu's (2016)
technical assistance model curriculum. Research supports the development of dispositions for
inclusion through focused coursework activities such as storytelling (Garwood & Van Loan,
2019). However, there remains variability in the number and description of dispositions present
among Education Preparation Programs (EPP) disposition assessments in the United States (US)
and no singular definition exists.

Literature Review

Researchers have proposed and studied various methods for assessing educator dispositions
including the five step DAATS model (i.e., disposition assessments aligned with teacher
standards) (Wilkerson & Lang, 2007) and Schussler et al.'s (2010) three-part framework for
examining essential teacher candidate dispositions. A contemporary framework proposed by
Villegas et al. (2017) includes six characteristics of inclusive teachers with both fundamental

orientations to diversity and pedagogical perspectives and practices. Jung and Rhodes (2008) findings showed there were multiple meanings of the disposition assessments, and they were used for a variety of purposes. Teaching, assessing, and evaluating dispositional aspects of teaching is substantially more difficult than assessing standards-based skills, and a narrow focus of teacher candidate assessment is often utilized rather than a complex system of addressing dispositions (Bauer & Thornton, 2013; Sherman, 2006). Further complicating the valid measurement of dispositions is that instruments, disposition surveys, fieldwork observations, and portfolio assessments generally present a limited view of candidate competence rather than a holistic view of a new teacher's ability (Henry et al., 2013). Others have noted the problematic nature in attending to dispositions discretely versus developing and assessing dispositions in tandem to avoid creating a false sense of separation between knowledge, skills, and dispositions (Osguthorpe, 2013). With the intricacies of measuring dispositions, a systematic approach to assessment is efficient and more importantly, equitable.

Research Questions

The following research question guided our exploratory study:

> What dispositional themes are present within a sample of educator preparation program disposition assessments within IHEs in the US?

Methods

We used a mixed method, explanatory sequential design and the inquiry process occurred in multiple phases. Phase one involved querying open-source dispositions assessments/rubrics posted on educator preparation program websites from each state within the US. Search terms used were educator dispositions; teacher dispositions; dispositions assessments; dispositions rubric. Phase two involved minor and major themes analyses.

Data Sources & Analysis

A master source table was created with representation from the 50 states. The researchers used a randomized convenience sampling technique by including the first open-source tool obtained from the representative IHE for the state if the instrument was a published document. Once the links to the public instruments were obtained, researchers performed a content analysis (Krippendorf, 2019) of each instrument and used invivo coding to list each domain assessed and totaled the domains on the master table. Phase two involved thematic analysis where the researchers utilized a summative qualitative content analysis procedure as described by Hsieh and Shannon (2005). The researchers divided the master table in half. Each researcher then created a separate table to capture minor themes independently using in vivo coding from the master source table. To perform the minor themes analysis, each researcher conducted frequency counts of similar domains amongst the assessments on her assigned states and used both in vivo coding and keywords to name the respective domain. Researchers then met to compare minor theme results and create an initial draft of major themes through applying the summative qualitative content analysis procedure. Subsequently, researchers held a second major theme

analysis meeting in which we arrived at consensus on major themes by returning to the master source table to further synthesize domains.

Theoretical Framework & Positionality

We utilized a Hermeneutical theoretical framework in analyzing our data sources. Hermeneutics involves analyzing and interpreting texts and the language used to describe ways of being in our current culture across different contexts (Bentz & Shapiro, 1998). Our positionality informed our examination. We are Education Specialist teacher preparation faculty with leadership roles as program directors. We both have a Christian worldview perspective on core values for teaching as we teach at Christian Institutions of Higher Education.

Results

At the time of our investigation, we located 43 sample assessment instruments and five supplementary documents (e.g., handbook narratives) referencing dispositions from all states except New Hampshire and South Dakota. Domains assessed ranged from 3 to 20 with an average of seven domains assessed.

Researcher one arrived at 15 minor themes; researcher two arrived at 20 minor themes. We arrived at a total of 16 major themes of essential dispositions evident within the assessments. The top three major themes recurring within the domains were diversity, equity, and inclusion, collaborative, and professionalism with a frequency of 35, 32, and 26 respectively. The major themes were:

1. Diversity, Equity & Inclusion
2. Collaborative
3. Professionalism
4. Effective Communicator
5. Content Knowledge/Pedagogy
6. Critical Thinker
7. Leadership/Initiative
8. Lifelong Learner/Professional Growth
9. Teachable
10. Dedicated/caring/passionate
11. Integrity
12. Reflective Practice
13. Dependable/Responsible
14. Self-Awareness (Self-regulated/EQ)
15. Student-Centered
16. Advocacy

We discovered that one major theme, *Diversity, Equity & Inclusion* (DEI), included 13 distinct minor themes or conceptualizations within assessments. For example, conceptualizations included: social justice and equity; respect for diversity; awareness of diversity; dedicated to equitable, just, and inclusive practices; diversity, equity, and inclusion and others.

Discussion

Some consensus exists within the field about dispositions for effective teachers. At the time of the sampling, at least 1 IHE in 90% of the US was assessing dispositions. The educational field at large recognizes and seeks out specific dispositions for future teachers. There is some alignment with the most contemporary framework located (Villegas et al. 2017). Researchers feel confident in creating disposition assessments for our candidates that include all the themes as it represents some consensus within the field at large.

This research is the beginning of an arduous process of seeking agreement on the determination of essential dispositions to develop in future teachers to create a more truthful, equitable, and just educational process for the Nation's children. Dispositions represented in assessments of IHEs across the US is an initial step in determining common dispositional traits, which may be prioritized within EPPs. Unpacking the more complex dispositional themes present within assessments is appropriate especially in light of the robust nature of the DEI major theme. This deconstructed and deep understanding of minor and major dispositional themes may be a springboard to facilitate dialogue, reflection, and/or agreement within and amongst EPPs.

Implications

The outcomes of this research illustrate multiple recurring dispositions in EPP assessments of IHEs across the US with some IHEs using identical assessment instruments. Major and minor themes of our analysis add to the literature base on dispositional assessments as well as the research on developing dispositions through coursework. The findings will inform other EPP faculty in their accreditation and program development efforts.

A concise list of dispositions deemed essential by colleagues in EPPs across the US will aid in developing or enhancing disposition assessments in a strategic way. Themes presented from the findings will serve as anchors for ensuring disposition assessments are measuring the most essential elements based on consensus within the field.

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"SEAS" THEM AT THE BEGINNING: AN ONGOING STUDY OF CEC MEMBERSHIP AND MENTORING TO RETAIN OHIO'S TEACHERS

Abstract

Considering the shortage of intervention specialists (ISs) due to a decrease in college enrollment in teacher preparation programs as well as a high rate of individuals leaving the classroom by year three, this presentation and study is exploring the impact of mentoring on first year teachers. The strategy that CEC-Ohio has implemented jointly with the Ohio Office of Exceptional Children to increase retention with CEC memberships and mentoring began in the fall of 2022. Now in year two of mentoring, discussion will include perceived impact of mentoring based on mentor and mentee survey responses, and suggestions for final survey questioning. Implications for practice include educator preparation programs, new teachers from under-represented groups, and future research that seeks to increase IS longevity.

Existing Research

Worldwide, there is a significant attrition rate for teachers in their first five years of teaching. The rate of attrition in various countries include The United States and England at nearly 50%, Belgium at 44.9%, Canada at 30-40%, and Australia, France, and Germany at less than 10%. (Zavelevsky, Benoliel, and Shapira-Lishchinsky, 2022). According to *Challenges for New Teachers and Ways of Coping with Them,* there are quite a few reasons teachers leave the classroom after their first year. Broadly, one of the most challenging tasks for new special education teachers is to "make sense" of, or figure out, their roles (Mathews et al., 2017). Specifically, reasons include little to no support from administration, difficult expectations to meet (both professionally and personally), a lack of resources, limited professional development opportunities, and difficult classroom behaviors just to name a few. In fact, "82% of special educators across the nation state that there is lack of support when trying to meet the needs of students with disabilities" (Dias-Lacy & Ruth V. Guirguis, 2017, p.265).

In response to these difficulties, mentoring has been proven to be successful for decades. Mentoring is a high-leverage practice (HLP) that can be used to communicate instructional expectations and support teacher effectiveness (Israel, Kamman, McCray, & Sindelar, 2014). High-leverage practices that foster a "common language" support understanding across audiences and provide practices needed to effectively teach students with disabilities (Windschitl, Thompson, Braaten, and Stroupe, 2012). In 2004, L.M. Kelly found that there is a

connection between mentoring and retaining new teachers. In the study, 94% of the teachers were retained at least through their fifth year. In 2010, another study of nearly 9000 found that teachers matched with mentors in similar teaching positions were less likely to transfer schools. An additional study by Ronfeldt and McQueen in 2017 found that there was a relationship between teachers involved in an induction program and the rate of teacher retention (Maready, Cheng, and Bunch, 2021). There are numerous benefits to mentoring including providing professional development opportunities, increased problem-solving skills, building confidence, new strategies to use in the classroom, ability to practice with mentors, and allow for a better outlook on education (Dias-Lacy & Ruth V. Guirguis, 2017). The focus of this study is mentoring teacher candidates and following them as they begin their teaching careers with CEC membership. Despite this supporting research for mentoring, no publications or studies surrounding the impact of professional organization membership on teacher candidates has been found. The presenters/authors of this session are seeking to identify the impact of CEC and have publishable data to share in the future.

Partnership with Ohio Office of Exceptional Children

Considering the educator shortage in Ohio, our CEC Unit board of directors was approached by the Ohio Director of the Office of Exceptional Children, JoHannah Ward. She was already familiar with CEC and some of our board members and had heard about other states offering memberships to new teachers and wanted to do the same in Ohio. With grant funding from the state office, we began planning to not just offer free memberships but to include a mentoring program.

We began by seeking mentorship of our own, with Dr. Jamie Hopkins and Dr. Bill Bogdan. Ohio natives, Jamie and Bill had been through many iterations of mentoring programs and had a lot to offer as we brainstormed, planned, and began in the fall of 2022 (Hopkins, 2018). We also worked with CEC National Executive Director, Chad Rummel, who gave us helpful suggestions as we began, including support with the grant funding details. The two authors who worked on the planning and implementation of the mentoring program, Taylor and Jennifer were first acquainted as mentor/mentee themselves. Jennifer was on the faculty at Walsh University where Taylor completed a BS in Education for the K-12 Intervention Specialist Ohio license. Taylor joined the CEC student chapter at Walsh and Jennifer was the advisor. Taylor opted into the then offered National CEC mentoring program through the Leaders & Legacy Division, of which Jamie Hopkins was a mentor. Taylor shares that when she started her first year of teaching, she thought she would be too busy for CEC, but after a few years realized she was missing the support that she had as an undergrad student, reached out to Jennifer, and joined the Ohio Board. With the initial stages of thinking through how to manage the membership as well as mentoring program, Taylor accepted the position of Chair of the Membership and Mentoring Committee.

New Teacher Institute Year 1

As we started the planning process, we had many steps to figure out, but the first thing we had to do was recruit mentors and first year teachers. We started our recruitment of mentors first; we

began sharing with our board members and then with our membership at our state conference. These two simple actions gave us the bulk of our mentors. We continued to recruit mentors via email and word of mouth. By the end of the recruiting period, we had 16 mentors.

We then moved on to recruiting the first-year teachers throughout Ohio. This was a much more daunting task as we were not sure how to gain the information, we needed to find these new teachers. We started by creating an informative letter explaining the goal of our mentoring program. Our first stop was to our partners, the Office for Exceptional Children. They were able to work with the state department to create a mailing list that went out to everyone in the state that applied for a first-year license. They then took our recruiting letter and shared it with the mailing list. We also shared our information on various social media platforms along with sending it to our whole membership list. Through these efforts, we had 99 first-year teachers join us for our inaugural year.

Once we had our mentors and mentees recruited, we worked to create our mentoring cohorts. We decided to match mentors and mentees based on location, so they had the opportunity to meet in person if they wanted. We had cohorts represented in many areas of the state including Cincinnati, Columbus, Canton, Zanesville, Dayton, and Youngstown.

Meetings were held on an individual cohort basis, and it was the responsibility of the mentor to host monthly meetings with their cohort. Most of these meetings were held via video conferencing. It was also required that the mentors support their mentees between meetings as well through email, text, phone call, or whichever method they agreed on. We also held a few mentor check-in meetings throughout the year to see how the mentoring committee could support the mentoring cohorts. We also held a final whole group meeting at the end of the year focusing on self-care, this meeting was very well received and impacted changes made for our second year of the mentoring program.

To gather data as the first year went on, we created pre, mid, and post mentoring surveys for both the mentors and mentees to participate in. Our goal was to gather information on the mentees' comfort levels in the classroom and to see what experiences our mentors had in the classroom and with mentors. When asking the mentees how prepared they feel to work with parents on a scale of one to five, one being not prepared at all and five being completely prepared, many of the participants rated themselves as a three. By the end of the year, all participants rated their preparedness as a four or five. Some common themes that were expressed in the pre mentoring survey for first-year teachers is that they were worried about meeting deadlines, keeping track of service minutes, and managing paraprofessionals. To address these concerns, we shared resources with mentors and mentees as talking points throughout the year. At the end of the year, we asked the first-year teachers what their plans were for the fall. Of the participants that responded, all of them were returning to the classroom in some capacity.

New Teacher Institute Year 2

Officially titled, The New Teacher Institute (NTI) our mentoring program continued for a second year with continued support from The Ohio Office of Exceptional Children. We used the feedback from mentors and mentees from the first year to make the second year even better. Several changes were put in place, one major change is that we made the best effort to pair our mentors and mentees by specialty instead of location. This change was made so that more

individualized support can be offered. This year we also had the opportunity to have smaller cohorts, we have 28 mentors and 31 mentees. We were able to extend the membership and mentoring offering to our previous year of mentees to continue to support them in their second year of teaching. There were four mentees that took this opportunity and are acting as a secondary mentor within their cohort.

To gain more participation, we decided to make the monthly meetings a whole group video conferencing session. We scheduled the meetings for the whole year and created a magnet that was sent in a welcome packet to all mentors and mentees. Some meetings were planned to be whole group sessions with a guiding topic while others were scheduled as a quick whole group session followed by time to meet as mentoring cohorts and then a whole group wrap up. It has been nice to get to know all the mentors and mentees better through this capacity. Mentors then can host office hours or other check-ins throughout the month to best support their mentees needs.

At the start of the year, we sent out a pre-mentoring survey to all of our participants. Our mentees were asked several questions. For example, we asked them to rate how they feel about working with parents, managing challenging behavior, lesson planning, writing IEPs, and we asked where they see themselves in 10 years. We asked our mentors about their classroom experience and their experience as a mentor or being mentored. All this information is used as the year goes on and then is compared to future surveys to see the growth in our mentors and mentees.

We have three more meetings remaining for this year and we will be sharing our mid-mentoring survey in the new year. We are excited to continue to learn from our experience and support the new teachers in the great state of Ohio as they embrace their new career.

Bringing NTI to TED

Teacher educators can "seas" their teacher candidates with the wonderful world of the Council for Exceptional Children during preparation through courses, chapter involvement, field experience, research-based practices, and community service. The CEC network can then build bridges within classrooms filled with upcoming and early career educators. Teacher educators need to "seas them as students" to create a long-lasting professional relationship early and establish sustainable buy-in as members. Opportunities including free membership during student teaching, now being offered by National CEC, has a far-reaching potential. We have followed up with student teachers in Ohio who took advantage of the free student teaching membership and hope that they will also participate in our membership and mentoring program their first year of teaching.

Discussion and Implications

There is a significant need for teachers in the classroom, especially intervention specialists. Incorporating CEC exposure and membership in preparation programs is another focus of the authors. Our plan is to continue offering membership and mentoring through the Ohio Office of Exceptional Children as long as we can assuming we will continue to show growth from our data

and participant responses. This primarily requires the Office's grant support, along with mentors volunteering their time and energy.

We also want to encourage TED members to seek opportunities to be mentors to teacher candidates and do what they can to be involved with student chapters. With teacher educators as captains and teacher candidates as first-mates, CEC can be the compass to navigate through the difficult and choppy waters that special education is currently facing.

As we move forward, we plan to make annual adjustments based on feedback from participants as well as survey data. Additionally, we highly recommend working with local and state agencies to provide early career networking, conference opportunities, and grant monies to purchase memberships in other states and provinces.

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WHAT WE TEACH, WE LEARN: PREPARING LEADERS ACROSS COLLABORATIVE PROJECTS

Abstract

A collaboration across three universities to train future leaders in special education presents a unique opportunity to design courses that take advantage of the available expertise and current technology. A summer course on policy that included students from all three universities was co-designed by faculty, students, the project advisory board, and content experts. Faculty provided the course outline, which took the classical seminar format of faculty led discussions framed around research for rural students and added contributions from students and policy experts. Students and guest panel members helped to fill in with student led seminars for selected topics, group collaboration on the research to practice gap and policy briefs, guest panels, interactive networking, and student discussion groups. Finally, the challenges (and solutions) of such a format are shared, as well as next steps.

Background/Rationale

There is a pervasive need for more training for rural administrators and other school leaders on the responsibility of providing special education and related services. School leaders have regularly reported a lack of knowledge and skills necessary to support students with disabilities and the teachers that serve them (DeMatthew & Mawhinny, 2014; Thompson & O'Brian, 2007; Hoppey & McLeskey, 2013). Rural school leaders report even greater challenges than in suburban and urban schools with finding providers for special education related services (e.g., counseling, social work, mental health services, physical therapy, or occupational therapy) and in all of the associated skills necessary to manage a special education program (Crockett et al., 2009; Isaac, 2014; Thompson & O'Brian, 2007). It is also increasingly difficult to recruit and retain highly qualified special education professionals to rural districts (Billingsley et al., 2014). The Universities of North Florida, Oklahoma, and Louisville designed a collaborative doctoral training program to address these needs by leveraging the faculty and resources at each university to increase the magnitude and ability to prepare and graduate special education leaders with specific expertise for children with disabilities living in rural, high-needs areas. A heavy focus of this training is on the influence of public policy on special education and the

responsibility of special education leaders to understand how policy is shaped and use their voice and influence to change policy to better support their students and communities.

The team of faculty at these three universities includes experts in special education policy (Pamela Williamson and David Hoppy at University of North Florida), rural special education (Ginevra Courtade and Brittany Hott), and school administration and leadership (all four). In designing the scope and sequence for this training program, it was clear that a course devoted to special education policy was needed. Not only do leaders need to know special education law and policy for compliance purposes, they need to develop advocacy skills to influence future policy which then impacts the practice in their schools (Cook et al., 2018; Rodriguez & Murawski, 2020). The course was designed to begin developing relationships with policymakers and stakeholders in order to develop the skills of advocacy and leadership.

The goals for the course included a) giving students a foundational understanding of the framework for policy making with the U.S. educational system, including the policy making process (policy actors, agenda setting, policy types, policy tools, policy implementation, and policy analysis and assessment); b) having students use key resources in the study of educational policy and policy analysis, and c) applying the concepts and methods of policy analysis in the development of a literature review or research proposal in identified area(s) of interest (West, 2023).

Challenges and Solutions

Many of the challenges for this course involved navigating the technology and individual university processes to allow all three cohorts collaborative access to the course. The actual enrollment in the course presented a challenge as each university required its own course in which students were enrolled. This was solved through having each faculty member serve as the instructor of record at their own institution. Student evaluation was also a challenge in that each institution has different mechanisms for grading and evaluation. Each faculty member had to develop assessment materials and did the final evaluation for their own students. As a result of having a larger shared enrollment, each course at the individual university appears smaller than it actually was, which will be solved through rotation of responsibility across universities and explanation during annual reviews.

Every university uses a different learning management system, but a free version of Canvas was used that all of the students could access with interactive features just for this course. Time zones were addressed by having more opportunities for asynchronous activities in addition to the synchronous discussion groups and panels. Instructors at each university also offered offer hours to their own students and virtual office hours were available across institutions and faculty for additional consultation and collaboration.

Course Activities

Rather than having formal guest lectures, experts in policy were invited to serve on panels. The students developed questions to ask of panel members in advance and were assigned to moderate the panel. Panels included government relationships professionals, school board members and superintendents, and state/regional policy implementers. The government relations professionals

were members of public interest groups, think tanks, coalitions, and other similar organizations. School board members and superintendents represented local policy makers and implementers. Experts on the panel of state/regional policy implementers included professional advocates. The faculty on this project used their professional relationships and connections to build these panels to give students access to those people actively engaged in policy on a regular basis both in local community settings and on a regional and national level.

In addition to exposure to expert panels, the students in this collaborative course completed targeted assignments designed to increase their knowledge of the policy development and advocacy process. Students first completed an annotated bibliography in an area of interest. Students then wrote policy syntheses and policy briefs, the topics of which aligned with their specific interests, the needs of the districts in which they work, or the specific supports or challenges the students saw that need change in policy. The rubrics for assignments were framed so that students would learn to deliver well-tuned, succinct messages to policy makers on behalf of the rural, high-needs environments in which they live and work.

Next Steps

As this collaborative training program is focused on training future special education leaders at the doctoral level and providing opportunities for practice, students will take next steps with the work they completed as a part of this course. Student will present their policy briefs at conferences, both local and national. Some students are working with faculty to present their policy briefs to law makers. There will also be cross-institutional support to address rural special education advocacy goals of students at local, state, and national levels. Additionally, the students in this program will take a research course that builds on what was learned in the policy course by expanding on the translation of research to policy actions (Hott et al., 2021).

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DUAL CERTIFICATION PRESERVICE TEACHERS' PERSPECTIVES ABOUT FIELD EXPERIENCES: A SYSTEMATIC LITERATURE REVIEW

Abstract

Field experiences during teacher preparation are fundamental to helping preservice teachers understand their future roles and responsibilities and can effectively prepare them to meet diverse student needs across a variety of contexts. This systematic literature review analyzes the perspectives of special education dual certification preservice teachers and their program experiences across ten studies. The history, purpose, and varying models (discrete, integrated, merged) of special education dual certification programs are discussed prior to reviewing the characteristics unique to different models and perspectives of preservice teachers' experiences described in the research literature. Findings revealed field placement site variation and prolonged duration contributed to preparing preservice teachers for their dual certification by exposing them to experiences that evolved their understanding of the roles they will be expected to carry out as future general or special educators. Preservice teachers described the benefits and strengths of field experiences that allowed them to explore teacher roles and responsibilities in both special and general education classrooms to consider what high-quality teaching for inclusive education entails.

Background and Rationale

Dual certification programs emerged in response to legal mandates such as the reauthorization of the Individuals with Disabilities Education Improvement Act, (IDEA, 2004) and Every Student Succeeds Act (ESSA; 2015), which led to the increased accountability for teacher preparation programs to prepare general and special educators to be highly qualified and fully prepared to meet the needs of students with disabilities in different learning contexts (Blanton et al., 2018). Dual certification reform initiatives in teacher preparation focus on joint efforts between special and general education disciplines to prepare preservice teachers (PSTs) for inclusive education (U.S. Department of Education, 2021). Given that 65% of students with disabilities are in general education most of the day, it's crucial for teacher preparation programs to equip special educators with general education curriculum knowledge to support these students in inclusive settings (McCray et al., 2014).

To prepare PSTs for dual certification in special and general education (e.g., early childhood, elementary, secondary), it is essential for preparation programs to address cross-discipline collaboration, and despite the sparse literature on collaborative teacher education, understanding how special and general educators collaborate in these dual certification programs

can equip PSTs to fulfill either role effectively, with a unified goal of catering to a diverse range of student learning needs. Blanton and Pugach (2011) created a classification system to define dual certification models (discrete, integrated, merged) along a continuum of faculty collaboration and curricular integration. In the Discrete Model, PSTs follow separate pathways for special and general education licensure, essentially completing two unrelated programs. The Integrated Model, while also maintaining separate pathways, differs in that the faculty from both disciplines collaborate to create some initial overlap in content knowledge and pedagogy. The Merged Model takes integration a step further by offering a single pathway to both licensures and is characterized by a unified curriculum and fully integrated coursework and field experiences. The continuum highlights the complexity of aligning a dual certification program with a specific model due to undefined boundaries, signifying that these programs can function while simultaneously evolving towards integrated and merged models.

Purpose of the Study

The purpose of this review is to examine the perspectives of dual certification PSTs on their field experiences. Additionally, this review explores the characteristics of field experiences for different dual certification program models. Field experiences play a critical role in helping PSTs understand what their future roles and responsibilities will entail and preparing them to meet these demands. PSTs' experiences and perspectives can help inform the development of field experiences in special and general education dual certification programs. The following research questions will be examined:

1. What are the characteristics of field experiences for special and general education dual certification programs as described in the research literature?
2. What are the perspectives of special and general education dual certification preservice in-service teachers about their experiences in their programs?

Method

Inclusion Criteria

Articles were included if they met the following criteria: (1) utilized qualitative, quantitative, or mixed method research designs; (2) peer-reviewed; (3) published in an academic journal; (4) published after 1997; (5) written in English; (6) conducted with preservice teachers enrolled in dual certification programs or dually certified in-service teachers in general and special education; and (7) research questions focused on the experiences and perspectives of preservice teachers about the dual certification program.

Search Procedures

Three different electronic databases were used to conduct the systematic search: *Education Research Complete, Education Resources Information Center (ERIC)*, *Academic Search Premier*, and *APA PsycINFO*. Each database was searched separately to yield a more

comprehensive search of empirical articles. The following three levels of key words were used for each database search: (Level 1) "dual certificat*" or "dual licens*", (Level 2*) special education, and* (Level 3) "*teacher preparation" or "teacher education"*. Search parameters were set to include articles that were peer-reviewed, published in academic journals, published from 1997-2022, and written in English. The initial search across databases yielded the following results: 18 from *Education Research Complete*, 24 from *ERIC*, 14 from A*cademic Search Premier*, and 4 from *APA PsycINFO* and totaled 56 articles altogether. After duplicate articles were removed, the remaining articles were screened by title and abstract using inclusion criteria, resulting in the elimination of articles 44. The remaining 12 articles were read in full to ensure expectations set by inclusion criteria were met indefinitely and five additional articles were eliminated. An ancestral search using inclusion and exclusion criteria was completed on the remaining seven articles and an additional three articles were found. In total, ten articles met the inclusion criteria and were reviewed.

Findings

Research Question 1*: What are characteristics of the field experiences for the dual certification programs in the research literature?*

Findings related to dual certification field placement characteristics revealed differences in the overall requirements and structure depending on the program model and existing partnerships with PK-12 school districts. Integrated and merged models required preservice teachers to complete their field experiences across a range of classroom environments (e.g., general education, inclusive classroom, self-contained) over a longer duration in comparison to discrete models. The faculty of integrated dual certification programs collaborated with school district personnel to optimize field placement locations and improve support structures for preservice teachers. These collaborative efforts also led to reconfiguring of roles and expectations for cooperating teachers and university supervisors, which fostered coordinated support on a more individualized level preservice teachers across different learning environments. Findings revealed the need for PSTs to experience supporting students with diverse needs and disabilities across a wide range of educational settings to be prepared for the role demands that await them as inclusive educators. The described attempt to integrate field experiences to merge disciplines of general and special education expose the complicated process of designing field experiences that suit the preparation needs of PSTs seeking dual certification.

Research Question 2: *What are the perspectives of special and general education dual certification preservice and in-service teachers about their experiences in their programs?*

PSTs described the benefits and strengths of field experiences that allowed them to explore teacher roles and responsibilities in both special and general education classrooms to consider what high-quality teaching for inclusive education entails. Preservice teachers also claimed residence-based models enabled them to develop a deepened awareness of what it means to be a teacher and special educator (Kervick et al., 2020). The prolonged duration within one classroom or school resulted in greater autonomy and involvement with the decision-making process,

revealing the overlap of general and special education teacher roles and responsibilities and improving preservice teachers' sense or preparedness to support students with disabilities in any environment. Preservice teachers also acknowledged the challenges and benefits of collaboration with other educators and across different disciplines to meet diverse student needs. Learning from multiple teacher perspectives supported preservice teachers with finding their own voice and identifying their beliefs and core values about teaching and learning (Recchia, 2009; Recchia & Puig, 2011).

Overall, field placement site variation and prolonged duration contributed to preparing preservice teachers for their dual certification by exposing them to experiences that evolved their understanding of the roles they will be expected to carry out in the future. Field experiences either led to improved perceptions of preparedness to teach or resulted in hindered opportunities for professional growth. Field experiences that led to an improved sense of preparedness were attributed to coursework, context of their field placement, and professional support provided by cooperating teachers and university supervisors (McMahon Giles & Kent, 2014; Kent & McMahon Giles, 2016; Kervick et al., 2020; Recchia, 2009; Recchia & Puig, 2011). Opportunities to observe and work with their cooperating teachers and university supervisors was a factor that led to improved comfort levels and confidence with supporting student diversity in the classroom (McMahon Giles & Kent, 2014; Kent & McMahon Giles, 2016).

Discussion

PSTs perceived fieldwork as a critical component of their preparation and described different benefits about coursework being complementary to the implementation of strategies and practice. PSTs learned that becoming an effective teacher is a process that involves reflecting on their experiences to challenge their current perceptions and eventually evolve their understanding about what quality teaching is and looks like (Recchia, 2009). Course content and assignments were more beneficial when aligned with the challenges preservice teachers expressed and had practical applications (e.g., behavior management, universal design for learning). PSTs valued professional relationships and mentoring support during their different field placement experiences. The support provided by cooperating teachers and university supervisors resulted from the configuration of mentor roles. When the presence of university supervisors was increased at school sites, it allowed them to collaborate with cooperating teachers and provide ongoing individualized support to PSTs. Additionally, school district partnerships enhanced opportunities to learn about inclusive practices from different angles across various settings.

Implications

Based on the findings of this literature review, we suggest:

1. Dual Certification programs include a formal evaluative process to identify potential field placement sites that are committed to the principles of inclusion in theory and in practice.
2. Rethinking the roles of cooperating teachers and university supervisors to leverage collaborative mentoring approaches that can improve the stability and depth of support provided to dual certification preservice teachers.

3. Faculty, school administrators, and staff prioritize building university-school partnerships that will allow teaching practices to evolve in sync with the inclusive pedagogy taught in dual certification programs today.

Conclusion

Dual certification programs are responsible for the preparation of highly qualified educators who will be committed to providing equitable learning opportunities and meeting the diverse needs of students with and without disabilities. However, the different models of dual certification programs highlight the challenges faculty and schools encounter when merging two tracks of certification that have historically focused on separate areas of expertise and skills. Dual certification programs should consider how the integration of curriculum and field experiences are equally imperative to providing preservice teachers with learning opportunities to align theory and practice for inclusive education and effective preparation for any future teaching role.

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INCREASING TEACHER DIVERSITY: LESSONS LEARNED FROM THE NYC MEN
TEACH PROGRAM

Abstract

There is a growing concern about the paucity of teachers of color in America's classrooms. The student population is increasingly diverse, with Black, Latino, and Asian students comprising more than 50 percent of the student population. In contrast, 76.5 percent of all public-school teachers are White (U.S. Department of Education, 2022). Even more concerning is the lack of male teachers of color within our public schools. Districts across the country have been faced with teacher shortages for some time. Numerous programs and initiatives have been enacted to combat the dilemma. However, targeted efforts to recruit culturally and linguistically diverse (CLD) males has been lacking. The New York City (NYC) Men Teach program is one specifically designed to increase the presence of CLD male teachers. This presentation provides an overview of the NYC Men Teach Program and outlines the key components for creating a program that will yield the desired results of increasing the number of CLD males in the teaching profession.

Background/Rationale

School districts across the nation are grappling with unprecedented teacher shortages (Sutcher et al., 2016). Urban districts perpetually face teacher staffing challenges in hard to staff areas such as special needs, bilingual education, math, and science (Sutcher et al., 2019). Additionally, the teacher workforce remains predominantly White and female (Ingersoll et al., 2019). Nationally, Black, Latino and Asian students comprise 50 percent of the public-school population; however, only one in ten teachers come from the aforementioned ethnic groups (Schaefer, 2021). Urban districts such as New York City, fail to provide students with classroom teachers who are representative of the students' racial, ethnic, and gender diversity. In New York City, 17% of students are Asian, 24% are Black, 41% are Hispanic, 15% are White, 49% are female, and 51% are male. By comparison, the New York City teacher workforce is 7% Asian, 17% Black, 17% Hispanic, 56% White, 77% female, and 23% male (New York City Department of Education, 2022). For every one teacher of color in New York City, there are 30 students of color.

Prior research demonstrates a strong link between teacher diversity and student achievement for all students, but particularly for male students and students of color (Carver-Thomas, 2018; Lachlan-Hache et al., 2020). According to a 2017 collaborative report between Johns Hopkins University, American University and the University of California, Davis, having at least one Black teacher in elementary school cuts the high school dropout rates of low-income Black boys by 39% and increases the college aspirations of poor males and females by 19%

(Causey, 2020). Despite knowing this, concerted efforts to recruit and retain minority male teachers have not occurred, resulting in a decade over decade decrease in the proportion of Black teachers (Carver-Thomas & Darling-Hammond, 2017). Adding to the difficulties in raising the presence of minority male teachers, is that minority students are not encouraged by minority teachers, counselors, or family members to consider teaching as a viable career path (Gordon, 2000). Research shows numerous in-service factors play a part in teachers' decision to stay on the job (Scott et al., 2021). Assessing why minority teachers are discontent and not encouraging younger minorities to teach would add to the research base and potentially highlight what efforts could be made to improve job satisfaction.

Many factors during pre-service training prove to be connected to a teacher's decision to stay or leave the teaching profession (Carver-Thomas & Darling-Hammond, 2017). Teachers were found to remain on the job longer when they received training on effective pedagogy, opportunities for fieldwork and student-teaching with ongoing support of university supervisors, and strong mentoring programs initiated during pre-service training and continued through the years of in-service teaching (Scott et al.). Therefore, the curriculum and planned events of a teacher education program must be done in a manner that details the continual interaction and longevity of the relationship between the candidate and program.

The NYC Men Teach Program

The Men Teach Program was a collaborative effort that came out of the Young Men's Initiative (YMI). The mission of YMI is to create policies, programs, and partnerships that aid in the success of young men of color. The year 2015, marked the year in which then New York City Mayor de Blasio along with the NYC Mayor's Office for Economic Opportunity (NYC Opportunity) announced the NYC Men Teach program. The Men Teach Program is a partnership between the Office of the Mayor, the New York City Department of Education, and The City University of New York (CUNY). This initiative aimed to improve the diversity of the NYC teaching workforce, and to create a continuously flowing pipeline of well-prepared male teachers of color.

The NYC Men Teach Focus and Key Personnel

The NYC Men Teach program has three main focuses: engagement, recruitment, and support. The New York City Department of Education (NYCDOE) Outreach Team plays a crucial role engaging community members and informing them of opportunities the NYC Men Teach program affords. The outreach team will actually go to community centers and other community-based organizations to hold information sessions, which participants can sign up for follow-up. The CUNY program managers are individuals who are housed at one of the participating CUNY campuses. Program managers team with the outreach team to offer information sessions, and subsequent workshops. There is great overlap and constant communication between the program managers and outreach team to ensure the greatest impact in recruitment. Recruitment efforts by CUNY program managers can also occur in an informal manner. Examples of informal

recruitment methods include happenstance meetings of male students of color on campus, guest speaking in non-education related undergraduate classes, and passing out solicitation flyers.

Other key personnel include ambassadors and CUNY faculty. Ambassadors are individuals who have been selected by the NYCDOE to serve as mentors, workshop facilitators, and applicant screeners. CUNY faculty also serve as applicant screeners and workshop facilitators. Additionally, faculty serve as academic advisors to ensure all requirements for graduation and certification have been met.

Collectively, NYCDOE ambassadors, CUNY program managers, and CUNY faculty provide ongoing support to aid in successful completion of coursework. Workshops are continuously provided and cover a range of topics. Depending on where a participant is in the program, they can attend workshops geared at resume building and interview skills, test prep for certification exams, and panel presentations of current and former public-school administrators and educators.

Key personnel play a vital role in the successful continuation of the Men Teach Program. Each has their own set of charges, and sometimes those charges overlap. Nevertheless, all have an end goal of each participant successfully completing the program, and subsequently having the support necessary to be an effective educator who remains a teacher.

Limitations

Despite its success, the NYC Men Teach program does have its limitations. First, the level of involvement and tasks to complete by the CUNY program director is extreme. So much responsibility residing with one person leaves the overall program in a precarious position. Second, the necessary collaboration between the three major institutions of government, a department of education, and an institution of higher education requires a longstanding commitment by each entity. Should one of these institutions falter in their level of commitment it places the entire program at jeopardy, potentially leading to its end.

Another limitation that is concerning is insufficient tutoring services for participants who academically struggle. Participants must be CUNY students and a minimum GPA is required to be admitted to the program. However, there are still some not adequately prepared for higher level courses in pedagogy.

As with many state and federal statutes, New York has a non-discrimination statute. As such, the Men Teach program must accept applications and admit participants regardless of gender or race. Though necessary, it does interfere with the stated purpose of the program and minimizes its impact.

Finally, other limitations that should be addressed include lack of faculty involvement with the program, inadequate tracking systems for program completers, and a multi-year contractual obligation for program completers to remain teachers. There is certainly a hierarchy of limitations; meaning, some should be immediately addressed. Ultimately, all limitations should be considered time-sensitive and must be addressed to ensure the longevity and efficacy of the Men Teach program.

Recommendations

Based on NYC Men Teach, the following are recommendations for institutions engaged in creating their own program to address teacher shortage:

- Of all key personnel, the most vital is the program manager. The program manager has many responsibilities ranging from nurturing and motivating participants, to disseminating transportation vouchers, to maintaining accurate records. The tasks and responsibilities held by the program manager are too many for one individual. The program manager must have an assistant, must be under a multi-year contract and receive adequate compensation.
- For a program to be effective and have a wide reach multiple institutions must collaborate. NYC Men Teach had three major entities: government, department of education, and an institution of higher education. Waning commitment from any of these institutions would ultimately lead to the end of the program. An annual review and updating of memorandums of understanding must occur so that all remain invested in the program.
- Recruiting individuals into the teaching profession is a difficult task that requires the casting of a wide net. Therefore, it must be understood the level of preparedness individuals have for taking higher level courses in pedagogy will vary. Programs must account for this and ensure adequate levels of academic support are available to ensure the success of all participants.
- State policies to guard against discriminatory practices are still necessary. However, it must be understood that some programs targeting individuals from historically disenfranchised groups are in existence due to past discriminatory practices. Therefore, concerted efforts must be made to utilize or create waivers for programs aiming to mitigate racial and gender disproportionality amongst teachers.
- Faculty involvement sends a powerful message. When faculty are involved with programs it speaks to the value placed on a program. Additionally, in the same manner it is important for program participants to act as role models for their future students, faculty act as role models for participants. Therefore, faculty should be well-informed of the program's existence and its mission. Due to the numerous demands placed on faculty, efforts must be made to entice faculty involvement and erase notions that participation is simply another task placed before them.
- The number one indicator of success for a program meant to address minority male teacher shortage, is that minority males be placed and remain in schools as teachers. This can only be determined if program participants are tracked and accurate data are maintained.
- Each program participant requires a tremendous amount of attention and resources. For a program to be deemed worthy there must be a return on investment. The return on investment of programs aimed at reducing teacher shortages is that program completers are placed and perform as teachers of record for an extended amount of time. Therefore, participants should be required to sign an attestation that they will teach for at least three years or be subjected to paying for participation in the program.

Conclusion

Each child comprising the diverse population of U.S. students deserves to have an opportunity to learn from an equally diverse pool of educators. Despite knowing this, most U.S. students will spend the majority of their instructional time being taught by white females. Teachers play a crucial role in the shaping of our behavior and how we navigate society. In addition to the words they speak, they serve as living role models for how people from varied backgrounds respond to the even more varied stimuli presented by our environment.

Initiatives such as the Men Teach Program serve a critical role in providing a pipeline for minority male teachers to enter the profession. An influx of Black and Brown males in the profession could have a multiplying effect, encouraging young boys of color to consider teaching as a career choice. Given the steady decline in the proportion of teachers of color in the classroom, it is clear that more programs should be created and concerted efforts should be made to duplicate and expand existing programs such as The Men Teach Program.

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PROFESSIONAL DEVELOPMENT THAT CLOSES THE
RESEARCH TO PRACTICE GAP

Abstract

For this literature review the researcher synthesized current literature on the individual and contextual factors that contribute to teachers' effective integration of new learning from professional development. From the literature, the factors that influenced teachers' implementation of new learning were teacher agency, de-implementation, differentiation, administrative support, and collegial support. These factors, when considered alongside the characteristics found in Desimone's conceptual framework, can increase the likelihood of implementation of new learning which can increase student achievement.

Background/Rationale

Teachers have the enormous responsibility of educating our future, yet we struggle to meaningfully support their preparation and continued professional development. The Office of Elementary and Secondary Education (2022) reported that in the 2020 – 2021 school year, school districts spent $1 billion on teacher professional development (PD). Ninety percent of those school districts reported spending their funding on short-term professional development that lasted three day or less which is direct conflict with the characteristics of effective professional development from decades of research. If we are going to devote such large sums of money to improve teacher quality and effectiveness to improve student achievement, we should ensure that we are spending our money and teachers' time more wisely with professional development that is aligned with what research tells us is effective.

Decades of research on teacher professional development concludes that it cannot only improve teacher knowledge, skills, and practice, but can also increase student achievement. Within that body of research, Desimone (2009) identified five common characteristics of high quality, effective teacher PD. The common characteristics include: goals that align with the schools' curriculum and goals, the needs of the students, and district and state policies and reforms; a specific focus on subject matter content and activities linked to how students learn that content; professional learning that is ongoing and includes at least twenty hours or more of contact time; sessions that provide active learning opportunities where teachers observe new learning in practice, engage in discussions, reflect on and receive feedback on their implementation, and analyze their students' work; and opportunities for teachers of the same grade level, school, or district to learn together and from each other.

However, Dingle et al. (2011) suggests that there are individual and contextual factors that contribute to the ability of some teachers integrating strategies into their instruction more effectively than others. The purpose of this literature review is to identify the individual and contextual factors of teachers who are effectively integrating learning from their PD into their

instruction. These findings should then be considered alongside the characteristics found in Desimone's conceptual framework when planning PD to increase the likelihood of implementation which can increase student achievement.

Methods

Electronic Search

A systematic search of the ERIC, Academic Premier, and Gale Academic OneFile databases was completed in October 2022 to find peer reviewed studies from 2010 to 2022. This timeframe is significant as it falls after the seminal work by Desimone (2009) identifying a conceptual framework for high equality, effective PD. Search terms included *teacher or educator AND professional development or professional learning or professional training or professional education AND elementary or secondary or K-12.* This search yielded 395 studies after duplicates were removed. Next, the title and abstract of each study was exported into the Covidence database, a systematic review software, and then screened for inclusion. Studies not included focused on the medical, health, psychology, early childhood, art, music, or physical education fields. After excluding these studies, 150 remained. Additional search efforts included ancestral, progeny, and hand searches that yielded 50 more studies that were then exported into Covidence. The next step was to code the abstracts of all 200 studies as either meeting or not meeting criteria. 118 studies were excluded because they either focused on student learning, learning management systems, or were course specific. This left 98 studies to complete a full text review on. These studies were then exported into an excel file along with a pdf of the full text. After completing the full text review, 14 studies were excluded using the previous exclusion criteria, leaving 68 studies to be used in the review.

Data Analysis

An inductive analysis approach was used to analyze the data. First, the previous excel file was expanded to include a focus on the following aspects of each study: research question/purpose, methodology, findings, and key quotes. After each study was tabled, coding was used to identify common themes. After several common themes were identified through coding, the themes were then combined into categories: teacher agency, de-implementation, differentiation, administrative support, and collegial support. Each category was then labeled as either an individual factor or a contextual factor.

Discussion

Across the readings, several individual and contextual factors emerged that increased teachers' implementation of new learning. The individual factors that influenced implementation were the inclusion of teachers from the planning of to the facilitation of PD, differentiated PD based upon teachers' years of experience, teachers' knowledge, their pedagogical skills, and explicit guidance on exactly what teachers were expected to teach. The contextual factors that influenced implementation were support from school leadership and collegial support.

Individual Factors

Teacher Agency. Teachers want to have more of a role in the design, delivery, and ongoing support of PD. The findings of a study found by Durksen et al. (2017) concluded that giving teachers the power to be decision makers in their own learning process is essential to improving students' learning. An increasingly common approach to PD that empowers teachers is through communities of practice or professional learning communities.

De-implementation. Teachers want to be explicitly told how to incorporate new learning with their current curriculum and standards. Accountability demands challenge teacher implementation of new strategies (Dingle et al., 2011) because teachers feel an intense pressure to prepare students for state assessments. When teachers are not explicitly told what this new learning is replacing - what to continue to do and what not to do any longer - each PD can feel like one more "thing" being piled on them to do which can be overwhelming.

Differentiation. Students come to school with varying levels of knowledge, experience, and ability and we expect teachers to differentiate their instruction to meet their students' needs. The same holds true for teachers; they come to professional development with different levels of experience in the classroom, with varying levels of knowledge depending upon their preparation and experience, and from different classroom contexts so why must they continually endure a one-size fits all approach instead of a differentiated approach to teacher PD to meet their needs?

Teachers with experience and greater content and pedagogical knowledge were able to combine that with the new knowledge gained from PD and integrate this new learning more easily into their classroom (Leko & Roberts, 2018; Whitworth & Chiu, 2015; Dingle et al., 2011; Brownell et al., 2009). Meanwhile, beginning teachers, with little content and pedagogical knowledge, were unable to successfully integrate new learning within their lessons or sometimes did not even try. (Korthagon, 2016; Whitworth and Chiu, 2015; Brownell et al., 2009). This supports the need to differentiate TPD so that we can ensure that we are providing teachers with varying levels of experience in the classroom and knowledge with what they need to develop in their profession.

Contextual Factors

Administrative Support. Also critical to the success of teachers' integration of new learning to improve outcomes is the support of the school-based and district leadership. When planning for teacher PD, school-based and district leaders need to zoom in and plan for how the new learning connects with what they are expecting teachers to teach in their classrooms, then zoom out a bit and look at how the school environment (class size, student behaviors, resources/materials, and teacher supports) can support teachers' application of their new learning. Finally, they need to zoom out a bit further to plan for how the district leadership will support the schools through continued professional development so that learning can be sustained over time and how the school-based leadership will be actively involved in the follow up support for teachers. It takes

time and often multiple opportunities to practice and apply information in the classroom which can feel risky, especially for teachers whose students must take an end of year standardized assessments, which means that teachers need support and feedback from their leadership team and encouragement to take the time and risks needed to effectively change their practice. Specifically, to see a change in teachers practice because of PD, teachers need individualized feedback related to their students and classroom practices (Lazarides & Warner, 2020; Whitworth & Chiu, 2015).

Collegial Support. Teachers want to engage with each other through a PLC to refine their practice. A change in teacher practice takes time and includes risk of failure, but when teachers are working in an environment where they feel supported by their colleagues and leadership team when facing different challenges that arise with students, they feel better equipped to handle those challenges (Bishop et al., 2010).

Conclusion

Now more than ever, we need to ensure that the PD we are providing is effective and designed to meet the varying needs of the teachers it serves. Desimone's (2009) conceptual framework provides an important place to start when planning PD that will result in a change in instruction and improved student outcomes. This includes designing PD that is focused on subject matter content and how students learn that content, active learning that engages teachers in inquiry, experimentation, and meaningful reflection on learning and their teaching practice, coherence of new learning to school, district, and state goals, learning and support that occurs over a period of time, and collective participation that includes collaboration between teachers in the same grade level, at the same school, or in the same department. However, as stated, this is a starting place, and there are other factors that need to be included in the planning process to ensure that the PD is not a one-size fits all, but instead is designed to meet the participating teachers' needs and provide ongoing follow-up support. This planning will require that school and/or district leadership be involved because it pertains to individual and contextual factors that can vary from teacher to teacher, school to school, and district to district. Planning for these individual factors should also involve teachers and take into consideration their experience in the classroom, their content knowledge, and their pedagogical skills so that they can work with the PD designer to help create a differentiated learning experience that will meet their needs. Planning effective PD will also require the leader to have a true understanding of their school environment through the lens of their teachers'. Understanding how teachers are feeling about how to use their new learning in conjunction with the curriculum and resources that are available to them to help them meet their students' needs, and their level of trust in their colleagues and administrators to support their learning and practice are all going to be critical components to consider when planning PD to improve teachers' practices. Once the planning is complete, the leaderships' involvement should continue throughout the process. They should be present and supportive throughout the sessions and be actively involved in the follow-up process to help support teachers as they transfer their learning to practice.

We expect a lot from our teachers, it is time that we also hold high expectations for those that are teaching our teachers how to better educate their students. It is evident in our nation's

stagnant achievement scores over the past several decades that there are pieces we are missing. One of those pieces is providing our teachers with PD that takes into consideration them as individuals and the varying contexts in which they teach to prepare and support their practice to increase student outcomes. A framework of the characteristics of effective PD has been defined for us for well over 10 years. Another body of research has identified important individual and contextual factors, that when combined with the characteristics of effective PD, can increase integration of new learning into practice to improve student outcomes. So as Desimone (2009) tells us, "It is (past) time to take advantage of this research to elevate the quality of professional development and elevate our understanding of how best to shape and implement teacher learning opportunities for the maximum benefit of both teachers and students".

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