Educator Preparation for Developing Culturally and Linguistically Responsive MTSS in Rural Community Elementary Schools

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Abstract

Special educators assume an essential leadership role in school-wide multilayered instructional systems for teaching culturally and linguistically diverse learners with and without disabilities, including learners at risk of being inappropriately referred for special education. Research findings from a model demonstration project are presented informing research to practice in the (a) development of partnerships, (b) delivery of effective professional development, and (c) framing of cultural and linguistic responsive teaching to improve instruction for English learners (ELs) in Grades K-3 in elementary schools in a rural community. Content, skill sets, and tools to include in educator training for general and special educators who teach English language and other diverse learners are recommended based on project findings.

Keywords

bilingual/English learners, special education referral, rural teacher preparation, teacher preparation policy/service delivery, multi-level instruction, general and special education

A recurring challenge in the education of English learners (ELs) with and without disabilities is the delivery of instruction that is responsive to students' cultural and linguistic strengths and qualities, particularly when using curricula, assessments, and referral procedures designed primarily for and validated with fluent English speakers. Use of generic teaching methods and a lack of understanding of the second language acquisition process can result in misjudgments about ELs' learning progress and potential need for referral for special education, especially in the area of literacy (Hoover, Baca, & Klingner, 2016; Ortiz et al., 2011). DuBois (2017) found through extensive interviewing of a small group of special education teachers that they lacked resources and strategies to deliver effective instruction, assessment, and referrals of ELs

citing lack of contemporary professional development (PD) as a critical concern. Similar preparation issues are frequently expressed by educators in rural education (Hoover & Erickson, 2015; Robinson, Bursuck, & Sinclair, 2013), for which research suggests that many remote communities are often challenged by limited resources and lack of contemporary expertise (Maheady, Magiera, & Simmons, 2016), highlighting the significance of this project for advancing skills of rural county educators. In this article, we describe the development, implementation,

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and initial benefits of a school-wide culturally and linguistically responsive (CLR) multi-tiered system of supports (MTSS) model developed through a university–school district partnership, along implications for educator preparation. Our MTSS project was implemented as a model demonstration project (MDP), which is described in a subsequent section.

MTSS is a contemporary framework that enables schools to establish structures and practices for providing all learners with the supports they need to succeed in the classroom. Its layered form of instructional delivery is grounded in evidence-based practice, data-based decision-making, family engagement, screening, and ongoing progress monitoring providing learners with value-added instruction that increases in duration and intensity based on progress toward grade or age-level benchmarks (Fuchs & Fuchs, 2006; Hoover, 2016; Vaughn, 2003). In regard to ELs, MTSS may prove to be a highly effective framework due to its capacity to "support English language learners when they first show signs of struggling with reading" (Orosco & Klingner, 2010, p. 270). The structure of MTSS may benefit all learners with particular significance to ELs in several ways: (a) provides a framework for valuing diverse qualities and strengths to improve accessibility to core instruction through differentiation (Council of Chief State School Officers, 2015), (b) frames instruction to assist educators to distinguish language acquisition and differences from disability (Hoover, Barletta, & Klingner, 2016), and (c) holds promise as a model to improve learning outcomes and reduce misplacement of ELs for special education (Cramer, 2015). Although recently more widely discussed in the literature (see Hoover et al., 2016; Ortiz et al., 2011), reviews yielded a dearth of research findings in which MTSS specific to ELs was examined. In addition, discussing culturally and linguistically diverse (CLD) learners within a response to intervention (RTI) model, Rinaldi, Ortiz, and Gamm (n.d.) wrote that the "process for determining whether students' difficulties are due to the normal process of English language acquisition or limited opportunity for acculturative

knowledge acquisition rather than a disability is neither well understood nor applied by school personnel" (RTI Action Network Website). In support, Vaughn and Ortiz (n.d.) discussed RTI and ELs stating that though effective with learners, in general, there exist significantly less information informing the effectiveness of multitiered models of instruction with ELs, especially in the area of reading. These and related statements from leaders in the field further support the fact that gaps in literature discussing MTSS and ELs exist, indicating a strong rationale for the project summarized in the article.

This article provides a summary of one aspect of an Office of Special Education Programs (OSEP)-funded MDP designed to develop, examine, and sustain MTSS in schools serving large numbers of ELs to improve their (a) core literacy instruction and (b) referral process for special education. We begin with a literature overview of MTSS and ELs followed by a summary of the MDP with specific attention to the MTSS model developed and delivered during PD. General findings relative to literacy instruction, student reading outcomes, and referral procedures are also provided. Elements of model sustainability are addressed to shape the overall process sufficient for educator preparation programs to incorporate into educator training. Recommendations for educator preparation are embedded into the description of and findings from our MDP, thereby linking research to practice in a direct way using authentic MTSS for ELs examples. For a more detailed account of this project and additional specific findings, the reader should contact the authors.

MTSS and ELs

A school-wide MTSS framework serves as the contemporary foundation for effective instruction by incorporating RTI and positive behavioral interventions and supports (PBIS) to meet integrated academic and behavioral needs (Colorado Department of Education, n.d.; Hoover & Patton, 2017). Embedded within the various definitions and perspectives

of MTSS is the concept that the academic and behavioral needs of all learners are addressed no matter how challenging this may be for schools. Specifically, students in the process of acquiring English as a second language (ESL) create unique challenges to educators who often lack the expertise to make content accessible while supporting students' English language development. As indicated, however, if developed and implemented properly, MTSS represents an effective structure for educating ELs (Klingner & Edwards, 2006), provided the model incorporates key features needed to deliver evidence-based instruction specific to the strengths and needs of CLD learners (Hoover et al., 2016).

MDP

As stated, an MDP, funded through the U.S Department of Education Office of Special Education Programs, was implemented through a university–school district partnership during a 5-year period. The purpose of MDPs is "to develop new practice, procedure, or program models on the basis of theory and/or evidence-based research. Each project then implements its model in typical settings, assesses impacts, and, if the model is associated with benefits, may go on to disseminate it or scale it up" (Shaver & Wagner, 2013, p. 2). Therefore, our model was initially developed based on literature-based theory along with research-based evidence, and refined during its implementation. Evidence of benefits of our model was limited to (a) educator use of CLR literacy instructional practices, (b) improved reading achievement, and (c) development of a CLR referral process. In this section, we describe the project and developed model along with select findings of observed benefits of the model including evidence collection procedures, types of tools used, and data analysis.

The project was designed to develop, implement, and sustain a school-wide MTSS framework with particular emphasis on a system of literacy supports. The 5-year demonstration project is characterized by the integrated components of (a) the university–school district partnership; (b) MTSS model

development; (c) ongoing PD with follow-up coaching, interviews, and observations; and (d) sustainability. Year 1 of the project was devoted to planning and development, Years 2 to 4 included the model implementation and needed refinements through ongoing PD and concurrent follow-up coaching, while Year 5 emphasized sustainability.

Site

The project site was a rural mountain school district located in a western state, which at the time of this project educated approximately 6,500 students; saw a more than 40% increase of ELs over the past few years, many of whom received free/reduced meals; served 10% to 12% of its students in special education of which more than 20% were Hispanic; and had an overrepresentation of ELs in special education (37% ELs in district with 49% of special education students being ELs). Three pilot schools participated in the project, which included one dual language school and two schools implementing an ESL model. The MDP focused on developing MTSS for ELs in Grades K-3 in the three pilot schools with an emphasis on literacy instruction and initiating CLR referrals to reduce the disproportionality. To participate in the project, selected pilot elementary schools were required to have at minimum 40% ELs and a minimum of 100 ELs in Grades K-3. Therefore, a total of more than 300 ELs directly benefitted from the project and were included in the data analyses to measure reading achievement.

Participants

As a condition for participation, all K-3 educators in the selected schools needed to agree to participate, engage in the PD, and implement project learning in their teaching and grade/school team level work. Participants in the project included all K-3 educators in the three pilot schools (24 general educators, six special educators, three mentor teachers, three master teachers, three building principals, three ESL/bilingual teachers, and three interventionists/reading specialists) whose experiences ranged

from novice to highly experienced educators (e.g., 10 or more years). Each school contained two K-3 classrooms for a total of 24 general education classrooms. This 100% participation showed the strong buy-in from all participants ensuring that every K-3 educator in each school simultaneously received the same job-embedded PD, and follow-up coaching and supports.

MTSS for ELs Model Overview

The MTSS model for ELs was developed via an iterative process, consistent with a model-demonstration process previously described, leading to a five-component framework with specific attention to literacy. Initially, a needs assessment was completed in conjunction with the development of a university–school district partnership, which is described in a subsequent section. Three existing instructional concerns serving as the foundation to the university–school district partnership surfaced: (a) Literacy instruction for ELs required significant improvements to reduce the achievement gap with non-ELs; (b) RTI implemented within the district and schools was inconsistent, and to a great extent ineffective in achieving its purpose, particularly for ELs; and (c) ELs were being referred and placed into special education at a disproportionate rate requiring significant changes to the referral and assessment procedures to be more culturally and linguistically responsive. In addition to the needs assessment, literature reviews informed the research grounding for selecting the various model components. See literature citations for additional information about each component in our MTSS model.

Based on the identified needs and literature sources, the MTSS model outcomes focused on three areas: (a) increasing teacher use of bilingual/ESL best practices in literacy instruction with specific emphasis on ELs who were struggling with reading or exhibiting signs of being at risk of underachievement, (b) improving ELs' reading achievement, and (c) developing a district-wide CLR referral process for special education. As indicated, development of the model began with a thorough review of the literature

from which initial components were identified and field reviewed by district and project staff. It was subsequently revised once the PD began based on input from school staffs and topics discussed during the PD sessions. After several revisions, a five-component model was created reflecting a culturally/linguistically responsive perspective in the delivery of quality education to all learners including ELs (Hoover & Soltero-Gonzalez, 2014).

MTSS Model Component 1: Multi-level instruction. The project's *multi-level instructional* feature refers to levels of instruction that increase in intensity and duration based on learners' educational progress (Hoover et al., 2016; Klingner & Edwards, 2006).

MTSS Model Component 2: Research-based core literacy instruction. *Research-based core literacy instruction* for ELs incorporates oral language proficiency in English in addition to key components of literacy such as reading comprehension, fluency, phonemic awareness, phonics, and vocabulary (August & Shanahan, 2008; Cloud, Genesee, & Hamayan, 2009; Klingner, Soltero-González & Lesaux, 2010).

MTSS Model Component 3: CLR practice. *Culturally and linguistically responsive* practices place students' cultural and linguistic backgrounds at the center of teaching and learning; they affirm learners' and families' values and funds of knowledge (Gay, 2002; González, Moll, & Amanti, 2005).

MTSS Model Component 4: Multiple levels of assessment and data sources. *Multiple levels of assessment and data sources* refer to use of valid screening, progress monitoring, and diagnostic formal, informal, and authentic assessment data (including assessment in the student's native language) to make informed ecological assessment decisions (Hoover & Klingner, 2011).

MTSS Model Component 5: Ecological decision-making. *Ecological decision-making* considers the combined environmental influences

(i.e., learner, classroom, and home/community factors) on instruction and assessment within an MTSS framework (Bronfenbrenner, 2005; Tharp et al., 2004).

Once developed, each of the MTSS model components was delivered to school staff through a series of PD workshops (30 hours annually), follow-up coaching sessions (two per participant each semester), classroom observations with debriefing examining literacy instruction (three per participant annually), and various self-assessments. The PD adhered to an interactive and relevant format in which (a) school staff participated in the PD development, (b) PD was delivered during regularly scheduled meetings to reduce impact on student instructional time, and (c) action plans were developed and implemented on completion of PD sessions. During Years 2 to 4 of the project, each of the five model components was addressed and operationalized by model project participants in their literacy instruction, school-wide problem-solving team meetings, and their mentoring and coaching completed as part of the district support to all teachers.

Evidence Collection and Analysis

Evidence of PD effectiveness was determined through (a) follow-up classroom observations and interviews that focused on literacy instructional best practices, (b) examining ELs' reading achievement, and (c) interactions with educators during referral team meetings. In regard to reading instruction, an observation tool (Hoover, Hopewell, & Sarris, 2014) was used to record evidence of use of literacy practices. The tool, titled Core ESL Instructional Practices (CEIP), includes 47 research-based practices clustered within seven core themes (i.e., Connections, Cultural Relevance, Native Language Use, English Language Development, Materials, Differentiations, Assessment for Instruction). Observers completed a minimum of three observations per participant during Year 3 in the project, documenting both frequency and qualtiy of literacy practices usage.

To measure reading achievement, the DRA was administered annually with scores recorded and analyzed. To examine the referral process, a 10-item tool (Hoover & Erickson, 2015) was used to observe and interview school teams in their EL referral team meetings. The referral tool included various items to assist educators to ensure that cultural and linguistic responsive instruction was provided to the referred EL such as documenting frequency of English language development, appropriateness of Tiers 1 and 2 instructions, and use of assessments validated with ELs, to name a few. The reader is referred to Hoover and Erickson (2015) for the complete tool.

Both qualitative and quantitative data analysis procedures were employed to examine the teacher literacy practices, student reading outcomes, and the special education referral process. Classroom observation data were analyzed qualitatively following a deductive process (Strauss & Corbin, 1998) based on the seven CEIP instruction themes. Evidence of use of different ESL/Bilingual practices observed was also analyzed quantitatively using a Y (yes)/N (no) format.

ELs' annual reading scores on the Developmental Reading Assessment (DRA2, Pearson Education, 2009) were analyzed using an interrupted time series design comparing achievement outcomes with pre-project baseline scores. We also examined the percentage of students at benchmark across grade levels through a logistic regression analysis. To analyze the referral evidence, researchers summarized extent each of 10 tool items was addressed in the EL referral meetings.

Literacy Practices, Achievement, and Referral Findings

As previously stated, evidence of initial benefits of our model was limited to (a) educator use of CLR literacy instructional practices, (b) improved reading achievement, and (c) development and use of a CLR referral process. Within implementation of the MTSS model, (a) teachers demonstrated increased use of literacy classroom instructional practices, (b) ELs had improved reading achievement, and (c) responsive referral procedures were developed, with each model component being

sustained beyond PD and project supports. Highlights of these findings are summarized below, followed by a more detailed description of four key educator preparation features essential to an MTSS for ELs model.

An important clarification to note is that it is beyond the scope of this article to provide detailed literacy instruction, achievement, and referral results from this comprehensive project. Our intent is to briefly summarize relevant findings with extended discussions about the implications for educator preparation. Readers are referred to sources indicated in each section below for more detailed summaries of project findings.

Increased Use of Literacy Best Practices

Prior to the PD sessions, classroom walk-throughs/observations occurred to gauge the extent the literacy instruction was culturally and linguistically responsive (i.e., use of CEIP practices). Findings from initial classroom visits showed that only a few ESL/bilingual best practices were in use. Educators who participated in the project demonstrated increased daily usage of several important best practices for teaching literacy to ELs including five of the more essential practices: (a) making connections to prior knowledge and experiences, (b) word walls, (c) strategic native language use, (d) posted sentence stems to support student extended verbal exchanges, and (e) students' interactions using academic language. Based on observations near the beginning of the project, regular use of these five research-based bilingual/ESL practices was not consistent across classrooms; on completion of the 5-year project, regular use of these and other best practices was observed. Overall, these results indicate initial benefits in the delivery of literacy instruction to ELs. For the complete CEIP tool, the reader is referred to Hoover, Hopewell, and Sarris (2014), and for a detailed analysis of the literacy instructional findings, the reader is referred to Soltero-Gonzalez and Hoover (in development).

Improved Achievement Over Time

ELs in the classrooms of educators who participated in the project for three years demonstrated a significant positive difference in reading achievement in English over those in the program for either one or two years. Also, a second significance in findings showed a narrowing of the gap between the number of ELs achieving at benchmark compared with non-ELs in the project over time. Achievement did not become noteworthy until the third year of implementation. These results highlight the importance of maintaining a CLR MTSS framework over an extended period of time (i.e., dosage effect). Therefore, a significant finding is that effects of the project on reading achievement relative to both DRA achievement scores and benchmark gap analysis did not become evident until learners were exposed to the project for three years. The reader is referred to Dudley, Hoover, Soltero-Gonzalez, Atteberry, and Wang (in development) for additional information about the detailed reading achievement analyses associated with the project.

CLR Referral Procedures

A 10-item tool was developed and piloted district-wide that included the three pilot schools in the project (Hoover & Erickson, 2015). The tool facilitates gathering a referral body of evidence that considers essential cultural and linguistic features needed to reduce unnecessary or inappropriate referrals of ELs for special education (e.g., delivery of English language development program, confirmation that Tier 1 instruction is culturally and linguistically responsive, evidence that native language is used by ELs in daily instruction, statement indicating how Tier 2 instruction includes use of evidence-based practices appropriate for and validated with ELs, etc.). On completion of the pilot, the culturally/linguistically responsive referral tool was adopted district-wide, thereby establishing a responsive process to assist school staffs in reducing the district's over-representation of ELs in special education.

For a detailed summary of the referral tool development and piloting, the reader is referred to Hoover and Erickson (2015).

Educator Preparation and MTSS for ELs: Implications and Recommendations

Consistent with results of our 5-year project, four thematic areas are recommended for inclusion in IHE teacher preparation and PD for preparing special educators to work with school districts in the development and delivery of instruction to ELs within a school-wide MTSS framework: (a) establish a university–school district collaborative partnership, (b) develop an integrated model that incorporates cultural and linguistic features into the MTSS framework, (c) deliver PD that reflects contemporary research with emphasis on transformative learning, and (d) establish sustainability as an outcome during initial planning, continuously during implementation, and directly addressed as a specific task once the model is integrated into school-wide teaching and learning.

Although these four themes are not all-inclusive given the comprehensive nature of the project, they represent essential features that ground educator preparation in the development and implementation of a CLR MTSS for ELs. Application of each project theme along with educator preparation recommendations are discussed below.

Theme 1: Establish University–School District Partnership

The partnership in the project emphasized the notion that the defined goals (i.e., improved teacher practices, appropriate referrals) are equally important as attaining the identified outcomes (i.e., increased student achievement, CLR referral process). In addition, as succinctly stated by Kruger, Davies, Eckersley, Newell, and Cherednichenko (2009) in the document *Effective and Sustainable University–School Partnerships*, "Partnerships are a social practice achieved through and characterized by trust, mutuality, and reciprocity among pre-service teachers, teachers and other school colleagues, and teacher educators" (p. 10). The nature of our university–school district partnership was one of cooperatively transforming structures and processes within three elementary schools, with subsequent implementation across the district on completion of the model demonstration phase.

Select transformational principles, along with cultural and linguistic responsive practice, informed the development and implementation of the partnership (and subsequently the PD) by empowering educators to (a) identify underlying assumptions, (b) self-reflect and consider alternatives, (c) engage in discourse, (d) commit to considering revisions to own assumptions and perspectives, and (e) be willing to act on identified revisions (Cranton, 2002). We were concerned with change in both educational practice along with improved effects on student outcomes.

Our work, therefore, was conceptually guided by select principles of transformative models to creating change and sustainability (Baumgartner, 2001; Mezirow, 1997; Taylor & Cranton, 2012) by challenging preconceptions and facilitating a more inclusive, reflective, and integrative frame of reference (Cranton, 2006). In addition, we incorporated a CLR focus to our transformational change efforts. Overall, the partnership facilitated attention to four key components as identified from the above sources, and applied to CLR education:

1. *Experiences*—baseline from which cultural/linguistic transformational change begins;
2. *Critical Reflection*–process of questioning one's current views from cultural/linguistic perspectives;
3. *Rational Discourse*—in-depth examination of existing views and exploration of alternative, cultural/linguistic diverse perspectives; and
4. *School–Home–Community Collaboration*—incorporation of the social environment reflecting an ecological

perspective to instructional change and learning outcomes.

Table 1, developed from project findings and above literature sources, illustrates examples of ways to incorporate the above four components into partnership development with educator preparation implications, thereby providing a relevant context for examining challenging concepts and skills to improve instruction and referral of ELs.

As illustrated, a variety of tasks in each component provided partners opportunity for deeper consideration of ways to develop and maintain a meaningful university–school district partnership sufficient to plan and implement the MTSS for ELs model, associated PD, and CLR referrals.

Implications for educator preparation: Partnership development. The application of skill sets associated with implementing each of the four components identified in Table 1 requires attention in educator preparation programming to best prepare current and future teachers. Systemic change and transformational learning best occur when educators are prepared to develop, enhance, and maintain partnerships among relevant stakeholders (e.g., Institution of Higher Education [IHEs], parents/community, school districts). IHE teacher preparation and PD should incorporate practices to ensure that special educators are equipped with skill sets necessary to develop an effective partnership to (a) guide MTSS needs assessments, (b) incorporate model components in PD, and (c) sustain efforts for continuation such as those described above and in Table 1.

Theme 2: Deliver Contemporary PD

Within the partnership, PD grounded the preparation of the K-3 educators in the three pilot schools placing an emphasis on transforming the existing school-wide MTSS models to reflect increased cultural and linguistic responsiveness. The structure of the PD in our project was designed to meet adult learners' motivations and ways of learning to be

most effective (Merriam, 2011), including follow-up coaching, mentoring, and observations. In addition, a shift has occurred "from passive and intermittent PD to that which is active, consistent, based in the teaching environment" (Stewart, 2014, p. 28). PD that is systematic, school-based, hands-on, and collaborative avoids the many PD practices documented in the literature as ineffective, such as fragmented, disconnected with curricula, or limited follow-up support (Darling-Hammond & Richardson, 2009). Educators possess motivations, ways of learning, preferred methods of study, and needed support systems that reflect effective adult learning. Specifically, preparation for and delivery of our PD recognized several adult learning perspectives (Merriam, 2011), thereby supporting adult educators who (a) assume increased control over own learning experiences, (b) draw on deep adult life experiences, (c) are more prepared to be reflective of their practice due to extensive experiences engaging in their actual practice, and (d) possess varied experiences and multiple ways of learning. Also, although a variety of practices are identified in the literature that best shapes effective PD, five key features are consistently mentioned and were incorporated into our model by building on adult learner qualities (e.g., Borko, 2004; Darling-Hammond & Richardson, 2009; Merriam, 2011; Quick, Holtzman, & Chaney, 2009; Stewart, 2014).

> **Feature 1**. *Facilitate higher-order thinking*, which stresses the importance of intellectually stimulating tasks with discussions about teaching and learning;
> **Feature 2.** *Interactive delivery*, which emphasizes working with teachers providing opportunities for collaborative interaction thereby facilitating educator ownership;
> **Feature 3.** *Use practical tasks*, which provides educators opportunity to examine methods and skills in concrete and practical ways, facilitating efficient transition to instructional implementation;
> **Feature 4.** *Relevant topics with support*, which prepares educators to best apply the PD concepts and skills within job-embedded

Table 1. CLR MTSS for ELs: Facilitating Effective Partnerships.

Component	Partnership tasks
Experiences	Cooperative work to establish experiential baselines to address the three areas of literacy, MTSS, and referral for ELs included extensive discussions and documentation of educator, school, and community/home experiences. During development and implementation of the partnership through meetings, workshops, and interactions with district administrators, building principals, school leadership, grade level and data teams, and the entire school staff, various experiences and perceptions were shared and documented.
Critical Reflection	Along with sharing of experiences, partner educators engaged in professional development and team meeting activities that challenged them to clarify and examine existing processes for implementing current literacy instruction, MTSS, and referral decision-making. Through various exercises, educators were challenged to examine their own views, extent to which the views are culturally/linguistically responsive, and ways in which the views are evident in each of the three areas of literacy instruction, MTSS, and referral, thereby strengthening the partnership throughout the project.
Rational Discourse	During the partnership development and throughout the project, partners engaged in ongoing discussions about the rationale that frames their views toward literacy instruction for ELs, culturally responsive teaching, MTSS, and depth and breadth of questions addressed to analyze student data. In addition, in-depth discussions occurred with district and school educators concerning rationale for current practices in referring and placing ELs for special education services. By critically reflecting on their views, partners engaged in discourse that challenged perceptions and explored alternatives, followed by commitments to change leading to the development of action items to transform instruction for and referral of ELs.
School–Home/ Community Collaboration	A critical feature of any substantive and lasting change in the education of ELs is connections to the home and community. Partners, therefore, engaged in discussions about the three areas (i.e., literacy, MTSS, referral) relative to social and ecological areas connecting to home/community funds of knowledge, expectations, and experiences.

Note. MTSS = Multitiered system of supports; EL = English learner.

relevant curricula with follow-up support and coaching, leading to more effective instructional implementation and sustainability; and

Feature 5. *Monitoring*, which includes both self and external assessments of implementation of PD topics and skills in the instructional setting.

A most critical aspect incorporated into the project's PD was application of the above five features to best reflect the adult learner qualities, thereby creating a unique transformative experience illustrated with examples in Table 2.

School staff were provided approximately 30 hours of annual PD with a minimum of two follow-up coaching sessions each semester during the 3 years. As indicated, PD was delivered in a variety of ways to minimize impact on teacher instructional time. The initial PD session was held during the first week teachers were required to report to the school yet prior to when students began attending. This initial session was a full day that fit directly into the schools' pre-established PD time. Subsequent PD sessions were planned and delivered during scheduled times that staff met such as grade-level team meetings,

Table 2. Core Essential PD Features With Strategy Examples.

PD Feature	PD development and delivery strategies
Higher-Order Thinking	Educators engage in examination of ESL practices to the higher levels of application/analysis by exploring strategies to incorporate into the unit level of instruction rather than only at the lesson implementation level (e.g., recognize and explain patterns and meaning, see parts and wholes; discuss "what if" situations, create new ideas, predict and draw conclusions relative to incorporating core ESL practices in instructional units to facilitate sustainability and in-depth applications).
Interactive Delivery	By working with teachers through use of focus group structures and coaching, the features of shared responsibility, input, dialogue, and decision-making occur leading to a collaboratively developed school-based PD model and its implementation.
Practical Tasks	Interactions among teachers and PD coaches include direct access to and use of existing units of study for teaching ELs providing opportunity in context, with targeted and focused demonstrations of ESL practices incorporated directly into teaching units.
Relevant Topics With Support	A core strategy within the developed school-based PD process is use of relevant curricula and action planning with follow-up classroom coaching/mentoring to further support incorporation of effective learning in the delivery of instructional units.
Monitoring	The school-based PD monitoring process included outcomes and benchmarks for (a) implementation of the core literacy practices in teaching units and (b) student outcomes in reading comprehension that are clearly defined, practical, realistic and measurable, and monitored as documented on the action plans.

Note. ESL = English as a second language; PD = professional development.

school instructional leadership data team meetings, and after-school all-staff meetings. This process produced increased participation, active involvement, and action plan development since sessions were already scheduled as meeting or planning times, thereby reducing impact on direct instructional time. As emphasized in the above discussions, the project's PD included a set of procedures that "involves transforming frames of reference through critical reflection of assumptions, validating contested beliefs through discourse, taking action on one's reflective insight, and critically assessing it" (Mezirow, 1997, p. 11).

Implications for educator preparation: PD. The delivery of PD to practicing educators is a common event that will most probably continue in school districts. When delivered effectively adhering to transformational practices

and planning, the PD has an increased probability of leading to improved instructional practice and student achievement. IHE preparation and PD should incorporate training to effectively apply the five thematic practices and adult learning qualities described above, to best prepare special educators for delivery of PD in ways consistent with procedures implemented in this demonstration project.

Theme 3: Develop CLR MTSS

The CLR MTSS was developed through an iterative process resulting in the five-component model described above. In addition, each component was operationalized through the identification of four criteria that collectively shape implementation of the components for a total of 20 criteria as illustrated in Table 3. These criteria were derived from the research cited for the components and are not designed

Table 3. Checklist of Criteria to Operationalize CLR MTSS for ELs.

1. Multi-Level Instruction

Criterion 1	School-wide multi-level model is in place and includes Tiers 1, 2, and 3
Criterion 2	Each tier of instruction is clearly defined and understood by educators
Criterion 3	Core Tier 1 general classroom instruction meets benchmark standards for approximately 80% of students
Criterion 4	General class educators, special educators, and bilingual/ESL specialists are involved in planning for and implementing Tiers 1 and 2 instruction

2. Research-Based Core Literacy Instruction

Criterion 1	Equitable access (e.g., accessing prior knowledge, building background knowledge) to the literacy curriculum exists for all ELs emphasizing listening, speaking, reading, and writing
Criterion 2	Literacy curriculum engages students and teachers in cooperative classroom activities by facilitating ongoing and joint productive classroom work
Criterion 3	Literacy instruction facilitates ongoing verbal interactions between teacher and students, and among students, to facilitate conversation through functional use of language and cross-language connections
Criterion 4	Literacy instruction develops both first and second language oral proficiency, reading fluency, vocabulary, and comprehension

3. Culturally/Linguistically Responsive Practice

Criterion 1	Instruction is grounded in the cultural heritage, values, and norms of diverse students
Criterion 2	Instruction reflects educator knowledge and application of first and second language acquisition stages and strategies
Criterion 3	Delivery of instruction and assessment are shaped by learner and family linguistic and cultural funds of knowledge
Criterion 4	Instruction supports learners' cultural and linguistic identities while simultaneously promoting academic and social-emotional development

4. Multiple Levels of Assessment and Data Sources

Criterion 1	Process exists linking assessment with instruction through use of curriculum-based measurement materials and procedures
Criterion 2	Universal screening, progress monitoring, and diagnostic assessments are incorporated in the teaching and learning process and understood by educators
Criterion 3	Formal and informal assessments are used to monitor learner progress conducted in learner's most proficient language and/or in both native language and English if bilingual
Criterion 4	A variety of authentic assessment measures in the language of instruction are used to determine learner progress toward intermediate and outcome benchmarks/objectives

5. Ecological Decision-Making

Criterion 1	The relationship among the three ecological factors (i.e., learner, classroom, home/community) is considered in program planning, referral, interpretation of assessment results, and selection of interventions
Criterion 2	Information and input gathered from different environmental settings using culturally responsive assessment measures, processes, observations, and interviews are included in grade or school-level team discussions about learner strengths and needs
Criterion 3	Gap analysis, rate of progress, and proficiency cut scores of struggling ELs are compared with true peers when determining need for more intensive levels of instruction (i.e., Tiers 2, 3), referral for special education, or a comprehensive special education evaluation
Criterion 4	Learner's language development behaviors are initially interpreted relative to second language acquisition, rather than indicative of a learning disability, emotional disorder, or intellectual disability (i.e., reducing disproportionality)

Note. EL = English learner.

to be all-inclusive. Rather, incorporating the four criteria for each component into the delivery of MTSS provides a solid foundation for transforming the school-wide model by addressing key features considered essential for educating ELs.

As shown, the table is structured as a checklist to facilitate use both as an assessment and training tool. To best incorporate the 20 criteria into the school MTSS model and PD, we suggest completing a needs assessment of the school's existing MTSS model using the checklist. Once results are analyzed, examination of current IHE coursework or district PD should occur to determine extent each criterion is properly incorporated into the training, follow-up support/coaching, as well as sustainability efforts.

Implications for educator preparation: CLR MTSS. A responsive MTSS framework for improving ELs' literacy instruction and related educational programming is best shaped by the criteria summarized in Table 3. IHE teacher preparation and PD should incorporate the 20 criteria reflective of the five MTSS model components into relevant coursework and workshop sessions to best equip special educators with skill sets necessary to shape school-wide efforts in a CLR MTSS for ELs model, such as the one implemented in this project.

Theme 4: Incorporate Sustainability

Sustaining a model or program includes continuation of successes initially achieved through implementation during capacity-building efforts (Dickerson, 2001; Johnson, Hayes, Center, & Daley, 2004). Though several features may be included in sustainability, the three most relevant to our MDP are *policy, training*, and *resources*.

Sustainability policy statement. Stated formal practices or procedures should be incorporated into school routines and structures to maintain implementation of the model, sending a clear message to educators that the model is valued and will be continued.

Sustainability of resources. School's human, physical, and technological resources necessary to sustain the model are identified and consistently utilized in teaching and learning.

Sustainability training. Commitment of district/school administration is essential to ensuring that new staff are prepared to incorporate the model components in ELs' instruction.

In our MDP, school staff in each of the three pilot elementary schools provided brief narrative paragraphs summarizing how they plan to sustain each of the five model components in the three areas of Policy, Resources, and Training. A checklist based on the school staff's sustainability plans (one for each school) was developed and used as a tool to complete follow-up observations and interviews to determine sustainability of the MTSS model one year after completion of all PD and associated coaching, follow-up, and external supports. After one year of sustainability, evidence from observations and interviews indicated that (a) each school is adhering to its established *policies* for implementing the MTSS components, (b) use of project *resources* occurs though informal ways with educators selecting different resources or aspects of resources as they deemed appropriate to their literacy classroom instruction, and (c) delivery of *training* on MTSS components occurs through informal trainings and supports provided at the grade level by participating teachers, as necessary, resulting in a focused approach to sustainability training of new staff. Specific conclusions we draw from our sustainability efforts to advance MTSS in the rural county schools include the following: (a) literacy practices are embedded in daily instruction and are no longer seen as add-ons, (b) supplemental (Tier 2 instruction) is much more purposefully aligned with Tier 1, (c) trained teachers are supporting and training other teachers, (d) learning activities for parents are modeled rather than telling them what to do, (e) multiple assessments and data sources are used with assessment now occurring in both languages (i.e., English and Spanish), (f) decision-making is more culturally/ecologically responsive (i.e., student,

school, family /community), and (g) district-wide use of the new culturally/linguistically responsive referral tool exists.

Implications for educator preparation: Sustainability. Positive sustainable results are best achieved when (a) expectations for sustainability are expressed early in the process, (b) sustainability is revisited periodically throughout model development and implementation, (c) school staff develop their own sustainability plans, and (d) accountability occurs through follow-up visits to assess the school's progress in implementing its developed sustainability plan. IHE teacher preparation and PD should incorporate practices to ensure that special educators are equipped with skill sets necessary to guide sustainable efforts such as those implemented in the MDP.

Summary

This MDP was limited to one rural school district, three elementary schools, and grades K-3 only. Although characteristics of the site and schools reflect those found in similar rural geographic regions, results must be interpreted within these limited parameters. Collectively, however, the integrated implementation of the five key model components and 20 operationalized criteria emphasized in the PD improved the overall school-wide delivery of MTSS sufficiently to show statistically significant improvements in reading instruction for ELs in Grades K-3 in three rural elementary schools. In addition, development and piloting of an innovative CLR referral tool led to district-wide adoption of a more responsive referral process aimed at reducing disproportionality of ELs in special education.

Implications for IHE special educator preparation and professional developers for working with teachers of ELs include developing practitioner skills in (a) creating collaborative partnerships, (b) incorporating CLR best practices within an MTSS framework, (c) delivering PD that focuses on collaborative and transformative learning, (d) conducting CLR referrals, and (e) sustainability. In summary, we recommend that special educators

be prepared to assist district staff and administrators in establishing systems and procedures that incorporate CLR instructional and decision-making features as the foundation to a school-wide MTSS model for ELs to improve literacy achievement and prevent inappropriate referrals to special education.

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