Multi-Tiered System of Supports for Teacher Preparation: A Framework to Attract, Retain, and Prepare Special Educators

AUTHORS

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ABSTRACT

Special education teacher preparation programs (SETPPs) take on the difficult task of preparing high-quality educators ready to meet the diverse needs of students with disabilities. This mission is increasingly vital as we face a widespread and long-standing shortage of special educators and declining enrollment in SETPPs. In this article, we will highlight how integrating a multi-tiered system of support (MTSS) model within a teacher preparation program can provide a systematic framework to improve recruitment and retention efforts, stakeholder satisfaction, and pre-service teacher quality. We will provide an illustrative description of how we incorporated an MTSS framework in our undergraduate SETPP, which included a continuum of interventions to meet a wide variety of pre-service teacher needs, data-based decisions and universal screening, and explicit instruction of our core competencies (i.e., knowledge, skills, dispositions). This article opens the conversation on the potential benefits of expanding the MTSS framework into higher education, specifically teacher preparation, as an innovative approach for attracting, retaining, and preparing high-quality special educators.

KEYWORDS Multi-tiered system of supports, special education, teacher preparation

ost people describe qualities of the "heart" when asked about the characteristics of a great special education teacher (SET). While well-intended, this categorization offers a narrow view of a demanding profession that requires extensive knowledge and skills to be effective (Brownell et al., 2019; Leko et al., 2015). The complexity of SET's work has increased in recent years due to the long-term educational impact of the COVID-19 pandemic and the ever-growing political nature of education. The coordinated efforts of special education teacher preparation programs (SETPPs) to produce knowledgeable and skilled professionals equipped for this challenging career become increasingly vital as we face SET shortages (Mason-Williams et al., 2020; Sutcher et al., 2019). High attrition rates (Billingsley & Bettini, 2019) and declining enrollment in SETPPs (Center for American Progress, 2019) contribute to the well-documented and long-standing shortage of SETs. As a result, SETPPs need to not only offer quality programming but also recruit more individuals to their program and ensure they remain through graduation. This may be a shift in focus for some programs.

SETPPs have the potential to directly impact the quantity and quality of the workforce and, consequently, student outcomes. The goal, of course, is to prepare highly effective SETs that can meet the diverse needs of students with disabilities. It is vital that SETPPs not only recruit more students, especially those from diverse backgrounds, but also monitor and support retention within programs for those students who may be having difficulty with the knowledge, skills, and dispositions necessary to be a special educator. SETPPs may benefit from a systematic, data-based approach to monitor their progress in these areas and overall program effectiveness (Brownell et al., 2020). Summative measures, such as state certification exams, require students to produce knowledge at the end of a program. These exams fail to provide real-time data that would allow faculty to make proactive changes. For example, program personnel could provide additional support to a pre-service teacher before they drop out of the program or graduate unprepared. Many SETPPs use self-developed observation rubrics for formative performance assessments in practice-based settings (Nagro & deBettencourt, 2017; Wineburg, 2006). However, the observation may be completed by a part-time field supervisor and end up relatively inaccessible to inform faculty or program-wide decisions. Although, little is referenced in the literature related to a formalized approach for data-based decisions in teacher preparation, using data to inform decisions is an established recommended practice in school-based settings (Council for Exceptional Children [CEC], 2020; McLeskey et al., 2017).

Multi-Tiered System of Supports

Scholars argue the current literature base offers insufficient research in SET preparation to constitute a strong empirical foundation (Brownell et al., 2020; Lignugaris-Kraft et al., 2014). Special education is a relatively new field, and much of the research has focused on targeted interventions for students with disabilities (Brownell et al., 2020; Sinelar et al., 2010). Where gaps in the literature exist, SETPPs must identify complementary research areas for direction. Therefore, SETPPs may seek an already established, systematic approach to guide the development of a data-based model to improve outcomes. Our program looked to the multi-tiered system of supports (MTSS) framework as a model to address the need for systematic data collection and effective pre-service teacher support.

As a brief review, MTSS uses a tiered

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system to provide these supports, with levels of intensity and individualization increasing through each level. Primary supports, or tier one, provide universal screening and support to all students, with explicit instruction and reinforcement for engaging in appropriate social and learning behaviors and achieving target academic goals. Students who demonstrate additional need beyond primary support move to secondary support, or tier two, which generally consists of more specialized group-based supports that aim to reduce the impact of barriers or risk factors that influence school or social performance. Students with the most significant behavioral or academic needs receive tertiary support, or tier three, in which they access intensive, highly individualized support.

The distinguishing features of MTSS – universal screening, progress monitoring, and a multi-level system of prevention and supports - offer a strong foundation from which to build an organized structure for data-based decision making, as well as professional and behavioral support at the collegiate teacher preparation level. Applying an MTSS-inspired model to a SETPPs offers the opportunity to cultivate a positive learning experience that produces robust educators who prosper and stay in the field. While noticeably absent from the teacher preparation literature, the concept of using a MTSS framework has shown promise for training in-service

teachers in classroom management practices (Gage et al., 2017; Grasley-Boy et al., 2019; Simonsen et al., 2013). Tiered models are supported by an extensive literature base that has evolved over time. The purpose of this paper is to open the conversation on the potential benefits of expanding MTSS into higher education, specifically teacher preparation, as an innovative approach for attracting, retaining, and preparing high-quality special educators.

Teacher Preparation Multi-Tiered System of Supports

Teacher preparation-multi-tiered system of supports (TP-MTSS) is a proactive and prevention-focused framework that uses universal screening, a continuum of interventions, progress monitoring, and data-based decisions to prepare high-quality SETs. To demonstrate the framework's feasibility and potential, we provide an illustrative description of how we integrate TP-MTSS within an undergraduate SETPP at a tier-one research-intensive university in the south-central United States. The degree consists of pre-program classes, three semesters of coursework, each with a related field experience, and a semester of clinical student teaching in special education. Students progress as a cohort, and the program prepares them for special education, general education, and English as a second language certifications. Roughly 25 students graduate

FIGURE 1: Sample	Disposition Matrix
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	Self-Regulated	Prepared	Professional	Emotionally, Socially, & Culturally Intelligent	Determined
	I challenge myself, show initiative, and take ownership of my growth and progress.	I am ready and willing to take the steps necessary to be successful.	I exhibit the qualities of a professional special education teacher.	I am emotionally, socially, and culturally aware and responsive.	I am committed to being the best educator for children, despite challenges.
University Setting	Seeks to grow professionally through the knowledge and practice provided in the university classroom Manages time effectively Accepts personal responsibility for current academic achievement by acknowledging role in performance Demonstrates resourcefulness by asking peers and reviewing course materials independently prior to seeking assistance from instructors Sets and pursues goals that foster professional growth	Comes to class with required materials and completed assignments Takes the initiative to get missed materials from peers when absent Reviews online learning platform and syllabi regularly Completes assigned readings	Arrives to class on-time, coherent, and focused Engages in class discussion/ activities in a meaningful and respectful way Responds to email within 48 hours in professional format Communicates absences, changes, and needs to program personnel in a timely manner Demonstrates active listening and appropriate technology use during class time Displays a positive and enthusiastic attitude Asks for clarification and assistance when needed from the appropriate person	Respectful toward the profession, university personnel, and peers by using positive written, spoken, and nonverbal language Exhibits empathy toward self, peers, and program faculty and staff Identifies own biases and prejudices to understand how experiences and background affect peers, professors, and other university personnel Takes appropriate actions to prevent biases from negatively impacting work with others	Completes assignments and meets deadlines in spite of hardships Embraces the hard work of classes and the high expectations of professors Demonstrates dedication to excellence regardless of classroom or personal circumstances

each semester, and the program typically serves 125 students across cohorts.

Comprehensive Support Across Three Domains

Supports within our TP-MTSS framework exist across three domains- foundational knowledge, skills, and dispositions. Foundational knowledge refers to the theoretical content necessary to be a successful SET acquired through reading, listening, or watching. In comparison, the skills domain represents the individual's ability to employ the knowledge in applied settings, which in this case would refer to both conceptual (e.g., virtual simulations, mini-lessons in a college classroom) and field-based

learning environments. Together, we synthesized the foundational knowledge and skills identified by the state (e.g., teacher standards; degree programs regulations), professional organizations (CEC, 2020; McLeskey et al., 2017), and university (e.g., priorities, core curriculum). We reviewed the literature and dispositions from other programs to determine the dispositions we felt were necessary for our students to become successful special educators. As a group, we developed a simple domain definition-prevailing tendencies of effective SETs, and a set of five dispositions- self-regulated; prepared; professional; emotionally, socially, and culturally intelligent; and determined (SP²ED).

Tier 1 Universal Supports

Program personnel explicitly teach the competencies within each of the three domains, with lessons adjusted based on student position in the program timeline. Before implementation, we revised our student handbook to include the rationale for the framework, a description of the procedures, and a detailed list of the competencies for all three domains. As a core Tier 1 practice, program personnel regularly review the updated handbook content related to TP-MTSS with pre-program and current students during scheduled meetings and class time. Faculty also reviewed and revised courses to ensure the syllabi, readings, assignments, and observation rubrics reflected the TP-MTSS language and

	Self-Regulated	Prepared	Professional	Emotionally, Socially, & Culturally Intelligent	Determined
Field-Based Setting	Evaluates personal performance and its impact on student achievement to identify areas of personal growth Solicits, accepts, and quickly implements feedback Takes initiative by talking with mentor teacher about ways to get involved in classroom Sets and pursues goals that foster professional growth	Adheres to program deadlines in preparation for field experience placements as they pertain to each block (i.e., attending pre- block orientations, completing placement forms) Arrives to placement with completed lesson plans and necessary resources Complete and submit documents on time to the university supervisor (i.e., mentor teacher's schedule, observation schedule)	 Prioritizes attendance and punctuality to assigned setting Follows the dress code established by host site and our program Maintains confidentiality unless there is an educational need to know; follows protocol set by our program and district in these instances Collaborates efficiently and respectfully with all affiliated personnel (e.g., field supervisor, mentor teacher, families, paraprofessionals, etc.) Adheres to ethical and legal guidelines for the profession (e.g., seclusion and restraint policies) Demonstrates a positive and enthusiastic attitude Asks for clarification and assistance when needed from the appropriate person Seeks to solve issues by discussion 	Exhibits empathy toward self, and all students, parents, teachers, and peers Values and advocates for all students and their families Identifies own biases and prejudices to understand how experiences and background affect students, parents, teachers, and supervisors Takes appropriate actions to prevent biases from negatively impacting work with others Uses professional language and engages in appropriate conversation while at the host site	Demonstrates commitment to excellence in teaching regardless of classroom setting, assigned mentor teacher, or personal circumstances Takes advantage of learning opportunities when offered (e.g., professional development sessions, individualized education program meetings) Familiarizes self with the relevant professional organizations and current research

FIGURE 1 CONTINUED: Sample Disposition Matrix

domain competencies. Revisions included few changes to how the program addressed knowledge and skills, other than ensuring program personnel review observation rubrics in early coursework to operationalize the skill components. However, we identified more substantial changes in the disposition domain when we realized that the program did not have a formalized or systematic approach to teach dispositions.

Within the TP-MTSS framework, we now explicitly teach dispositions across coursework, field experiences, and program-sponsored extracurricular activities. Pre-service teachers receive and are provided instruction on the *Dispositions Matrix* within early pre-program classes, which includes specific

examples, stated in the affirmative, for each of the five dispositions separated by setting (i.e., university or field). See Figure 1 for a sample disposition matrix. The pre-service teachers watch videos for each disposition and then complete reflection assignments. Faculty hang posters detailing the dispositions in university classrooms as a visual reminder for pre-service teachers and a teaching tool for faculty. In addition, we schedule mandatory meetings before schoolbased placements to review the fieldbased portion of the Disposition Matrix. All program personnel are encouraged to use the disposition language in their positive and corrective feedback to students across the university and fieldbased settings.

Universal supports encompass procedures for teaching but also formal systems for reinforcing when a pre-service teacher exemplifies competencies. All program personnel (e.g., faculty, staff, field supervisors, doctoral student instructors, mentor teachers) use a pre-formatted electronic survey link to send a positive *Need to Know* to the program chair. The online survey asks for the rater's name, the student's name, domain and competency demonstrated, and details about why the program should recognize the student. In addition, pre-service teachers have opportunities to highlight a peer for engaging in the domain competencies by placing a positive Need to Know note in a physical box maintained by the program. In response to either submission,

FIGURE 2: Sample Flow Chart for Moving Among the Tiers of Support



a faculty member publicly announces why the individual received a positive *Need to Know* in a shared cohort course or privately informs the student based on preference.

Universal Screening and Ongoing Monitoring

We screen all pre-service teachers currently enrolled in our program and students in pre-program classes across the three domains to identify those at risk for poor outcomes and monitor program effectiveness. The undergraduate program chair and a graduate assistant serve as the TP-MTSS data managers and coordinate data collection and synthesis. All sources of information remain confidential, and TP-MTSS practices align with federal confidentiality regulations (Family Educational Rights and Privacy Act [FERPA], 1974).

Course grades serve as the screener for foundational knowledge. The state education agency requires a 2.75 overall grade point average (GPA) to sit for the certification exam. and our handbook outlines students must maintain a 3.0 GPA in special education-related courses. Consequently, a student must maintain appropriate grades to graduate and become a state-certified teacher, in addition to needing the knowledge to be an effective SET. The program coordinator asks the academic advisors to screen student grades before the start of each semester, and they identify students getting close to, at, or below GPA requirements. In addition, at midterms every semester, the program coordinator prompts faculty to provide the names of students in danger of receiving a C or below. High GPAs do not guarantee effective SETs, nor does a low GPA automatically signify an ineffective teacher. Nevertheless, grades act as a gatekeeper in the current system, and we intend to proactively support students before poor grades become an issue or

exist permanently on their record.

A field supervisor and at least one faculty member assess the dispositions of all students at the end of each semester with an online form. The form asks the rater to score the student on a scale of 1 (almost never displays) to 5 (almost always displays) for each disposition, with an option to provide a brief explanation for the score choice. We expect pre-service teachers to exemplify the five dispositions on the university campus and in field settings. Pre-service teachers complete a more detailed self-assessment at the beginning of the semester, requiring them to rate themselves on each positively stated example listed in the Dispositions Matrix.

Program personnel assess skills in courses with applied assignments (i.e., teaching lessons) through common faculty-created observation rubrics at least two times per semester. The setting, rater, and criteria vary based on position in the coursework sequence. Pre-service teachers initially present lessons in the university classroom, moving to fieldbased placements later in the program. A faculty member, the mentor teacher, and the field supervisor evaluate the lesson and then provide the scores and rubric comments to the TP-MTSS data managers.

In addition to the domain-specific screeners, data managers monitor *Need to Know* submissions. We provide the reusable online survey link to all personnel involved in pre-service teacher development (e.g., faculty, staff, field supervisors, mentor teachers) to positively acknowledge or indicate areas of concern throughout the semester across all domains. For example, a mentor teacher may report that the pre-service teacher arrived late multiple days.

Data-Based Decisions

SETPPs collect numerous pieces of data each year to fulfill SEA and university requirements and monitor individual student progress. Implementing TP-MTSS prompted a thorough reexamination of our current data system's efficiency and usability. Results of the appraisal indicated that numerous data sources failed to produce useful benefits for the program. Most notably, data tended to be fragmented across the college, repetitive, and largely inaccessible. This led the program to improve current data systems to use the data in real time to make decisions about instruction, support, and program improvement. Where possible, data sources with overlap were consolidated. All pre-service teacher data is now centrally located, deidentified, and available to select personnel to aid in program, department, and college-level initiatives. For example, program faculty receive deidentified disposition screener summary data to incorporate additional content into relevant courses. Synthesizing data allows our TP-MTSS data managers to easily identify patterns across students highlighting program implications and within students indicating the need for more intensive supports. The special education field endorses using valid data to inform decisions in school-based settings (CEC, 2020; McLeskey et al., 2017). This initiative offered a real-life example of using data to inform decisions and adopting TP-MTSS gave us the opportunity to model best practices.

Tiered Intervention Structure

The primary purpose of the tiered intervention structure is to support pre-service teacher development (i.e., not inherently punitive). We describe TP-MTSS as a structured support system designed to provide targeted assistance rather than simply pinpointing areas for growth. Collectively, our program personnel outlined benchmarks for each domain, delineating the specific scores that would identify the need for

SCENARIO	QUALIFYING AREA	SUPPORTING DATA	INTERVENTION	PROGRESS MONITORING
Kristin struggled with the transition to college life. She grew up in a small rural area and many of her introductory courses included more students than in her high school graduating class. Overwhelmed by the drastically different learning format, increased academic expectations, and social pressures, Kristin's GPA suffered in her first year of college. She was nervous that she would not maintain at least a 2.75 GPA for the certification exam.	Foundational Knowledge	2.79 Overall GPA	Check-In Check-Out (Tier 2): Kristin requested to meet with her mentor once a week in person. Her goals centered on time management, organization, and assignment completion. Weekly meetings focused on creating an action plan for upcoming assignments, celebrating the previous week's successes, and reviewing feedback from professors. The mentor also offered helpful strategies to increase productivity, communicate with professors, and navigate the college experience.	A formal grade check occurred at midterm and end of the semester.
Jason's friends know him as the guy who is perpetually 15-minutes late. He was assigned a field experience placement at an elementary school in another town and the traffic makes the drive time unpredictable. By the second week, Jason had arrived late three times already. His cooperating teacher was very impressed with his instructional skills but worried about his professional behavior.	Dispositions	Three <i>Need to</i> <i>Knows</i> Submitted by Mentor Teacher	Self-Monitoring (Tier 2): Jason attended an initial meeting with his mentor to learn the self-monitoring procedures and review the disposition expectations. Daily, Jason recorded his wake-up time, getting ready time, drive time, and if he arrived at the field placement on-time. Jason reflected on his data and made changes in his routine to meet his disposition goal. Mentor and cooperating teacher provided verbal reinforcement.	The student sent a picture of his self- monitoring log weekly to the mentor.
Lisa considers herself to be extremely shy. She has a hard time with her teacher voice and effective classroom management skills in her initial field placements. The program offered Tier 2 support in the form of additional small-group instruction addressing her areas of need. Unfortunately, she showed little progress in the field-placement when it came time for the official review of her Tier 2 goals.	Skills	Lack of Progress in Tier Two Supports & Low Teaching Rubric Scores	Coaching Cycle (Tier 3): Lisa's mentor observed her teaching in the classroom at least once a week. Sessions were scheduled so that Lisa and her mentor could immediately debrief after the observation. The mentor provided specific written and verbal performance feedback and facilitated goal setting and action planning. When possible, the mentor modeled a teaching voice and specific classroom management skills. Lisa and her mentor regularly reviewed goal data to monitor progress.	Mentor completed the program teaching rubric with each observation.

Tier 2 and Tier 3 supports. Data managers continually monitor records and initiate meetings with relevant personnel to discuss the need for tiered supports when scores reach the agreed-upon cut points. Pre-service teachers requiring Tier 2 support receive a *Support and Growth Plan*, and those in need of Tier 3 supports receive a *Probationary Plan*. See Figure 2 for a flow chart representing the tiered intervention structure.

Tier 2 supports include supplemental interventions designed to target pre-service teachers at risk for behaviors that are contradictory to those displayed by highly effective SETs or at risk of not becoming certified and employed teachers. We provide targeted interventions to increase practice and feedback in the area of need. The program coordinator, identified mentor, and pre-service teacher write the *Support and Growth Plan* together, guided by the available data. See Figure 3 for a sample template. An individual in the department (e.g., faculty, graduate assistant, staff) coordinates the intervention, acts as a mentor, and collects progress monitoring data on the goals. Data managers select these mentors based on their relationship with the pre-service teacher and their area of expertise. Mentors, in addition to the overall TP-MTSS training, receive a protocol for core components of the specific intervention, although they are given the flexibility to adjust based on their professional expertise. All aspects of the intervention Tier 2 supports phase out at the time of review if the data returns to Tier 1 levels and the pre-service teacher meets goals. The plan can continue or turn into Tier 3 support if data warrants.

Tier 3 supports incorporate individualized and intensive interventions intended to assist pre-service teachers with high-risk behaviors, which may prohibit them from achieving their goal of becoming a SET. Interventions focus on the underlying reasons for the behavior and prioritize comprehensive support by integrating wraparound supports from campus and community organizations. The program coordinator, mentor, and pre-service teacher develop the Probationary Plan together based on data, and the process follows similar procedures to Tier 2. The document includes the same components as the Tier 2 plan but also asks the team to describe any previous interventions with the corresponding data. If no progress or regression occurs, we consider two options: extending Tier 3 supports or potentially terminating the student from the program. The fundamental goal of TP-MTSS is to provide support and prepare highly effective SETs. In extreme cases, and with ample data to inform the decision, the support may involve helping a pre-service teacher select another profession where they can find success.

Selecting Interventions When Research is Scarce

Established tiered support frame-

works integrate a continuum of evidence-based interventions consistently shown to provide positive outcomes based on a long history of school-based research. However, the literature offers significantly less information regarding effective methods and interventions for teacher preparation (Brownell et al., 2020; Leko et al., 2015). Program personnel involved in the TP-MTSS implementation process relied on research related to adult learning strategies, knowledge gained from school-based applications of MTSS, and an understanding of the process of intensifying an intervention (Fuchs et al., 2017) to compensate for the limited research when selecting tiered interventions. Intervention selection depends on the area of need, the underlying reasons, pre-service teacher input, and faculty recommendations. See Table 1 for descriptive examples of tiered supports.

Tier 2 Interventions. Program personnel choose from three Tier 2 interventions: self-monitoring, check-in check-out (CICO), and supplemental instruction. The process of self-monitoring involves observing a specific aspect of one's own behavior, recording the results, and using the information to improve outcomes in the future (Rispoli et al., 2017). Self-monitoring is related to positive behavior change in a wide range of adult and student populations (McDougall et al., 2017; Rispoli et al., 2017). After operationally defining the target behavior(s), the pre-service teacher is required to self-record the frequency. All target behaviors are written in the affirmative. Mentors provide recommendations on monitoring the behavior, manipulating antecedent conditions, using the data to inform change, and providing their own reinforcement. This student-directed intervention is intended to help the pre-service teacher build the capacity for behavior change through newly acquired self-management skills. Pre-service teachers provide data to their mentor on the timeline agreed upon in their plan as a measure of fidelity.

Frequently used as a Tier 2 intervention in school-based settings, CICO is a structured feedback system designed to help individuals meet behavioral expectations (Hawken et al., 2015; Todd et al., 2008). CICO combines the components of mentoring and ongoing behavioral feedback. Research supports using CICO in school-based settings, with several studies representing high-school students (Drevon et al., 2019; Maggin et al., 2015). The TP-MTSS version of CICO requires the pre-service teacher to meet with the mentor weekly or bi-weekly in person or online. We prioritize the relationship when choosing an individual to serve as the mentor. The pre-service teacher discusses their progress and feedback they have received from their instructors to the mentor during the scheduled meetings. Mentors provide performance feedback on the data, engage in action planning, and facilitate goal setting.

Finally, the program may decide the pre-service teacher requires additional instruction or resources in the identified area of need. In this case, the program prioritizes area of expertise when selecting the mentor, which we have found limits the planning investment since they often have ready-to-go resources and plans. The mentor provides explicit instruction individually or to a small group for approximately 30 to 60 minutes weekly or bi-weekly. Pre-service teachers may also receive resources to review and reflect on in writing.

Tier 3 Interventions. Program personnel draw on department, college, university, and community resources to create a comprehensive and holistic plan that puts the student at the center. Students may experience difficulties outside the scope of our domains, such

FIGURE 3: Sample Support and Growth Plan Template

Support & Growth Plan

"Who dares to TEACH must never cease to LEARN" - John Cotton Dana

Student Name				
Date				
Support Area	Foundational Knowledge	Skills	Dispositions	
Student Data				
Assigned Mentor				
S.M.A.R.T. Goal(s)				
Method of Support	Check- In/Check- Out	Self- Monitoring	Additional Instruction	
	Resource Referrals	Additional Resources	Other	
Plan Details				
Student Expectations				
Mentor Expectations				
Timeline for Completion				
Data Collection Schedule				

My signature below acknowledges that I have read and comprehend the plan as written. I understand the expectations and agree to abide by procedures outlined.

(Signature of Student)

(Signature of Program Coordinator)

(Date)

(Date)

(Signature of Mentor)

(Date

as food insecurity, mental health concerns, student loans, academic deficiencies, and family responsibilities. The team can choose any Tier 2 supports at an increased level of intensity for skill deficits in the areas of dispositions and foundational knowledge. Pre-service teachers who require Tier 3 support in the skill area of receive intensive instructional coaching, which refers to the ongoing process of an experienced individual (coach) observing and then providing feedback and support to assist another individual in their desire to improve a specific teaching skill (Ennis et al., 2020; Stormont et al., 2015). The literature supports coaching as an effective method for improving pre-service teacher instructional practice (Brownell et al., 2019; 2020). In this program, the process involves the mentor regularly observing in the classroom setting, providing written and verbal performance feedback, and engaging in modeling, action planning, and goal setting. Mentors and pre-service teachers regularly review the data to monitor progress.

IMPLEMENTATION CONSIDERATIONS

As you start to think about how TP-MTSS might fit within your preparation program, there are a couple of things to consider. First, implementing a program-wide initiative with fidelity requires buy-in, input, and participation from all affiliated program personnel and leadership. This includes, but is not limited to, faculty, staff, instructors, adjuncts, graduate assistants, field supervisors, academic advisors, select representative students, and the department chair. As an initial step, make sure to include everyone in the planning process because the authentic discussions during this time ensure the procedures are supported, feasible, and appropriate across settings. Even though faculty and staff regularly mentor students and

analyze data, it is especially beneficial to include leadership in conversations related to assigning structured roles (e.g., data managers, mentors) to evaluate the responsibilities against their current workload. As they see the need, smaller programs may need to seek volunteers outside of their department to serve as mentors. A systems-level approach requires training for all affiliated program personnel in every aspect of the TP-MTSS framework before implementation and ongoing check-ins (e.g., regular program meetings, quarterly retreats) to monitor effectiveness and personnel needs. Discussions during the ongoing check-ins may indicate the training needs go beyond the specifics of the day-to-day procedures to topics such as elements of effective mentoring or coaching frameworks. Ultimately, the framework's success comes from a mutual understanding of the TP-MTSS plan and agreement on its importance for the program goals.

Second, simplify the data collection and management process and proactively set the program up for success. Select TP-MTSS data sources (i.e., screeners, progress monitoring tools) that are simple and efficient. This may mean revising current measures, where possible, to minimize overlap across sources and streamline the content to focus on key progress indicators. Our program relies on the various applications in the university-affiliated G Suite (e.g., Google Drive, Google Forms, Google Sheets, Calendar) for both data collection and management. All data sources (e.g., Need to Know, disposition self-assessment and screener, grade checks by advisor and faculty, observation rubrics, progress monitoring data) are Google Forms that automatically populate into a Google Sheet for that is conditionally formatted to easily identify patterns and separate data by cohorts. While the primary data manager should

regularly review the data, it is helpful to set up the Google Form to send an email notification each time a form is submitted. A program may also consider proactively scheduling email reminders to prompt program personnel to complete screening measures and submit progress monitoring data to correspond with the assessment schedule. There are more complex data management tools available for sale to SETPPs that may offer additional capabilities. However, the user-friendly, accessible, and cost-effective university-sponsored tools (e.g., G-Suite, Qualtrics, Microsoft Products) are often more than enough to support your TP-MTSS framework.

Third, ensure that you focus time on developing a system for celebrating successes in addition to structured supports. Formal recognition contributes to developing a positive program culture and provides necessary feedback to the pre-service teachers. Reinforcement of domain competencies is the backbone of the framework. Finally, adapt TP-MTSS to your program. The framework should reflect the pre-service teachers and communities you serve, the unique elements of your program, and the priorities of your department and university.

Recruitment and Retention Efforts

Modern special education exists within an era of widespread shortages, high turnover rates, and declining enrollment in teacher preparation programs (Billingsley & Bettini, 2019; Sutcher et al., 2019). Whereas the supply of SETs is decreasing, the number of students receiving special education services continues to increase year after year (U.S. Department of Education, 2021). New approaches certainly have their place in the solution, but our SETPP instead turned toward a familiar and established framework for guidance. After nearly four years of implementation, we have

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Marcia L. Montague is a Clinical Assistant Professor of Special Education at Texas A&M University. Her research interests surround equity in access for individuals with disabilities and at-risk youth. Dr. Montague engages in research and service activities centering on supporting the transition to postsecondary education for and the college retention of first-generation students. seen the TP-MTSS framework increase our capacity to recruit students to our program and retain them through graduation and employment.

Most official recruitment efforts from our school of education tend to focus on selecting this university over others, assuming the student knows their intended major and will apply at the appropriate time. Highlighting the supportive and positive framework guiding the program during events for high schoolers and transfer students surely will support recruitment efforts. Although, according to one survey, approximately 30% of undergraduates change their major within three years of enrollment (Leu, 2017). This highlights the importance of another, equally as important, recruitment window—the 45 to 60 credit hours of coursework before the student formally applies to the program. Implementing the framework in education-related classes the students take before they formally apply showcases the positive nature of the program and offers the tiered support structure to ensure they can meet the application requirements. Thiem and Dasgupta (2022) explain that college students from historically marginalized groups may have less social capital than their White peers, which, in this case, refers to a student's ability to obtain university-related resources or information from personal connections. When needed, the systematic and proactive nature of TP-MTSS in preprogram classes has allowed us to address social capital barriers by connecting students with mentors that can help them navigate university life and systems early in their educational careers, potentially putting the student in a better position to meet application requirements. Innovative solutions to the SET shortage may require looking at recruitment in different ways, including ways to support and connect with students from initial enrollment and application to the program.

The framework prompted a paradigm shift in the way we approach students who were initially unsuccessful in the program, leading to higher retention rates for those students. In the past, if a student showed deficits (e.g., always late, low assignment grades), they may have been placed on a growth plan and expected to figure the problem out independently. We often proceeded under the assumption the shortfall resulted from a performance deficit (i.e., will not do), rather than exploring the potential it was a skill deficit (i.e., cannot do-yet requires explicit instruction) or a consequence of navigating conflicting priorities (e.g., finances, needing to work, taking care of family). This approach allows us to dig into the root of what is causing our students to need support and tailor a plan for each student.

Many students struggle with the transition to college life as they encounter challenges related to increased academic demands, living on their own, new social opportunities, and for some, financial independence. Just under a third (29.5%) of college students reported they experienced high levels of stress (highest ranking offered), according to the National College Health Association (2022). Not surprisingly, the TP-MTSS data post-COVID-19 show an increased number of students requiring more intensive support to deal with the fallout from the pandemic in schools and their personal lives. Pre-service teachers may not be able to meet program expectations due to their struggle to navigate college life, rather than inability, a deficit in skills. or a lack of desire to become a teacher. With the well-documented shortage of SETs, every pre-service teacher counts. TP-MTSS allows the program to help them through (i.e., build skills, offer resources, referrals to campus supports) those circumstances rather than lose them from our program or the teaching field altogether. The students vocalize

their appreciation for the supportive, rather than punitive, nature of the tiered intervention structure, and they will sometimes ask for tiered supports before our data sources detect the need. The framework has provided the program with the structure to develop high-quality resilient educators, who are self-aware of their needs, approach their profession with a growth mindset, and celebrate their successes–all of which will help them thrive and remain in the field.

REFERENCES

- American College Health Association. (2022). American College Health Association: National College Health Assessment II: Reference group data report spring 2022. https://www.acha.org/documents/ncha/ NCHA-III_SPRING_2022_REFER-ENCE GROUP DATA_REPORT.pdf
- Billingsley, B., & Bettini, E. (2019). Special education teacher attrition and retention: A review of the literature. *Review of Educational Research*, 89(5), 697-744. <u>https://</u> doi.org/gf5czh
- Brownell, M. T., Benedict, A. E., Leko, M. M., Peyton, D., Pua, D., & Richards-Tutor, C. (2019). A continuum of pedagogies for preparing teachers to use high-leverage practices. *Remedial and Special Education*, 40(6), 338-355. <u>https://doi.org/ ggqmw6</u>
- Brownell, M. T., Jones, N. D., Sohn, H., & Stark, K. (2020). Improving teaching quality for students with disabilities: Establishing a warrant for teacher education practice. *Teacher Education and Special Education*, 43(1), 28-44. <u>https://doi.org/ gggmxx</u>
- Center for American Progress. (2019). What to make of declining enrollment in teacher preparation programs. <u>https://www.americanprogress.org/article/make-declining-enrollment-teacher-preparation-programs/</u>
- Council for Exceptional Children. (2020). *Initial K-12 standards*. <u>https://excep-</u> tionalchildren.org/standards/initial-practice-based-professional-preparation-standards-special-educators
- Drevon, D. D., Hixson, M. D., Wyse, R. D., & Rigney, A. M. (2019). A meta-analytic review of the evidence for check-in checkout. *Psychology in the Schools*, 56(3), 393-412. https://doi.org/10.1002/pits.22195
- Ennis, R. P., Royer, D. J., Lane, K. L., & Dunlap, K. D. (2020). The impact of coaching on teacher-delivered behavior-specific praise in pre-K–12 settings: A systematic review. *Behavioral Disorders*, *45*(3), 148-166. https://doi.org/ghfjrv

Family Educational Rights and Privacy Act of 1974, 20 U.S. C. A. § 1232g et seq.

- Fuchs, L. S., Fuchs, D., & Malone, A. S. (2017). The taxonomy of intervention intensity. *Teaching Exceptional Children*, 50(1), 35-43. https://doi.org/d578
- Gage, N. A., MacSuga-Gage, A. S., & Crews, E. (2017). Increasing teachers' use of behavior-specific praise using a multitiered system for professional development. *Journal of Positive Behavior Interventions*, 19(4), 239-251. <u>https://doi.org/</u> gnf9sb
- Grasley-Boy, N., Gage, N. A., & MacSuga-Gage, A. S. (2019). Multitiered support for classroom management professional development. *Beyond Behavior*, 28(1), 5-12. <u>https://doi. org/10.1177%2F1074295618798028</u>
- Hawken, L. S., Bundock, K., Barrett, C. A., Eber, L., Breen, K., & Phillips, D. (2015). Large-scale implementation of check-in, check-out: A descriptive study. *Canadian Journal of School Psychology*, 30(4), 304-319. <u>https://doi. org/10.1177%2F0829573515601005</u>
- Leko, M. M., Brownell, M. T., Sindelar, P. T., & Kiely, M. T. (2015). Envisioning the future of special education personnel preparation in a standards-based era. *Exceptional Children*, 82(1), 25-43. https:// doi.org/10.1177%2F0014402915598782
- Leu, K. (2017). Beginning college students who change their majors within 3 years of enrollment. National Center for Education Statistics, U.S. Department of Education.
- Lignugaris-Kraft, B., Sindelar, P. T., Mc-Cray, E. D., & Kimerling, J. (2014). The "wicked question" of teacher education effects and what to do about it. In P. T. Sindelar, E. D. McCray, M. T. Brownell, & B. Lignugaris/Kraft (Eds.), *Handbook* of research on special education teacher preparation (pp. 461- 471). Routledge.
- Maggin, D. M., Zurheide, J., Pickett, K. C., & Baillie, S. J. (2015). A systematic evidence review of the check-in/check-out program for reducing student challenging behaviors. *Journal of Positive Behavior Interventions*, 17(4), 197-208. <u>https://doi.org/f7ptz5</u>
- Mason-Williams, L., Bettini, E., Peyton, D., Harvey, A., Rosenberg, M., & Sindelar, P. T. (2020). Rethinking shortages in special education: Making good on the promise of an equal opportunity for students with disabilities. *Teacher Education and Special Education*, 43(1), 45-62. https://doi. org/10.1177%2F0888406419880352
- McDougall, D., Heine, R. C., Wiley, L. A., Sheehey, M. D., Sakanashi, K. K., Cook, B. G., & Cook, L. (2017). Meta-analysis of behavioral self-management techniques used by students with disabilities in inclusive settings. *Behavioral Interventions*, 32(4), 399-417. https://doi.org/10.1002/

<u>bin.1491</u>

- McLeskey, J., Council for Exceptional Children, & Collaboration for Effective Educator Development, Accountability and Reform. (2017). *High-leverage practices in special education*. Council for Exceptional Children. <u>https://highleveragepractices.org/</u>
- Nagro, S. A., & deBettencourt, L. U. (2017). Reviewing special education teacher preparation field experience placements, activities, and research: Do we know the difference maker? *Teacher Education Quarterly*, 44(3), 7-33. <u>https://www.jstor.org/stable/90010901</u>
- Rispoli, M., Saini, S., Mason, R., Brodhead, M., Burke, M. D., & Gregori, E. (2017). A systematic review of teacher self-monitoring on implementation of behavioral practices. *Teaching and Teacher Education*, 63, 58-72. https://doi.org/f93pw8
- Simonsen, B., MacSuga-Gage, A. S., Briere, D. E., Freeman, J., Myers, D., Scott, T. M., & Sugai, G. (2014). Multitiered support framework for teachers' classroom-management practices: Overview and case study of building the triangle for teachers. *Journal of Positive Behavior Interventions*, 16(3), 179-190. <u>https://doi.org/</u> <u>gh5tnq</u>
- Stormont, M., Reinke, W. M., Newcomer, L., Marchese, D., & Lewis, C. (2015). Coaching teachers' use of social behavior interventions to improve children's outcomes: A review of the literature. Journal of Positive Behavior Interventions, 17(2), 69-82. https://doi. org/10.1177%2F1098300714550657
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2019). Understanding teacher shortages: An analysis of teacher supply and demand in the United States. *Education Policy Analysis Archives*, 27(35), 1-35. <u>http://dx.doi.org/10.14507/</u> <u>epaa.27.3696</u>
- Thiem, K. C., & Dasgupta, N. (2022). From precollege to career: Barriers facing historically marginalized students and evidence-based solutions. *Social Issues* and Policy Review, 16(1), 212-251. <u>https:// doi.org/js87</u>
- Todd, A. W., Campbell, A. L., Meyer, G. G., & Horner, R. H. (2008). The effects of a targeted intervention to reduce problem behaviors: Elementary school implementation of check in-check out. *Journal of Positive Behavior Interventions*, 10(1), 46-55. <u>https://doi.org/bxp82m</u>
- U.S. Department of Education. (2021). 43rd annual report to congress on the implementation of the Individuals with Disabilities Education Act, 2021.
- Wineburg, M. S. (2006). Evidence in teacher preparation: Establishing a framework for accountability. *Journal of Teacher Education*, 57(1), 51-64. <u>https://doi.org/ch7</u>