Leveraging the Science of Reading to Support ELs/EBs
The Reading League
Summit 2023
Summit Synthesis



Introduction

Literacy is life! When a person knows how to read, they have agency to exercise power over their lives. Teaching students to read has also become a national crisis as thousands of students across the nation have been found to be performing below standard on our nation's report card, National Assessment of Education Progress (NAEP). Unfortunately, how best to teach students how to read and what body knowledge should govern the practices educators should use remains a contentious debate. This debate is especially poignant regarding students who are learning how to read in a new language as they are learning to speak that language. Addressing the English reading needs of students who do not speak the language as their home or heritage language was the focus of The Reading League's first ever Summit. The goal was to address critical issues in teaching reading to English Learners (ELs), Emerging Bilinguals (EBs) and Multilingual learners (MLLs). Given the current landscape about the teaching of reading writ large, any discussion about teaching reading to a community of learners who are acquiring reading at the same time they are learning a new language requires special attention. The terms for ELs, EBs, and MLLs are often interchangeable and will be referred to as ELs/EBs throughout this paper.

Questions about the science of reading, the neuroscience of language and reading, policy, and instructional practice were all on the table. The group came together to determine how best to shed light on the very real need to build knowledge, dispel myths, challenge assumptions, build some consensus, seek common ground, and lead with possibilities by hearing from leading voices around the science of reading, education for ELs/EBs. What follows is a synthesis of the Summit and possibilities for how to move the conversation, the understanding, the practices, and the policymaking forward.

Throughout this report, you will have the opportunity to tap into each panel, see the words of attendees, and see a visual representation of each panel. When you get to the prezi icon you will be directed to targeted slides within the prezi. Click the link directing you to the prezi and go to the directed page to access details from the panel.



The Summit was the culmination of a desire to build a national coalition to address the language and literacy needs of a group of students most often referred to through acronyms such as ELs/EBs. You might even have seen, heard, or used different acronyms to describe the population of young people who enter or attend public school speaking a home language that is different from English. With the increasing diversification of the US population, attending to the academic needs of this group is crucial. According to the National Center for Education Statistics (NCES), public school students who are classified as English learners increased to just over 10% in 2019 up from just over 9% in 2010. This translates into an increase of nearly 600,000 students, ranging from under 1% in West Virginia to nearly 20% in Texas, (NCES, 2022).

Setting the Stage



To anchor the message that we all have more in common than what divides us, Dr. Tracy Weeden led everyone through an exercise in finding similarity among differences. Attendees were asked to consider their intersectional identities and asked to share them with others. What we all found exemplified the reality that despite having different experiences, differences of opinions and varying perspectives, there really is more that joins us than that which divides us. As attendees shared their "I am," lists, they learned how many qualities they shared with their colleagues. Starting from the point of commonality with a shared goal of elevating how to ensure intentional equitable focus on developing the reading skills of ELs/EBs created a space for attendees to approach the day's conversations primed to seek similarity while they appreciated difference.

The Reading League, with the mission to advance the awareness, understanding, and use of scientificaligned reading instruction, teamed up with members of the National Committee for Effective Literacy (NCEL) in a spirit of humility to seek common ground around the teaching of reading to students who are expanding their literacy repertoire by adding English, even if they are not fully literate in a home language or may be learning to read in their home language while they are learning to read in English. These two groups decided it was time to break some eggshells, that is, they decided it was time to work together to shed light on the complexity of teaching reading to ELs/EBs, and to find ways to address the even more complex teaching of reading to ELs/EBs. Their willingness to sit across the table, listen, and seek understanding can serve as a model for how other groups that way possess different ideologies about how best to teach reading can do the same with the ultimate goal of serving all students, but especially those who continue to experience school on the margins.

As shared by Kari Kurto, TRL's National Science of Reading Project Director and Martha Hernandez, Californians Together's Executive Director they came together beginning in April 2022, because they saw that far too many children were being left behind due to on-going adult disputes about what the science

says is the most effective route for literacy development and instruction for ELs/EBs. Through a series of meetings, they sought to answer the following critical questions:

- ➤ What are the essential elements of instruction for students to become proficient readers and writers?
- ➤ What recommendations can be made for frequency, dosage, and methods for foundational skill instruction?
- ➤ What is the disconnect between the research, policy, and implementation? In other words, what is actually happening in classrooms vs. what the research suggests should be happening?

From their meetings, the coalition built consensus and found alignment across many areas including the following:

- MLLs must be front and center when discussing our students' literacy needs, not an afterthought;
- Foundational skill instruction is essential, but not sufficient for ELs, and EBLs;
- > There are instructional practices under the umbrella of the science of reading that are not actually aligned with the research meaning what some educators are saying is "the science of reading," is simply the use of long-held practices that are more commonly held beliefs rather than based on science;
- ➤ It is essential to see home language as an asset and move toward biliteracy, building vocabulary and background knowledge in the students' home language
- > It's an equity issue to assess ELs and EBLs in their home language whenever possible;
- Oral language development is essential and must be included in EL/EB instruction and intervention;
- ➤ There are deep connections between language and literacy development and content knowledge there is talk about background knowledge all the time and it's especially essential here;
- Language develops as a vehicle for learning and making meaning of the world;
- > Literacy serves as a mechanism to learn and express knowledge of thought;
- ➤ Language development and literacy development are inextricably linked.
- ➤ Did we not also have an agreement that English Language Development needed to be a key component of any literacy program for English learners as differentiated from language development that is needed for all students.

The Summit contained four panels:

- > The Neuroscience of Language and Literacy
- > Foundational Skills within a Comprehensive Literacy Program
- > Developing Oral Language, Vocabulary, and Background Knowledge
- Policy to Support All Learners

Each panel addressed a critical area in the science of reading domain and was moderated by an expert in that domain. Panelists were asked to respond to a set of questions designed to shed light on, build knowledge around, and challenge myths and assumptions related to the connection between what the science of reading is all about and how it relates to the development of ELs/EBs. Question and answer periods were offered for each panel and special attention was given to finding alignment between and

among ideas shared. The goal was advancing the literacy development of a population of students who often find themselves, through no fault of their own, in the middle of adults trying to make sense of the complexities of reading.

What is most important to recognize is that despite ideological and implementation differences, they discovered there is more commonality than division. They also agreed that the commonalities must drive the conversations, policies, and most importantly, the practices if ELs/EBs are to receive an equitable excellent education.

What follows is a synthesis of the day's discussion. This document is structured to provide the titles of each panel along with the names and a brief description of the moderator and panelist. The panel discussion questions are also provided along with a synopsis of responses and key takeaways from each panel. This is an interactive document where you have opportunities to delve deeper into the panelists' responses, hear their actual words, and view a customized illustration of the key points of each panel. When you come across the, "click here," this is your chance to experience live elements of the Summit.

The Neuroscience of Language and Learning

The objective of this panel was to engage cognitive and neuroscientists in a discussion of the current research on multilingualism and literacy development. This panel was moderated by Dr. Kenneth Pugh, President and Director of Research at Haskins Laboratories, a Yale University and University of Connecticut affiliated inter-disciplinary institute, dedicated to the investigation of the biological bases of language.

Dr. Pugh was joined by:

- > Dr. Ioulia Kovelman, a professor of psychology at the University of Michigan and a Director of the Language and Literacy Laboratory. Dr. Kovelman studies the influences of bilingualism on children's emerging neural architecture for language and literacy skills.
- ▶ Dr. Marilu Gorno-Tempini, a behavioral neurologist and the Charles Schwab Distinguished Professor in Dyslexia and Neurodevelopment. Dr. Gorno Tempini directs the Language and Neurobiology Laboratory of the UCSF Memory and Aging Center and serves as co-director of the UCSF Dyslexia Center and the UCSF/UC Berkeley Schwab Center for Dyslexia and Cognitive Diversity.
- Dr. Maryanne Wolf, an advocate for children and literacy around the world. She directs UCLA's Center for Dyslexia, Diverse Learners, and Social Justice in the School of Education and Information Studies. Dr. Wolf has authored more than 160 publications and has numerous awards for her work on dyslexia and reading.
- ➤ Dr. Brianna Yamasaki, an Assistant Professor in the Department of Psychology at Emory University. Her research interests lie at the crossroads of cognitive and developmental psychology. Dr. Yamasaki's program of research leverages cognitive neuroscience, behavioral co-variance, longitudinal designs, and training studies to explore individual differences in language and literacy development.

Panelists were asked to shed light on 5 major questions associated with the neuroscience of language and literacy. What follows is a synthesis of the panelists' responses. As you read each response, be sure to click on the links provided to delve more deeply into the panelists' ideas.

Getting to the Brain of the Science of Reading



The science of reading is often communicated as though there is a singular science when in fact, there are decades of reading research making up what is now called the science of reading. What often gets left out is the research on literacy for ELs/EBs and critical information about the brain and specifically about whether there are specific differences between bilingual and monolingual brains.

Discussion Question:

There has been a lot of discussion about whether or not there is such a thing as a "bilingual brain," and if so, what are the implications for teaching reading to students we alternately refer to as English Learners, Emergent Bilinguals, or Multilingual Learners. Is this true? If so, do we need to use separate approaches to teach reading for EL/EB students? Where is the future research needed?

This question continues to create angst across the country, and it was no different at the Summit. Any understanding about the science of reading must begin with an understanding of the neuroscience, or that study of the nervous system that emphasizing understanding how the brain functions, of language and literacy. The neuroscience, while not as discussed, has contributed greatly to the overall understanding of how the brain learns to read. Since literacy development hinges on a person's ability to make sense of language, developing an understanding of how the neuroscience of language and literacy works is essential. Knowledge of the neuroscience of language and literacy will dispel the myths and challenge the assumptions and harmful practices and policies many students face as they are becoming literate in English at the same time they are learning to speak English. This is not to say that the neuroscience will eradicate the myths and poor practices; however, this knowledge should force those in the profession to make use of the information to challenge widely held beliefs and practices that continue to yield outcomes that harm children.

The question about whether there is such a thing as a "bilingual brain" is nuanced. First and foremost, **every** brain of every person from every corner of the world is different because every person is different. No two people are alike; therefore, the uniqueness of every person must be embraced and fostered while at the same time, it is important to understand there are things universally true about

developing a reading circuit.. This is especially true for children and has far reaching implications for teaching and learning and is critical to understanding the nuances of the answer to this question.

So...what's the answer?

The big answer is NO, there isn't and YES, there is such a thing as a "bilingual brain."

Let's consider why there *isn't* necessarily a "bilingual brain." The basic reason why there is no such thing as a bilingual brain is because all brains are structurally and physiologically the same. That is, for the most part, all brains are made of the same materials and are structured, from a volume perspective – put together – the same way. So, while there may be physical rare exceptions, most brains are physically the same. Hence, the "no" there isn't such a thing as a "bilingual brain." Consider it this way, if you simply look at the physical make up of brains from different people from different walks of life, from just their physical appearance, they would all look the same. One would not be able to tell anything unique about any of the brains by simply looking at it from the outside.

Now comes the "yes," part of the answer.

Considering the previous statement, determining whether there were any differences in the brains from the various walks of life, would require looking *inside* the brain to gain deep knowledge about what each of those brains were "doing." It is looking inside the brain that highlights the differences between and among any two brains. What this means is that how brains function – do what they do – creates differences between any two brains. Remember, no two children are alike; thus, no two brains are alike. The difference between the brains of any two children is in the function of the brain, not in how it is structured from a physical perspective. Function here means what the brain is doing; this is what creates the differences. In this regard, the answer is "yes," there is such a thing as a bilingual brain.

How any one brain differs functionally from another is based on many factors. As Dr. Yamasaki explained, there is a "bilingual brain" because those who are bilingual interact with the world in a different way. Therefore, their brains are doing "different" work. The languages a child may speak interact with, layer on, and scaffold onto each other; thereby changing how the brain functions in ways that differ from a monolingual brain. This accounts for what can be understood to be the "bilingual brain." To take this a step further, the brain has a wiring system, called circuits. Information moves across the brain via these circuits. Consider the circuits like maps moving information across the brain, helping the individual make sense of their world. In this case, the language circuits are helping the child make meaning between their two languages. This mapping for students who speak more than one language or are ELs/EBs is different from those who only speak one language. This is a simplified description of what it means to have a "bilingual brain." The brain of the bilingual or multilingual speaker or reader functions in a linguistically different way from a monolingual speaker because the bilingual brain may perform language tasks differently.

Brain-based Differences and Reading Development

Recognizing the nuances of there being or not being a "bilingual brain" matter because of the instructional implications. It matters also because the science here dispels many myths and challenges belief systems about the brain that should influence instruction in such a way as to improve ELs/EBs'

access to high-quality instruction. The second question for this panel opened the door for deeper understanding of how brain-based differences impact learning to read.

Since the brains of ELs/EBs function differently, and because languages are different, it stands to reason

Discussion Question:

Are there brain-based differences between learning to read in a first language and second language, and are there instructional implications? What implications does this have on language and literacy development? Instruction? Assessment?

that there are going to be brain-based differences in learning to read between two or more languages. From Dr. Gorno Tempini, we learned that there is a continuum of differences between learning to read in a first language (L1) and second language (L2.) In a study shared by Dr. Tempini, participants learned there are many factors that account for these brain-based reading differences. Dr. Tempini explained that late bilinguals showed more activation in a particular region of the brain than those who were early bilinguals. Additionally, language type affected what region of the brain got activated when learning to read in an L2. According to the research shared (Liu & Cao; Brain & Lang, 2016), when the L1 and L2 were similar, the L1 served as a mapping agent for the L2 skill development <cli>click here for prezi slides 91-98 >.

Language type and age of L2 learning are big factors in how easily a child learning a new language learns to read in that language. Late bilinguals tend to be between 7 and 8 years. For this group, we learned they have more executive regions of their brain upon which to linguistically code switch. While this code-switching is useful, it does create more stress on the brain to move between the circuits. Code-switching here refers to the linguistic coding as the brain moves between the L1 and L2. While it may involve cultural cueing systems, it is more related to the function of the circuitry rather than the cultural dynamics of switching between language uses for audience-specific purposes.

Early bilinguals tend to use a single part or region of the brain more than their late bilingual counterparts. These differences anchor the notion of the bilingual brain existing on a continuum rather than there being a single bilingual brain. From a reading development perspective, the research, as Dr. Tempini pointed out, suggests, and predicts that when there are large overlaps between the L1 and L2, measures and instructional practices that are predictive in English reading outcomes in monolinguals should be effective with bilinguals. This is largely because the brain can use the L1 as a map to the L2. The research on measurement also makes it clear that assessing students in their home language is ideal with norming measures applied.

The instructional implications must consider that educators do not have access to brain imaging tools that will provide insight into what students know and are able to do with language or where they may be experiencing challenges in learning to read in English. Educators also are not privy to large bodies of research that would inform their instructional decision making. The research does provide instructional insight and guidance for classroom level educators. Most important for educators to understand is that allowing students to use their home language is beneficial to dexterity and moving toward proficiency in

their second language. Home language use has been disparaged for many students, robbing them of the ability to make critical connections across languages. There is also the need to address educator bias and parental misconceptions about the use of home language as a tool for developing in the second language.

Instructionally, educators must build their understanding of how various aspects of different languages interact with English. While there is a basic understanding of the relationship between English and Spanish due to morphology and phonology, other languages such as Mandarin Chinese or Japanese do not transfer as "readily." The structural differences between non-orthographic languages and English require a higher level of knowledge for teachers supporting students in their English language development. It is also important for teachers to build oral language development skills in bilingual learners of English. This additional level of learner means educators need more support at the pre- and in-service level. They need more explicit and ongoing professional learning to support the implementation of practices that support ELs/EBs language development. In addition to ironing out the science of reading that is the body of knowledge grounded in decades of research, about what it means to teach reading, attention must be given to the science of teaching English to learners who are adding to their language repertoire <click here to view the prezi slides 79-132>. Although it is widely believed and touted as such, the idea that ELs/EBs were excluded from the reading research must be dispelled. It must also be made clear that research on ELs/EBs was part of the body of knowledge on teaching reading, with more research underway and much needed to shed light on the various aspects of how different languages and the factors that impact English language acquisition interact to influence a child's English literacy development.

Relationship Between a Heritage and New Language

To understand the relationship more deeply between heritage or home language and reading development, panelists were asked to discuss the instructional implications of incorporating home language and teaching reading in English.

Discussion Question:

How does your heritage language, as a spoken language, contribute to your children's neural architecture for reading? What are the instructional implications?

Students who are expanding their language repertoire by adding English often find their heritage or home languages devalued. They also face educators who lack knowledge and harbor biases about whether heritage languages should be "allowed" in classrooms. Additionally, families of students learning English lack deep knowledge and understanding about the benefits of using heritage languages as a bridge to acquiring English reading skills.

Dr. Kovelman shed light on the benefits of making space for heritage language in students learning to read in a second language. The overall point made here is that language is critical. Children bring strengths from their heritage languages to learning how to read in a new language. Home language is extremely important because it is a bridge to the new language. Additionally, similarities between the phonemes, orthography and phonological structures of the home and new language allow the brain to make morphological connections, thereby adding reading development in the new language. cclick here for prezi slides 103-108.

Overall, Dr. Kovelman made it clear that bilingual speakers of different home language or heritage languages may learn to read in English differently from each other. The differences are based on many factors related to the impact of shared direct and indirect cross-linguistic influences such as phonology, morphology, orthography, and cultural factors. Cross-linguistic influences also influence how children process language features that are similar and different across their two languages. Similar features are reinforced, and different features may require additional attention and support or instruction. cclick here for prezi slides 103-108. The most important message from Dr. Kovelman was that there are many paths to successful reading for bilingual students, there are cultural, language and literacy benefits of bilingualism for all learners, and home languages must be understood as a bridge rather than a hindrance to ELs/EBs learning to read in a new language.

Considering Future Research Opportunities

While there has been considerable past research on reading and literacy development and new research is underway, panelists were asked to shed light on what they believe are some critical areas of research needed to continue building knowledge about how to teach students who are learning to read in English as they simultaneously learn to speak the language.

Discussion Question:

What questions are NOT addressed by current SoR research but are central when working with ELLs/EBs? Where do we need future research?

Dr. Yamasaki offered three areas to direct a way forward:

- Focus on heterogeneity. According to research, there is a bias toward narrowly classifying students as either English speaker or non-English speaker. There must be a willingness to explore more nuanced ways to "see" students beyond these categories. Dr. Yamasaki highlighted the disparities in ELs/EBs being over referred for special services due to a limited understanding of where students may be experiencing specific reading acquisition challenges. By focusing on heterogeneity, educators can better understand the nuanced ways in which students acquire reading skills and how best to address specific challenges students may be experiencing as they acquire new reading skills in a new language.
 - To expand on the importance of focusing on heterogeneity, Dr. Tempini offered a
 California example showing how to assess students early for possible reading difficulties.

She offered that that it is helpful for students to be assessed in their home language where possible to determine what kind of specific reading difficulties a student might be experiencing.

- Expand our models of reading. Because learning to read is complex in any language, and especially so when navigating a new language, there must be a willingness to examine and appreciate the many skills students use to learn language. Reading is taxing on the brain and students employ executive functions that allow them to move between their heritage/home and new languages. There needs to be research on how these various skills collaborate to support ELs/EBs in reading development. Dr. Yamasaki shared that there must be an examination of how specific linguistic and non-linguistic skills interact and support skills needed to develop a comprehensive understanding of the reading brain. Additionally, researchers must explore cultural factors that influence how ELs/EBs acquire speaking and reading skills in a new language. It is crucial to remember that all students bring assets to their learning environment; however, for ELs/EBs, this truth is often forgotten.
- ➤ Increase our ecological relevance. Much of research on understanding language and reading acquisition for ELs/EBs occurs in decontextualized laboratories that do not map authentically to the dynamics of a classroom. Dr. Yamasaki suggested that to better understand language and reading development in ELs/EBs, research has to move to the "ground level." That is, it must take place in classrooms to better understand the environmental learning factors such as teaching, peer relationships, and other factors that influence learning.

Panel Takeaways

The thick rich information from this panel offered many important takeaways.

Discussion Question:

What are the takeaways for our audience and how do we communicate these takeaways to various audiences?

As many educators in the profession continue to build knowledge about the specific intricacies of the body of knowledge deemed "the" science, there is still more to be discussed and learned. According to Dr. Wolf, future research is needed in the following areas: a focus on heterogeneity which would mean looking at experience diversity of learners more effectively to determine how such experiences impact oral language development and learning to read in English; expanding models of reading to look at different ways students incorporate forms of reading as a basis for building English language reading skills; and a need to increase ecological relevance, which refers to how research is conducted with students instead of on students as well as how to make the structures of research relevant to how students experience school. As shared, few if any schools have brain imaging machines that allow for indepth brain understanding. Unfortunately, such brain imaging research does not mimic authentic learning please click here for prezi slides 129-132>.

The science of reading is indeed complex because the brain is not wired for the skill. Additionally, the economics of teaching children to read has often drowned out the real implications of the need to put children first. Lastly, because many adults lack a depth of knowledge about the science, they enact and hold onto practices, such as adhering to specific time frames for teaching phonics, they believe are based in the science and become reluctant to move away from such practices. The body of knowledge should be the driving factor in how best to teach the skill of reading for all children, but especially for those who are expanding their repertoire of language by adding English.

Foundational Reading Skills Within a Comprehensive Literacy Program

The objective of this panel was to explore the components of a comprehensive literacy program as it relates to EL/EBs. This panel was moderated by Dr. Antonio Fierro, Chief Academic Advisor for Tools 4 Reading. Dr. Fierro helps lead the Mississippi Momentum Project, assisting university and college faculty throughout the state with implementing the science of reading in their college coursework.

Dr. Fierro was joined by:

- ➤ Dr. Claude Goldenberg, the Nomellini & Oliver Professor of English, emeritus, at Stanford University. Dr. Goldenberg's research has centered on promoting academic achievement among language minoritized students, particularly those from Spanish-speaking backgrounds. He also served on the National Research Council's Committee for the Prevention of Early Reading Difficulties in Young Children and on the National Reading Panel, which synthesized research on literacy development among language-minoritized children and youth.
- ➤ Dr. Martha I, Martinez, Senior Director of Research and Evaluation for Sobrato Early Academic Language (SEAL). Dr. Martinez oversees the organization's research agenda, including supporting and directing evaluations of SEAL's professional development in PK-6 grade school settings on teacher practice, student outcomes, and school systems.
- Dr. Sylvia Linan Thompson, associate professor at the University of Oregon in the Department of Special Education and Clinical Sciences and affiliated with the Center on Teaching and Learning.
 Dr. Linan Thompson's research and teaching focus on beginning literacy instruction specifically examining appropriate instructional an

The next topic for discussion focused on how foundational reading skills fit within a comprehensive literacy program. There were three focus questions designed to build knowledge around how foundational skills support a comprehensive reading program. The role of foundational literacy skills has become a cornerstone of discussion in how educators are meant to implement the extensive science of reading to build literacy for all students and especially ELs/EBs.

Discussion Question:

Should foundational skills be taught directly? If so, how should this occur?

The unequivocal response to this question was YES. Foundational skills should be taught explicitly and systematically as part of a comprehensive literacy program. Using a traditional dictionary definition, Dr. Claude Goldenberg defined explicit as being expressed without vagueness, implication, or ambiguity. Using the dictionary definition again, he shared that systematically means teaching new concepts in relation to other elements in a coherent system generally presented from simple to increasingly complex. Goldenberg's statement matters because the brain must have direct opportunities for learning how to make connections between spoken words and written words. Since the brain is not wired for reading, explicit and systematic instruction provides the most direct and best assurance that students will learn how to read. Additionally, foundational skills are a complex mix of the "Fab 5" (phonemic awareness, phonics, fluency, vocabulary), and comprehension with instructional decisions to be given to existing background knowledge, age of acquisition of a new language, reading proficiency in the home language, learning context, and many other factors that influence learning. Panelists made it clear that any discussion about the foundational skills only being about phonics instruction is a misunderstanding of what the extensive researched body of knowledge indicates. Furthermore, it must be fully understood that proficiency with learning the English foundational reading skills is essential in developing advanced levels of English reading skills. Naming the foundational literacy skills as English foundational skills is important because students learning English have heritage language. This explicit naming of English was necessary to dispel the myth and challenge underlying beliefs that students who are learning English automatically lack language skills.

The critical question becomes, what does it mean to support students who are expanding their language repertoire by adding school-based English literacy skills? Primarily, there simply must be an end to the either-or current debate about whether or not bi- and multilingual learners need to learn the foundations of English reading. On this issue, there should be no equivocation click here for prezi slides 139—

140>. As shared by the neuroscientists, the brain is wired with the foundations for speech, not for printed language. This is where the need for building English reading foundational knowledge arises. Building foundational English reading knowledge and skill does not diminish or detract from a student's ability to engage in more complex literacy expression. As students who are learning to speak a new language as they learn to read that new language, in this case English, their oral language development becomes critical. It also becomes critical for foundational literacy skills to be explicitly taught so students can make connections between the spoken and written language.

The on-going discussions about foundational literacy skill development have tended towards a narrow understanding of the relationship between the foundations of reading in English and oral language development. Since the brain is wired for speech, building foundational oral English language skills is essential to building concomitant foundational English reading skills. Foundational oral language skills include at least five of the following components: phonological skills, syntax, morphological skills, pragmatics, and vocabulary also known as semantics. As Dr. Goldenberg shared, moving from speech to print requires a heightened level of letter sound discrimination. This is where reliance on students' home language becomes a source for support. The goal is to capitalize across linguistic connections so that students benefit from the brain development that occurs when they are using various parts of their brain to attach aspects of the L2 (English) to aspects of their L1 (home language). By allowing the use of

the home language as a tool for developing oral English skills, students have access to an asset, which can be leveraged as a source of strength in learning school-based English.

It is critical to understand that building English reading foundational skills begins before the actual reading phase. As Dr. Goldenberg shared, the goal of developing English reading foundational skills is automaticity at every level. Students must become fluent with all components of learning how to read in English. There must be automatic letter recognition; knowledge of letter sounds as separate from letter sound association; automatic decoding; it's gotta be automatic and fluent from the git go – you can't wait until they start reading texts to work on fluency. This is where the misconception about the role of reading foundations comes in. If educators hold fast to the belief that foundational English reading skills are only for the reading process, they will miss opportunities to support students in building and developing the skills necessary BEFORE they begin their English reading journey.

Students need every opportunity to develop their English reading skills in much the same way as they naturally build hearing skills. Once again, because the brain is wired for hearing, we hear and process information as it comes into it; however, such is not the case with reading. It requires systematic, direct instruction to help students translate the automaticity they have with hearing and discriminating between sounds to develop the same automaticity with the print. As Dr. Goldenberg explained, we hear things and process them as they come in; but until you can read in the same way you process things as they come in, which requires language at the speed of sight, you will not be a proficient reader. The lack of English language skill development will result in a bottle neck of sense making.

Discussion Question:

What are some primary considerations for teaching foundational skills to ELs/EBs?

While much of the discussion about ELs/EBs developing foundational literacy skills, too little attention actually focuses on teaching. A critical element in ensuring ELs/EBs become literate is the classroom context, and the interaction between teachers and students. Teachers are responsible for supporting ELs/EBs in developing their English language skills. Teachers need to support ELs/EBs in explicit English language development, which includes providing multiple opportunities for oral language practice, to foster the bridge between home languages and sense making in English both in speech and print. As Dr. Martha Martinez pointed out, the science of reading tends to get conflated with the simple view of reading. While the simple view of reading illuminates the reading skills needed to become a proficient reader, this model does not take the classroom, teacher, and students into account. We need other models of reading that integrate the full body of the science of reading, along with the science of learning and development, and the bilingual brain. sclick here to view prezi slides 147-1572. For instance, when educators use a phonics-only approach saying it is the science of reading, when the science clearly states otherwise, they are relying on a misinterpretation of the science. A primary consideration of teaching foundational skills to ELs/EBs must be given to an accurate understanding and implementation of the overall science.

To make English literacy instruction more effective, educators need to take a wider view of their practices. According to Duke and Cartwright (2021), the Active View of Reading offers a more comprehensive way of getting students to English reading. The model suggests educators consider the reader because reading encompasses more than students calling words off pages. Although the Active View of Reading is very new and more research is needed to test its validity, it does offer a wider understanding of many factors that impact reading development. Raising Dr. Yamasaki points about heterogeneity, it is important to consider the influence of factors such as culture, environmental influences at the school level, and the assets students bring to their learning that impact language acquisition and literacy learning.

Consideration must also be given to self-regulation processes related to motivation and engagement, the role of the "Fab 5" English reading foundational skills, bridging concepts of print, and actual language comprehension. These elements taken together lead to deeper reading. This approach to English reading development incorporates foundational literacy components and makes room for a deeper understanding of the role of the reader in the process and what the reader brings to the "reading English table," click here to view prezi slides 155-158. Once again, there is no either-or. The Active View of Reading requires educators to have a deeper set of skills to foster comprehensive English literacy and language development. Realizing that bi- and multilingual learners' brains function differently than monolingual brains means a willingness to recognize the role of context. For ELs/EBs, their cultural linguistic contexts are always present as they build their English literacy skills. This is another reason why home language is an important source for bridging between languages and must be part of a comprehensive English literacy development program.

The body of knowledge for teaching ELs/EBs is clear; there is no either-or when it comes to teaching foundational English reading skills. However, the foundations must be coupled with additional supports that incorporate home language as a lever to acquiring English and becoming literate and must be an active part of students learning English. There must be explicit English language instruction and development along with building students' academic English language that comes from building content (disciplinary) knowledge. Finally, there must be explicit instruction about how languages work giving attention to irregularities within and across language.

English language proficiency equaling intellectual capacity. Assumptions about intellect drive instruction because students are assessed in English and the data only reveal what students can do in English. It does not reveal the full literacy capacity of a student. Data should be administered from an asset perspective seeking to learn what students can do in their home/heritage language as well as what they can do in English. Assessing students in a single language offers an incomplete story, which is often biased against students relegating them to remedial classes when such an intervention may not be what the student needs. A report by AimsWeb assessed K-3rd grade students at the beginning of the year. When the 3rd graders were assessed in Spanish, 21% of those assessed needed Tier 2 interventions. From that same group, 69% needed Tier 2 intervention when they were assessed in English <cli>click here to view the prezi slide 155>. Such disparities offer additional questions about what it means to need interventions and demonstrate the importance of assessing in the home language whenever possible.

Discussion Question:

How can data help us understand the foundational skills students do or do not know? What research is necessary to make sure we have the right data to make informed decisions?

Data should always point to expanding instruction instead of leading to reductive support structures that relegate students to minimalist learning opportunities. The challenge here is integration and teacher practice. Educators have a lot on their plate and often their instruction and professional development are offered in silos. Such siloed instruction entrenches the idea that supporting ELs/EBs is an afterthought when it should be at forefront. Educators need a range of skills to support ELs/EBs in acquiring English literacy skills. While much of the discussion about teachers' skill development centered on technical skills related to research understanding and implementation. The starting point of enhanced skills needs to center educator beliefs as these are undergirding factors that influence educator instructional decision making. The degree to which educators hold on the deficit beliefs and/or continue to use instructional practices not grounded in the actual body of knowledge is the degree to which ELs/EBs will continue to be taught the same as native speakers of English without any differentiation for their first and second language and literacy development. . This could lead to inaccurately implementing the full range of the science of reading, over-identifying ELs/EBs for special services, neglecting to fully incorporate home languages as a bridge to deepening oral language development, and barriers to gaining knowledge about how to incorporate the assets students bring to their learning.

Developing Oral Language, Vocabulary, and Background Knowledge

As many educators say, "theory is fine, but what does it mean for me?" The question about implementation and the theories shared in previous panels can be evidenced in classrooms and was addressed in the panel addressing oral language, vocabulary development and the role of background knowledge in supporting ELs/EBs in their English language and reading development.

This panel was moderated by Dr. Magaly Lavadenz, who is the Leavey Presidential Chair in Ethics and Moral Leadership and founding Executive Director of the Center for Equity for English Learners in the School of Education at Loyola Marymount University. Her research addresses the intersections and impact of policies and practices for culturally and linguistically diverse students.

Dr. Lavadenz was joined by:

- > Dr. Mitchell Brookins, senior director with Leading Educators. Dr. Brookins is a former teacher building leader, and district-level leader. Under his instructional leadership as a school administrator, his school realized a 19-point growth in overall school performance, which moved his school from a "D" to a "C" in one school year.
- ➤ Dr. Amy Elleman, a former teacher and administrator who served students with learning and behavioral difficulties. Her research focuses on the examination of factors central to reading comprehension and includes investigating individual differences in vocabulary acquisition for students with learning difficulties, conducting a meta-analysis of comprehension studies

- conducted over the last century, and examining the impact of knowledge and inference instruction for students with reading comprehension difficulties.
- ➤ Patricia Pate, is a program manager for Sobrato Early Academic Language (SEAL) specializing in curriculum design that supports the needs of dual language learners and English learners. Ms. Pate has more than two decades of education experience and has worked with hundreds of educators providing training in research-based and dual language pedagogy and partners with districts to build internal coaching capacity.

The practical aspects of this panel offered attendees a window into how to evidence the research in ways that produce positive outcomes for ELs/EBs. Dr. Lavadenz reiterated the point that ELs/EBs have intersectional identities and bring assets to their learning that must be actively sought out and made part of their learning. These assets must be acknowledged and used as a bridge for building reading and writing skills. There must also be a willingness to ask critical questions about teacher preparation and leader development to ensure educators are implementing the science of reading accurately.

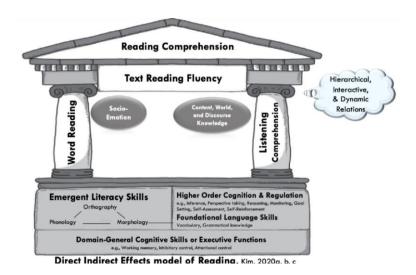
Dr. Lavadenz raised a critical point about the need to know students. She shared the concept of, "conosimiento," which is related to having a deep understanding of who "we" are. Taking the time to know students, their assets, and realizing they have intersectional identities is essential to ensuring students remain at the center of literacy building process. The discussion questions on this panel evidenced and expanded on Dr. Lavadenz's points.

Discussion Question:

There are many misconceptions that the science of reading has a focus on word recognition and even more narrowly, just phonics. What do we know from the research about the critical role of building oral language, vocabulary, and background knowledge in reading comprehension?

The most important misconception that MUST be addressed, according to Dr. Elleman as well as others throughout the Summit, is that the science of reading is NOT a phonics only body of work. Additionally, Dr. Elleman offered that the science of reading continues to expand and exemplified this point through an explanation of the Simple View of Reading which was widely accepted based on research from Gough and Tunmer (1986). This view suggested that reading comprehension was simply the interaction between word recognition and language comprehension. While this view had its place in the body of research, Dr. Elleman offered a wider perspective.

By sharing the Indirect/Direct Effects Model of Reading, attendees were able to see the layers that impact reading development. This model takes into account word recognition, language comprehension as well as other factors related to the student's emergent literacy skills, their foundational language skills, and many other factors. The image below shows the full scope of the model.



While the research on this model is recent (2020), it extends the body of knowledge and incorporates a wider view on what reading comprehension. It demonstrates that reading comprehension is far more complex than what is often communicated. This complexity matters for all students and especially for ELs/EBs who too often are viewed through narrow lenses.

The big takeaways on the relationship between language, vocabulary, and background knowledge are:

- > Academic vocabulary and comprehension develop concurrently
- > Growth in academic language and comprehension takes place at a similar rate for learners
- ➤ Language interventions to support ELs/EBs must involve multiple components to be effective
- ➤ Language instruction must incorporate more than vocabulary to impact comprehension

While many educators and families attempt to relegate a student's home language, research has demonstrated the importance of students being able to use their home as tools for language and reading and writing development in a new language.

Discussion Question:

What are the benefits of building oral language, vocabulary, and background knowledge in a students' home language?

As shared throughout the Summit, reading is a complex endeavor. It encompasses a multitude of skills and requires learners to build a web of circuits that begin with hearing their home language and making

critical connections to a new language, in this case English. NCEL posed that a comprehensive literacy program for English development in ELs/EBs includes foci on the following components:

- ➤ Precursor skills and conditions for early learners ages 3-5 years old in both home language and English that would focus on foundational literacy skills.
- ➤ Literacy instruction for kindergarten and above would involve both foundational skills and literacy components (i.e. Oral Language Development (OLD), meaning making, cross language connections and metalinguistic development)
- Essential Context Components with focus on integrated content knowledge; differentiated instructional practices, safe environments with strong relationships, relevant curricular materials
- > Dual Language/Biliteracy Learning to build biliteracy, which uses literacy for and in academic study in at least two languages. Biliteracy means there is strategic and aligned literacy instruction across multiple languages along with assessments in multiple languages.

Dual literacy development requires explicit structures that support students and leaders in the use of multiple languages as a source for learning and assessment <cli>click here to view the prezi slides 193-208>. And while dual literacy development benefits students, this panel also made it clear that multilingualism should also be considered as part of developing a comprehensive literacy program. Many ELs/EBs speak more than two languages as they work to acquire English as part of an already advanced linguistic system. By having a multilingual perspective, educators can go beyond seeing students through a binary lens and build knowledge around how the brain makes connections between many languages. Along with the benefits of dual literacy development, multilingualism offers the following benefits:

- Cognitive greater control of executive functioning of the brain, stronger working memories and attention spans, higher multitasking abilities, increased intellectual flexibility
- ➤ Educational strong academic outcomes, higher metalinguistic abilities, and abstract thinking skills, more likely to attend college
- > Economic greater job opportunities and earning potential
- Social cultural understanding of other world cultures, increased empathy development, strong sense of identity and connection to family and culture

These benefits were highlighted throughout the Summit; however, special attention was given to them during this session to expand the conversation to include the fact that ELs/EBs may be adding English language skills to more than one existing language system.

The final element of this panel offered attendees express information on the practical ways leaders can ensure success with their ELs/EBs.

Discussion Question:

How do instructional leaders ensure all necessary components of language instruction, background knowledge, foundational skills, and writing are taught in a way that will support overall literacy development?

While much of the discussion about English learning success centers on teachers, building-level success with ELs/EBs hinges on effective building leadership. As a former building leader, Dr. Mitchell Brookins shared that the building leader's mindset sets the stage for success because they set the conditions for learning. He also shared that leaders must have a clearly defined comprehensive plan that centers data as a vehicle for understanding, progress monitoring, and communication. Educators need leaders able to support their instructional development so the classroom level instructional practices are grounded in the actual science as opposed to what is currently taking place in many schools. As Dr. Brookins stated, if educators are implementing ineffective instructional practices masquerading as the science of reading, the question as to why must be levied at the instructional leader.

Instructional leaders must have an accurate understanding of the science to ensure their teachers are equipped to deliver scientifically-based instruction. They must be able to communicate data with teachers, students, and families; and they must be willing to include students in the process of planning. Dr. Brookins shared that he involved his teachers and students in data sharing and planning, which led to his school moving from a "D" designation to a "C" in a single year. He focused on what it would take for his ELs/EBs to exit their programs ready to be successful in the "regular" classroom. This, he said, was the key to moving forward and achieving more educational equity for this student population.

Policy to Support All Learners

Policy, particularly at the federal level, sets the conditions for what students should receive on many educational fronts. Policy makers at all levels must ensure as many stakeholders as possible are involved in the process. While there is a lot of concern across the nation about third grade reading, with 29 states having policies relating to implementing the science of reading, insufficient attention has been given to how best to support English reading development for ELs/EBs. This panel shed light on the degree to which policies have included research-based guidelines for ELs/EBs, students with dialectical variations and other language differences.

This panel was moderated by Becky Sullivan, director of K-12 English Language Arts at the Sacramento County Office of Education and project lead for the Expert Lead in Literacy Grant. Ms. Sullivan's work supports California's System of Support and has focused on early literacy development across the state.

Ms. Sullivan was joined by:

- > Dr. Linda Cavazos, Executive Director of ELLAS Consulting (English Learner Leadership Advocacy Support). She is a national expert on English learners whose work focuses on supporting the needs of English learners and culturally and linguistically diverse learners.
- > Shelly Spiegel-Coleman, the Strategic Advisor of Californians Together. This role allows her to continue supporting the organization's goals and advance its mission after having served as its Executive Director for thirteen years.
- > Dr. Jóse Viana, Senior Education Advisor for Lexia Learning. Dr. Viana formerly served as the Assistant Deputy Secretary and Director of the Office of English Language Acquisition at the

United States Department of Education, where he oversaw the overall leadership, management, and direction of education for English language learners nationwide.

To guide the discussion on the role policy has in shaping the learning landscape for English language learners, panelists addressed four questions.

Discussion Question:

Across the nation, researchers, teachers, literacy and biliteracy specialists and parents are contributing to the discussion on how to support all students becoming proficient readers and writers each with their own research base, lived experiences, and professional expertise. How does a state and the nation bring together these groups to create effective, data-driven policy?

According to Dr. Viana, shared a framework for policy development and effectiveness must begin with a set of critical questions:

- > Who's implementing?
- Who's most affected?
- > What mechanisms for feedback exist?
- > What voices need to be heard, but may not be at the table?

These questions form the basis of strong policy development and make room for stakeholders to be involved in the process. Without asking these questions, those most impacted by policies are most often left out and in many cases are misrepresented. Additionally, an effective policy must include: targeted intervention; family involvement, a reporting system, and financial commitment. Each of these elements when taken together can be the basis for supporting English development in ELs/EBs.

According to Dr. Cavazos and Ms. Spiegel-Coleman, state-level policy making should include more contextually driven structures. An effective state implementation plan must be a multi-year, multi-pronged approach to developing literacy for all students, with specific clearly defined structures for the needs of ELs/EBs. Additionally, state plans should specifically address the need for on-going professional development for educators and leaders. As shared, it is important for policymakers to have a focus on biliteracies and an understanding that biliteracy and bilingualism encompasses more than students speaking Spanish and English. As our country continues to diversify, policies must address biliteracy and bilingualism from a broad perspective.

A critical component of addressing the needs of ELs/EBs from a policy perspective is to be sure this group becomes centered in policy-making discussions. Currently none of the states with the largest population of ELs included policies that would meet the needs of biliteracy and bilingualism. To address this challenge, panelists offered the following considerations:

- > Policies at the state and federal levels must include support for bi-literacy and bi-lingualism.
- > ELs/EBs and their literacy development needs MUST be included within legislation for all students and not treated as sideline issues

- ➤ Policies must include an integrated approach to the components of literacy development as research suggests works best for all students, and especially for students who are learning the language at the same time they are learning to read and write in English
- English language development has to be integrated into professional development and curriculum differentiating for English proficiency levels and the asset of the students' primary language
- ➤ Policies must include capacity building for educators and leaders to better understand the research behind educating ELs
- > There must be consideration given to removing barriers for school entry and access to support for families and their children

Monolingualism has largely been the focus of early literacy development. Such a focus, as shared across all the panels, has left far too many students on the margins of learning. The idea of bilingualism, as discussed in the upcoming question, should also take into account the dialectical aspects of literacy development both for students speaking dialects of English and those students whose dialect of their home languages may be forms of world languages commonly taught and/or valued in schools.

Discussion Question: To what extent (to which) has policy included research-based guidelines for ELs/EBs, students with dialectical variations, and other language differences?

The goal should be to find as wide a group as possible to ensure broad representation of stakeholders - should include families and children where possible. This will ensure policy development with an eye towards those closest to the issues policies are attempting to address. Currently, much of the legislation on literacy development has centered on the 5 elements – phonemic awareness, phonics, fluency, vocabulary, and comprehension. There must be a wider net cast to include oral language development and the unique needs of ELs/EBs with an understanding of how students move from a home language to a new language. According to Dr. Cavazos, rarely do students move linearly from a home language to a new language. Policies must provide conditions for educators to develop their knowledge on how to support students in language development as shown through research.

Current limited understandings on what the science of reading is all about have resulted in narrowly defined policies to address literacy development, which have not addressed specific language and literacy needs of ELs/EBs. These limitations have treated ELs/EBs as a homogenous group, creating policies that limit educators' abilities to fully meet their needs. Additionally, there has been no attention given to Indigenous speakers or those whose language has been colonized – students who speak dialects of school-based English as a home language. Finally, educators receive narrow professional support both in their education preparation programs and in their districts.

For policies to be more robust, the following must be included:

> Targeted policy revisions – to bring ELs/EBs to the center; away from the sidelines, which is how much of the legislation regarding literacy development is currently crafted.

- Family involvement to center families and establish partnerships, realizing that parents are students' first teacher and to ensure cultural continuation.
- ➤ Reporting system to use first and second language data judiciously and effectively in story-telling about progress and areas for continuous improvement.
- Financial commitment to support the ongoing work of literacy development with specific and targeted emphasis on ELs/EBs.

The opening questions on policy centered on federal policies; however, state-level policies tend to have the most immediate impact on classroom level instruction.

Discussion Question: What would state level literacy policy for all learners need to include? Why is it important to include real and measurable outcomes?

The big answer here is: the plan for all learners must include a clear focused attention on ELs/EBs and attention paid specifically to bilingualism and bi-literacy development. Current policy structures treat ELs/EBs as a "call out," thus relegating this group as an afterthought. ELs/EBs should be centered in the policy making process to ensure full representation and inclusion. While there are no absolutes with what state-level policy should include, panelists offered the following suggestions as a way to move any policy-making endeavor forward:

- Should be grounded in a wide research base that includes the work of a diverse population of researchers
- Policy should always focus on evidence-based instruction: non-negotiables (i.e. Oral Language Develop, foundational reading skills);
- > Avoid laws that are too vague, realizing intent does not match implementation.
- > There should be ways to measure implementation of any policy to ensure outcomes are realized.

Having access to and a clear understanding of data cannot be overstated. All stakeholders deserve and want to know how students are progressing. Parents, especially, want information on how their children are progressing; however, such information must be communicated in a timely manner, in a variety of ways, and should allow parents to become more involved in their child's learning. Data also provides a way for progress monitoring to allow stakeholders to better understand where progress is being made and where more work is needed for students to work towards mastery.

The question becomes, what kind of data, whose data, and what story is the data telling. Unfortunately, data has been used to foster deficit thinking about ELs/EBs due to the privilege of English. As shared by Dr. Viana, data should provide opportunities for understanding the assets children bring to their literacy development. Data must be comprehensive and provide insight into practices that lead to desired educational outcomes for ELs/EBs as well as insight into those that are not. The approach should be systematic with an eye towards understanding short- and long-term gains. There are no easy answers.

Considerations for the Future

Much ground was covered in this first TRL Summit and starting from a point of commonality set the stage for deeper understanding of the complexities of reading and how to support ELs/EBs in their English language and literacy development. The success of this Summit was due to the deep knowledge of the panelists and their willingness to make the complex more easily digestible. The realization and acknowledgement that there is more left to do was also a key element making this Summit effective. It was also due to attendees' willingness to engage as Dr. Tracy Weeden led in discovering that each of us has more in common than that which divides us. Thematically, it was clear that being multilingual is a superpower and yet, more learning and discussion are needed to continue moving forward for more effective research, practice, and policy development for ELs/EBs successful English literacy development.

Questions from participants opened the door for deeper consideration. Nikita, owner of an after-school Kumon Center, offered her take on the day's events sharing, "I'd like to see afterschool to take a role in the discussion. The only thing is quality...there isn't enough quality control." She also wondered about how to lean on private-corporate partnerships to relieve stress felt by educators currently being asked to do herculean tasks with tepid results at best.

Questions about how to support learners from English colonized communities in their academic English development were raised as a point of critical concern. There must be a willingness to acknowledge the reality that being bi- and multilingual includes dialectical forms of English from marginalized communities of color. There must also be a willingness to include researchers whose work extends the understanding and conversation about how dialectical forms of English speech as well as dialects of other languages influence the development of school-based, privileged forms of English.

Further consideration must also be given to including more voices from "the ground." As one participant from Wyoming shared, "I love your data. I love your blah...blah...but he's [Brookins] is telling me he's sitting down with his ELs and asking them can I please work with you." This sentiment demonstrates the need for a balanced representation of voices to ensure educators receive concrete, turnkey strategies for how to improve literacy development for all students and especially for ELs/EBs.

This Summit brought together an esteemed group of experts, practitioners, and policy makers addressing the science of reading and how to apply the science to effective instruction for a group of learners who have been summarily left on the margins of the research and policy making thereby creating instructional disparities and outcomes due to a lack of understanding and an unwillingness of adults to build much needed consensus on how to implement high quality language and literacy instruction for ELs/EBs. .

By starting from a point of seeking commonalities, TRL and NCEL have set the stage for others to follow. Seeking respect meant coming to the table to listen carefully, honor truthfully, and lean into the discomfort and realize that the only way forward is to continue returning to the table. This opening salvo on how to have dialogue should serve as a window on what it could look like when those in power make the decision to collaborate, challenge themselves to seek to be understood, and work to understand. In so doing, students get the best chance for educational success. As another participant put it, "It's about the children; it's all about the children." The ultimate goal is for excellent equitable learning that bring ELs/EBs from the margins to the center and get them out of programs that continue to limit their access to an excellent education.

