Multi-Tiered System of Supports for Multilingual Learners Using Culturally and Linguistically Aligned Practices



National Center on

INTENSIVE INTERVENTION

Multi-Tiered System of Supports for Multilingual Learners Using Culturally and Linguistically Aligned Practices

Julie Esparza Brown, EdD Portland State University Amanda K. Sanford, PhD Portland State University Donna Sacco, PhD American Institutes of Research

This document was produced under U.S. Department of Education, Office of Special Education Programs, Award No. H326Q210001. Celia Rosenquist serves as the project officer. The views expressed herein do not necessarily represent the positions or policies of the U.S. Department of Education. No official endorsement by the U.S. Department of Education of any product, commodity, service, or enterprise mentioned in this document is intended or should be inferred. This product is in the public domain. Authorization to reproduce it in whole or in part is granted. Although permission to reprint this publication is not necessary, the citation should be: Brown, J. E., Sanford, A. K., & Sacco, D. (2023). *Multi-tiered system of supports for multilingual learners using culturally and linguistically aligned practices*. National Center on Intensive Intervention at the American Institutes for Research.

Contents

	Page
Introduction	1
MTSS With Embedded CLA Practices	2
Multi-Level Prevention System With Embedded CLA Practices	3
CLA EBPs: The PLUSS Framework	4
Data-Based Decision Making With a CLA Lens	6
Screening With a CLA Lens	7
Progress Monitoring With a CLA Lens	8
Customized True Peer Group Factors	9
Case Study	10
Case Study Part 2: Week 10 Tier 2 Data Meeting	11
PLUSS Enhancements: Tiers 2 and 3	12
Case Study Part 3: Considering DBI for Panchito	13
DBI and the PLUSS Framework	14
Conclusion	14
Appendix: Sample Lesson Plan Using PLUSS Framework	15
References	16

Exhibits

	Page
Exhibit 1. MTSS Essential Components	2
Exhibit 2. Multi-Level Prevention System of MTSS With Embedded CLA Practices	3
Exhibit 3. PLUSS Framework	4
Exhibit 4. Decision Tree Using Screening Data With a CLA Lens	7
Exhibit 5. Side-by-Side Comparison of Academic Data With ML and IEP Status	10
Exhibit 6. Progress at 10 Weeks of School	11
Exhibit 7. Progress at 16 Weeks of School	13

Introduction

In the 2020-21 school year, 11.78% of students aged 5 (school age) through 21 who were served under the Individuals with Disabilities Education Act (IDEA), Part B, were English learners (ELs), according to the Office of Special Education (OSEP) Fast Facts (U.S. Department of Education, OSEP, 2022). This is a 30% increase since the 2012 school year, which is particularly significant in that, when compared to all students served under IDEA, Part B, ELs are more likely to drop out of school and less likely to graduate with a regular diploma (U.S. Department of Education, OSEP, 2022). In addition, data indicate that ELs are both overrepresented at the secondary level and underrepresented at the elementary level in special education (Broughton et al., 2023; U.S. Department of Education, Institute of Educational Sciences, 2021). Many state and local education agencies have implemented a multi-tiered system of supports (MTSS) to address the academic and behavioral

needs of all students; yet a need remains to provide educators with the knowledge and skills to enhance the supports for ELs within MTSS (Gonzalez et al., 2022). Education agencies can fulfill a promise to reduce the over- and under-identification of ELs for special education and related services and to greatly improve the learning outcomes for ELs by ensuring that schools align their instructional practices for ELs across all tiers of instruction, supporting educators to provide culturally and linguistically aligned (CLA) practices, and paying close attention to data-based decision making (Gonzales & Tejero Hughes, 2021; Gonzalez et al., 2022; Hoover et al., 2020). The intent of this brief is to explore *how* to use CLA strategies to support ELs across all tiers of an MTSS framework.

Please note, various sources use several terms to describe students who are learning English as an additional language. The Every Student Succeeds Act uses the term English learners (ELs) to describe students who qualify for federal Title III services aimed at developing their English language skills to support academic success. The U.S. Department of Education is currently adopting the term multilingual learners (MLs), which is a term that more accurately reflects the multiple languages that many ELs and their families speak and that highlights students' linguistic assets. From this point forward in the brief, we refer to ELs as MLs.

GLOSSARY OF ACRONYMS

CLA = culturally and linguistically aligned

EBP = evidence-based practice

EL = An English learner is a student whose difficulties in speaking, reading, writing, or understanding the English language may deny them the ability to meet the challenging state academic standards. ELs are entitled to English language development (ELD) programs to become proficient in English and to participate equally in the standard instructional program.

ELD = English language development services provided to students who qualify as ELs

L1 = a child's home/first/heritage language

L2 = a child's second language (in this context is most often English for MLs)

ML = Multilingual learner is a term that more accurately reflects the multiple languages that many ELs and their families speak.

MTSS = multi-tiered system of supports

MTSS With Embedded CLA Practices

MTSS is a proactive and preventative framework meant to maximize student achievement and address cultural, linguistic, social, emotional, and behavioral needs from a strength-based perspective. For MLs, an MTSS framework can provide research-based instruction and intervention, positive behavioral supports, and social and emotional learning that are culturally and linguistically sustaining (Paris & Alim, 2017). Incorporating data-based decision making supports educators in providing instruction that benefits the full range of students. Using an MTSS framework embedded with CLA practices that provide specific supports for MLs across all tiers can result in fewer students needing intensive intervention and/or possible referral for special education and related services. However, if students do indeed require either intensive intervention or special education and related services, the use of a CLA lens can inform instructional adaptations specific to the needs of MLs. Project LEE et al. (2021) provides a detailed rubric for evaluating the features of MTSS as the relate to MLs.

Exhibit 1 provides the MTSS essential components from the MTSS Center at the American Institutes for Research® (mtss4success.org).

The MTSS framework with embedded CLA practices comprises four essential components:

- Multi-level prevention system with embedded CLA practices
- Data-based decision making with a CLA lens
- Screening with a CLA lens
- Progress monitoring with a CLA lens

Exhibit 1. MTSS Essential Components

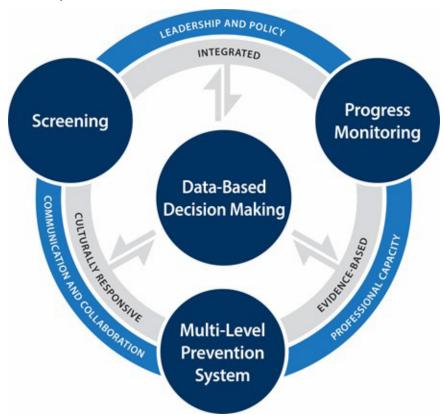


Exhibit 2 provides the traditional MTSS pyramid with an embedded CLA lens—from screening and core instruction to more intensive supports. In Tier 1, all MLs must receive their legally entitled Title III English language development (ELD) services and work toward their state's English language proficiency standards in addition to studying all grade-level core subjects. Although Title III ELD services are provided as part of core curriculum, MLs continue to require language supports throughout the tiers and across all content. Therefore, MLs' English language proficiency levels are addressed at all tiers within the MTSS model by coupling supports aligned to students' English language proficiency levels with academic and/or behavioral supports. Because curriculum and intervention programs often do not include MLs in their research sample, it is important to use evidence-based practices (EBPs) and best practices for MLs in tandem and at all levels of the multi-level system. Educators can provide scaffolds and supports for language development in all educational settings by co-planning and/or consulting with the ELD teacher.

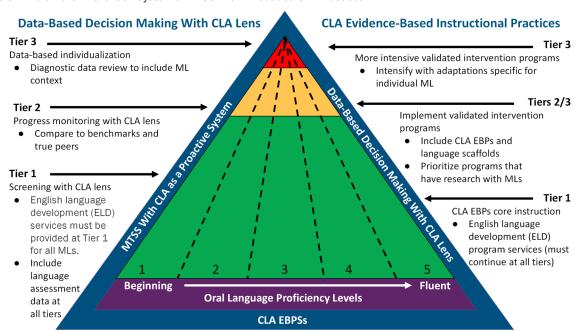


Exhibit 2. Multi-Level Prevention System of MTSS With Embedded CLA Practices

Note. CLA = culturally and linguistically aligned; EBP = evidence-based practice; ML = multilingual learner; MTSS = multitiered system of supports.

Multi-Level Prevention System With Embedded CLA Practices

The multi-level prevention system of MTSS emphasizes a design that plans proactively for MLs by using a CLA perspective. In keeping with MTSS, the framework provides progressively more intensive support to match students' instructional and/or behavioral and emotional needs across three tiers. The first tier is universal support designed to provide evidence-based core instruction aimed at enabling all learners to meet grade-level benchmarks. These universal supports alone will meet the needs of most learners (~80%). The second tier includes services for students who, based on screening data, demonstrate a need for more strategic instructional support (~15%). The third tier offers the most intensive instructional support—students receive services at this tier when progress monitoring data show a need for substantial support (~5%).

At Tier 1, it is essential to implement CLA EBPs that proactively support students in building on their cultural and linguistic assets to achieve successful academic and social outcomes. For MLs, Tier 1 must include

federally mandated ELD services, and these ELD services must continue as part of core instruction even when students receive Tier 2 and Tier 3 interventions. At Tier 2, implementation of a research-validated intervention program supports students who have additional instructional needs. Teams should look for intervention programs that have been research validated specifically with MLs. In addition, all intervention programs should also incorporate CLA EBPs, including language scaffolds. At Tier 3, interventions should be more intensive and focused, use data-based individualization (DBI) tailored to meet the instructional needs of students, and give special attention to CLA EBPs for MLs. One way to ensure that MLs receive CLA EBPs is to implement the PLUSS framework at all tiers of instructional support.

CLA EBPs: The PLUSS Framework

The PLUSS framework is an evidence-based overlay for instruction and intervention programs that capitalizes on and aligns with the linguistic, cultural, and experiential resources of MLs (Sanford et al., 2012). The intent is not to replace but to enhance instruction already in place (hence, the acronym PLUSS). The components of PLUSS thoughtfully and comprehensively integrate EBPs proven to be effective for MLs into core instruction, supplemental interventions, and special education. The PLUSS components are (a) Preteaching critical vocabulary, priming background knowledge, and making cultural connections; (b) Language modeling, instruction, and opportunities for practice; (c) Using visuals and graphic organizers; (d) Systematic and explicit instruction; and (e) Strategic use of native language, culture, and teaching for transfer.

Using the PLUSS framework ensures CLA practices are included throughout the MTSS tiers, as well as throughout special education (specially designed instruction). The framework also is useful for dual language and English-only programs. Exhibit 3 describes each component of PLUSS and includes definitions, examples, and the research base for the effectiveness with MLs.

Exhibit 3. PLUSS Framework

PLUSS component	Preteach critical vocabulary, priming background knowledge, and making cultural connections		
Definition	Identify and preteach vocabulary; build background knowledge critical to understanding content; and make connections to prior learning, experiences, and student culture. Teach word-learning strategies to support understanding and vocabulary usage in context.		
Examples and models	Definition Characteristics May reduce a drawing or picture.] Vocabulary Word Examples Non-Examples		

August et al., 2021; Baker et al., 2014; Beck et al., 2002; Cho et al., 2019; Echevarria et al., 2008; Gersten et al., 2007; Lesaux et al., 2012; Linan-Thompson & Vaughn, 2007; Nagy & Hiebert, 2010; Silverman et al., 2020

PLUSS Component	Language modeling, instruction, and opportunities for practice			
Definition	Provide language instruction (phonology, morphology, syntax, semantics, and pragmatics) at the word- and sentence-level that supports students in understanding content. Teacher models appropriate use of academic language and then provides structured opportunities for students to practice using the language in meaningful contexts.			
Examples and models	Compare Solike Decause they both			
Tigard-Tualatin School District*				

Baker et al., 2014; Battle & Pastrana, 2007; Dutro & Moran, 2002; Gersten et al., 2007; Gibbons, 2009; Morales & Saenz, 2007; Scarcella, 2003

*Thank you to Tigard-Tualatin School District for providing examples

PLUSS component	Using visuals and graphic organizers		
Definition	Use pictures, graphic organizers, gestures, real objects, and other visual prompts to make critical language, concepts, and strategies more comprehensible to learners.		
Examples and models	desierto desierto callente y seco COLLTS Program; Tigard-Tualatin School District*		

Baker et al., 2014; Brechtal, 2001; Eshet-Alkalai & Chajut, 2007; Goldenberg, 2008; Haager & Klingner, 2005; Linan-Thompson & Vaughn, 2007; Yang & Kim, 2016

*Vocabulary card from the COLLTS Program, Center for English Learners at American Institutes for Research; Graphic organizers from Tigard Tualatin School District

PLUSS component	Systematic and explicit instruction
Definition	Explain, model, provide guided practice with monitoring and feedback and opportunities for independent practice in content and concepts (I do, we do, you do).
Examples and models	I do: Teacher models a think-aloud on how to compare and contrast characters in a story.
	We do: Teacher asks questions of students and provides sentence frames to help them compare and contrast.
	You do: Teacher asks students to compare and contrast, in partners and then in writing using a graphic organizer.

Archer & Hughes, 2011; Baker et al., 2014; Calderón, 2007; Chiappe et al., 2002; Fien et al., 2011; Kamps et al., 2008; Klingner & Vaughn, 2000; Richards-Tutor et al., 2016; Roberts et al., 2022; Weingarten et al., 2018

PLUSS component	Strategic use of native language, culture, and teaching for transfer		
Definition	Identify concepts and content students already know in their native language and culture to explicitly explain, define, and bridge to new language and concepts in English. Use translanguaging strategies.		
Examples and models	Andrew of Methods of M		
	Tigard-Tualatin School District*		

August & Shanahan, 2006; Baker et al., 2014; Carlo et al., 2004; Cheung, 2005; Durán, 2016; Durgunoğlu, 2002; Genesee et al., 2006; Linan-Thompson et al., 2007

Data-Based Decision Making With a CLA Lens

CLA data-based decision making involves evaluating both the effectiveness of the system of instruction, supports, and placements for MLs and evaluating the individual instructional needs of MLs. The process includes CLA universal screening (Tier 1) and CLA progress monitoring (Tiers 2 and 3) described below in the case study. At Tier 1, it is recommended that data be disaggregated by student groups (e.g., ML status, Title I, race/ethnicity, special programs). It is important to examine whether MLs are meeting grade-level benchmarks at a similar rate as their monolingual English-speaking peers. In addition, it is valuable to include language data in planning instruction for MLs to ensure both their instructional and linguistic needs are being addressed (see Case Study for inclusion of language data alongside reading data.). At Tier 2, CLA progress monitoring involves setting ambitious goals to help students meet grade-level standards. Consider progress compared to these ambitious goals and progress compared to true peers, or students with similar linguistic, cultural, and school experiences. At Tier 3, diagnostic data can be used to individualize instruction with adaptations based on specific ML context, and progress monitoring data should be collected more frequently than at Tier 2. The Tier 3 diagnostic data includes multiple forms of data, such as family interviews, language proficiency assessments in both home or heritage language and English, and social emotional and behavioral information.

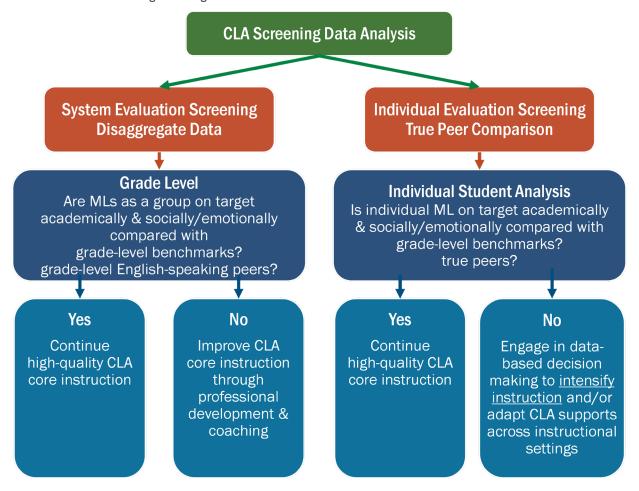
It is valuable to include individuals with expertise in both content and ELD on data-based decision-making teams. When making decisions about student responsiveness and intervention strategies for MLs, teams can examine additional contextual information, such as English language proficiency, language proficiency in the home language, educational history (e.g., limited or interrupted formal education, language[s] of instruction, ELD program models), and cultural and experiential backgrounds. Reviewing student records and talking to the parents and students both help obtain pertinent information that may not be included in educational records (e.g., first, home, or heritage language [we will call L1] skills, cultural values and beliefs, life experiences and assets, and prior formal education [in L1], as well as English [we will call L2 or second language], and developmental milestones). Be aware that many children also have a third or more languages. In addition, meeting with parents (using interpreters when needed) may clarify the languages used in the home and community and to what extent they are used. This background information helps to provide a holistic understanding of the ML and supports effective decision making.

^{*}Thank you to Tigard-Tualatin School District for providing examples

Screening With a CLA Lens

Screening with a CLA lens allows teachers to identify the level of support students need to achieve successful outcomes in school. It is helpful to disaggregate by student groups to (a) determine program effectiveness at meeting the needs of MLs as a group and (b) identify students, including MLs, who require additional support to meet important learning outcomes. Exhibit 4 highlights a decision tree for CLA screening analysis comparing system data and individual student data. When examining screening data, the reviewers can ask critical questions to determine if the system is healthy. For example, questions might include the following: Are MLs as a group on target academically and socially and emotionally compared to grade-level benchmarks and Englishspeaking peers? What individual supports are needed to help students be successful?

Exhibit 4. Decision Tree Using Screening Data With a CLA Lens



Effective screening tools must have documented reliability and validity for the population being screened. It is important that MLs be included in reliability and validity studies and that the tools show predictive and concurrent validity in predicting meaningful outcomes for MLs (e.g., Baker et al., 2022a; Baker et al., 2022b; Baker et al., 2022c; Cummings et al., 2021). In general, reliable screening tools are usually developed in accordance with rigorous psychometric procedures; therefore, reliability is not usually an issue when assessing MLs (Brown & Sanford, 2011). Validity often is an issue with respect to assessments for MLs. The variability in languages spoken, cultural experiences, and classroom instruction influence the validity of screeners for MLs (Brown & Sanford, 2011; Ortiz, 2008; Ortiz & Dynda, 2005), which results in a paucity of screening tools validated for MLs. Additional examples of measures that include MLs in their norming sample and that provide

comparisons based on students with similar language and cultural development are the Ortiz Picture Vocabulary Acquisition Test (Ortiz, 2018) and the Bilingual English-Spanish Assessment (Peña et al., 2018). These assessments provide a measure of general language acquisition. Gathering information on language development and academic data can provide a better gauge of an ML's current level of performance.

One important data source to include is students' language skills in L1 and L2 (when available) in reviewing student data to provide an appropriate context to evaluate current levels of performance. To demonstrate content validity for screening tools in other languages, they must not be literal translations from English tools. Rather, it is important to consider the characteristics of the orthographic system of the language they are assessing, as described by Baker et al. (2022b) in the development of Indicatores dinámicos del éxito en la lectura (Baker et al., 2006; the Spanish parallel to DIBELS 6th Edition [Good & Kaminski, 2002]). When screening tools are not available in the home language, information regarding a student's language milestones, development, and literacy is critical and can be gathered through parent interviews (using an interpreter when needed). Although the data from an ML's English language proficiency levels provides critical context, these data often are overlooked or not understood. It is helpful to review these data so that educators, in collaboration with the ELD specialist, understand what can be expected at various levels of language acquisition. Language data also help educators understand what skills MLs are building and how best to support them as they progress through the stages of language development.

In summary, the following recommendations will ensure appropriate use of screening tools with MLs (adapted from Brown & Sanford, 2011):

- Use screening tools with demonstrated reliability and validity to identify and monitor students' need for instructional support in L1 (and L2 when appropriate).
- Assess students' language skills in L1 and L2 to provide an appropriate context regarding evaluation of current levels of performance (via assessments or home interviews).
- Plan instruction based on what is known about the student's academic and/or social, emotional, and behavior needs and language performance data across L1 and L2.
- Disaggregate student data to determine if systems are providing equitable support for MLs (see Exhibit 4).

Progress Monitoring With a CLA Lens

The purpose of progress monitoring with a CLA lens is to determine whether instruction is effective in supporting students to meet academic, social, and emotional goals. If students are not making adequate progress, instruction should be intensified (e.g., Brown & Sanford, 2019; Mars et al., 2022). If all students or all students in a specific group are not responding to instruction, changes should be implemented for the whole group. Core instruction should be evaluated to determine what additional CLA components could be added to instruction. When an individual student is not responding to instruction, then making adaptations for that individual student using data-based decision making would be appropriate (Weingarten & Steinle, 2023).

The following are suggestions for progress monitoring that is CLA for MLs (modified from Brown & Sanford, 2011):

- Use progress monitoring tools with documented reliability and validity for MLs.
- Monitor student progress in all languages of instruction.

- Use validated methods for setting ambitious goals that support students toward meeting grade-level standards.
- Evaluate growth frequently, increasing the intensity of instruction when growth is less than expected.
- Evaluate growth compared with the progress of true peers and grade-level benchmarks.
- Monitor language progress in addition to academic progress.

For individual MLs, it is critical to consider cultural and linguistic factors and measure their growth compared with true peers (Brown & Doolittle, 2008). True peers, who are students with similar backgrounds and characteristics, can be informative and help differentiate whether a student's slow progress is a result of a group instructional issue or an individual's need for more support.

Customized True Peer Group Factors

The best standard for creating a true peer group is to identify a nationally normed sample of the population of interest (e.g., Ortiz,

2018; Peña et al., 2018). When a nationally normed group is unavailable, the second best option is to create large-scale district or school norms that disaggregate student data by ML status and language proficiency and can make comparisons for students compared with a districtwide ML local norm sample. When neither option is available, or when the characteristics of the student are unique to the point that these norm samples do not represent the student, then create a customized true peer group to try to make the best comparison possible for the child of interest.

Suggestions for creating a customized true peer group:

- Include the largest feasible number with at least three to five students within a true peer group.
- Include those students who are similar on the following characteristics:
 - Current grade/age
 - Home language proficiency level and growth
 - English language proficiency level and growth
 - Age of exposure to English
 - Amount of formal education in English and/or home language
 - Other significant developmental experiences (e.g., lack of school attendance, immigration or refugee experiences, exposure to trauma)

As noted with screening tools, finding progress monitoring tools with proven validity for MLs can be challenging. It is important to use multiple forms of data and comparisons to true peers to discover potential reasons for lack of progress and appropriate adaptations for instruction. The following case study describes how a school team moved through the CLA data-based decision-making process to plan CLA instruction and interventions for two MLs.

DUAL LANGUAGE PROGRAMS

To plan instruction for MLs in dual language programs, academic and language proficiency data from both instructional languages can be placed side by side for a more holistic picture of students' knowledge. This process helps teachers plan instruction while simultaneously considering the linguistic and academic levels. "The goal of these programs is to produce biliterate individuals, and research suggests that achieving literacy in one language confers a benefit on the second language" (Steele et al., 2017, as cited in Brown & Sanford, 2019, p. 81). For examples of side-by-side comparisons, see Exhibit 5.

Case Study

Case Study Part 1: Beginning-of-Year Tier 1 Data Meeting

At the beginning of the year, the principal of Dolores Huerta Elementary School holds individual grade-level meetings with the general education teachers, literacy, and math specialists, ELD specialists, counselors, and special educators to review the beginning-of-year screening data they have collected. These meetings facilitate planning for instructional groups. The school has a large Spanish-speaking student population and screens these students in both English and Spanish reading, math, and language. During the grade-level meetings, attendees place literacy and language proficiency data for individual MLs side by side to see a holistic picture of each student. The grade-level teams use students' language proficiency levels; ML status; and other programs, such as special education and gifted services, to identify the appropriate level of academic and language(s) support for each student. For the purpose of this example, the focus will be on teaching English reading, although the focus could shift to other languages of instruction in dual language programs. Exhibit 5 illustrates how the teams place language and academic data side by side.1

STUDENT ORF FLO ML EPS IEP 1. Hector 2. Kathleen 3. Connor 4. Natalia Χ 2 5. Maya 6. Daniel 1 7. Marisa 3 8. Chasito 2 9. Panchito

Exhibit 5. Side-by-Side Comparison of Academic Data With ML and IEP Status

Note. ORF = oral reading fluency, FLO = fluidez en la lectura oral (Spanish oral reading fluency, ML = student receiving English language development (Title III) services (multilingual learner), EPS = English Proficiency Scores: 1 = low, 5 = high, IEP = individualized education program (special education services).

By analyzing the data side-by-side, teachers see how students have acquired literacy in either language and can identify ways to bridge what students know in one language to teach reading in English. In Exhibit 5, students who are in the green zone in English receive high-quality core instruction (Students 1–3). Students who are in the green zone in Spanish but show lower levels of English proficiency (Students 5 and 8) also receive core instruction, with explicit attention given to teaching transfer skills and more frequent progress monitoring. These students have already established literacy skills in Spanish and need to be taught to transfer those skills to English rather than be retaught skills and concepts they have mastered in a home language.

¹ Educators can use this display in dual language programs of any two languages or in English-only programs and include only English reading data, ML status, and individualized education program (IEP) status.

Students who show additional need for support in both languages (either red or yellow zone in both languages; (Students 4, 6, 7, and 9) are placed in Tier 2 strategic intervention groups according to their skill level and monitored more frequently to determine if they are making adequate progress toward grade-level goals. Students with severe and persistent learning and or behavioral needs are placed in Tier 3 instruction using DBI. Students with IEPs receive specially designed instruction and related services and may also receive instruction in Tier 2 and/or Tier 3 as well as core. Teams meet regularly to review progress monitoring data to determine whether students are making adequate progress. This process can be used to review progress across all content areas.

Case Study Part 2: Week 10 Tier 2 Data Meeting

Following the first meeting of the year, during which instructional teams reviewed all students' data, two second grade students, Chasito and Panchito, were placed in a small reading intervention group. The literacy specialist provided a Tier 2 reading intervention to them within a small group of six second-grade students. The group met daily for 30 minutes of reading instruction, which focused on phonics and decoding skills in the student's homeroom. The six students also received 90 minutes of daily reading instruction from their classroom teacher as part of core or universal instruction in the five big ideas in beginning reading (phonemic awareness, phonics, fluency, vocabulary, and comprehension). During that time, the students also engaged with authentic texts with rich vocabulary and language use.

After 6 weeks of small-group, Tier 2 instruction, the team held its monthly data meeting to review student progress. Chasito's and Panchito's teachers compared the boys' progress monitoring data with the other instructional group members and learning goals. Chasito and Panchito were growing at less than the expected rate of progress needed to meet grade-level benchmarks in English. Their second-grade teachers wanted to know if Chasito and Panchito needed to be moved to the Tier 3 intensive intervention.

The ELD specialist and literacy specialist suggested they compare Chasito's and Panchito's progress to true peers. For this comparison, they used data for all the MLs in the district and created growth norms for all students who had been classified as ML since attending school. The second-grade-level benchmarks are depicted with the red line with triangles in Exhibit 6, with the growth norms for true peers graphed with the blue line with squares. Chasito's progress is noted with the purple line with circles, and Panchito's progress is noted with the green line with diamonds.

Number of Words Read Correctly per Minute 80 70 60 50 40 30 Grade-Level Aim Line for All Students 20 True Peer Aim Line for All Similar MLs Chastio's Progress 10 Panchito's Progress

Exhibit 6. Progress at 10 Weeks of School

Note. Student data graphs are adapted from Ortiz & Brown, 2016.

The ELD specialist and literacy specialist reminded the team to look at two comparisons when reviewing the data of MLs. First, review the students' performance compared to grade-level benchmarks (the red line with triangles). Then compare individual student performance to the average performance of MLs in the district as seen with the blue line with squares (local normative groups), otherwise known as the true peer group (Brown & Doolittle, 2008). This example indicates that Chasito and Panchito both need added support because both students' performances are below benchmark and both students' progress shows they are not on track to meet end-of-year benchmarks.

However, when we consider the nature of the support required (i.e., a change to the whole group's instruction versus change to an individual student's instruction), there needs to be another comparison. When the team compares Chasito's and Panchito's growth to the blue line with squares (the true peers), this comparison reveals that Chasito's growth is very similar to true peers. This finding implies that the instructional system supporting Chasito and the other MLs in the group needs to be intensified and aligned with students' language proficiency levels and cultural and experiential backgrounds. The intention is to close the gap and meet gradelevel standards, and a move to Tier 3 DBI instruction for Chasito would not be appropriate. For Chasito and the rest of the true peer instructional group, the team should consider the PLUSS framework to provide linguistically and culturally aligned instruction for the entire ML group in Tier 2 and core instruction.

In contrast, when the team examines Panchito's rate of growth compared to other MLs (true peers), the team finds that Panchito's rate of growth is lower than that of students with similar backgrounds. In this case, Tier 3 with DBI problem solving for Panchito might be appropriate. Because it was early in the process, the team decided to implement the PLUSS framework and monitor progress weekly for both students. This was to see if they could increase Chasito's and Panchito's rates of improvement before deciding whether to refer Panchito to a DBI problem solving team.

PLUSS Enhancements: Tiers 2 and 3

The Tier 2 team hypothesized the following: If Chasito and Panchito were provided with English language supports across the school day and explicit language instruction integrated with the reading intervention, in addition to their ELD program services, they would increase their oral reading fluency and comprehension.

The literacy specialist partnered with the ELD specialist and second-grade classroom teachers to identify ways to enhance language supports and cultural alignment using the PLUSS framework in core instruction. The second-grade classroom teachers identified vocabulary and background knowledge from the core curriculum that could be pre-taught before introducing the unit. The teachers were especially mindful of making cultural connections to students' background knowledge and thoughtfully teaching (not assuming) background knowledge students needed to understand the content. All teachers worked with the ELD specialist to identify language supports and partnering routines to ensure students had ample opportunities to be explicitly taught to use and practice academic language. They created sentence frames and stems appropriate for students' levels of English language proficiency to support academic language. For example, they used the following sentence stems in English and Spanish to support a compare and contrast activity while making connections across languages:

"Both	and are simil	ar because		
However.	and	are different because	. whereas	

Working with the ELD specialist, the teachers identified key strategies that support academic content vocabulary, which included graphic organizers, visuals, and dual language glossaries. By co-planning with the ELD specialist, teachers were able to support all classroom instruction for MLs. After incorporating the PLUSS framework in Tier 1 and Tier 2, the team conducted weekly progress monitoring to evaluate the effect of the added supports.

Case Study Part 3: Considering DBI for Panchito

After another 6 weeks, the team reviewed Chasito's and Panchito's data. Chasito had responded to the PLUSS enhancements delivered in small-group Tier 2 instruction and was on track to meet mid-year benchmarks. The team decided to continue with the current intervention for him with the goal of supporting the entire true peer group so that they would meet grade-level benchmarks.

However, Panchito was still not making the expected progress. The team decided to move Panchito to Tier 3 intensive intervention, using DBI. The second-grade teacher had completed a student summary form for Panchito and tried to provide a full picture of the student's learning context. The teacher was careful to use objective language, data, and important background information. The teacher's primary area of concern was that Panchito was reading 16 words correctly per minute (wcpm) at the start of the school year, whereas the fall benchmark was 52 wcpm, and the winter benchmark was 72 wcpm. After 12 weeks of small group reading instruction, for 30 minutes 5 times a week, Panchito improved from 22 wcpm at 10 weeks of school to 25 wcpm at 16 weeks, a rate of improvement of 0.5 words per week. Although the increase in wcpm shows improvement, Panchito was not making adequate progress to meet mid-year benchmarks, even though other students in the group were making progress to close the gap with grade-level benchmarks. See Exhibit 7 for the visual representation of student progress.

Number of Words Read Correctly per Minute 80 70 60 50 40 30 Grade-Level Aim Line for All Students 20 True Peer Aim Line for All Similar MLs 10 Chastio's Progress Panchito's Progress 11 12 13 16

Exhibit 7. Progress at 16 Weeks of School

Note. Student data graphs are adapted from Ortiz & Brown, 2016.

The teacher consulted with the ELD specialist to include Panchito's current English language proficiency data, which indicates he was at a Level 2 (Scale 1–5) in listening, speaking, and reading, and his writing skills were lower (Level 1). To provide a more complete picture, the ELD specialist looked back at scores from kindergarten and first grade that indicated Panchito entered school at a Level 1 and had only progressed one language level since kindergarten (in contrast to true peers who had progressed to a Level 3 in the same time frame).

The hypothesis started out like this: If Panchito was provided with more intensive reading intervention and English language supports in the intervention and across the school day, then he would increase his accuracy and oral reading fluency, in addition to his comprehension.

DBI and the PLUSS Framework

The team decided Panchito needed a more intensive intervention program and smaller group size to be successful. To plan instruction, the ELD specialist utilized performance data from the English language proficiency annual assessment and the weekly monitoring of student performance to identify specific goals. Her goals for Panchito included using past tense verbs, answering in complete sentences, and increasing vocabulary. Specific visuals and sentence frames were created for the intensive intervention to match Panchito's needs. The appendix provides an example of a PLUSS lesson plan that includes the explicit goals Panchito was working on. The team planned to collect more data to determine if the changes to the intervention were working.

Conclusion

This brief highlighted an MTSS process with embedded CLA strategies to support MLs. The four components of MTSS with CLA strategies include (1) a multi-level prevention system with embedded CLA practices, (2) databased decision making with a CLA lens, (3) screening with a CLA lens, and (4) progress monitoring with a CLA lens. The PLUSS framework was described as a means of incorporating culturally and linguistically aligned supports. True peer comparisons were introduced to guide additional perspectives for evaluating student progress and instructional effectiveness. Incorporating this CLA lens to the MTSS process for MLs and other diverse learners will provide a holistic approach to data-based decision making.

Successful implementation of any MTSS framework, particularly one with embedded CLA strategies, requires the support and critical understanding of leadership. Implementing an MTSS framework with embedded CLA strategies should not be regarded as something new but rather as an improvement to the system in place. The framework with embedded CLA strategies has a broader scope and attends to the needs of MLs and other diverse learners. With the support of leadership, schools will be able to champion appropriate scheduling, coplanning, co-teaching, and other structures required for successful implementation of such a framework. By following the process described in this brief and providing CLA supports across instruction within an MTSS framework, schools can more accurately identify students for intervention support, which will ultimately lead to improved student outcomes.

Appendix: Sample Lesson Plan Using PLUSS Framework

Content Objective: When presented with decodable words ending with -ed, students will read 9 out of 10 correctly. Language Objective: When presented with four vocabulary words ending with -ed, students will be able to use 4 out of 4 correctly in a complete sentence orally showing their understanding that -ed means it happened in the past.

	Strategies:	L – Language modeling, instruction & opportunities for practice	U – Use visuals and graphic organizers	S – Strategic use of native language, culture, and teaching for transfer
P Preteach critical vocabulary, prime background knowledge & make cultural connection	Opening Activity: Before beginning the lesson, use the pre-made picture cards (with the word written on the back) to quickly move through the verbs of the lesson with the group (walk, talk, call, jump). Begin by chorally practicing the word that you want students to use with the card. Read the word using decoding strategies first, then flip the card to show the meaning.	Provide each student with a picture card with a sticky note with -ed written on it Model the word (have students repeat) model the word with -ed at the end (students repeat) and use it in a sentence (students repeat) Sentence frames: . "The verb (verb) means (definition) and "The verb (word + -ed) means to (word) in the past."	Picture cards Four sentence frames to complete	Provide extra practice with vowel sounds that don't exist in students' native language.
S Systematic & explicit instruction	The lesson format was: *Sounds (choral and independent test) *Decoding and word reading practice (choral responses) *Story reading (quotation finding, first and second reading, story and picture comprehension) *Independent activity Chorally sound out and read words – then ask comprehension questions. Closing activity: Since students were asked to practice reading words with –ed endings, to provide additional practice, provide each with teacher created sentence completion activity where they can practice adding the correct ending to the words to show past or present	Practice: have students respond chorally to most questions requiring a short response. Practice: have students hold up appropriate picture cards after teacher/other students read the word Practice: have each child practice reading text with expression	Picture and word cards verbs to add -ed endings Use Total Physical Response (TPR) to define words since they are all visible actions (e.g. could demonstrate jumping)	Teach for Transfer: caminé hablé llamé brinqué Native Language: If students have confusion about a word, ask othe students to share the word in their native language if they know it.

Provided with permission from Project LEE (Project ELLIPSES et al., 2021; https://www.projectlee.org/wpcontent/uploads/2021/09/Series2-Brief3_Final.pdf).

References

- Archer, A. L., & Hughes, C. A. (2011). Explicit instruction: Effective and efficient teaching. Guilford Press.
- August, D., & Shanahan, T. (2006). Developing literacy in second-language learners: Report of the National Literacy Panel on language minority children and youth. Erlbaum.
- August, D., Uccelli, P., Artzi, L., Barr, C., & Francis, D. J. (2021). English learners' acquisition of academic vocabulary: Instruction matters, but so do word characteristics. Reading Research Quarterly, 56(3), 559-582. https://doi.org/10.1002/rrq.323
- Baker, D. L., Crespo Alberto, P., Monzalve, M. M., Garcia, I., & Gutiérrez-Ortega, M. (2022a). Relation between the essential components of reading and reading comprehension in monolingual Spanish-speaking children: A meta-analysis. Educational Psychology Review, 34(4), 2661–2696. https://doi.org/10.1007/s10648-022-09694-1
- Baker, D. L., Cummings, K., & Smolkowski, K. (2022b). Diagnostic accuracy of Spanish and English screeners with Spanish and English criterion measures for bilingual students in grades 1 and 2. Journal of School Psychology, 92, 299-323. https://doi.org/10.1016/j.jsp.2022.04.001
- Baker, D. L., Park, Y., & Andress, T. T. (2022c). Longitudinal predictors of bilingual language proficiency, decoding, and oral reading fluency on reading comprehension in Spanish and in English. School Psychology Review, 52(4), 421-434. https://doi.org/10.1080/2372966X.2021.2021447
- Baker, S. K., Geva, E., Kieffer, M. J., Lesaux, N., Linan-Thompson, S., Morris, J., Proctor, C. P., Russell, R., Gersten, R., Dimino, J., Jayanthi, M., Haymond, K., & Newman-Gonchar, R. (2014). Teaching academic content and literacy to English learners in elementary and middle school (NCEE 2014-4012). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. https://ies.ed.gov/ncee/wwc/Docs/PracticeGuide/english_learners_pg_040114.pdf
- Battle, J., & Pastrana, A. (2007). The relative importance of race and socioeconomic status among Hispanic and White students. Hispanic Journal of Behavioral Sciences, 29(1), 35-48. https://doi.org/10.1177/0739986306294783
- Beck, I. L., McKeown, M. G., & Kucan, L. (2002). Bringing words to life: Robust vocabulary instruction (2nd ed.). Guilford Press.
- Brechtal, M. (2001). Bringing it all together: Language and literacy in the multilingual classroom. Dominie Press.
- Broughton, J. A., Pryzmus, S. D., Ortiz, A., & Cruz, B. J. (2023). Critical consciousness in decision-making: A model for educational planning and instruction in bilingual/multilingual students with disabilities. Exceptional Children, 65(5), 338-349. https://doi.org/10.1177/00400599221093655
- Brown, J. E., & Doolittle, J. (2008). A cultural, linguistic, and ecological framework for response to intervention with English language learners. Teaching Exceptional Children, 40(5), 66-72. https://www.colorincolorado.org/research/cultural-linguistic-and-ecological-framework-responseintervention-english-language

- Brown, J. E., & Sanford, A. (2019). Culturally and linguistically responsive multi-tiered support systems for English learners: High quality teaching practices across the tiers. In E. Haas & J. E. Brown (Eds.), Supporting English learners in the classroom: Best practices for distinguishing language acquisition from learning disabilities (pp. 23-64). Teachers College Press.
- Brown, J. E., & Sanford, A. (2011). RTI for English language learners: Appropriately using screening and progress monitoring tools to improve instructional outcomes. U.S. Department of Education, Office of Special Education Programs, National Center on Response to Intervention. https://mtss4success.org/sites/default/files/2020-07/rtiforells.pdf
- Brown, J. E., & Sanford, A. K. (2019). Culturally and linguistically responsive multi-tiered support systems for English learners: Assessment across the tiers. In E. M. Haas & J. E. Brown (Eds.), Supporting English learners in the classroom: Best practices for distinguishing language acquisition from learning disabilities (pp. 65-93). Teachers College Press.
- Calderón, M. (2007). Teaching reading to English language learners: Grades 6–12. Corwin Press.
- Carlo, M. S., August, D., McLaughlin, B., Snow, C. D., Dressler, C., Lippman, D. N., Lively, T. J., & White, C. E. (2004). Closing the gap: Addressing the vocabulary needs of English-language learners in bilingual and mainstream classrooms. Reading Research Quarterly, 39(2), 188-215. https://doi.org/10.1598/RRQ.39.2.3
- Cheung, S. L. (2005). A classroom entry and exit game of supply with price-taking firms. The Journal of Economic Education, 36(4), 358-368. https://doi.org/10.3200/JECE.36.4.358-368
- Chiappe, P., Siegel, L. S., & Wade-Woolley, L. (2002). Linguistic diversity and the development of reading skills: A longitudinal study. Scientific Studies of Reading, 6(4) 369–400. https://doi.org/10.1207/S1532799XSSR0604 04
- Cho, E., Capin, P., Roberts, G., Roberts, G. J., & Vaughn, S. (2019). Examining sources and mechanisms of reading comprehension difficulties: Comparing English learners and non-English learners within the simple view of reading. Journal of Educational Psychology, 111(6), 982-1000. https://doi.org/10.1037/edu0000332
- Cummings, K. D., Smolkowski, K., & Baker, D. L. (2021). Comparison of literacy screener risk selection between English proficient students and English learners. Learning Disability Quarterly, 44(2), 96-109. https://doi.org/10.1177/0731948719864408
- Duran, M. O. (2016). Crosslinguistic influence in L2 English oral production: The effects of cognitive language learning abilities and input [Doctoral dissertation, University of Barcelona]. https://www.tdx.cat/bitstream/handle/10803/401091/MOD_PhD_THESIS.pdf?sequence=1&isAllow ed=y
- Durgunoğlu, A. Y. (2002). Cross-linguistic transfer in literacy development and implications for language learners. Annals of Dyslexia, 52(1), 189-204. https://eric.ed.gov/?id=EJ657413
- Dutro, S., & Moran, C. (2002), Rethinking English language instruction: An architectural approach. In G. Garcia (Ed.), English learners reading at the highest level of English literacy. International Reading Association.

- Echevarria, J., Vogt, M., & Short, D. (2008). Making content comprehensible for English learners: The SIOP model. Pearson.
- Esthet-Alkalai, Y., & Chajut, E. (2007). Living books: The incidental bonus of playing with multimedia. Journal of Educational Multimedia and Hypermedia, 16(4), 377–388.
- Fien, H., Smith, J. L. M., Baker, S. K., Chaparro, E., Baker, D. L., & Preciado, J. A. (2011). Including English learners in a multitiered approach to early reading instruction and intervention. Assessment for Effective Intervention, 36(3), 143-157. https://doi.org/10.1177/1534508410392207
- Genesee, F., Geva, E., Dressler, C., & Kamil, M. L. (2006). Synthesis: Cross-linguistic relationships. In D. August & T. Shanahan (Eds.), Developing literacy in second-language learners: Report of the National Literacy Panel on language-minority children and youth (pp. 153-174). Routledge.
- Gersten, R., Baker, S. K., Shanahan, T., Linan-Thompson, S., Collins, P., & Scarcella, R. (2007). Effective literacy and English language instruction for English learners in the elementary grades (NCEE 2007 -4011). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. https://ies.ed.gov/ncee/wwc/Docs/PracticeGuide/20074011.pdf
- Gibbons, P. (2009). English learners, academic literacy, and thinking: Learning in the challenge zone. Heinemann.
- Goldenberg, C. (2008). Teaching English language learners: What the research does and does not say. American Educator, 32(2), 8-44.
- Gonzales, W., & Tejero Hughes, M. (2021). Leveraging a Spanish literacy intervention to support outcomes of English learners. Reading Psychology, 42(4), 411-434. https://doi.org/10.1080/02702711.2021.1888352
- Gonzalez, J. E., Durán, L, Linan-Thompson, S., & Jimerson, S. R. (2022). Unlocking the promise of multitiered systems of support (MTSS) for linguistically diverse students: Advancing science, practice, and equity. School Psychology Review, 51(4), 387-391. https://doi.org/10.1080/2372966X.2022.2105612
- Good, R. H., Kaminski, R. A., & Dill, R. (2002). DIBELS oral reading fluency. In R. H. Good & R. A. Kaminski (Eds.), Dynamic indicators of basic early literacy skills (6th ed.). Institute for the Development of Educational Achievement. http://dibels.uoregon.edu/
- Haager, D., & Klingner, J. K. (2005). Differentiating instruction in inclusive classrooms: The special educator's guide. Pearson.
- Hoover, J. J., Soltero-González, L., Wang, C., & Herron, S. (2020). Sustaining a multitiered system of supports for English learners in rural community elementary schools. Rural Special Education Quarterly, 39(1), 4-16. https://doi.org/10.1177/8756870519847466
- Kamps, D. M., Abbott, M., Greenwood, C., Willis, H., Veerkamp, M., & Kaufman, J. (2008). Effects of smallgroup instruction and curriculum differences for students most at risk in kindergarten: Two-year results for secondary- and tertiary-level interventions. Journal of Learning Disabilities, 41(2), 101-114. https://doi.org/10.1177/0022219407313412

- Klingner, J. K., & Vaughn, S. (2000). The helping behaviors of fifth graders while using collaborative strategic reading during ESL content classes. TESOL Quarterly, 34(1), 69-98. https://doi.org/10.2307/3588097
- Lesaux, N. K., Harris, J. R., & Sloane, P. (2012). Adolescents' motivation in the context of an academic vocabulary intervention in urban middle school classrooms. Journal of Adolescent & Adult Literacy, 56(3), 231-240. https://doi.org/10.1002/JAAL.00132
- Linan-Thompson, S., Cirino P. T., & Vaughn, S. (2007). Determining English language learners' response to intervention: Questions and some answers. Learning Disability Quarterly, 30(3), 185-195. https://doi.org/10.2307/30035563
- Linan-Thompson, S., & Vaughn, S. (2007). Research-based methods of reading instruction for English language learners: Grades K-4. Association for Supervision and Curriculum Development.
- Morales, M. C., & Saenz, R. (2007). Correlates of Mexican American students' standardized test scores: An integrated model approach. Hispanic Journal of Behavioral Sciences, 29(3), 349-365. https://doi.org/10.1177/0739986307302176
- Nagy, W. E., & Hiebert, E. H. (2010). Toward a theory of word selection. In M. L. Kamil, P. D. Pearson, E. Birr Moje, & P. P. Afflerbach (Eds.), Handbook of reading research (Vol. IV; pp. 388-404). Routledge.
- Ortiz, S. O. (2018). Ortiz Picture Vocabulary Acquisition Test. Multi-Health Systems Inc. https://storefront.mhs.com/collections/ortiz-pvat
- Ortiz, S. O. (2008). Best practices in nondiscriminatory assessment. In A. Thomas & J. Grimes (Eds.), Best practices in school psychology V (pp. 661-678). National Association of School Psychologists.
- Ortiz, S. O., & Brown, J. E. (2016). A collaborative evaluation model: What you must know before referring an English learner [Paper presentation]. Northwest Educational Service Center English Learner Conference, Hillsboro, OR, United States.
- Ortiz, S. O., & Dynda, A. M. (2005). The use of intelligence tests with culturally and linguistically diverse populations. In D. P. Flanagan & P. L. Harrison (Eds.), Contemporary intellectual assessment (2nd ed., pp. 545-556). The Guilford Press.
- Paris, D., & Alim, H. S. (Eds.). (2017). Culturally sustaining pedagogies: Teaching and learning for justice in a changing world. Teachers College Press.
- Peña, E. D., Gutierrez-Clellen, V. F., Aquiles, I., Goldstein, B. A., Bedore, L. M. (2018). Bilingual English-Spanish Assessment (BESA). Brookes Publishing. https://products.brookespublishing.com/Bilingual-English-Spanish-Assessment-BESA-P1044.aspx
- Project ELLIPSES, Project ELITE, & Project LEE. (2021). Meeting the needs of English learners with and without disabilities: Brief 3, English learners with significant learning difficulties or disabilities: Recommendations for practice. U.S. Department of Education, Office of Special Education Programs. https://www.projectlee.org/wp-content/uploads/2021/09/Series2-Brief3_Final.pdf

- Project LEE, Project ELLIPSES, & Project ELITE. (2021). Multitiered system of supports for English learners: Literacy implementation rubric. U.S. Department of Education, Office of Special Education Programs. https://mtss4els.org/files/resource-files/Lit-Imp-Rubric_2021.pdf
- Richards-Tutor, C., Baker, D. L., Gersten, R., Baker, S. K., & Smith, J. M. (2016). The effectiveness of reading interventions for English learners: A research synthesis. Exceptional Children, 82(2), 144-169. https://doi.org/10.1177/0014402915585483
- Roberts, G. J., Hall, C., Cho, E., Coté, B., Lee, J., Qi, B., & Van Ooyik, J. (2022). The state of current reading intervention research for English learners in grades K-2: A best-evidence synthesis. Educational Psychology Review, 34, 335-361. https://doi.org/10.1007/s10648-021-09629-2
- Sanford, A., Brown, J. E., & Turner, M. (2012). Enhancing instruction for English learners in RTI systems: The PLUSS Model. Multiple Voices for Ethnically Diverse Exceptional Learners, 13(1), 56-79.
- Scarcella, R. (2003). Academic English: A conceptual framework. University of California Linguistic Minority Institute.
- Silverman, R. D., Johnson, E., Keane, K., & Khanna, S. (2020). Beyond decoding: A meta-analysis of the effects of language comprehension interventions on K-5 students' language and literacy outcomes. Reading Research Quarterly, 55(S1), S207-S233. https://doi.org/10.1002/rrq.346
- Steele, J. L., Slater, R. O., Zamarro, G., Miller, T., Li, J., Burkhauser, S., & Bacon, (2017). Effects of dual language immersion programs on achievement: Evidence from lottery data. American Educational Research Journal, 54(1S), 282S-306S. https://doi.org/10.3102/0002831216634463
- U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics. (2021). The condition of education. https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2021144
- U.S. Department of Education, Office of Special Education Programs. (2022, April 8). OSEP fast facts: Students with disabilities who are English learners (ELs) served under IDEA Part B. https://sites.ed.gov/idea/osep-fast-facts-students-with-disabilities-english-learners
- Weingarten, Z., Bailey, T. R., & Peterson, A. (2018). User guide for sample reading lessons. National Center on Intensive Intervention at American Institutes for Research. https://intensiveintervention.org/sites/default/files/User_Guide_Sample_Reading_Lessons-508v2.pdf
- Weingarten, Z., & Steinle, P. (2023). Using diagnostic data to inform intervention planning. American Institutes for Research.
- Yang, S., & Kim, M. C. (2016). Supporting oral narrative development of kindergarten English language learners using multimedia stories. Journal of Interactive Learning Research, 27(4), 381–397.



National Center on INTENSIVE INTERVENTION

at the American Institutes for Research® ■

1400 Crystal Drive, 10th Floor | Arlington, VA 22202-3289 +1.202.403.5000 | AIR.ORG www.intensiveintervention.org



