

HOW SOCIAL AND EMOTIONAL LEARNING SUPPORTS STUDENT LITERACY, PRE K-GRADE 5



AUTHORS

DR. ALESSANDRA E. WARD, WHEATON COLLEGE, MASSACHUSETTS

JENNA L. BEEBE, WHEATON COLLEGE, MASSACHUSETTS

GEORGE M. LANE, WHEATON COLLEGE, MASSACHUSETTS

LAKEISHA STEELE, COLLABORATIVE FOR ACADEMIC, SOCIAL, AND EMOTIONAL LEARNING

AILEEN MA, COLLABORATIVE FOR ACADEMIC, SOCIAL, AND EMOTIONAL LEARNING

CASEL recognizes the generous support of W.K. Kellogg Foundation and W. Clement and Jessie V. Stone Foundation in advancing the work that generated this brief.

We are grateful for their continued support and collaboration

JANUARY 2025

We are currently at an inflection point in the United States that requires us to support each student to learn to read fluently and well.

According to the National Center for Education Statistics, reading scores have been on a decline over the past decade, with steep declines in most states after the COVID-19 pandemic. Long-term trend data from the National Assessment of Educational Progress (NAEP) show widening gaps between high performers and low performers, and a widening Black-white achievement gap. NAEP data also show significant declines in reading scores across student groups, including Black students, white students, and students of two or more races and multilingual learners since 2019–2020. What’s more, NAEP data indicate that reading scores throughout the 1990s were relatively flat, which signals that children in the United States have experienced a decades-long struggle with reading.

Since the 2000 National Reading Panel, new insights have emerged from a comprehensive understanding of the Science of Reading—not only about the nature of reading but also about how students develop their skills in it and what effective teaching pedagogy is. Many states have passed legislation in the past few years emphasizing a comprehensive approach to improving reading and literacy.

There is more we can and must do to support literacy development and instruction to ensure student success. In our nation’s classrooms, we tend to see the academic demands of learning as separate from emotions and relationships. However, current research in the fields of human development, learning sciences, and neurosciences build on each other and demonstrate that learning environments and instruction that support students’ social and emotional development are integral to student literacy development.

This is the second in a series of briefs published by the Collaborative for Academic, Social, and Emotional Learning (CASEL) on how social and emotional learning (SEL) is integral to the teaching and learning of literacy practices.

In this brief, we discuss how to support the development of elementary-aged children’s ability to read competently. We explain the crucial role that SEL plays in supporting the literacy development of children in the early childhood and elementary years (grades PreK through 5). We provide an overview of how children in this age group learn to read, and of all the skills and processes that the contextualized behavior of reading encompasses. Further, we explain the background and history of SEL, including its benefits for children’s general and academic development and specifically their literacy development. In closing, we outline policy recommendations to strengthen literacy development and instruction at the district and state levels. For recommendations on the federal level, please refer to the white paper by CASEL and leading researchers, [“Bridging Sciences: An Integrated Approach to Supporting Student Literacy Development.”](#)

LEARNING TO READ: AN OVERVIEW

The process of learning to read, which begins in childhood and continues throughout the lifespan, is nothing short of incredible. While we may not be able to recall our own early reading journeys, many parents and early childhood educators can recount tales of the children under their care: “aha” moments where something just seemed to click and children’s learning advanced by leaps and bounds. Those visible moments are just the tip of the iceberg, as children have been observing, imitating, and gradually acquiring social, cultural, and cognitive skills that underlie literacy development for years.

EMERGENT LITERACY

There are two main prerequisites for learning to read: *phonological awareness*, or an awareness of the sounds within spoken language, and an understanding of what is called the *alphabetic principle*: the idea that those sounds can be represented by letters and letter combinations. Children begin developing phonological awareness in infancy. In fact, young infants can hear all the sounds of any language—a feat which adults cannot do—but their brains begin to selectively attune to the sounds typical of the languages actually spoken around them starting around six months of age (Lee et al., 2020). Children acquire phonological awareness in a predictable sequence of skills: They first become aware of how the stream of spoken language can be broken down into sentences, then words, then how those words can be further broken down into parts (syllables, onsets and rimes, and then the smallest unit of sound, called the phoneme). A child who has reached this final stage of developing phonemic awareness will be able to manipulate those smallest units of sound; for example, they will be able to break the word “sat” into three sounds (/s/, /a/, and /t/), orally substitute the final sound for /p/ to make the word “sap,” or delete the first sound from “sat” to make the word “at.” Realizing that the word “at” can be represented on the page using two letters, A and T, is an instance of what it can look like when a child grasps the alphabetic principle: an “aha” moment, indeed!

From a very young age, children also develop an understanding of how texts work, and they develop an awareness of the purposes for which the adults and older children in their families and communities use those texts. The first of these understandings is concepts of print. It includes skills such as understanding the direction in which print is read, where on the page to begin, how to hold a book or other print text in the correct orientation (digital devices, interestingly, adjust orientation for you when you turn the device!), how to turn pages, and more. Young children’s awareness of the purposes for which texts are used can be seen, for example, in a scribbled but linear approximation of a grocery list that the child insists on bringing to the store, or in the creation of a sign for their bedroom door that includes their name. Importantly, these community uses of text are culturally situated practices that develop and are sustained over time. For example, children may develop an understanding of narrative structure (how stories work) through the social practices of bedtime read-alouds with a caregiver, oral storytelling, multimodal texts (such as videos and performances), or some combination of these. All communities use both narrative and informational texts for a variety of purposes and in multiple ways, and all are valid.

Of course, these emergent literacy skills are just the beginning of the process of learning to read, which continues in earnest as children enter formal schooling and which includes a variety of additional skills and competencies. We elaborate on these in the next section through a consideration of several models of reading development published over recent decades.

MODELS OF READING

Over the past 35 years, a variety of models have been put forth to express what is involved in learning to read. In this brief, we will focus on three: the Simple View of Reading (SVR; Gough & Tunmer, 1986), the Reading Rope (Scarborough, 2001), and the Active View of Reading (Duke & Cartwright, 2021). Through consideration of these three models, we will see how, as the field's understanding of reading processes has advanced through years of research, we have been able to communicate with increasing precision the complexity of the reading process.

THE SIMPLE VIEW OF READING

The Simple View of Reading, or SVR, is perhaps the most widely known and commonly disseminated model of reading processes. It holds that reading is the product of (1) decoding, or the ability to “read isolated words quickly, accurately, and silently,” through “the use of letter-sound correspondence rules” (Gough & Tunmer, 1986, p. 7) and (2) listening comprehension. This model is often expressed as an equation: D (decoding) \times C (listening comprehension) = R (reading). The authors updated their model in 2020, broadening the first component to word recognition (Hoover & Tunmer, 2020), encompassing both alphabetic decoding and the skills that underlie it (i.e., concepts of print, the alphabetic principle, letter knowledge, and phonemic awareness). In other words, reading happens when children are able to recognize words and match those words to ones in their oral vocabularies.

Research has repeatedly validated these two components of word recognition and listening comprehension as being vital contributors to reading. However, some experts have made critiques of the model. First, the simplicity of the model, while attractive, fails to capture many other important contributors or predictors of reading comprehension. To name a few: social, cultural, and motivational factors (e.g., Gavalek & Bresnahan, 2009), higher-order cognitive processes such as metacognition (thinking about thinking; e.g., Baker & Carter Beall, 2009) and executive functioning (skills related to decision-making and self-regulation; e.g., Johann & Karbach, 2019), as well as academic language, perspective taking, and argumentation (e.g., Snow, 2018). When educators trained only in SVR encounter a child who is struggling to read for reasons unrelated to decoding or listening comprehension but instead to factors not reflected by SVR, they can be left questioning what to do to support that child (Duke & Cartwright, 2021). The studies that have validated SVR also have used relatively simple measures of reading comprehension (e.g., literal inferences and summaries), which do not capture more complex comprehension processes such as deeper analysis, synthesis, and critique (Snow, 2018). While these processes are of utmost importance for adolescent readers, children begin developing them in upper elementary school.

THE READING ROPE

Scarborough's (2001) Reading Rope model depicts the reading process as a rope woven of two major strands, each of which is composed of smaller strands. The major strands align with those proposed by SVR: word recognition and language comprehension. However, the rope model unpacks each of these larger strands into their component constructs: for word recognition, phonological awareness, decoding, and sight recognition; for language comprehension, background knowledge, vocabulary, language structures (e.g., grammar), verbal reasoning (e.g., inference or metaphor), and literacy knowledge (e.g., concepts of print or knowledge about genre). This model is often shared with practitioners, particularly those working with children with dyslexia. It has also since been updated to include a third strand representing executive functioning (Cutting et al., 2015), which includes skills such as cognitive flexibility, working memory, inhibitory control, attention, and planning. While this model is more robust than SVR, it still does not capture all of the contributors that research has demonstrated contribute to reading.

THE MANY STRANDS THAT ARE WOVEN INTO SKILLED READING

LANGUAGE COMPREHENSION

BACKGROUND KNOWLEDGE
(facts, concepts, etc.)

VOCABULARY
(breadth, precision, links, etc.)

LANGUAGE STRUCTURES
(syntax, semantics, etc.)

VERBAL REASONING
(inference, metaphor, etc.)

LITERACY KNOWLEDGE
(print concepts, genres, etc.)

WORD RECOGNITION

PHONOLOGICAL AWARENESS
(syllables, phonemes, etc.)

DECODING (alphabetic principle,
spelling-sound correspondences)

SIGHT RECOGNITION
(of familiar words)

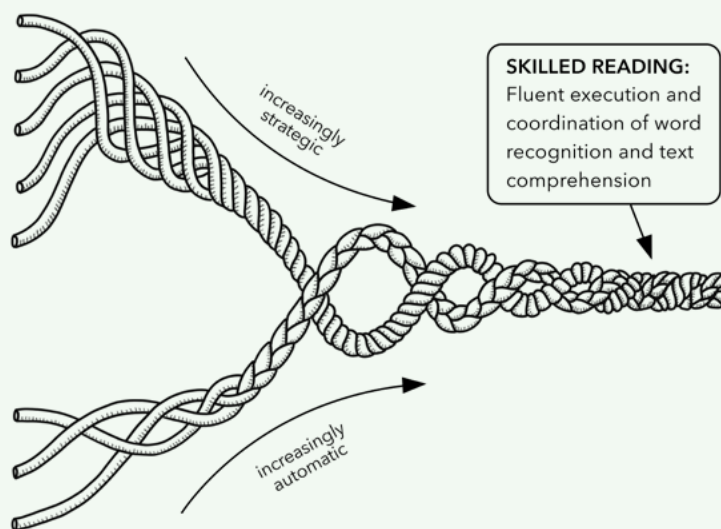


Image courtesy of
Dr. Hollis Scarborough,
2001

THE ACTIVE VIEW OF READING

A third, recent model of reading is the Active View of Reading (Duke & Cartwright, 2021). This model reflects all of the constructs previously discussed, and it also includes additional research-validated constructs and communicates nuance in the interrelationships between constructs “within, across, and beyond word recognition and language comprehension” (p. S32). This model depicts word recognition and language comprehension as overlapping, and it recognizes the existence and importance of skills that “bridge” these two crucial domains, including concepts of print, reading fluency (the ability to read words accurately, automatically, and with expression), vocabulary knowledge, morphological awareness (attention to small, meaningful word parts), and graphophonological semantic cognitive flexibility (or GSF, which is the ability to simultaneously consider aspects of word meaning and letter-sound relationships). The Active View of Reading expands on the rope model’s consideration of executive functioning, including a third category of skills labeled “active self-regulation” that includes general and reading-specific (i.e., GSF) executive functioning, motivation and engagement (whether children want to read and why, and “the time, effort, and persistence of literacy behavior,” Guthrie & Wigfield, 2018, p. 59) and strategy use (conscious choices readers make to control the reading process). Research has found that all these skills influence the other components of the model (i.e., word recognition, bridging processes, and language comprehension).

SUMMARY

The purpose of this section has been to provide an overview of the many skills and processes that contribute to elementary-aged children’s ability to read competently. While it is not possible in the scope of this brief to go into every early literacy construct in detail, we hope we have communicated the complexity of what it means to be able to read and how researchers have attempted to capture this complexity over the years, as new research has shed light on additional contributing factors.

Appreciating this complexity is important. If we ignore it, we risk failing hosts of children for whom these factors are of vital importance. We risk not understanding why children may struggle to learn to read, and therefore we risk our ability to provide them with the interventions they need.

As we conclude this section, we also remind the reader that this process does not conclude with the elementary grades, or even with the completion of formal education. Learning to read is a lifelong developmental process. As we humans develop throughout our lifespan, our purposes for engaging in reading change. So do the texts we choose to read, the manner in which we read them, and the meanings we construct. As Fox and Alexander (2016) state, “Understanding learning to read as a lifelong process has strong entailments in terms of what reading is taken to be. In particular, it means that the nature of reading changes as the reader develops. Further, the view of reading across an entire lifespan necessarily incorporates context. Reading becomes viewed as essentially embedded in the context of the reader’s life and as oriented toward contextually meaningful purposes. When thus contextualized, reading is positioned as a behavior (Russell, 1961) rather than as a skill set or ensemble of processes” (p. 8).

In other words, while this section has outlined a collection of skills and processes that are particularly relevant to the elementary years, they still do not capture all that is involved in the behavior of reading. The context is key, and we will continue to highlight that context (in particular, social and emotional context) and its effects on reading throughout the remainder of this brief.

CONNECTIONS BETWEEN EARLY DEVELOPMENTAL AND READING PROCESSES AND SEL

The subject of this brief is the connection between reading in the elementary grades and SEL. With our foundations of reading established, including what is involved in learning to read, we now turn to introducing SEL. We will first outline the background and history of SEL and then detail its role in both child development and elementary-age children’s educational achievement.

THE BACKGROUND AND HISTORY OF SEL

SEL is a field with a rich history and strong research base. In this brief, we use CASEL’s definition of SEL as a foundational understanding of the concept: SEL is “the process through which all young people and adults understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions” (CASEL, n.d.-b). Put simply, SEL helps develop the skills and competencies that all people—the youngest children through centenarians—need for a fulfilling life. SEL has connections to other ideas you may be familiar with, such as character education, emotional intelligence, 21st-century skills, youth civic engagement, and others. What these concepts have in common is a goal that has always been central to American education: the development of active and engaged citizens who participate in and sustain our democracy.

The field has existed long enough to proliferate a series of frameworks (over 136!) for understanding the various competencies and skills involved (more than 700!; Berg et al., 2017; Cipriano et al., 2022; Jones et al., 2017). The most widely applied in school settings is the CASEL framework, which divides SEL skills into five broad competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. Each of these competencies can be thought of as a bucket that includes observable behaviors and dispositions; for example, the competency of self-awareness includes understanding one’s own identities (relational, cultural, linguistic, racial, gender, ability, and more), strengths and weaknesses, emotions, thoughts, knowledges (i.e., knowing what you don’t know), biases, interests, and values, as well as understanding how all of these affect one’s behavior in different contexts and situations.

The concept of SEL that we use in this brief series originated in the 1960s, with Dr. James Comer and his Yale University colleagues’ Comer School Development Program in New Haven, Connecticut, which sought to bring teachers, parents, administrators, and mental health professionals together to consider a more holistic way of supporting and educating the whole child. Participating schools saw benefits to students’ academic success, as well as declines in truancy and behavioral problems, and the program grew and expanded across the New Haven district throughout 1987–1992. In 1994, a multidisciplinary group of researchers, educators, and other practitioners and advocates for children came together to both coin the term “social and emotional learning” and found the organization that would become CASEL, now known as the Collaborative for Academic, Social, and Emotional Learning.

SEL has become an integral part of education in the past 15 years or so, as evidenced by the enormous volume of research that has been conducted and which is summarized in the subsequent section of this brief. States across the nation have developed their own frameworks and sets of academic standards to guide SEL instruction in American schools. The first state to develop SEL standards was Illinois in 2004. As of the publication of this report, 25 states plus the District of Columbia have now developed or adopted their own SEL standards. This attention signals that SEL is a discipline worthy of intentional planning and tracking of

instructional goals, on par with English language arts (ELA), mathematics, science, and social studies. Curricular programs to support educators in teaching SEL have proliferated, as have efforts to review the quality of those programs and provide states and districts with guidance in selecting the best programs to meet their needs. The first of these reviews took place in 2003, and we draw on the recent iterations of these reviews in forthcoming sections about curricular avenues for connecting SEL and literacy.

SEL AND DEVELOPMENTAL PROCESSES

SEL interventions (including but not limited to explicit classroom instruction) in preschool and elementary school have demonstrated remarkable improvements in various domains of child development. There are significant findings pertaining to biological development, executive functioning, emotional well-being, social development, and academic achievement in preschool and elementary school students. There is also evidence that SEL interventions in childhood improve a variety of outcomes later in life, including better high school graduation rates and decreased use of mental health services as adults (Taylor et al., 2017).

BIOLOGICAL DEVELOPMENT

Researchers have found evidence suggesting that SEL intervention can improve students' neurological development. Human brains of all ages are plastic, meaning they are capable of change. Children's brains are especially plastic, since they are developing so rapidly and are shaped greatly throughout their preschool and elementary school years. Children are learning to read, write, understand arithmetic, make friends, and understand the world around them, all of which depend on their neurological functioning. Multiple studies have found significant results using electroencephalograms (EEG) to measure neural activity and brain waves. Studies using EEG have found improvements in inhibitory control (being able to stop or resist thoughts or impulses), emotional responsiveness (the ability to respond with empathy and care to others), and resting brain activity state (how the brain functions when at rest, not doing something specific) along with a reduction in resting arousal state for children receiving SEL intervention (Andreu, et al., 2023; Egana-delSol, et al., 2023; Blewitt et al., 2024). Another study used functional magnetic resonance imaging (fMRI) to look at blood flow to various parts of the brain (Bauer et al., 2019). This study found that students in the SEL intervention group had reduced right amygdala activation, meaning a reduction in stress response severity, compared to controls (Blewitt et al., 2024). There was also a significant correlation between the reduction in amygdala activity and decreased levels of perceived stress. This points to the role that SEL instruction physically shapes children's brains for the better, improving various neurological functions that are critical to healthy child development.

Connected to neurological development, two crucial domains where SEL intervention can play a role in improving children's development are hormonal and autonomic. Hormonally, the human stress response, also known as the fight-or-flight response, involves a set of cascading interactions between the autonomic nervous system and the endocrine system. It is ultimately responsible for physically mobilizing a person to escape a life-threatening situation, though today it is activated more frequently and over smaller stressors. While elementary school students may not be mobilizing from life-threatening situations, they may still experience other stressors, such as difficulties in their home life or struggling to succeed academically. But what role does SEL play in the stress response? Researchers have used cortisol, a stress hormone, to measure the stress response. Multiple studies have demonstrated a decrease in cortisol levels in elementary school students after receiving SEL interventions, compared to no decrease in cortisol levels in the control group (Blewitt et al., 2024). These studies are part of a growing body of evidence suggesting that SEL interventions improve the stress response in children, likely because SEL teaches children how to identify their emotions, use coping strategies, and self-regulate. Autonomically, studies have also

looked at heart rate variability (HRV), a measure of physiological resilience to stress, to investigate the impacts of SEL on the autonomic nervous system. A study found that low-income, urban kindergarteners demonstrated improvement after SEL intervention compared to a control group (Calhoun et al., 2020). This study also noted that students in the SEL intervention group, regardless of their baseline stress physiology, had significant improvements. This finding highlights how SEL can benefit students independent of their autonomic nervous system functioning at baseline.

Improvements in biological development for children are vital for their continued success later in life. Children who have lower resting neural activity and arousal rates, less pronounced amygdala activation, and lower cortisol levels are going to have an easier time coping with stressors than those who do not. The ability to cope with stress is vital to being successful, whether that is socially, academically, occupationally, or in other areas. Children who grow up having an easier time with self-regulation and stress management, through the support of their strong neurological development, will grow up to be adults who can manage themselves well, too. This translates to adults who can rebound well from stressful situations at work and effectively manage difficult emotions when dealing with conflict at home, for example.

EXECUTIVE FUNCTION

Another area where SEL can have profound impacts on children's development is executive functioning. The frontal lobe of the brain is responsible for executive functions, including working memory, attention, and self-regulation. These are crucial to children's ability to succeed in school, maintain relationships, and thrive in the world. The impact of SEL on executive functioning has been thoroughly studied in preschoolers, though studies have used elementary-aged samples as well. A study investigating a preschool SEL curriculum found that teacher ratings of children's executive functioning significantly improved compared to the control group; students (particularly boys) improved in their inhibitory control, flexibility, and working memory (Kats Gold et al., 2021). Another study examining the effects of an SEL curriculum found that preschoolers in the intervention group significantly outperformed their control group counterparts on tasks assessing their executive functioning (Diamond et al., 2007). This intervention was particularly helpful for students who were already at a below-baseline level of executive functioning, improving these critical skills for children struggling most.

A study found that preschool students in an SEL intervention group demonstrated improvements in self-regulatory skills, specifically in executive functioning and attention/impulsivity (Raver et al., 2011). Also, this study provides evidence that SEL intervention can improve the behavioral health of children living in poverty. Research has shown that poverty is a significant threat to children's development, especially their psychological and behavioral development (e.g., Duncan et al., 2012). The inclusion of executive-function-focused SEL interventions could be crucial to mitigating these effects for low-income children.

There is also evidence that improvements in executive functioning through SEL intervention are consistent predictors of improved pre-literacy skills in preschoolers (Bierman et al., 2008). Elementary school students have also demonstrated significant improvements in math and reading skills, especially for those deemed high behavioral risk by teachers (Jones et al., 2011). SEL intervention leads to improvement of executive functioning, which enables students to be more academically successful. We will speak more to this relationship in the section on Academic Achievement, below.

With an easier time focusing, self-regulating, and remembering information, children will have a better foundation for achieving academic success and developing quality relationships with others. These skills will also translate into positive outcomes in adulthood, as effective executive functioning is at the forefront of being a competent, emotionally understanding adult. For example, being able to remember dates for

important meetings at work, regulating one's anger when in traffic, and being flexible to accommodate family obligations are ways in which effective executive functioning in childhood can continue into adulthood.

EMOTIONAL WELL-BEING

Another area in which SEL can improve children's development is their emotional well-being. Emotional well-being in children can look like a strong self-perception, positive attitudes, receptive emotional knowledge (where children can match labels of emotion to their corresponding expressions, such as being able to label a frowning face as sad), and low levels of emotional distress (Kats Gold et al., 2021). School-based SEL interventions have a clear positive impact on elementary schoolers' well-being. A meta-analysis investigating outcomes of SEL interventions for elementary school students found that students receiving SEL programming had improved social and emotional skills, more positive attitudes, fewer conduct problems, and lower levels of emotional distress and internalizing problems than their control group counterparts (Durlak et al., 2011). Other meta-analyses have found improvements in emotional well-being as well, including significant reductions in emotional distress, externalizing behaviors (such as aggression, bullying, and noncompliance), and internalizing behaviors (such as anxiety, loneliness, and poor self-esteem) (Cipriano et al., 2023; Murano et al., 2020, Kats Gold et al., 2021). Also, a study found that improved SEL skills after intervention led to significant improvements in various follow-up indicators of well-being (Taylor et al., 2017). Not only does SEL intervention improve emotional well-being in the short term, but these effects can last months or even years after the intervention concludes.

Afterschool programs for youth that focus on the promotion of SEL skills have also demonstrated significant improvements in children's self-perception (Durlak et al., 2010). How children perceive themselves is critical to their emotional well-being, so the more we can foster an improvement in self-perception through SEL, the better. More studies investigating the positive impacts of SEL in afterschool programs should be conducted to better support students outside of the classroom.

If we provide children a solid foundation of skills and connection to community through SEL instruction, then they will have a much easier time coping with any stressors that come their way. Whether that is a change in family dynamic at home or learning difficult material in school, not having the burden of emotional distress makes things much easier to manage. And the potential to carry a strong sense of emotional well-being into adulthood will set people up to move through emotional distress with more ease, feel confident in themselves when approaching new challenges, and have a positive attitude about the world around them.

SOCIAL DEVELOPMENT

Humans are innately social beings, and being able to create and maintain lasting, meaningful relationships with others is crucial at all stages of life. Developing relationships with others, including family, friends, teachers, and peers, is an important skill for children to learn. While social development can occur in any setting a child is in, it's particularly relevant at school. So, how can SEL intervention help with social development? One of the five major SEL competencies is relationship skills, where children learn how to communicate with others, resolve interpersonal conflict, and practice collaborative problem-solving (CASEL, n.d.-b). These skills are incredibly important for the social development of preschoolers and elementary schoolers.

Multiple studies have found significant improvements in positive social behavior, including prosocial behavior (behavior that helps others, e.g., understanding and supporting others or expressing disapproval of harmful behavior), for students who received SEL intervention (Taylor et al., 2017; Durlak et al., 2010). Other studies have found similar results, though their measures have been more specific. For example, one study examining the SEL curriculum Head Start REDI for preschoolers found significant improvements in competent

social problem-solving for children who received the intervention (Nix et al., 2013). Relationship skills can be improved through SEL intervention, even in children as young as three. Also, other studies have found improvements in classroom supportiveness, concern for others, social competence, and peer relationships for students receiving SEL intervention (Muñoz et al., 2006; Jones et al., 2011; Cipriano et al., 2023).

The support that SEL provides to children’s social development will continue to help them as adults. People who know how to manage conflict, collaborate, and problem-solve will be more well-adjusted citizens than those who do not. Without these skills, adults may struggle to hold a job, maintain lasting relationships with others, or act as a leader. SEL interventions, where relationship skills are practiced and encouraged, provide children with a framework to become better partners, friends, parents, and workers later in life.

ACADEMIC ACHIEVEMENT

The positive impacts of SEL intervention on academic achievement are undeniable. As students progress through school, they learn so much—especially in preschool and elementary school where they are learning foundational skills that will support them throughout the rest of their life. Academically, preschoolers are learning emergent literacy and arithmetic skills, like comprehension of spoken language, vocabulary, letter naming, and basic addition and subtraction (Raver et al., 2011). Elementary schoolers build off these critical early skills and eventually venture off into more applied topics. Later education can only be explored if students have a strong foundation of basic literacy and math skills. So, how can SEL help with academic development at this crucial learning period?

A meta-analysis of 213 studies found significant improvements in academic performance for students in SEL intervention groups (Durlak et al., 2011). Additionally, in a subset of included studies, this meta-analysis found an increase of 11 percentile points in academic achievement for students receiving SEL instruction, which is noteworthy. For younger children, multiple studies using a sample of Head Start preschools found significant improvements in preacademic skills, including vocabulary, letter naming, early math skills, and emerging literacy (Raver et al., 2011; Nix et al., 2013). In one study, these findings translated to academic improvements in kindergarten, specifically for reading achievement and learning engagement. A study using a sample of non-Head Start preschools found similar results; SEL intervention improved emergent literacy compared to control counterparts (Kats Gold et al., 2020).

Another study demonstrated that students deemed the highest behavioral risk showed significant improvements following SEL intervention in teacher reports of math and reading skills (Jones et al., 2011). This provides evidence for the effectiveness of SEL on children’s academic achievement for those who are already struggling. Also, afterschool programs that focus on SEL skill-building have demonstrated significant improvements in academic achievement, specifically school grades and standardized test scores (Durlak et al., 2010). As previously mentioned, the better children are able to self-regulate, focus, and problem-solve, all of which are taught and promoted through SEL intervention, the more likely they will succeed academically.

Students who have strong academic skills are more likely to have an easier time finishing school and getting accepted into college, which are two important milestones in young adulthood. Through the support of SEL, academic gains such as those mentioned in this section are crucial for success. Even for students who do not go down the road of higher education, a solid foundation in basic academic skills will serve them throughout their life. People need to possess basic literacy and math skills for many jobs, while some may require some additional applied skills in science, technology, or arts. Regardless, a good basis of knowledge is crucial for people to be able to be successful community members, relatives, and workers, and SEL can help them get there.

LATER-IN-LIFE IMPACTS

SEL has far-reaching positive impacts on multiple domains of children’s development. While improvements in child development are definitely noteworthy, do these improvements extend into adolescence and adulthood? The short answer is yes; there is a plethora of evidence suggesting that receiving SEL instruction in preschool and/or elementary school leads to improved outcomes across the board later in life. A comprehensive meta-analysis focusing solely on follow-up effects from SEL intervention found that conduct problems, emotional distress, drug use, and attitudes, for example, were significantly improved for those who received SEL instruction as children (Taylor et al., 2017). Also, this meta-analysis noted improvements in the following areas: relationship quality, school attendance and high school graduation rates, college attendance, safe sexual behaviors, income, use of mental health services, substance abuse, and arrests. This study even noted the expected monetary benefit or cost reduction per event in a few of these categories. For example, students who graduated from high school had an estimated lifetime monetary benefit of around \$367,000 (Taylor et al., 2017). This means that each student would make approximately \$367,000 more over the course of their lifetime than if they had dropped out of high school. Not only does this suggest significant improvements years after SEL intervention, but it also gives a glimpse of the potential economic benefits. Having well-adjusted adults capable of self-regulation, maintaining healthy relationships, and succeeding academically (among other benefits) actually saves money and cuts spending.

DEVELOPMENTAL BENEFITS OF SEL INTERVENTIONS

Domain	Specific Benefits	Supporting Studies
Biological Development	<ul style="list-style-type: none"> • Improvements in neurological functioning <ul style="list-style-type: none"> – Improved resting brain activity state and resting arousal state – Reduced right amygdala activation (less perceived stress) • Improvements in autonomic and hormonal functioning with regards to stress responses <ul style="list-style-type: none"> – Decrease in cortisol levels – Improved heart rate variability 	Blewitt et al., 2024
Executive Function	<ul style="list-style-type: none"> • Gains in the following executive function skills: <ul style="list-style-type: none"> – Inhibitory control – Flexibility – Working memory – Self-regulation • Increased executive function skills through SEL instruction also showed improved academic performance 	Kats Gold et al., 2021 Diamond et al., 2007 Raver et al., 2011 Bierman et al., 2008 Jones et al., 2011

Domain	Specific Benefits	Supporting Studies
Emotional Well-Being	<ul style="list-style-type: none"> • Increases to the following: <ul style="list-style-type: none"> – Social and emotional skills – Positive attitudes – Self-perception • Decreases to the following: <ul style="list-style-type: none"> – Emotional distress – Internalizing behaviors – Externalizing behaviors – Conduct problems 	Kats Gold et al., 2020 Durlak et al., 2011 Cipriano et al., 2023 Murano et al., 2020 Taylor et al., 2017 Durlak et al., 2010
Social Development	<ul style="list-style-type: none"> • Improvements in the following: <ul style="list-style-type: none"> – Positive social behavior – Prosocial behavior – Social problem-solving – Classroom supportiveness – Concern for others – Social competence – Peer relationships 	Taylor et al., 2017 Durlak et al., 2010 Nix et al., 2013 Muñoz et al., 2006 Jones et al., 2011 Cipriano et al., 2023
Academic Achievement	<ul style="list-style-type: none"> • Benefits for preschoolers: <ul style="list-style-type: none"> – Acquisition of emergent literacy and arithmetic (e.g., understanding spoken language, vocabulary, letter naming, basic math functions) • Benefits for elementary schoolers: <ul style="list-style-type: none"> – Improved math and reading achievement – Learning engagement – Standardized test scores – School grades 	Raver et al., 2011 Durlak et al., 2011 Nix et al., 2013 Kats Gold et al., 2020 Jones et al., 2011 Durlak et al., 2010
Later-in-Life Outcomes	<ul style="list-style-type: none"> • Improvements in the following later-in-life outcomes: <ul style="list-style-type: none"> – Relationship quality – School attendance – High school graduation – College attendance – Safe sexual behaviors – Income – Use of mental health services – Substance abuse – Arrests 	Taylor et al., 2017

The research is clear: SEL has important benefits both for general human development and for academic achievement. We now delve in to further analyze the connections between SEL and literacy development that may drive some of these benefits.

SEL AND LITERACY DEVELOPMENT

As described in detail in our introductory brief, [“The Role of Social and Emotional Learning in Improving Literacy Development,”](#) connections exist between the competencies children develop as they are learning to read and the five SEL competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. In this section, we will connect the ideas that we introduced in that introductory brief more explicitly to the Active View of Reading. We present this information as a table to demonstrate how the SEL competencies and accompanying questions/skills described in [“The Role of Social and Emotional Learning in Improving Literacy Development”](#) align with the constructs identified in the Active View model. We encourage readers who have not read [“The Role of Social and Emotional Learning in Improving Literacy Development”](#) to do so before continuing on in this section.



DEVELOPMENTAL BENEFITS OF SEL INTERVENTIONS

SEL Competency	Question(s) from “The Role of Social and Emotional Learning in Improving Literacy Development”	Construct(s) in the Active View of Reading Model
Self-Awareness	What are my personal strengths and areas for growth as a reader/writer? Can I be successful (or learn to be successful) at this reading/writing task?	Active self-regulation: Motivation and engagement
	Is what I am reading/writing making sense? Is it communicating my intended message or answering my questions/goals for reading?	Active self-regulation: Executive function skills and strategy use
Self-Management	What can I do when I don’t understand what I read, or when my writing doesn’t communicate what I want it to?	Active self-regulation: Strategy use
	How can I manage feelings that may come up during the reading/writing process or during assessments (e.g., frustration, confusion, accomplishment, joy)? How can I persevere when reading/writing is challenging?	Active self-regulation: Executive function skills, motivation, and engagement

SEL Competency	Question(s) from “The Role of Social and Emotional Learning in Improving Literacy Development”	Construct(s) in the Active View of Reading Model
Social Awareness	<p>How can reading help me explore the human experience and develop empathy and perspective-taking?</p> <p>How can reading help me safely explore challenging or controversial life topics?</p>	<p>Language comprehension: Cultural and other content knowledge</p>
	<p>What is the relevance of reading/writing to my life and to others?</p> <p>How do I understand the world, and how is this similar to/different from how others understand the world?</p> <p>How can I learn from others’ perspectives?</p>	<p>N/A</p> <p>The Active View is a reader model and thus does not address this construct; however, the authors also acknowledge that “reading is also impacted by text, task, and sociocultural context” (p. S33).</p>
Relationship Skills	<p>How can I read/write together with others?</p> <p>How do I communicate my thoughts in writing?</p>	<p>N/A</p> <p>The Active View is a reader model and thus does not address this construct; however, the authors also acknowledge that “reading is also impacted by text, task, and sociocultural context” (p. S33).</p>
Responsible Decision-Making	<p>What goals do I have for reading/writing and what do I need to do to achieve them?</p>	<p>Active self regulation: Motivation and engagement, executive function skills, and strategy use</p>

As you can see, the connections between reading and SEL are particularly strong in the domain of active self-regulation, which the Active View of Reading understands as a precursor to being able to coordinate the word recognition, bridging processes, and language comprehension that result in successful reading. The active self-regulation domain is the part of the Active View model that represents the biggest update over the SVR and Reading Rope models. This means that if we are attending only to earlier models of reading, we may miss these important connections between SEL and literacy. A contemporary and comprehensive understanding of reading and an understanding of how literacy and SEL can mutually benefit and reinforce each other go hand in hand.

RECOMMENDATIONS TO SUPPORT SEL AND LITERACY DEVELOPMENT

In conclusion, we believe that designing for SEL in the classroom has remarkable potential to support American early childhood and elementary students’ literacy development and post-pandemic academic recovery. In this section, we provide recommendations to policymakers at the district and state level to use connections between the domains of SEL and literacy to support student SEL and literacy development in tandem. For recommendations on the federal level, please refer to the white paper by CASEL and leading researchers, [“Bridging Sciences: An Integrated Approach to Supporting Student Literacy Development.”](#)

District	State	State and District
<ul style="list-style-type: none"> • Use pedagogical routines that support both domains. • Adopt SEL curricula that support literacy. • Adopt literacy curricula that support SEL. • Adopt curricula that intentionally integrate SEL and literacy. 	<ul style="list-style-type: none"> • Create and adopt robust standards for SEL across grade levels. • Integrate SEL into ELA standards across grade levels. • Provide guidance on using SEL as an evidence-based strategy to support literacy development. 	<ul style="list-style-type: none"> • States should incorporate SEL into state teacher preparation and professional development programs. Districts should invest in ongoing coaching and professional learning to strengthen literacy instruction.

District Recommendation 1

USE PEDAGOGICAL ROUTINES THAT MAY SUPPORT BOTH DOMAINS.

The first recommendation we suggest at the district level is the usage of, or the adoption of, curricula with built-in support for pedagogical routines that address the points of intersection identified in the previous section. These are motivation and engagement, executive functioning skills, strategy use, and development of cultural and other content knowledge. We encourage policymakers at the district level who are responsible for curriculum adoption choices to consider the presence or absence of these routines in their evaluation procedures.

MOTIVATION AND ENGAGEMENT

A strong body of research links reading motivation to achievement (e.g., Baker & Wigfield, 1999; Cox & Guthrie, 2001) and identifies a collection of practices to support motivation and engagement. Motivation-supportive practices include: social collaboration, opportunities for success that enhance self-efficacy, timely and task-specific feedback, authentic (i.e., real-world) and relevant tasks, choice and support for student autonomy, thematic or knowledge-oriented instruction, and instruction in strategic literacy behaviors (Guthrie & Wigfield, 2018). Note that these last two practices overlap with other pedagogical routines that are addressed in more detail in this section. Educators should strive to provide instructional environments that: empower students to drive their own learning through pursuing relevant questions and activities in which they have some say, ideally in collaboration with others; offer all students opportunities to be successful and provide strategies and feedback that help them get there; and organize learning in coherent ways that draw on interdisciplinary connections.

EXECUTIVE FUNCTIONING SKILLS

Students can be taught some of the executive functioning skills necessary for reading, and it is also important to recognize that some executive functioning skills (such as working memory) develop with age. Therefore, pedagogical routines need to be built that reflect an understanding and respect of brain development in these areas. Working memory refers to the limited, short-term memory that allows us to hold onto information while engaged in a specific cognitive task. A reading-related example would be the amount of textual information we can hold while reading to answer a certain question. Younger students have smaller working memories than older students and can hold information for shorter periods of time. For this and other reasons, texts designed for younger students are shorter, with more built-in breaks (e.g., smaller amounts of text on a page and shorter paragraphs).

Students can be taught other executive functioning skills, including GSF and planning. Duke, Ward, and Pearson (2021) give an example of a four-quadrant matrix that can be used to promote GSF; essentially, it is a puzzle that requires students to activate information both about word meaning and about letter-sound relationships to solve (p. 664). Students can be taught planning skills for both reading and writing, for example, by engaging in before reading routines in which they consider their purposes for reading and preview the text's organization, and by engaging in planning processes using graphic organizers and the like. These skills have some commonalities with strategy instruction, which leads us to our next pedagogical routine.

STRATEGY USE

A very large body of research supports the teaching of cognitive strategies for reading and a variety of models for doing so. One widely used model is Reciprocal Teaching (RT), originally developed in 1984 by Palincsar and Brown. This model engages students in four cognitive strategies: summarization, question generation, clarification, and prediction. A review of the literature on RT found significant positive effects on student reading comprehension, particularly when explicit instruction was provided in the four strategies (Rosenshine & Meister, 1994). Collaborative Strategic Reading (Klingner & Vaughn, 1999) combines the teaching of before (e.g., brainstorming, predicting), during (e.g., monitoring and fixing up, identifying main ideas), and after (e.g., reviewing and asking questions) reading strategies with an element of social collaboration—which, as described previously, also benefits motivation.

A 2023 meta-analysis of the effects of teaching cognitive reading strategies more broadly contributes two more important findings. First, the authors found that no one strategy was more powerful than the rest; instead, teaching strategies in related sets (e.g., teaching identification of main idea, text structure, and retelling together) was most effective. Second, they found that the positive effects of strategy instruction held only when background knowledge instruction was also included (Peng et al., 2023). With that second finding in mind, we turn now to a deeper discussion of the role of background knowledge instruction in supporting reading comprehension.

DEVELOPMENT OF CULTURAL AND OTHER CONTENT KNOWLEDGE

Another area of reading and reading instruction that has received substantial attention in recent years is the role of cultural and content knowledge. While it seems obvious that students can understand a text better if they have some prior knowledge about its topic (Smith et al., 2021), not all curricular materials are designed to build this knowledge. “Knowledge-building curricula” are those that systematically foster the development of students’ background knowledge on a variety of topics. The Knowledge Matters Campaign identifies five key characteristics of knowledge-building curricula: they are specific, cumulative (each topic/year builds on the

last), well-rounded (connections are built across content areas), prepare students well for future learning, and rigorous, with developmentally appropriate supports (Knowledge Matters Campaign, 2016). Many knowledge-building curricula achieve these characteristics by intentionally integrating reading into science and social studies instruction, pushing back on a post-No Child Left Behind trend to spend more time on literacy and reduced time on those other subjects. A recent meta-analysis on the impacts of integrated literacy and content area instruction in grades K-5 found that integrated curricula had significant and positive effects on students' vocabulary, comprehension, and content knowledge (Hwang et al., 2021). Knowledge-building can also be achieved through the use of conceptually related text sets, or having students read multiple texts on the same topic; a 2021 study of first and second graders found that read-alouds of conceptually coherent text sets supported both children's vocabulary and listening comprehension (Wright et al., 2021).

When thinking about building knowledge through curriculum and pedagogical routines such as read-alouds, it is important to consider: whose knowledge? In other words, what perspectives, values, and ways of knowing are being centered by curricular materials and other instructional practices? A failure to consider this question may result in the overwhelming centering of dominant, white, middle-class perspectives, as one study of a common knowledge-building curriculum found (Rigell et al., 2022). Hattan and Lupo (2020) offer important reminders that (1) other kinds of knowledge exist beyond content knowledge, such as cultural and linguistic knowledge and prior experiences, (2) students must be supported in activating, integrating, and revising all of these kinds of knowledge throughout the reading process, and (3) a focus on knowledge-building must avoid positioning certain groups of students as lacking knowledge more than others. Hattan (2022) builds on these ideas to offer the following questions that teachers and others responsible for curriculum adoption and implementation might consider:

Who wrote the texts that are included in my school's curriculum?

What voices are represented in these texts?

What voices are left out?

What texts should I eliminate from my instruction?

What supplemental texts would enhance students' knowledge and provide additional perspectives?

(Hattan, 2022, n.p.)

ADOPT SEL CURRICULA THAT SUPPORT LITERACY.

The second district-level recommendation we propose is the adoption of SEL curricular materials that have research demonstrating that these materials also support literacy development.

SEL CURRICULA THAT SUPPORT LITERACY: CASEL RATINGS

Implementation of various SEL curricula have been shown to improve students' literacy outcomes across a variety of measures. From pre-literacy in preschoolers (e.g., knowledge of the alphabet) to literacy in older elementary school students (e.g., reading comprehension), SEL can play a significant role in supporting these skills. As we delve into SEL curricula, we note that our analysis is not an endorsement of a specific curricula; it is instead an examination of SEL curricula in the [CASL Program Guide](#) that support literacy development.

CASEL has a Program Guide that records various metrics of different SEL curricula and assigns them a rating (CASEL, n.d.-a). For evaluation outcomes, CASEL records improvements in positive social behavior, identity development/agency, school connectedness, school climate, academic performance, SEL skills and attitudes, and improved teaching practices, as well as reduced problem behavior and emotional distress. CASEL determines if a curriculum meets these evaluation outcomes based on whether research on the curriculum has shown statistically significant effects. They also record characteristics of the school (e.g., urbanity and location) and student demographics, including race, ethnicity, and whether students are low-income. For design metrics, CASEL investigates whether or how curricula integrate SEL into other academic instruction, whether lessons are freestanding, any organizational strategies used, and relevant teaching practices. Additionally, CASEL looks at how SEL is promoted across settings, including the classroom, at home, at school (systemic), for family and caregivers, and in the community. Last, they note whether the curriculum has any strategies to promote equity in education, such as working with bias. Based on this information, CASEL then gives each curriculum a specific designation: SElect, Promising, or SEL-Supportive. For a curriculum to meet the highest rating, SElect, it must promote social and emotional skills in specific categories, provide opportunities to be able to practice, offer multiyear programming, and have high-quality training and implementation options. One step down from SElect is Promising; these curricula must promote improvement in specific student and/or teacher SEL competencies and provide comprehensive programming. Last, curricula can be designated as SEL-Supportive if they meet some, but not all, criteria for a SElect or Promising designation.

Manners of the Heart is an SEL curriculum for students in preschool through second grade that focuses on encouraging students to treat others with respect (Manners of the Heart, n.d.). This program aims to improve students' prosocial behavior, respect for others, self-regulation, and responsibility. The curriculum earned a "Promising" CASEL rating because it has demonstrated improvements in multiple SEL competencies and gains in student outcomes, including academic performance (CASEL, n.d.-a). An unpublished report found that *Manners of the Heart* was also effective in improving standardized reading scores in a racially and socioeconomically diverse group of kindergarten students (greater than 80 percent Black, 84 percent eligible for free or reduced-price lunch) in an urban school district (LeBlanc, 2014).

Peace Learning Circles provides a teaching practices approach to SEL for students in grades K-12 to create a caring and supportive learning environment (Peace Learning Center, n.d.). Currently, *Peace Learning Circles* is not only implemented in schools, but is also implemented in settings such as community nonprofits and juvenile justice facilities, striving to bring peace and increase the learning of every student. This curriculum earned a "SElect" CASEL rating, as it has demonstrated effectiveness in improving student outcomes, including academic performance

and school climate (CASEL, n.d.-a). *Peace Learning Circles* has been shown to be effective in diverse communities of grade 3 and 4 students in urban schools in the US Midwest (30 percent Black students, 33 percent eligible for free or reduced-price lunch) and the US West (24 percent Latinx, 17 percent Asian American, 17 percent Black, 54 percent free or reduced-price lunch) (Kiger, 2000). Students who took part in *Peace Learning Circles* demonstrated improvements in standardized reading scores, positive social behaviors, and classroom climate.

Positive Action is an SEL curriculum for students from preschool through 12th grade, which focuses on the idea that we feel better about ourselves when we do positive actions (*Positive Action*, n.d.) through a lesson-based approach to SEL (CASEL, n.d.-a). *Positive Action* earned a “SElect” designation from CASEL because it demonstrates efficacy across SEL competencies, in various settings, and offers multi-year programming. A randomized controlled trial found that this curriculum was shown to be effective in diverse groups of students (32 percent Part Hawai’ian, 12 percent Filipino, 54 percent eligible for free or reduced-price lunch) (Snyder et al., 2009). Specifically, students who took part in the *Positive Action* intervention group had significant improvements in standardized reading and math scores.

Responsive Classroom is an SEL curriculum committed to promoting a safe and positive school community, actively engaging students with academics, and effectively managing classrooms through teaching that is developmentally appropriate (*Responsive Classroom*, n.d.). This program, for students in grades K-6, earned a “SElect” CASEL rating because it supports all SEL domains across multiple settings while also promoting educational equity (CASEL, n.d.-a). Research has demonstrated that *Responsive Classroom* is effective at improving academic performance (including standardized reading and math scores), social behaviors, and teaching practices as well as reducing emotional distress in students in grades 1-4 (Rimm-Kaufman et al., 2007a; Rimm-Kaufman et al., 2007b). It has also been shown to be efficacious in diverse groups of students, including Black and Hispanic/Latinx students (54 percent ethnic minorities) as well as those from low-income families (35 percent eligible for free or reduced-price lunch).

RULER is an SEL curriculum for students in preschool through 12th grade that focuses on growing students’ emotional intelligence and translating those skills to improvements in and outside of the classroom (*RULER Approach*, n.d.). *RULER* earned a “SElect” CASEL rating because it demonstrates improvements for students in all SEL competencies, supports advancements in educational equity, and is effective across contexts (CASEL, n.d.-a). One study found significant improvements in pre-literacy skills for a diverse group of preschoolers (52 percent Hispanic/Latinx, 17 percent Black/African American, 4 percent Asian) who took part in *RULER* (Bailey et al., 2023). Another study also found that the use of *RULER* led to improvements in observed emotional support and classroom climate in addition to increases in teacher-reported positive interactions with students (Rivers et al., 2012).

Student Success Skills is an SEL curriculum for students of all grade levels (PreK-12) that focuses on the promotion of academic success through fostering a supportive learning environment and practicing skills to encourage better social and emotional functioning (*Student Success Skills*, n.d.). This curriculum earned a “SElect” rating because it supports SEL growth in all five competencies and improves various student outcomes (CASEL, n.d.-a). Specifically, studies have shown significant improvements in math and reading achievement, executive functioning, and feeling connected to classmates (León et al., 2011; Lemberger et al., 2015). One study in particular demonstrated that *Student Success Skills* is effective in a student population that is 100 percent Latinx and 100 percent non-native English speakers (León et al., 2011).

LITERACY IMPROVEMENTS FROM SEL CURRICULA

The curriculum *Peace Learning Circles* (formerly known as Tribes) has demonstrated improvements in children’s literacy rates through empirical research. One quasi-experimental study (Kiger, 2000) assigned third graders at an urban school district in the Midwest to one of three groups: *Peace Learning Circles*, part *Peace Learning*

Circles (where the curriculum was only partially implemented), and a control group. Students in the *Peace Learning Circles* intervention group had significant improvements in reading comprehension, as measured by a state-mandated reading comprehension test compared to the other two groups. This study should be replicated using a larger, more diverse sample of students and a randomized controlled design to investigate improvements in literacy further.

Researchers have found literacy improvements in elementary school students from the *Positive Action* SEL curriculum. Specifically, a study used a sample of students from racially diverse Hawai'i schools to investigate a variety of outcomes, including improvements in literacy (Snyder et al., 2009). This randomized controlled trial looked at standardized math and reading scores and proficiency, as well as absenteeism, suspension, and retention. All measures were found to be significant at one year post-trial. Additionally, schools that implemented the *Positive Action* intervention met or exceeded state averages for academic achievement post-trial, despite their students being below baseline at the start of the intervention. Notably, all observed outcomes had moderate to large effect sizes. This study is particularly relevant given that it includes a very high percentage of racial and ethnic minority students, especially Pacific Islander and Filipino students, who are often particularly underrepresented in research.

The Responsive Classroom SEL curriculum has also been shown to improve students' literacy, among other outcomes. One quasi-experimental study measured academic achievement as well as teacher and observer reported use of *Responsive Classroom* techniques (e.g., how teachers manage behavior, classroom setup, and encouraging sharing between students) over one-, two-, and three-year periods (Rimm-Kaufman et al., 2007b). This sample was made up of more than 50 percent of students with racial or ethnic minority identities. Researchers found that children at schools that implemented the *Responsive Classroom* curriculum for periods of two or three years significantly improved in their reading and math achievement. The *Responsive Classrooms* curriculum typically takes three to five years to adopt, so investigating these findings in classrooms that have been using it for an extended period would be a great next step in supplementing this research.

The *RULER* Approach (Yale Center for Emotional Intelligence, 2021) has demonstrated significant improvements in preschool children's pre-literacy skills. A quasi-experimental study used a diverse sample of 1,051 preschoolers—Hispanic or Latinx (53 percent), Black (17 percent), Asian (4 percent), and multiracial or other (4 percent)—in the northeast United States (Bailey et al., 2023). Researchers measured pre-literacy skills using a 15-minute direct child assessment investigating knowledge of the alphabet, comprehension, phonological awareness, and vocabulary/oral language understanding. Results indicated that, across all demographic variables, students with access to the *RULER* curriculum improved significantly in their pre-literacy skills. Researchers mentioned that students in the *RULER* group improved approximately 0.25 standard deviations in their pre-literacy skills, meaning students were significantly above average, which is consequential for schools.

Children taking part in the *Student Success Skills* curriculum have also shown improvements in literacy. A quasi-experimental study investigated reading and math achievement in a sample of Latinx students with limited proficiency in English (León et al., 2011). Researchers found that children in the *Student Success Skills* intervention group had significantly improved scores in reading and math as measured by standardized test scores. A medium effect size ($d = 0.37$) was found. This study's focus on ethnic minorities with limited English proficiency is quite notable, highlighting how SEL curricula such as *Student Success Skills* can help students from diverse backgrounds—including multilingual students—improve their literacy skills.

Last, the *Manners of the Heart* curriculum has shown preliminary effectiveness in improving kindergarteners' literacy. An unpublished quasi-experimental study used a sample of diverse students (greater than 80 percent

Black, 84 percent eligible for free or reduced-price lunch) from an urban school district in the Southeast United States (CASEL, n.d.-a). Researchers found that kindergarteners who took part in the curriculum had significantly improved standardized reading scores. While this study has not undergone peer review, and more research is needed, there is preliminary evidence demonstrating literacy improvements from participation in the *Manners of the Heart* curriculum.

SAMPLE MATERIALS ANALYSIS

We engaged in an examination of publicly available sample materials from the SEL curricula described above, focusing on Grade 2 where possible as it represents the midpoint of the PreK through Grade 5 developmental span. While this analysis is based only on a limited set of materials and does not claim to provide empirical evidence, we aim to illustrate some of the mechanisms and routines that may be responsible for the positive literacy-related findings related to these curricula. We turn now to identifying some of these, connecting them both to elements of the Active View of Reading model and to Common Core State Standards for English Language Arts (CCSS-ELA).

Many programs, but particularly *RULER*, emphasized the development of a large and nuanced vocabulary of terms for communicating emotions; vocabulary knowledge is one of the processes identified in the Active View of Reading as bridging word recognition and language comprehension, and it is crucial to the development of both reading ability and emotional intelligence (Galligane & Han, 2015). Vocabulary-oriented lessons could address the following CCSS-ELA standard: “Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.”

Many SEL programs (e.g., *RULER*, *Positive Action*, and *Manners of the Heart*) include regular read-alouds or other reading experiences of texts (usually narratives) that feature SEL-related themes. Engaging in teacher-led read-alouds and later discussions about text supports students’ listening comprehension. To connect to the Active View, text discussions may activate and build students’ cultural and other content knowledge, as well as develop their verbal reasoning. Comprehension support is especially robust when teachers ask a range of questions that prompt and assess students’ literal comprehension (e.g., in *Positive Action*, “What was Sammy’s problem at the beginning of the story?” Grade 2, Unit 4, Lesson 86, n.d.), inferential comprehension (e.g., in *Manners of the Heart*, “Why do you think Nicholas stole from the people of Merryville?” Grade 2, Week 4, Day 1, n.d.), and evaluative comprehension (e.g., in *RULER*, “What did the character or person do to handle the emotion(s)? Were the strategies helpful or unhelpful? What other strategies might have worked?” Yale Center for Emotional Intelligence, 2021, pp. 9–10). Some of the CCSS-ELA standards that may be addressed through these kinds of activities include: “Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text” and “Analyze how and why individuals, events, or ideas develop and interact over the course of a text.”

Experiences with texts in these programs also offer opportunities for students to develop cognitive strategies for reading; strategy use is one of the components of the Active Self-Regulation element in the Active View. Some examples of strategies we identified in the sample materials include identifying main idea (e.g., in *Manners of the Heart*, “Our hearts grow when we begin to help others,” Grade 2, Week 4, Day 1, n.d.), and identifying cause and effect (e.g., in *Manners of the Heart*, “What happened to Nicholas when he began helping out around the farm?” Grade 2, Week 4, Day 1, n.d.). These programs also encourage students to develop

and practice strategies outside of the context of text reading discussions. For example, *RULER* has as one of the Essential Questions that students consider throughout the curriculum, “How do my emotions influence understanding of myself, others, and my community?” (Yale Center for Emotional Intelligence, 2021, p. 4). Considering questions such as these helps students develop an awareness of cause-and-effect relationships, which are crucial to understanding both narrative and some kinds of informational texts. *Peace Learning Circles’* Routine Cards prompt students to summarize and synthesize information that is shared either orally by peers (e.g., Pictures pictures pictures routine card, n.d.) or visually (e.g., Appreciating others routine card, n.d.). Summarizing information presented by a single source and synthesizing information across multiple sources are vital skills, particularly when conducting informational research. CCSS-ELA standards that may be addressed by these kinds of questions and discussions include: “Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas” and “Analyze how and why individuals, events, or ideas develop and interact over the course of a text.”

Finally, the identified programs also offer opportunities for students to engage in writing. Reading and writing share underlying cognitive processes, and teaching one reinforces and supports the other (Fitzgerald & Shanahan, 2010). For example, the first day in each *RULER* Feeling Words Unit prompts students to record a story of a time they experienced the emotion targeted in that day’s lesson (Yale Center for Emotional Intelligence, 2021, p. 8). *Peace Learning Circles’* Appreciating Others Routine Card includes an option for students to write contracts committing themselves to a particular practice of appreciation (Appreciating others routine card, n.d.). *Manners of the Heart* asks students to chart the duties and responsibilities they perform at home (Grade 2, Week 4, Day 1, n.d.). While the writing experiences described here are short, they may still address CCSS-ELA standards such as, “Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details and well-structured event sequences” or “Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.”

District Recommendation 3

ADOPT LITERACY CURRICULA THAT SUPPORT SEL.

For this section, we present findings for several commonly adopted literacy curricula: *Core Knowledge Language Arts*, *Great Minds: Wit and Wisdom*, and *EL Education*. These are not the only curricular possibilities for adoption by states and districts, nor do we necessarily advocate for these choices over others. We selected these curricula because they are currently gaining traction in U.S. schools, because they have empirical evidence for their general effectiveness at supporting literacy achievement, and because they are designed to build knowledge, which we have already outlined as an important consideration in curriculum design and adoption. These represent a sample chosen to illustrate possibilities for using existing literacy curricular programming to better support SEL development. In presenting each, we highlight not the general literacy findings (as these are beyond the scope of this report), but the research findings or articulated design supports that are related to SEL.

Core Knowledge Language Arts (CKLA) aims to build knowledge through classic children’s literature and the explicit teaching of vocabulary. While there are no empirical studies of the curriculum’s effectiveness in supporting SEL, there are findings related to the curriculum’s support for vocabulary, and as we note in our analysis in the later section, the vocabulary targeted in CKLA includes many SEL-related words. For example, one study from 2020 found that focus groups that were taught using CKLA saw medium-to-high effect sizes specifically in the acquisition of new vocabulary around the unit content, which (based on the

analysis of curricular materials we highlight in the later section) includes vocabulary that relate to the five SEL competencies (Cabell, 2020).

Great Minds: Wit and Wisdom has published multiple articles and documents on how their curriculum has been designed with SEL in mind, although no empirical studies have yet been conducted on whether the program has measurable effects on SEL development. One of these guidance documents explicitly outlines the five competencies and gives module-specific examples of these competencies in action, in addition to multiple SEL annotated lesson plans (Bailey et al., 2019).

EL Education conducted a study within Detroit Public Schools Community District in their K-8 schools (EL Education, 2022). The study was conducted in 2018–2020, using outside education firm WestED, to observe impacts of SEL development with the students studying the EL Education curriculum. Within this time frame, the study reported that in SEL skills and competencies “...Detroit students outperformed their peers in comparison districts in kindergarten and grades 3 through 8, with small-but-meaningful effect sizes ranging from .12 to .15 standard deviations—a statistically significant finding.” Although it is important to acknowledge that EL Education funded this study, these results are promising as to not only the impacts of the specific curriculum but also the importance of SEL within elementary and middle schools.

SAMPLE MATERIALS ANALYSIS

We examined publicly available sample materials from the literacy curricula described above. We looked for practices and routines that offered potential to connect to and/or build the five SEL competencies of self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. We will now take each competency in turn, offering examples of the routines we noticed in the sample materials and connecting the routines to the Washington State SEL standards (Washington Office of Superintendent of Public Instruction, 2019) that may be addressed by each routine. We selected the Washington standards because these standards: (a) were recently updated in 2019, (b) cover grades K through 5, (c) include systematic attention to equity, (d) use the five competencies described in the CASEL framework and go beyond to add a sixth competency of self-efficacy (which, as mentioned in this report, is a factor in literacy achievement), and (e) were among the most complete standards according to CASEL’s review of existing state standards and competencies (CASEL, 2020).

Finally, we may also note routines and opportunities that were not present in the curricular materials we were able to review, but which we believe have promise and could potentially be incorporated into literacy curricular materials and instruction. Again, by providing these examples, we do not endorse any particular curriculum or make causal claims that these practices would definitely support SEL, as we do not yet have the empirical research necessary to do so. We do this to highlight possibilities.

SELF -AWARENESS

CASEL describes the self-awareness competency as “the abilit[y] to understand one’s own emotions, thoughts, and values and how they influence behavior across contexts” (n.d.-b). Self-assessment routines are one way students may demonstrate a growth mindset, which is a component of self-awareness. When students have a growth mindset, they understand that their intelligence and achievement can progress over time, in proportion to their effort (as opposed to being fixed personality traits). In *EL Education*, students are asked to reflect on progress over time. They are first offered the reminder that “[y]our ability grows with your effort, so it’s fine if you aren’t there yet!” and then are asked to respond to the prompt, “How have I improved since I last worked on

this skill? How can I improve next time?” (Grade 4, Unit, 1, Lesson 8, 2017). Asking students to consider current progress then encourages them to consider the possibility for future growth in a skill area, and having a written record allows them to examine the evolution of these thoughts over time. This example may address Washington SEL standards: Benchmark 3A Late Elementary Indicator “I can identify an accomplishment and reflect on the steps I took to get there.”

Another skill encompassed within the self-awareness competency is the awareness of personal emotions. The CKLA *Wind in the Willows* unit contains many examples of read-aloud questions prompting this awareness, including, “Ask students if any of them have ever been away from home for a long time. Ask, ‘What was it like? How did you feel being away from home? How did you feel when you got back home?’” (Grade 3, Domain 1, 2013, p. 98). Later in the unit, students are asked, “How would you feel if a friend lied to you and tricked you?” (Grade 3, Domain 1, 2013, p. 185). This question goes a step further, asking students not only to consider actual past emotional experiences, but also to be aware of how they *might* feel in a hypothetical situation. These examples both potentially demonstrate Washington SEL standards: Benchmark 1A Early Indicator “With adult assistance, I can recognize, identify, and name my emotions, feelings, and thoughts.”

SELF-MANAGEMENT

The self-management competency is defined as “The abilit[y] to manage one’s emotions, thoughts, and behaviors effectively in different situations and to achieve goals and aspirations” (CASEL, n.d.-b). However, we did not find many examples of this competency in action within the samples examined. While we acknowledge that our access to curricular materials was limited, this demonstrates a potential need for growth in curricular design targeting this specific competency. The self-management competency could be incorporated into literacy curricular materials in a variety of ways. For example, during read-alouds, teachers might engage students in discussions of how characters respond and balance their feelings in different situations, and whether students know of any other management techniques a character might benefit from. Curricular materials might also support self management by explicitly teaching students how to set reading-related and writing-related goals and how to manage their own actions to help them progress toward those goals. The capacity to manage thoughts, feelings, and behaviors in multiple contexts is important to success both in education and in the workforce, and it’s important that curriculum reflects this need.

SOCIAL AWARENESS

CASEL defines the SEL domain of social awareness as “the abilit[y] to understand the perspectives of and empathize with others, including those from diverse backgrounds, cultures, and contexts” (CASEL, n.d.-b). One prominent practice that may support social awareness is the posing of prompts and questions during read-alouds and other shared reading experiences that prompt students to consider the emotions that particular characters are experiencing or expressing. These questions are strongest when students are asked to explain why they think a character is feeling a certain way; this allows them to cite characters’ facial cues, body language, actions, and thoughts (if narrated). For example, in the CKLA Grade 3 *Wind in the Willows* unit, students are asked, “Is Rat angry with the dejected Mole? How do you know?” (Grade 3, Domain 1, 2013, p. 42). *EL Education’s* Grade 1 unit on Sharon Creech’s *Love That Dog* engages students to create an ongoing anchor chart where they record events that happen to the main character, Jack, how Jack feels about the event, and how students know how he feels (Grade 4, Unit 1, Lesson 10, 2017). These types of questions and prompts may address the following Washington SEL standards: Benchmark 4A Early and Late Indicators “With adult assistance, I can identify emotions and perspectives expressed by others,” and “I can identify verbal, physical, and situational cues that affect how others may feel.”

The literary device of perspective also provides opportunities to teach and reinforce learning about social awareness. Understanding others' perspectives is a key component of developing empathy, as well as of reading comprehension. The CKLA Grade 3 *Wind in the Willows* unit has identifying perspective as one of the unit's major objectives; students are explicitly taught that "perspective is how someone sees or experiences something" (Grade 3, Domain 1, 2013, p. 35), and students practice identifying the perspective from which the story is being told multiple times, culminating in a collaborative writing experience in which they retell the story from the perspective of a different character. These types of instructional experiences may begin to address the following Washington SEL standard: Benchmark 4A Early Elementary Indicator "With adult assistance, I can recognize that people can have different feelings when faced with the same situations."

Literacy curricula also have the power to introduce students to cultures, ideas, and ways of knowing that differ from their own. These opportunities may come from text, such as in the CKLA *Wind in the Willows* unit, where students are introduced to and have the opportunity to discuss words (e.g., cheek; Grade 3, Domain 1, 2013, p. 129), foods (e.g., bubble and squeak; Grade 3, Domain 1, 2013, p. 141), and ways of dress (e.g., for judges; Grade 3, Domain 1, 2013, p. 129) that are common in the United Kingdom, the home of the text's author. Opportunities can also come through interactions with peers. For example, when teaching vocabulary in EL Education's *Love That Dog* unit, students have an opportunity to say what the translation of the word is in their home language, broadening their classmates' linguistic horizons and demonstrating value for their home language and cultural practices (Grade 4, Unit 1, Lesson 3, 2017). These types of instructional experiences may address the following Washington SEL standards: Benchmark 4A "Demonstrates awareness of other people's emotions, perspectives, cultures, languages, histories, identities, and abilities" and Benchmark 4B Late Elementary Indicator "I can identify similarities and differences in verbal and nonverbal communication between and within a variety of cultural and social groups."

RELATIONSHIP SKILLS

Relationship skills, defined by CASEL as "The abilities to establish and maintain healthy and supportive relationships and to effectively navigate settings with diverse individuals and groups" (CASEL, n.d.-b), have some overlap with the Social Awareness competency. For example, read-aloud questions such as "How does Rat demonstrate friendship? Does Mole demonstrate friendship? Why or why not?" (Grade 3, Domain 1, 2013, p. 42) display concepts of empathy found within the social awareness category, but also concepts of positive relationship modeling found with relationship skills category.

One way curricular materials can foster relationship skill development is by providing opportunities for, and explicit support of, group collaboration. A common and quick way to encourage collaboration is Think-Pair-Share: students start by reflecting on a question or topic, get with a partner or small group, and then discuss their interpretations. Pairs may also discuss briefly with another group before the teacher calls on a few dyads to share with the whole class. The CKLA *Wind in the Willows* unit explicitly teaches the routine, making it a buildable skill for students over time (Grade 3, Domain 1, 2013, p. 42). In the *Wit and Wisdom Once Upon a Farm* kindergarten unit, students are asked to find partners to reread a text, and then following the reading, students do a Think-Pair-Share discussing "How do you sit with your partner during Partner Reading?" (Kindergarten, Lesson 7, n.d.). This prompt asks students to consider communal norms within classroom spaces; being aware of one's position in space and vocal volume ensure that the classroom remains an environment conducive to learning, even when many children may be speaking concurrently. These examples fall under Washington SEL standards: Benchmark 6B Early Indicator "With adult assistance, I can positively and respectfully interact in peer and group activities and interactions."

Relationship skills can also be taught through feedback-based activities. The *Wit and Wisdom Once Upon a Farm* unit engages students in reading and recording poems in small groups before providing feedback to one another (Kindergarten, Lesson 3, n.d.). While a Think-Pair-Share is still a suggested activity within this example, the group component of the activity helps students learn how to give kind and respectful responses to peer work: “Volunteers from the group offer one compliment and one suggestion about the recording. Repeat this for each group.” Similarly, in *EL Education’s* Grade 4 Unit 1, students are given explicit criteria on how one might respond to summaries written by their classmates (Grade 4, Unit 1, Lesson 1, 2017). These practices provide opportunities for students to demonstrate Washington SEL Benchmark 5A Early Elementary Indicator “With adult assistance, I can demonstrate attentive listening skills” and Washington SEL Benchmark 6A Late Elementary Indicator “I can engage with other students in opportunities to influence how the classroom and school functions.”

RESPONSIBLE DECISION-MAKING

Defined by CASEL as “the abilit[y] to make caring and constructive choices about personal behavior and social interactions across diverse situations” (CASEL, n.d.-b), the Responsible Decision-Making competency is important as children need more guidance around how to make healthy choices. Curricular materials may prompt students to discuss, for example, whether they agree with the choices and decisions of a character, or what they would do if they were in that character’s position. The CKLA *Wind in the Willows* unit goes even further to explicitly highlight the concept of responsibility in decision-making, including “Would you consider Toad to be responsible or irresponsible based on his actions so far?” (Grade 3, Domain 1, 2013, p. 139) and “What reasons do Mr. Badger, Rat, and Mole have to make Toad be more responsible?” (Grade 3, Domain 1, 2013, p. 130). Questions such as these prompt discussion on the justification of actions and what behaviors are appropriate in the context of a situation. This allows for differences in opinion with the support of text, and it can create avenues for positive discourse.

EL Education fourth grade materials include an anchor chart labeled Becoming an Ethical Person focused on behaviors a person might display to behave ethically. This includes phrases such as “I show respect. This means I appreciate the abilities, qualities, and achievements of others and treat myself, others, and the environment with care” and “I behave with integrity. This means I am honest and do the right thing, even when it’s difficult, because it is the right thing to do” (Grade 4, Unit 1, Lesson 2, 2017). Alongside these statements are examples of behaviors that demonstrate these qualities, including not looking at other people’s papers and throwing away garbage. Ideas of intentional and ethical behavior are important to teach children to create a sense of community and interpersonal accountability. These examples demonstrate Washington SEL Benchmark 2B Early Elementary Indicator “With adult assistance, I can follow routines and identify ideas to solve problems” and Washington SEL Benchmark 3B Late Elementary Indicator “I can identify the connections between behaviors and outcomes and understand that choices are influenced by potential consequences.”

Another skill encompassed within responsible decision-making is the understanding of justice and fairness. This includes both historical and literary examples. In *Wit and Wisdom’s* Grade 2 curriculum, students look at civil rights activists such as Dr. Martin Luther King, Jr. and Ruby Bridges and how their actions show change (Module 3, n.d.). Historical examples of justice-seeking can demonstrate how changes happen in real time and on a larger scale. The Civil Rights Movement in particular is still at the forefront of public consciousness and is thus an easily recognizable example of these ideas. Within literature, the CKLA *Wind in the Willows* unit asks questions about the characters, including “Do you think Toad’s punishment of being sent to jail for 20 years is fair? Why or why not? Do you think this sentence will change Toad’s behavior?” (Grade 3, Domain 1, 2013, p. 131). Questions such as these prompt discussion on the justification of actions and what behaviors

are appropriate in the context of a situation. Seeing these stories play out can create avenues for positive discourse about consequences and then observation of the delivery. The given examples are encompassed with the Washington SEL standards: Benchmark 6C Early Indicator “With adult assistance, I can identify individual and community rights and responsibilities.”

District Recommendation 4

ADOPT CURRICULA THAT INTENTIONALLY INTEGRATE SEL AND LITERACY.

We now turn to our fourth and final district recommendation. In this report, we have noted the great potential that exists to use connections and synergies between literacy and SEL. Curricular materials that are explicitly designed to integrate multiple domains, including but not limited to literacy and SEL, can make it easier for districts, schools, and educators to take advantage of these opportunities. We know of at least two curricula that were explicitly designed to weave together literacy and SEL: *Reading with Relevance* and the *Great First Eight* curriculum.

Reading with Relevance seeks to “inspire relevant reading experiences, heartfelt conversations, and instructional breakthroughs in classrooms across the nation” (Reading with Relevance, n.d.). This curriculum was originally designed to support students who were multiple years behind grade level and had significant social and/or emotional struggles which seriously affected their ability to learn. *Reading with Relevance* uses tools of SEL to develop students’ literacy and critical thinking skills. Their lessons contain themes of diversity, equity, social justice involvement, and cultural affirmation, all of which bolster both positive SEL and academic success in students. As this curriculum falls under the umbrella of SEL curricula, it’s important to note that CASEL has designated this program as “SElect.” Relevant studies on this curriculum are unpublished and have not undergone peer review. However, preliminary research has shown significant improvements in reading scores, school engagement, and perceived school safety and has demonstrated effectiveness in diverse populations (CASEL, n.d.-a). More research is needed to further investigate *Reading with Relevance’s* impacts and ability to be systemically implemented, and what research has been done must be subject to peer review and published widely.

The *Great First Eight Curriculum* is an all-day, “fully research- and standards-aligned, comprehensive, and strengths-based [curriculum] ... designed for classrooms with a number of children from historically underrepresented racial and ethnic backgrounds” (*Great First Eight*, n.d.)¹. The curriculum, which includes materials for PreK through grade 2 (as well as infant and toddler materials, which are not relevant to this report), offers instructional periods dedicated to the explicit and systematic teaching of both literacy foundational skills and SEL. The curriculum also intentionally integrates the two domains. Common Core State Standards for reading literature are regularly addressed in the SEL portion of the day, which includes frequent read-alouds of narrative text, and interdisciplinary projects build students’ skills in both areas, along with mathematics, science, and social studies. *Great First Eight* is currently in a period of staggered development and release; as of the publication of this report, the Kindergarten and Grade 1 curricular materials are available to schools that elect to participate in a Vanguard program, with the Kindergarten materials becoming available for adoption by any district in the

¹ Disclosure: Dr. Ward was involved with the creation of the *Great First Eight* curriculum, but as the curriculum is freely available online as an Open Educational Resource, she does not have any financial interest in describing it in this report.

2024–2025 academic year. As the curriculum is so new, research studies have not yet been conducted on its effectiveness in supporting children’s achievement in literacy or SEL. However, as all instructional practices are deeply aligned with research, it holds considerable promise.

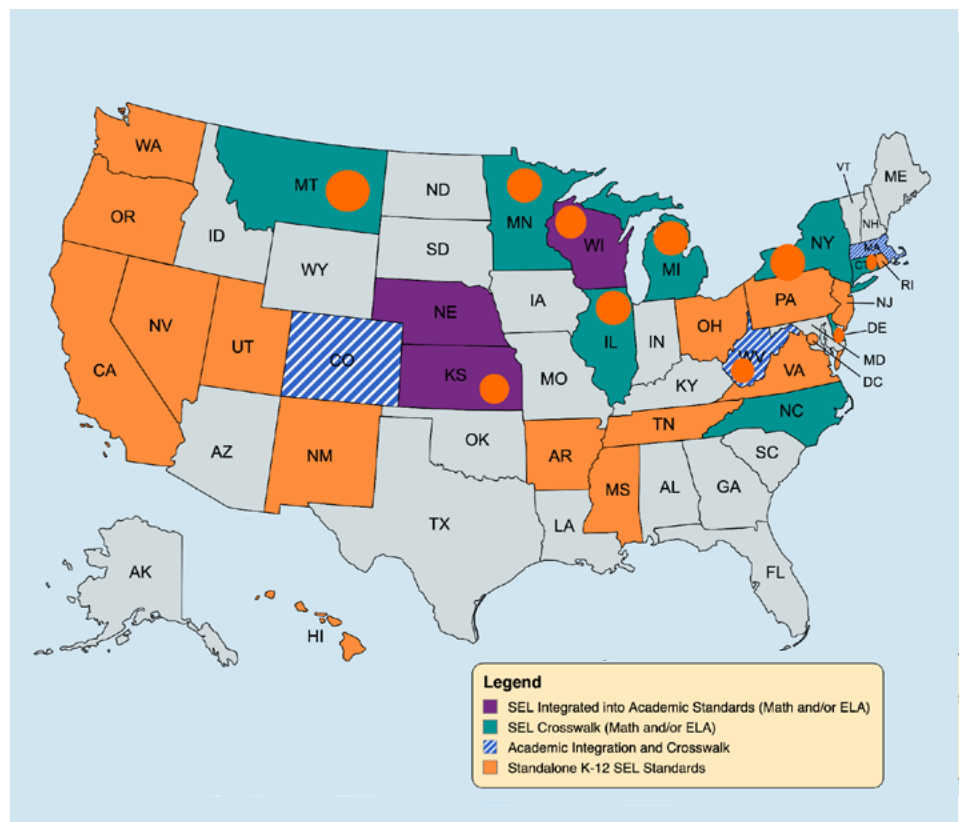
States and districts wanting to adopt intentionally integrated curricular materials currently face a challenge. As mentioned in the earlier section of this brief on laws surrounding literacy curricula, many states have laws requiring that literacy curricula be high-quality and aligned with current reading research. To ensure this, some states (e.g., Rhode Island and Ohio) have partnered with independent organizations that review curricular materials for research alignment, such as EdReports. Other states have implemented their own similar review processes (e.g., CuRaTe in Massachusetts). Districts in states with these laws may select for adoption only curricula that have attained a certain rating in the review process, unless they undergo a lengthy waiver submission process for each school desiring to use something else.

Importantly, these review processes were designed for the vast majority of curricular materials, which focus on just a single academic subject or domain at a time. This means that states with curricular legislation that requires an EdReports review are effectively prevented from even considering *Great First Eight, Reading with Relevance*, or other integrated curricula that may be published in future. As we highlight in the forthcoming policy recommendations, this presents an opportunity for policymakers to encourage review organizations to update their processes to accommodate integrated curricula.

State Recommendation 1

CREATE AND ADOPT ROBUST STANDARDS FOR SEL ACROSS GRADE LEVELS.

Our first recommendation for state policymakers is the creation and/or adoption of robust SEL standards across PreK through grade 6. Educational standards express what students should know and be able to do by the end of a given academic year, and they are a crucial driver of instruction. Curriculum developers and classroom teachers alike are responsible for documenting which standard(s) are addressed in any given unit or lesson, and for ensuring that children meet the standards for their grade level over the academic year. In the case of SEL, standards identify skills and competencies that students should develop across grade



levels (Mahoney et al., 2021; Yoder, Martinez-Black et al., 2020). State SEL standards help ensure alignment across districts and effective implementation of SEL by educators and school leaders. By integrating SEL into instruction and curriculum, educators can teach and model skills for life and school success.

Standards exist for all other academic domains, including mathematics and ELA (e.g., the Common Core State Standards, which are in use in 41 U.S. states as of 2024 and which have inspired state-level standards in other areas; National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010), science (e.g., the Next Generation Science Standards at the national level; NGSS Lead States, 2013) and state learning frameworks at the state level, and social studies (e.g., the C3 Curriculum Frameworks at the national level; National Council for the Social Studies, 2013) and state learning frameworks at the state level. However, although there has been growth in the number of states that have established SEL standards since Illinois first adopted standards in 2004, standalone SEL standards are not as widely adopted. As of 2024, 25 states plus the District of Columbia have developed SEL standards, competencies, or benchmarks for K-12. SEL standards can have a profound impact on student success, and we encourage more states to go further in their education agenda to improve student outcomes by adopting SEL standards.

State Recommendation 2

INTEGRATE SEL INTO ENGLISH LANGUAGE ARTS STANDARDS.

Our second recommendation for state policymakers is to integrate SEL into state ELA standards. As the research outlined in this brief shows, SEL has a valuable role to play in supporting student literacy development. Embedding SEL standards into state ELA standards is crucial in ensuring SEL can be used as an evidence-based strategy to drive student literacy development.

Five states—Colorado, Massachusetts, Nebraska, West Virginia, and Wisconsin—have integrated SEL into their ELA academic standards and serve as examples of ways to approach SEL and ELA standards integration work. Eleven states—Colorado, Connecticut, Delaware, Illinois, Massachusetts, Michigan, Minnesota, Montana, New York, North Carolina, and West Virginia—have crosswalked or mapped their SEL standards side-by-side with their ELA standards to identify which skills are common and equivalent between both sets of standards.

Further, Colorado, Massachusetts, and West Virginia have integrated SEL into their academic standards and crosswalked SEL with ELA standards. Several state efforts serve as examples for how SEL can be leveraged to advance academic and literacy development goals together as a part of state standards and strategic planning work:

Nebraska’s revised College and Career Ready Standards for ELA recognize SEL as an integral part of rigorous and meaningful curriculum and instruction.

Colorado’s academic standards around reading, writing, and communicating integrate SEL throughout its grade-level expectations, evidence outcomes and academic context, and connections for prepared graduates.

Nebraska-
SEL as foundation for academic standards

NEBRASKA'S COLLEGE AND CAREER READY STANDARDS FOR ENGLISH LANGUAGE ARTS

Social Emotional Learning
Social and emotional learning (SEL) is the process through which children and adults understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions. Because SEL plays a critical role in learning and human development, the revised standards for English Language Arts recognize it as an integral part of rigorous and meaningful curriculum and instruction.

Colorado-
SEL integrated into academic standards

READING, WRITING, AND COMMUNICATING
Kindergarten, Standard 1: Oral Expression and Listening

Prepared Graduate:
1. Collaborates effectively in group meetings or leaders who listen actively and respectfully, pose thoughtful questions, acknowledge the ideas of others, and contribute ideas to further the group's attainment of an objective.

Grade Level Expectation:
1. Communicate using verbal and nonverbal language.

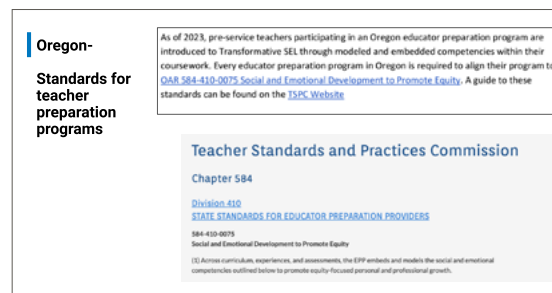
Evidence Outcomes:
Students Can:
a. Participate in collaborative conversations with diverse partners about English Language Arts topics and texts with peers and adults in small and larger groups.
b. Confine one's speaking to a particular topic and stay on the subject and respond to others' comments and questions.
c. Listen to others, understand what they are saying, get attention in groups, and respond appropriately.
d. Engage in shared and reciprocal speaking, such as reporting out, answering questions, and responding to others.
e. Use appropriate volume and tone for the situation.
f. Use appropriate volume and tone for the situation.

Academic Content and Connections:
Colorado Essential Skills:
1. Identify and regulate one's own emotions, thoughts, and values and their influence on behavior.
2. Demonstrate understanding of one's own emotions and thoughts and use this knowledge to regulate one's behavior.
3. Establish and maintain a range of relationships to communicate personal interests, experiences, skills, and abilities.

General Outcomes:
1. Use SEL to enhance learning.
2. Demonstrate understanding of one's own emotions, thoughts, and values and their influence on behavior.
3. Demonstrate understanding of one's own emotions and thoughts and use this knowledge to regulate one's behavior.
4. Establish and maintain a range of relationships to communicate personal interests, experiences, skills, and abilities.
5. Use SEL to enhance learning.

Oregon requires educator preparation programs in the state to align their programs with SEL standards, such that all pre-service teachers are introduced to SEL through modeled and embedded competencies within their coursework.

Massachusetts has articulated the role of SEL in ELA and literacy through its 2017 Curriculum Framework. This includes Guiding Principle 10, which states: “[s]ocial and emotional learning can increase academic achievement, improve attitudes and behaviors, and reduce emotional distress. Students should practice recognizing aspects of themselves in texts (self awareness), struggling productively with challenging texts (self management), tailoring language to audience and purpose (social awareness), grappling vicariously with choices faced by others (responsible decision making), and collaborating respectfully with diverse peers ([relationship skills](#)).”



State Recommendation 3

ISSUE GUIDANCE ON USING SEL AS AN EVIDENCE-BASED STRATEGY TO SUPPORT LITERACY DEVELOPMENT.

Our third recommendation is for states to issue guidance to support districts and schools in implementing SEL as an evidence-based strategy to support literacy development.

Several states mentioned above, which have either integrated SEL into ELA standards across grade levels or conducted crosswalks between both, include instructional examples of combining SEL within ELA instruction in their ELA standards. Examples of this include [Massachusetts](#) and [Minnesota](#).

Washington State has produced a [lesson-planning tool](#) to support ELA educators in the state to “intentionally plan ways to nurture social [and] emotional competencies within their academic lessons.” The tool is scaffolded for educator use and includes a standards crosswalk, application of how the standards align, and a roadmap. Questions for reflection are also included to allow educators to customize these strategies for their classrooms.

Illinois has produced guides for different stakeholder audiences, including students, parents, district leaders, regional leaders, and others. Illinois’ [Comprehensive State Literacy Plan](#) is connected to multi-tiered systems of support to enhance the core learning environment and offer students timely interventions that encompass various aspects of a child’s development, including academics, behavior, and social and emotional needs.

New York includes examples of integrating SEL into ELA lessons at the elementary level within its [Social Emotional Learning: A Guide to Systemic Whole School Implementation](#).

The CASEL Collaborating States Initiative and the Massachusetts Department of Education worked together in 2017 to produce a Examples of [Social and Emotional Learning in English Language Arts Instruction](#), which can inform state agencies in providing practical guidance on the implementation of SEL as an evidence-based

strategy to support ELA instruction. In turn, this resource has informed several states' efforts to produce similar guidance documents, such as [this resource](#) from the North Carolina Department of Public Instruction's Office of Academic Standards.

We encourage states to provide guidance to support districts and schools in the practical implementation of SEL to support literacy development.

State and District Recommendation 1

INCORPORATE SEL IN STATE TEACHER PREPARATION AND PROFESSIONAL DEVELOPMENT PROGRAMS AND INVEST IN ONGOING COACHING AND PROFESSIONAL LEARNING AT THE DISTRICT AND SCHOOL LEVELS TO STRENGTHEN LITERACY INSTRUCTION.

Our fourth recommendation is geared toward better equipping educators with training and professional development on SEL to boost their ability to provide effective literacy instruction.

National Center for Education Statistics (NCES) surveys of PreK-12 teachers indicate that they believe that reading is one of the most difficult subjects to teach. Additionally, students of color and those from families experiencing poverty are the least likely (when compared to their white, more affluent peers) to have a teacher certified in reading or language arts teaching them. Teacher pedagogical knowledge and instructional skills are critical levers shaping students' ability to read and develop other literacy skills.

There is evidence to support enhancing pre-service and in-service teacher coursework and professional development in strong evidence practices such as SEL. States are uniquely positioned to ensure pre-service teachers have more reading instruction coursework and exposure to human development and neurosciences research that is tied to evidence-based reading and literacy skill development. States can also ensure that pre-service teachers receive preparation for teaching and supporting students' literacy development, particularly children with disabilities, English learners, students of color, and children from low-income families.

Similarly, districts have a valuable role to play in investing in ongoing coaching and professional learning to ensure educators have the support they need to use SEL to strengthen literacy instruction. Boston Public Schools (BPS) has dedicated resources to supporting educators through ongoing coaching and professional learning with regard to integrating SEL in literacy instruction. BPS supports its educators in implementing academic integration work, specifically by providing an overview of where SEL lives in the district's literacy curriculum, and providing resources to help educators deepen SEL practices in the classroom.

REFERENCES

- Amplify (n.d.). Core Knowledge Language Arts [Program of studies]. <https://www.coreknowledge.org/language-arts/>
- Andreu, C. I., García-Rubio, C., Melc on, M., Schonert-Reichl, K. A., & Albert, J. (2023). The effectiveness of a school mindfulness-based intervention on the neural correlates of inhibitory control in children at risk: a randomized control trial. *Developmental Science*, Article e13403. <https://doi.org/10.1111/desc.13403>
- Appreciating others routine card* [Sample lesson material]. (n.d.). *Peace Learning Circles*. <https://peacelearningcenter.org/everyday-circles/>
- Baker, L., & Carter Beall, L. (2009). Metacognitive processes and reading comprehension. In S. E. Israel & G. G. Duffy (Eds.), *Handbook of research on reading comprehension* (pp. 373–388). Routledge.
- Baker, L., & Wigfield, A. (1999). Dimensions of children's motivations for reading and their relations to reading activity and reading achievement. *Reading Research Quarterly*, 34(1), 452–477.
- Bailey, C. S., Martinez, O., & DiDomizio, E. (2023). Social and emotional learning and early literacy skills: A quasi-experimental study of RULER. *Education Sciences*, 13(4), Article 4. <https://doi.org/10.3390/educsci13040397>
- Bailey, E., Basiouny, H., Graham, N., Thompson, M., & Wilson, M. (2019). *The CASEL framework in action: How Wit & Wisdom® integrates social, emotional, and academic learning*. <https://greatminds.org/english/blog/witwisdom/the-casel-framework-in-action-how-wit-wisdom-integrates-social-emotional-and-academic-learning>
- Bauer, C. C. C., Caballero, C., Scherer, E., West, M. R., Mrazek, M. D., Phillips, D. T., Whitfield-Gabrieli, S., & Gabrieli, J. D. E. (2019). Mindfulness training reduces stress and amygdala reactivity to fearful faces in middle-school children. *Behavioral Neuroscience*, 133(6), 569–585. <https://doi.org/10.1037/bne0000337>
- Berg, J., Osher, D., Same, M. R., Nolan, E., Benson, D., & Jacobs, N. (2017). *Identifying, defining, and measuring social and emotional competencies* [Final Report]. American Institutes for Research. <https://www.air.org/sites/default/files/downloads/report/Identifying-Defining-and-Measuring-Social-and-Emotional-Competencies-December-2017-rev.pdf>
- Bierman, K. L., Nix, R. L., Greenberg, M. T., Blair, C., & Domitrovich, C. E. (2008). Executive functions and school readiness intervention: Impact, moderation, and mediation in the Head Start REDI program. *Development and Psychopathology*, 20(3), 821–843. <https://doi.org/10.1017/S0954579408000394>
- Blewitt, C., Morris, H., Sun, Y., Gooley, M., Kirk, H., Bergmeier, H., & Skouteris, H. (2024). Does social and emotional learning intervention influence physiological and biological indicators? A systematic literature review of universal and targeted programs in PreK to grade 12. *Social and Emotional Learning: Research, Practice, and Policy*, 3, 1–15. <https://doi.org/10.1016/j.sel.2024.100028>
- Cabell, S. (2020). *Impact of the Core Knowledge Language Arts' read-aloud program on kindergarteners' vocabulary, listening comprehension, and general knowledge*. Florida State University. <https://cehhs.fsu.edu/sites/g/files/upcbnu4516/files/research/Sonia%20Cabell%2C%202020.pdf>
- Calhoun, B., Williams, J., Greenberg, M., Domitrovich, C., Russell, M. A., & Fishbein, D. H. (2020). Social emotional learning program boosts early social and behavioral skills in low-income urban children. *Frontiers in Psychology*, 11, 1–14. <https://doi.org/10.3389/fpsyg.2020.561196>
- CASEL. (n.d.-a). Connect your criteria—CASEL program guide. <https://pg.casel.org/connect-your-criteria/>

- CASEL. (n.d.-b). *What is the CASEL framework?* <https://casel.org/fundamentals-of-sel/what-is-the-casel-framework/>
- CASEL. (2020, March). *An examination of K-12 SEL learning competencies/standards in 18 states* [Framework brief]. <https://casel.org/casel-gateway-examining-kthru12-learning-competencies/?view=true>
- Cipriano, C., Strambler, M. J., Naples, L. H., Ha, C., Kirk, M., Wood, M., Sehgal, K., Zieher, A. K., Eveleigh, A., McCarthy, M., Funaro, M., Ponnock, A., Chow, J. C., & Durlak, J. (2023). The state of evidence for social and emotional learning: A contemporary meta-analysis of universal school-based SEL interventions. *Child Development, 94*(5), 1181–1204. <https://doi.org/10.1111/cdev.13968>
- Cox, K. E., & Guthrie, J. T. (2001). Motivational and cognitive contributions to students' amount of reading. *Contemporary Educational Psychology, 26*, 116–131.
- Cutting, L. E., Bailey, S. K., Barquero, L. A., & Aboud, K. (2015). Neurobiological bases of word recognition and reading comprehension. In C.M. Connor & P. McCardle (Eds.), *Advances in reading intervention: Research to practice to research* (pp. 73–84). Paul H. Brookes.
- Diamond, A., Barnett, W. S., Thomas, J., & Munro, S. (2007). Preschool program improves cognitive control. *Science, 318*(5855), 1387–1388. <https://doi.org/10.1126/science.1151148>
- Duke, N. K. & Cartwright, K. (2021). The science of reading progresses: Communicating advances beyond the simple view of reading. *Reading Research Quarterly, 56*(S1), pp. S25–S44. <https://doi:10.1002/rrq.411>
- Duke, N. K., Ward, A. E., & Pearson, P. D. (2021). The science of reading comprehension instruction. *The Reading Teacher, 74*(6), 663–672.
- Duncan, G. J., Magnuson, K., Kalil, A., & Ziol-Guest, K. (2012). The importance of early childhood poverty. *Social Indicators Research, 108*(1), 87–98. <https://doi.org/10.1007/s11205-011-9867-9>
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*(1), 405–432. <https://doi.org/10.1111/j.1467-8624.2010.01564.x>
- Durlak, J. A., Weissberg, R. P., & Pachan, M. (2010). A meta-analysis of after-school programs that seek to promote personal and social skills in children and adolescents. *American Journal of Community Psychology, 45*(3–4), 294–309. <https://doi.org/10.1007/s10464-010-9300-6>
- Egana-delSol, P., Sun, X., & Sajda, P. (2023). Neurophysiological markers of emotion regulation predict efficacy of entrepreneurship education. *Scientific Reports, 13*(1), 7206. <https://doi.org/10.1038/s41598-023-34148-1>
- EL Education. (2017) 4th Grade Language Arts [Program of studies]. <https://curriculum.eleducation.org/>
- EL Education. (2022). *Detroit Public Schools community district rigorous study finds kindergarten and grades 3-8 ELA curriculum impact*. <https://eleducation.org/our-results/research-studies/detroit-public-schools-community-district/>
- Fitzgerald, J., & Shanahan, T. (2000). Reading and writing relations and their development. *Educational Psychologist, 35*(1), 39–50. https://doi.org/10.1207/S15326985EP3501_5
- Fox, E., & Alexander, P. A. (2016). Learning to read. In R. E. Mayer & P. A. Alexander (Eds.), *Handbook of research on learning and instruction* (pp. 8–32). Routledge.
- Gallingane, C., & Han, H. S. (2015). Words can help manage emotions: Using research-based strategies for vocabulary instruction to teach emotion words to young children. *Childhood Education, 91*(5), 351–362. <https://doi.org/10.1080/00094056.2015.1090849>

- Gavalek, J., & Bresnahan, P. (2009). Ways of meaning making: sociocultural perspectives on reading comprehension. In S. E. Israel & G. G. Duffy (Eds.), *Handbook of research on reading comprehension* (pp. 140–176). Routledge.
- Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education, 7*(1), 6–10. <https://doi.org/10.1177/0741932586007001>
- Grade 4, Unit 1, Lesson 1* [Sample lesson plan]. (2017). EL Education. <https://eleducation.org/curriculum/access-materials>
- Grade 4, Unit 1, Lesson 2* [Sample lesson plan]. (2017). EL Education. <https://eleducation.org/curriculum/access-materials>
- Grade 4, Unit 1, Lesson 3* [Sample lesson plan]. (2017). EL Education. <https://eleducation.org/curriculum/access-materials>
- Grade 4, Unit 1, Lesson 8* [Sample lesson plan]. (2017). EL Education. <https://eleducation.org/curriculum/access-materials>
- Grade 4, Unit 1, Lesson 10* [Sample lesson plan]. (2017). EL Education. <https://eleducation.org/curriculum/access-materials>
- Grade 3, Domain 1* [Sample lesson plan]. (2013). Core Knowledge Language Arts. <https://www.coreknowledge.org/free-resource/ckla-domain-01-classic-tales-the-wind-in-the-willows/>
- Grade 2, Module 3* [Sample lesson plan]. (n.d.). Great Minds: Wit and Wisdom. <https://digital.greatminds.org/insync/teacher>
- Grade 2, Unit 4, Lesson 86* [Sample lesson plan]. (n.d.). *Positive Action*. <https://www.positiveaction.net/sample-lessons#2nd-grade>
- Grade 2, Week 4, Day 1* [Sample lesson plan]. (n.d.). Manners of the Heart. <https://mannersoftheheart.org/uploads/docs/Grade-2-Sample-Lesson.pdf>
- Great First Eight. (n.d.). *Great First Eight Kindergarten* [Program of studies]. <https://greatfirsteight.org/>
- Guthrie, J. T., & Wigfield, A. (2018). Literacy engagement and motivation: Rationale, research, teaching, and assessment. In D. Fisher & D. Lapp (Eds.), *Handbook of research on teaching the English language Arts* (4th ed., pp. 57–84). Routledge.
- Hattan, C. (2022). Whose knowledge matters in literacy instruction? *Albert Shanker Institute*. <https://www.shankerinstitute.org/blog/whose-knowledge-matters-literacy-instruction>
- Hattan, C., & Lupo, S. M. (2020). Rethinking the role of knowledge in the literacy classroom. *Reading Research Quarterly, 55*, S283–S298.
- Hoover, W. A., & Tunmer, W. E. (2020). *The cognitive foundations of reading and its acquisition: A framework with applications connecting teaching and learning*. Springer.
- Hwang, H., Cabell, S. Q., & Joyner, R. E. (2021). Effects of integrated literacy and content-area instruction on vocabulary and comprehension in the elementary years: A meta-analysis. *Scientific Studies of Reading, 26*(3), 223–249. <https://doi.org/10.1080/10888438.2021.1954005>
- Johann, V. E., & Karch, J. (2019). Effects of game-based and standard executive control training on cognitive and academic abilities in elementary school children. *Developmental Science, 23*(4), Article e12866. <https://doi.org/10.1111/desc.12866>

- Jones, S., Brush, K., Bailey, R., Brion-Meisels, G., McIntyre, J., Kahn, J., Nelson, B., & Stickle, L. (2017). *Navigating SEL from the inside out: Looking inside & across 25 leading SEL programs—A practical resource for schools and OST providers*. Harvard Graduate School of Education.
- Jones, S. M., Brown, J. L., & Lawrence Aber, J. (2011). Two-year impacts of a universal school-based social-emotional and literacy intervention: An experiment in translational developmental research. *Child Development, 82*(2), 533–554. <https://doi.org/10.1111/j.1467-8624.2010.01560.x>
- Kats Gold, I., Kopelman-Rubin, D., Mufson, L., & Klomek, A. B. (2021). I Can Succeed for preschools: A randomized control trial of a new social-emotional learning program. *Early Education and Development, 32*(3), 343–359. <https://doi.org/10.1080/10409289.2020.1755777>
- Kiger, D. (2000). The Tribes process TLC: A preliminary evaluation of classroom implementation & impact on student achievement. *Education, 120*(3), 586.
- Kindergarten, Lesson 3* [Sample lesson plan]. (n.d.). Great Minds: Wit and Wisdom. <https://digital.greatminds.org/insync/teacher>
- Kindergarten, Lesson 7* [Sample lesson plan]. (n.d.). Great Minds: Wit and Wisdom. <https://digital.greatminds.org/insync/teacher>
- Klingner, J. K., & Vaughn, S. (1999). Promoting reading comprehension, content learning, and English acquisition through Collaborative Strategic Reading (CSR). *The Reading Teacher, 52*(7), 738-747.
- Knowledge Matters Campaign. (2016, October 5). Five essential features of knowledge-rich curriculum. <https://knowledgematterscampaign.org/wp-content/uploads/2016/10/FiveEssentialFeatures.pdf>
- LeBlanc, M. (2014). *Manners of the Heart: Evaluation report 2013–2014 elementary program research study*. Unpublished report.
- Lee, C. D., Meltzoff, A. N., & Kuhl, P. K. (2020). The braid of human learning and development: Neuro-physiological processes and participation in cultural practices. In N. S. Nasir, C. D. Lee, R. Pea, & M. McKinney de Royston (Eds.), *Handbook of the cultural foundations of learning* (pp. 24–43). Routledge/Taylor & Francis Group. <https://doi.org/10.4324/9780203774977-3>
- Lemberger, M. E., Selig, J. P., Bowers, H., & Rogers, J. E. (2015). Effects of the Student Success Skills program on executive functioning skills, feelings of connectedness, and academic achievement in a predominantly Hispanic, low-income middle school District. *Journal of Counseling & Development, 93*(1), 25–37. <https://doi.org/10.1002/j.1556-6676.2015.00178.x>
- León, A., Villares, E., Brigman, G., Webb, L., & Peluso, P. (2011). Closing the achievement gap of Latina/Latino students: A school counseling response. *Counseling Outcome Research and Evaluation, 2*(1), 73–86. <https://doi.org/10.1177/2150137811400731>
- Manners of the Heart. (n.d.) *About Us*. Retrieved April 27, 2024, from <https://mannersoftheheart.org/>
- Muñoz, M. A., & Vanderhaar, J. E. (2006). Literacy-embedded character education in a large urban district: Effects of the child development project on elementary school students and teachers. *Journal of Research in Character Education, 4*(1–2), 47–65.
- Murano, D., Sawyer, J. E., & Lipnevich, A. A. (2020). A meta-analytic review of preschool social and emotional learning interventions. *Review of Educational Research, 90*(2), 227–263. <https://doi.org/10.3102/0034654320914743>

- NAEP (National Assessment of Educational Progress). (2024, March 5). *Assessments: Reading*. <https://nces.ed.gov/nationsreportcard/reading/>
- National Center for Educational Statistics. (2006). *Teacher qualifications, instructional practices, and reading and mathematics gains of kindergartners* [Research and development report]. <https://nces.ed.gov/pubs2006/2006031.pdf>
- National Council for the Social Studies. (2013). *The College, Career, and Civic Life (C3) framework for social studies state standards: Guidance for enhancing the rigor of K-12 civics, economics, geography, and history*. <https://www.socialstudies.org/sites/default/files/c3/C3-Framework-for-Social-Studies.pdf>
- National Governors Association Center for Best Practices & Council of Chief State School Officers. (2010). *Common Core State Standards for English language arts and literacy in history/social studies, science, and technical subjects*. https://www.thecorestandards.org/wp-content/uploads/ELA_Standards1.pdf
- NGSS Lead States. (2013). *Next Generation Science Standards: For states, by states*. The National Academies Press. <https://www.nextgenscience.org/search-standards>
- Nix, R. L., Bierman, K. L., Domitrovich, C. E., & Gill, S. (2013). Promoting children’s social-emotional skills in preschool can enhance academic and behavioral functioning in kindergarten: Findings from Head Start REDI. *Early Education and Development, 24*(7), 1000–1019. <https://doi.org/10.1080/10409289.2013.825565>
- Palincsar, A. S., & Brown, A. L. (1984). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition and Instruction, 1*(2), 117–175. <http://www.jstor.org/stable/3233567>.
- Peace Learning Center. (n.d.) *About us*. Retrieved April 27, 2024, from <https://peacelearningcenter.org/about-us/>
- Peng, P., Wang, W., Filderman, M. J., Zhang, W., & Lin, L. (2023). The active ingredient in reading comprehension strategy intervention for struggling readers: A Bayesian network meta-analysis. *Review of Educational Research, 94*(2), 228–267. <https://doi.org/10.3102/00346543231171345>.
- Pictures pictures pictures routine card* [Sample lesson material]. (n.d.). *Peace Learning Circles*. <https://peacelearningcenter.org/everyday-circles/>
- Positive Action*. (n.d.). *Introduction*. Retrieved April 27, 2024, from <https://www.positiveaction.net/introduction#philosophy>
- Raver, C. C., Jones, S. M., Zhai, F., Bub, K., & Pressler, E. (2011). CSRP’s impact on low-income preschoolers’ preacademic skills: Self-regulation as a mediating mechanism. *Child Development, 82*(1), 362–378. <https://doi.org/10.1111/j.1467-8624.2010.01561.x>
- Reading with Relevance. (n.d.) *About*. Retrieved April 27, 2024, from <https://readingwithrelevance.org/about-us-2>
- Responsive Classroom (n.d.). *About Responsive Classroom*. Retrieved April 27, 2024, from <https://www.responsiveclassroom.org/about/>
- Rigell, A., Banack, A., Maples, A., Laughter, J., Broemmell, A., Vines, N., & Jordan, J. (2022). Overwhelming whiteness: a critical analysis of race in a scripted reading curriculum. *Journal of Curriculum Studies, 54*(6), 852–870, <https://www.tandfonline.com/doi/abs/10.1080/00220272.2022.2030803>
- Rimm-Kaufman, S. E., & Chiu, Y.-J. I. (2007a). Promoting social and academic competence in the classroom: An intervention study examining the contribution of the Responsive Classroom approach. *Psychology in the Schools, 44*(4), 397–413. <https://doi.org/10.1002/pits.20231>

- Rimm-Kaufman, S. E., Fan, X., Chiu, Y.-J., & You, W. (2007b). The contribution of the Responsive Classroom approach on children's academic achievement: Results from a three year longitudinal study. *Journal of School Psychology, 45*(4), 401–421. <https://doi.org/10.1016/j.jsp.2006.10.003>
- Rivers, S. E., Brackett, M. A., Reyes, M. R., Elbertson, N. A., & Salovey, P. (2012). Improving the social and emotional climate of classrooms: A clustered randomized controlled trial testing the RULER approach. *Prevention Science, 14*(1), 77–87. <https://doi.org/10.1007/s11121-012-0305-2>
- Rosenshine, B., & Meister, C. (1994). Reciprocal teaching: A review of the research. *Review of Educational Research, 64*(4), 479–530. <https://doi.org/10.3102/00346543064004479>.
- RULER Approach. (n.d.) *What is RULER?* Retrieved April 27, 2024, from <https://www.rulerapproach.org/about/what-is-ruler/>
- Russell, D. H. (1961). *Children learn to read* (2nd ed.). New York: Ginn and Company.
- Scarborough, H.S. (2001). Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice. In S.B. Neuman & D.K. Dickinson (Eds.), *Handbook of early literacy research* (Vol. 1, pp. 97–110). New York, NY: Guilford.
- Smith, R., Snow, P., Serry, T., & Hammond, L. (2021). The role of background knowledge in reading comprehension: A critical review. *Reading Psychology, 42*(3), 214–240.
- Snow, C. E. (2018). Simple and not-so-simple views of reading. *Remedial and Special Education, 39*(5), 313–316. <https://doi.org/10.1177/0741932518770288>.
- Snyder, F., Flay, B., Vuchinich, S., Acock, A., Washburn, I., Beets, M., & Li, K.-K. (2009). Impact of a social-emotional and character development program on school-level indicators of academic achievement, absenteeism, and disciplinary outcomes: A matched-pair, cluster randomized, controlled trial. *Journal of Research on Educational Effectiveness, 3*(1), 26–55. <https://doi.org/10.1080/19345740903353436>
- Student Success Skills. (n.d.). *Home*. Retrieved April 27, 2024, from <https://studentsuccessskills.com/>
- Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). Promoting positive youth development through school-based social and emotional learning interventions: A meta-analysis of follow-up effects. *Child Development, 88*(4), 1156–1171. <https://doi.org/10.1111/cdev.12864>
- Washington Office of Superintendent of Public Instruction. (2019). *Social emotional learning standards, benchmarks and indicators*. Washington State Government. <https://www.pesb.wa.gov/wp-content/uploads/SELStandardsBenchmarksIndicatorsLongForm.pdf>
- Wright, T. S., Cervetti, G. N., Wise, C., & McClung, N. A. (2021). The impact of knowledge-building through conceptually-coherent read alouds on vocabulary and comprehension. *Reading Psychology, 43*(1), 70–84. <https://doi.org/10.1080/02702711.2021.2020187>
- Yale Center for Emotional Intelligence. (2021). RULER for elementary school teaching guide [Curricular program of study sample materials]. https://www.rulerapproach.org/wp-content/uploads/2021/08/SAMPLE_RULER_Elementary_Teaching_Guide.pdf
- Yoder, N. Martinez-Black, T., Dermody, C., Godek, D., & Dusenbury, L. (2021). *Theory of Action: Systemic Social and Emotional Learning for States*. Collaborative for Academic Social and Emotional Learning.