

Biliteracy and the Science of Reading

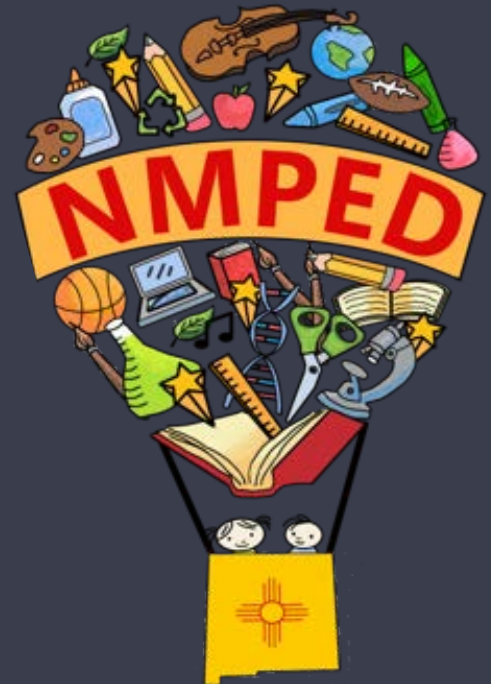
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For LESC
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New Mexico Public Education Department

Mission

Equity, Excellence & Relevance

The New Mexico Public Education Department partners with educators, communities, and families to ensure that ALL students are healthy, secure in their identity, and holistically prepared for college, career, and life.



Vision

Rooted in our Strengths

Students in New Mexico are engaged in a culturally and linguistically responsive educational system that meets the social, emotional, and academic needs of ALL students.



The Call and Thanks

- In 2019, during the regular 54th legislative session, [Senate Bill 398](#) was passed.

“...every school district and charter school shall develop and implement a literacy professional development plan that includes a detailed framework for structured literacy training by a licensed and accredited or credentialed teacher preparation provider for all elementary school teachers...”

- SB398 required:
 - The use of structured literacy based on the science of reading
 - Professional development by an accredited provider
 - Screening of all first-grade students
 - District literacy plan

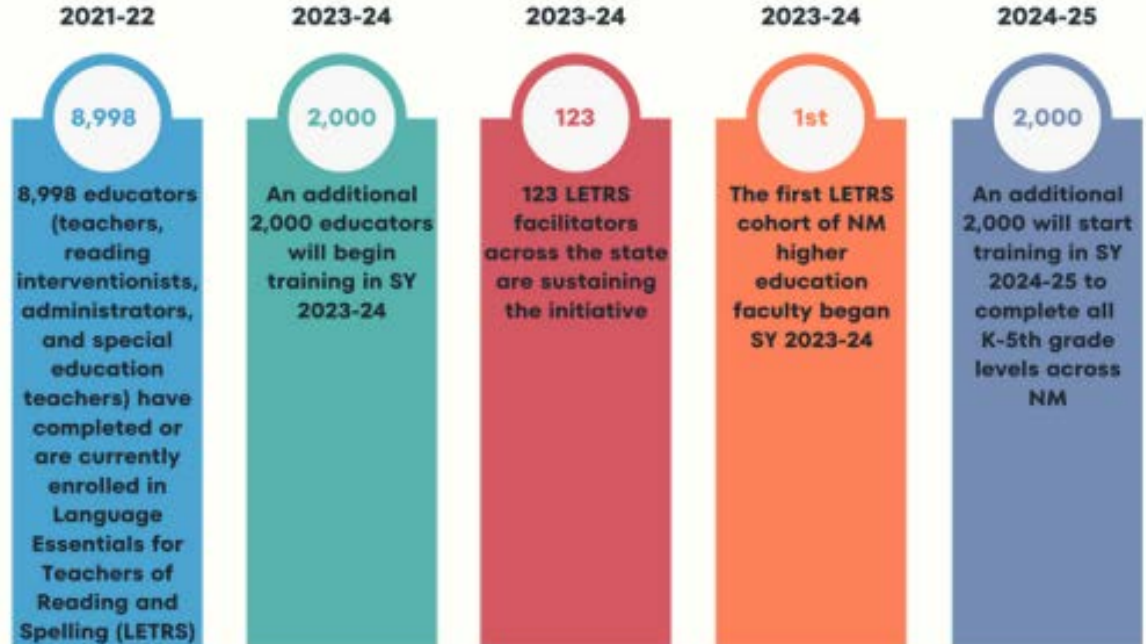
Structured Literacy is taking the research on the science of reading and putting it into practice in the classroom. Structured literacy is the kind of instruction and evidence-based practices required by SB 398 which guides educators in the classroom to reach 95% of students reading proficiently.

Current Status: Professional Learning and Coaching Supports

STRUCTURED LITERACY NEW MEXICO OUTCOMES - JUNE 2023

2019-2021

- Mobilization around the state
- Early implementers
- Working Group of experts for statewide implementation planning

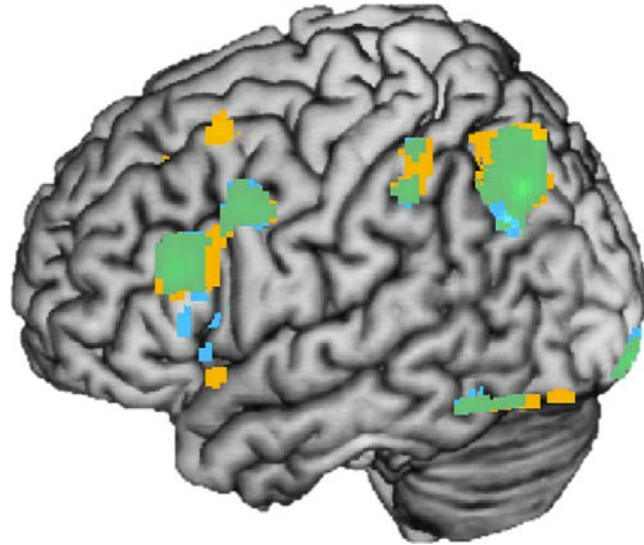


Structured Literacy for Biliteracy

English, Spanish, and Biliteracy Development

- Oral Language Development
- Five Components of Reading
 - Phonological awareness
 - Syllables, alliteration, onset-rime
 - Phoneme segmentation, blending
 - Phoneme/syllable substitution, addition, deletion
 - Phonics
 - Alphabetic principle
 - Letter-sound correspondences
 - Encoding
 - Fluency
 - Automaticity
 - Accuracy
 - Vocabulary
 - Word consciousness, word parts
 - Comprehension

Brain Activation for Word Reading in Bilinguals



Network of brain activation showing shared semantic representation for word reading and bilinguals: the orange shows activation for L2 word reading (English) the blue shows activation for L1 word reading in Portuguese and the green shows an overlap between L1 and L2.

Cognitive Workload

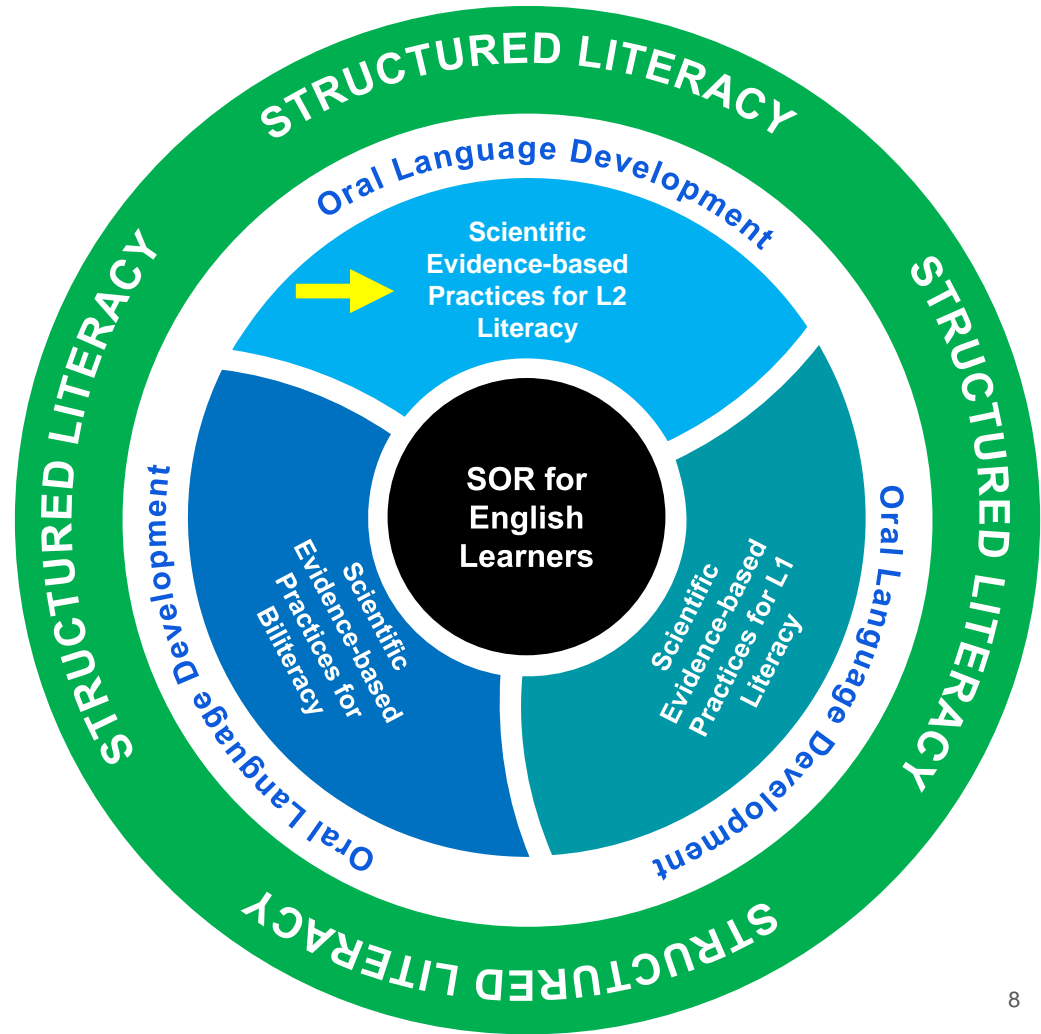
- For complex comprehension tasks, brain activation is associated with the cognitive load of the task.
- Activation differences in a student's first language (L1) and in a student's second language (L2) have been noted in the prefrontal brain region with listening comprehension tasks of higher cognitive load and in the frontal-parietal network region during higher phonological processes used for reading comprehension.
- Studies show recruitment and activation of other brain networks to support the cognitive demands of writing processes.
- Brain activation differences are reliant on proficiency levels in L1 and L2, age of acquisition, the cognitive workload, and the linguistic differences between the languages.

(Buchweitz & Prat, 2013)

Research Based Practices for L2 Literacy

Structured Literacy evidence-based practices

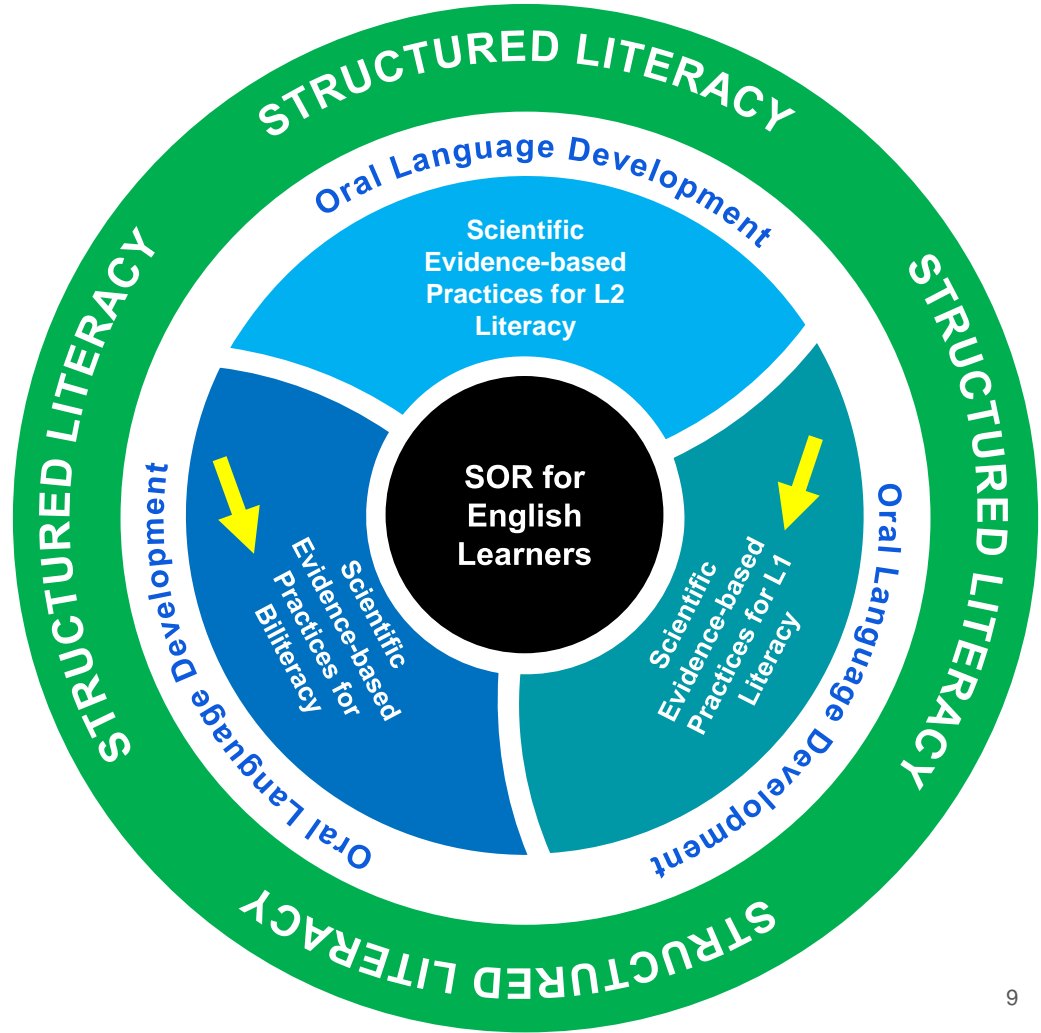
- explicit
- systematic
- cumulative
- hands on, engaging
- multimodal
- diagnostic and responsive
- immediate feedback
- gradual release model



Research Based Practices for Home Language Literacy and Biliteracy

Evidence-based Practices for Spanish Literacy and Biliteracy

- Metalinguistic awareness
- Metalanguage
- Cross-linguistic transfer
- Ample discourse and dialogue
- Holistic assessment
- Enhanced oral language development/oracy



Spanish and Biliteracy Development

Additional Instructional Areas

Additional instructional areas:

- Linguistic responsiveness
- Academic/instructional vocabulary in L1 and L2
- Language structures and functions in L1 and L2
 - Grammar usage in L1 and L2
- Number and gender in nouns/adjectives in Spanish
- Cross-linguistic connections
- Metalanguage/Metalinguistic awareness
- Differentiated instruction for language and content
- Culturally and Linguistically Responsive Instruction (CLRI)
 - Cultural relevant materials

Elements of Effective Literacy Instruction in Dual Language Education (NCEL)

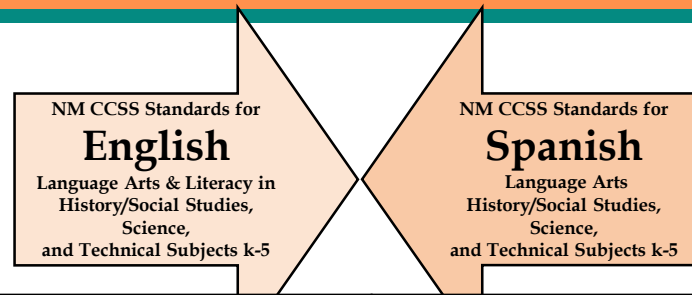
- Active engagement in language production in both languages
- Strategically coordinated, aligned literacy instruction in both languages (scope and sequence authentic to each language)
- Use of both languages for meaningful interaction and academic study
- Affirming climate for linguistic and cultural diversity
- Integration of language and culture
- Cross-language connections/
Metalinguistic awareness
- High quality, equitable, instructional materials in both languages
- Exposure to high level, expressive and authentic language models
- Valid and appropriate dual language literacy assessment
- Integration of content with language and literacy development, using content as a bridge across languages

(Escamilla, Olsen, & Slavick, 2022)

CLRI Facilitated Through Holistic Standards Based Instruction

Contextual Application for Culturally and Linguistically Relevant Instruction

- In totality, the NM English Language Arts and Spanish Language Arts Standards are utilized to support students holistically in their college and career readiness.
 - Focus on Literacy in History/Social Studies, Science and Technical Subjects
- The NM Standards (CCSS) allow for an array of pedagogical approaches in the teaching of all the Language Arts Standards.
- Structured Literacy is the research-based approach used to teach **reading** explicitly and systematically in NM.



College and Career Readiness Anchor Standards for Reading	Standards Estándares para la Preparación Universitaria y Profesional
Reading Standards for Literature	Estándares de Lectura para la Literatura
Reading Standards for Informational Text	Estándares de Lectura para Texto Informativo
Reading Standards for Foundational Skills	Estándares de Lectura: Destrezas Fundamentales
Writing Standards	Estándares de Escritura y Redacción
College and Career Readiness Anchor Standards for Speaking and Listening	Estándares de Audición y Expresión Ora
Speaking and Listening Standards	
College and Career Readiness Anchor Standards for Language	Estándares de Lenguaje
Language Standards	
Language Progressive Skills, by grade	Progresión de destrezas de lenguaje por grado
Range, Quality, and Complexity of Student Reading	Nivel del lectura y de complejidad de texto

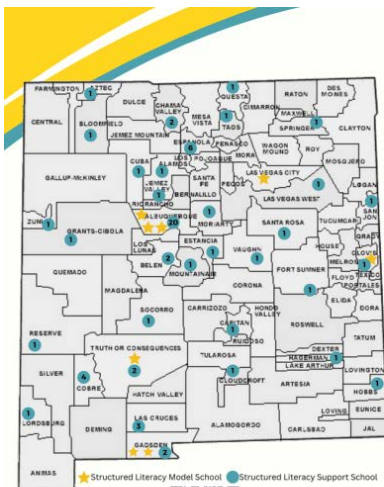
NM Professional Learning and Coaching Supports

STRUCTURED LITERACY MODEL SCHOOLS

Structured Literacy Model Schools serve as exemplars of literacy instruction based on a structured literacy approach. These schools have begun the journey of implementing structured literacy schoolwide. The staff have an understanding of the components of a structured literacy approach and are willing to make instructional changes as needed. These schools receive coaching support for all teachers and a \$50,000 grant to help implement evidence-based practices in classrooms.

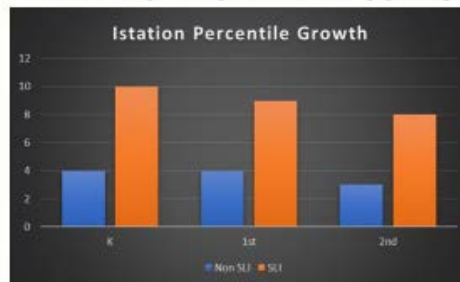
STRUCTURED LITERACY SUPPORT SCHOOLS

Structured Literacy Support Schools applied to be part of a network of schools focused on strong implementation of structured literacy. A literacy coach is assigned to the school and visits regularly to support educators and administrators in creating the systems to support the implementation of structured literacy practices. Literacy coaches also deliver professional learning to educators and administrators as needed or requested. These schools receive a grant ranging from \$25,000 to \$40,000, based on the number of teachers coached at each school site.



List of Model and Support Schools

1STATION PERCENTILE GROWTH OF STRUCTURED LITERACY MODEL AND SUPPORT SCHOOLS



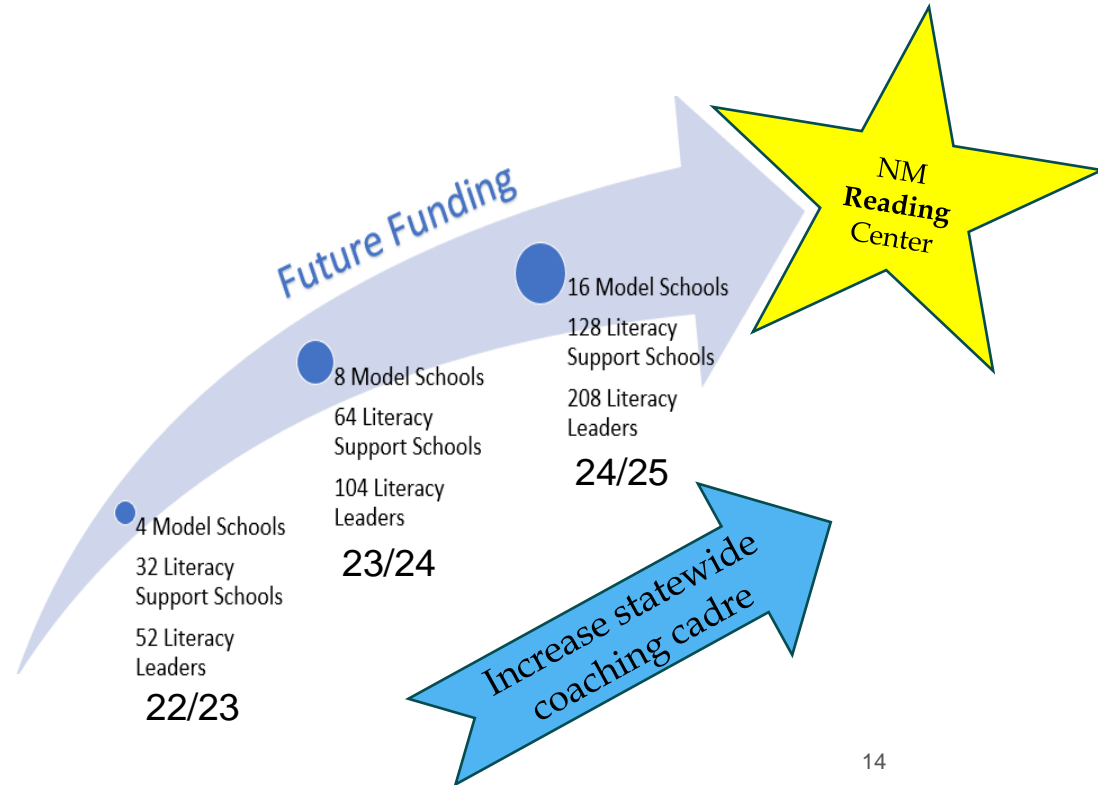
Predicted completion document of LETRS training for all K-5 teachers by 2026.

The percentile growth of Structured Literacy Model and Support Schools in SY2022-23 demonstrates significantly higher performance in grades K-2. This is encouraging and validates the research that providing coaching support and professional learning does, in fact, lead to a change in classroom instructional practices. Based on this evidence and other indicators of success, the NMPED Literacy and Humanities Bureau plans to continue this work and to expand the structured literacy initiative.

Considerations for Next Steps

Continued recurring funding in the following areas:

- Ongoing phase in of educators, administrators, and facilitators in LETRS training (5th grade teachers start 2024/25)
 - SEG for subs and stipends
 - Below the line for PD and coaching
- Increase the number of Model/Literacy Support Schools
- Increase the number of literacy leaders
- Increase the number of regional literacy coaches
- Supports for secondary literacy
 - Add system-wide cohorts
- Building a reading center to support all students and educators



Vision for the NM Reading Center



- Governor's Literacy Summit
- Collaboration between NMPED and NMHED to include structured literacy in educational preparation programs
- Support for educators and students
- Summer Literacy Program
- Leading the country in positive supports incorporating language and culture
- NM Reading Center
 - Lab classrooms, interventions for students, professional development and coaching for teachers and leaders, secondary supports

Questions

