THE ROLE OF SEL IN IMPROVING LITERACY DEVELOPMENT INTRODUCTORY BRIEF

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RATIONALE FOR THE SERIES

This series seeks to document how social-emotional development and well-being are integral to the teaching and learning of robust literacy practices. While much of our attention will be on such learning in the context of schooling, it is also important to consider how engagement in a wide range of literacy practices across childhood and adolescence unfold in settings outside of school. Following this introductory brief, we will offer briefs that illustrate how literacy learning entails social-emotional learning and development, with practical examples. However, we will start with the theoretical grounding, which we believe is important for several reasons.

We have a tendency in PreK-12 education to look for simplistic solutions, to recipes for teachers to follow. Undergirding all teaching is the complexity of human learning and development of children, adolescents, and adults. Without a grounding in this complexity, we are inclined to homogenize groups, to miss opportunities to see the creative genius of children and adolescents, and to underestimate the power of teachers to productively and creatively wrestle with the fascinating challenges that children and adolescents pose because of their humanity. Thus we hope this introduction to the science of human learning and development, as articulated by scholars in the fields of neuroscience, psychology, human development, learning sciences, literacy, and social and emotional learning, will prompt school communities to organize themselves as learning communities. We hope policymakers across levels of our system will be bold in creating policies to help deliver students a high-quality education that supports their cognitive, social, and emotional development and well-being to improve literacy development.

We also hope to ground this work in an understanding of the civic goals of public education. This brief will document the relationship between social-emotional development and literacy development, as well as how social and emotional learning (SEL) and literacy development are central to civic reasoning and discourse. Preparation for civic reasoning and discourse are cornerstones of a high-quality public education, and literacy is core to civic reasoning and discourse. Investigations of sources of knowledge and argumentation are distributed through uses of language, an array of textual representations, and through processes of reasoning using these artifacts.

RELATIONSHIPS BETWEEN THINKING, FEELING, AND PERCEPTION AND THEIR INFLUENCE ON LEARNING

In recent years, there has been increased attention to social and emotional learning, much inspired and supported by the groundbreaking work of the Collaborative for Academic, Social, and Emotional Learning (CASEL). However, much of the uptake of this research in schools has been limited to special programming outside of regular content area instruction. One of the outcomes of this segregation has been the implication that social and emotional learning is somehow separate and apart from cognition and the cognitive work of schooling. In this series on SEL and literacy, we aim to demonstrate how learning is always multidimensional and dynamic. This introductory brief will be followed by reports on SEL and literacy learning and instruction in grades PreK-5 and then in grades 6-12. However, this introduction will focus on the underlying science on how thinking, feeling, and perceptions along multiple dimensions interact to influence what we do as learners.

This research is based on empirical studies carried out in the fields of human development, various fields of psychology, learning sciences, and the neurosciences (Bransford, Brown, & Cocking, 1999; Damon & Lerner, 2006; Nasir, Lee, Pea, & McKinney de Royston, 2020; National Academies of Sciences & Medicine, 2018). We begin with research in the neurosciences for several reasons (Organization for Economic Cooperation and Development, 2007). As humans we live in a physical body and that physical body is the vehicle through which we experience the world. It is through our senses of sight, hearing, smell, touch, and taste that we experience the external world. A powerful dimension of this physiology is that our bodies are dynamic and adaptive. This means that if we do not have sight or hearing, for example, our other senses are enhanced such that we are able to navigate the physical world. Understanding this adaptiveness is critical to conception that disabilities are about difference, not deficit (Artiles, 2003).

Our senses take in what we are able to perceive in the world and connect to physiological systems that chemically transmit information to our organs. Among the most important organs with which our senses communicate, of course, is the brain. The brain may be thought of as the central manager communicating across systems, monitoring systems, and providing feedback to our organs and to our consciousness. That consciousness tells us how to make sense of what we experience, how to react, and how to engage with experiences in the immediate moment and across time. There are at least two filters that the brain uses to make judgments. One filter is physical—the immediate recognition of pain, hunger, and physical or psychological threat.

Judgments about physical pain and hunger are relatively straightforward. But our judgments of threat are more complicated. As we perceive the world—physical objects from the natural world, physical objects and artifacts created by humans, and routine practices from the social world that humans create—we filter or construct the features of those objects and events through what are called schema. From infancy throughout our lives, we look for patterns and impose significance to those patterns. The significance we impose on our observations in the world involve classifications—distinguishing plants from animals, distinguishing among different kinds of animals. We also develop schema for social actions, relationships with others, and feelings we have. The meanings we attribute to objects, actions, and relationships are always filtered through the emotional salience we attribute to experience (Immordino-Yang & Damasio, 2007). For example, the young child comes to recognize what a knife is, what its functions are, the different kinds of knives, and most importantly, that they can be very dangerous.

A central psychological function of the brain is the ego. In turn, emotions are central to our ego focused perceptions of our needs and what experiences we predict, based on past experience, are most likely to fulfill those perceptions of what we need (Damasio, 1995). These emotions are both individual and influenced by our participation in routine cultural practices. For example, there are some societies (largely western) where ego-focused emotions are socialized to privilege independence and individuality, while in other societies (largely Asian, African, and many indigenous communities), ego-focused emotions are socialized to privilege inter-dependence and collectivity.

Along with understanding the centrality of the emotional salience we attribute to experience, there is another dimension we inherit from our evolution as humans. That is, we are social animals (Immordino-Yang, Darling-Hammond, & Krone, 2019). Social animals run in packs and socialize via in-groups and out-groups. Relationships and negotiating relationships are central to animals' sustenance. We know that from birth, human infants pay more attention to other humans than objects. Infants make close observations of the humans with whom they interact, and through gaze and physical interaction attend to those humans who most directly provide them with sustenance and comfort (e.g., Mom, who nurses at the top of the social ladder) (A.N. Meltzoff, 1988; A.N. Meltzoff & Decety, 2003). Because we are social animals, we also learn by observing others. There is a field of psychology called social cognition (Flavell & Miller, 1998), which studies how humans from birth across the life course are always seeking to understand the internal states (thoughts, feelings, and intentions) of others, again filtered through the emotional salience we attribute to our experiences with others.

With these foundational principles in mind, let us first look at how the brain manages this complex work. In the past, researchers have focused on the functions of individual regions of the brain (on cognition, on language, and on emotions, for example). However, most recent research documents that these regions of the brain talk to one another. Based on experience in the world and perceptions informed by those experiences, these regions co-activate such that thinking, feeling (e.g. the emotional salience we attribute to experiences), and perceptions interact in dynamic ways to shape what we do. These same co-activation relations across regions of the brain manage our sense of physical well-being (e.g., detecting hunger, fever, fatigue, etc.) simultaneously with our sense of psychological well-being.

Immordino-Yang offers a succinct summary of how the social and emotional are co-activated in cognition:

> Traditional Western views of the mind and body, such as that of Descartes, divorced high-level, rational thought from what were thought of as the basal, emotional, instinctual processes of the body (Damasio, 2005 [1994]). By contrast, recent work in affective and social neuroscience has revealed a new view of the mind. Far from divorcing emotions from thinking, this research collectively suggests that emotions, such as anger, fear, happiness and sadness, are cognitive and physiological processes that involve both the body and mind (Damasio et al., 2000). As such, they utilize brain systems for body regulation (e.g. for blood pressure, heart rate, respiration, digestion) and sensation (e.g., for physical pain or pleasure, for stomach ache). They also influence brain systems for cognition, changing thought in characteristic ways—from the desire to seek revenge in anger, to the search for escape in fear, to the receptive openness to others in happiness, to the ruminating on lost people or objects in sadness. In each case, the emotion can be played out on the face and body, a process that can be felt via neural systems for sensing and regulating the body, or the emotion can sometimes involve simulations of the body that do not leave the brain. And in each case, these feelings interact with other thoughts to change the mind in characteristic ways, and to help people learn from their experiences. Put simply, what affective neuroscience is revealing is that the mind is influenced by an interdependency of the body and brain; both the body and brain are involved, therefore, in learning (Immordino-Yang & Damasio, 2007).

> Further, educators have long known that thinking and learning, as simultaneously cognitive and emotional processes, are not carried out in a vacuum, but in social and cultural contexts (Fischer & Bidell, 2006). A major part of how people make decisions has to do with their past social experiences, reputation and cultural history. Now, social neuroscience is revealing some of the basic biological mechanisms by which social learning takes place (Frith & Frith, 2007; Mitchell, 2008). According to current evidence, social processing and learning generally involve internalizing one's own subjective interpretations of other people's feelings and actions (Uddin et al., 2007). We perceive and understand other people's feelings and actions in relation to our own beliefs and goals, and vicariously experience these feelings and actions as if they were our own (Immordino-Yang, 2008). Just as affective neuroscientific evidence links our bodies and minds in processes of emotion, social neuroscientific evidence links our own selves to the understanding of other people.
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> Immordino-Yang, 2011, p. 99

There is contributing evidence from other disciplines that confirms the significance of perceptions of the self, perceptions of tasks, and relationships and the emotional salience we attribute to experience (C. Lee, Meltzoff, & Kuhl, 2020). Perceptions of the self are multiple—how we see ourselves as individuals and as members of groups (e.g., nuclear family, extended family, peer social network, groups that share interests, and members of broader communities such as age cohorts, ethnic/racial groups, religious groups, nationalities, etc.).

This issue of perceptions of the self is complex in part because we have a tendency in educational practice to homogenize groups. Understanding how human communities at all levels are both homogeneous and heterogeneous, both stable over time and changing over time, is essential. This means instruction that seeks to develop social-emotional well-being must assume this complex multi-dimensional understanding of identity. Teachers, as well as parents and other caregivers, must be sufficiently humble and disposed to learn from those we seek to teach, to try and understand when and how different dimensions of one's identity are going to be most salient for engagement.

Perceptions inform students' sense of relevance, and relevance recruits emotional attachments to the tasks, to those who support and with whom they interact, and to the settings in which experiences of learning unfold. Eccles' (Eccles, 2005) work on what she calls subjective task value represents one illustration of longitudinal research on how perceptions matter. Eccles' model addresses the importance of the learner's intrinsic interest in the task, the learner's perceptions of the utility of the task for immediate or long-term goals, the learner's perceptions of their ability to carry out the task, and the cost of putting in the effort to accomplish the task. Again, these perceptions in all their dimensions are centrally influenced by the emotional salience the learner attributes to the task, the setting, and the perceptions of other actors in the social setting (e.g. teachers, peers, family). In addition, Dweck's (2002) research on what she calls growth mindset points to how students' perceptions of themselves can have an impact on their learning. For example, students who see themselves as learners with a growth mindset value effort in the face of challenge, whereas those who perceive themselves in terms of fixed abilities may not even try if the work is perceived as too hard.

Another framework that is useful for understanding how these dimensions of thinking, feeling (e.g., emotional salience we attribute to experiences), and perceptions unfold and are shaped is Spencer's Phenomenological Variant of Ecological Systems Theory, or PVEST (2006). Perception (e.g., phenomenology) is at the heart of the framework. Spencer is interested in understanding resilience in the face of challenge. This is another area where our field of education must widen its conceptualization of challenge. We have a tendency to

attribute life course challenge only to students and families living in poverty, or who are members of racial/ethnic minority groups. For example, we do not sufficiently document the examples of students from such communities who not only achieve academic success in school, but also achieve positive life course outcomes. This meta-narrative reinforces beliefs of homogeneity and does not support us in understanding and interrogating multidimensional and dynamic resources that all youth bring to their learning experiences.

PVEST argues that life course challenge is not simply the objective risks and challenges faced in life, but rather the relationships between those risks and challenges,the nature of supports available, and how responsive those supports are to these challenges and risks. These supports can include belief systems and relationships that support the social and emotional navigation of challenge as well as systemic supports for health and security. The framework argues that these supportive or non-supportive beliefs, relationships, and resources help shape how people perceive their abilities to wrestle with challenge. This framework is developmental in that these processes unfold across time; what they look like in early childhood, middle childhood, adolescence, and adulthood will differ. Again, across these processes social relationships, emotional attributions to self and others, settings, and tasks not only matter but serve as an underlying driver for outcomes.

We have offered here what we know is a highly technical discussion of the research that informs how thinking, feeling, and perceptions interact and co-activate in dynamic ways. However, we think this invocation of empirical evidence is important because there are significant misconceptions that continue to drive how we organize to teach students and how schools typically seek to address social-emotional well-being. We tend to homogenize students from low-income and racial/ethnic minority communities. We tend to think of the academic demands of learning as separate and apart from emotions and relationships. We politicize attention to relevance of teaching strategies and content, rather than viewing perceptions of relevance as a central arbiter of engagement and motivation and understanding that perceptions of relevance are informed by the emotional salience we attribute to experience. Finally, we do not have sufficient understanding of how learning across the life course is dynamic and not static, that people—children, adolescents, and adults—are indeed malleable and capable of change (Cantor, Osher, Berg, Steyer, & Rose, 2018).

Sense of social-emotional well being is a consequential anchor and filter through which our efforts to learn, engage, and persist unfold. In what follows, we seek to illustrate how these dimensions of social-emotional development are entailed in how we teach and how students learn to engage in literacy practices, practices that are essential to navigating and sustaining our democratic experience. While this conception of human learning and development is complex, we experience this complexity every day in our understanding of how we navigate social spaces and relationships. We also experience this complexity in observations of children and adolescents who show us every day, moment by moment, that relationships matter, that emotions matter, that they learn by observing and engaging in the natural and social world, and that they surprise us in learning things that we didn't teach them (C.D. Lee, 2023).

THE IMPORTANCE OF A DEVELOPMENTAL PERSPECTIVE

These complex relationships among perceptions of the self, feelings as the emotional salience we attribute to experiences, and acts of cognition unfold across the life span. For example, as children mature into adolescence, they develop more nuanced capacities to understand systems. Even very young children from infancy on are on a journey to learn to navigate social relationships, read the internal states of others, and wrestle with ethical values of that which is just and that which is unjust, that which is good and that which is bad (L. Nucci & Ilten-Gee, 2021; L. P. Nucci & Turiel, 1978; Turiel, 2007). Children in Pre-K or kindergarten classes are able and indeed disposed to make value judgements about who is being mistreated. One beautiful example of this capacity for moral reasoning is the letter written by a 6-year-old to President Barack Obama after viewing the tragic circumstances of children in the Syrian conflict. He asked the president to invite the child he saw on TV to come and live with his family.

While even young children have these ethical capacities and dispositions to establish what they perceive as meaningful and healthy relationships with others, they are also learning these capacities through whether relationships within and across the routine settings in which they participate are experienced as nurturing and affirming. The quality of these relationships contribute to children's perceptions of threat and safety and to their development of self-efficacy. Studies of young children have shown that they are more likely to imitate behaviors they observe that entail warmth as opposed to behaviors they observe that involve anger on the part of adults (Lee, Meltzoff & Kuhl, 2021). One interesting distinction over the course of moral development in children is their evolving distinctions between values that are rooted in evaluations of physical, social, and emotional harm and values that are rooted in institutional and societal norms (Turiel, 2015).

In addition to the developmental trajectories around engaging our emotions as a driver of relationships, engagement, motivation, and persistence, there are also important developmental issues related to literacy, most specifically narrative. Among the dispositions we inherit from our evolution as a species is the disposition to encode experiences in the world as narratives that entail actors with internal states and goals, who engage in actions toward those goals and internal states (Bruner, 1990; Trabasso & van den Broek, 1985). This disposition is part of how our brains organize information for efficiency and recall over time. Even very young children attend to narrative and organize their representations of experience as narratives. The ability of even very young children to make sense of narrative structures can be readily seen in how children attend to and interpret the narratives they see and hear via television, movies, and oral stories, and in how they themselves tell stories. Narratives on television, for example, often embody complex themes around ethics and morality. We might think about series such as "Daniel Tiger" and "Sesame Street." Even as these commercial digital narratives seek to teach content (e.g., about the animal world, about plants, etc.), they still most typically humanize stories about such topics, where issues of relationships and feelings are central. Thus such series serve as resources for the dual and complementary aims of social and emotional learning and literacy.

As children progress into middle childhood and adolescence, their abilities to conceptualize and wrestle with more complex social and emotional dilemmas strengthen. This is because their own social relationships are typically wider than in early childhood. As their bodies mature, social comparisons and emotional attachments that include friendship, enemies, and eventually romantic feelings are deeply embedded in their experiences in and out of school. In terms of literacy, this maturation means they are able, with the appropriate supports, to interrogate texts (written, visual, and auditory) that invite more complex and mature questions.

Thus we argue that literacy learning and social and emotional learning across early childhood, middle childhood, and adolescence are intimately intertwined and interdependent.

RELATIONSHIPS BETWEEN LITERACY PRACTICES, COGNITION, AND EMOTIONS

When considering what goes on when we read, you might think first of the numerous mental or cognitive processes that readers have to coordinate. Let's take the example of a second grader named Maya, who has been asked to read a paragraph of an informational text on how light travels. Maya must engage in many mental processes to read the paragraph, essentially simultaneously.

At the word level, Maya must identify the letters and letter combinations on the page, match those to sounds, and switch back and forth between considering those letter-sound relationships and meaning (a process termed graphophonological-semantic cognitive flexibility, or GSF, Cartwright, 2007) to determine an accurate reading of the word. For example, in considering how to read the word brightens, Maya might draw on her understanding of the -igh spelling pattern (also used in the word light), as well as her knowledge that adding the ending -en(s) changes the adjective bright into a verb that means "to become brighter."

At the sentence level, Maya must consider how the sentence containing the word brightens is constructed and what that tells her about relationships between ideas in the sentence. For example, in the sentence, "Light brightens as you move closer to it, and dims as you get farther away," Maya must understand how the two parts of the sentence describe essentially opposite processes (and therefore, how dims can be understood as an antonym of brightens).

At the same time, she must continually construct and refine a representation of the meaning of the overall text, drawing on her background knowledge of the text topic, as well as what she is currently learning as she reads, to "integrate the known with the new" (Kintsch, 1988). Perhaps Maya has experienced, in the context of playing a nighttime game of "sardines" with friends, how moving the flashlight closer to another player's face makes the beam seem brighter and more intense when she spots them in their hiding place.

As important as these cognitive processes are, they are not all there is to the complex act of reading, nor do they occur in a vacuum (Duke, Ward, & Pearson, 2021). Reading (and literacy more broadly) is also deeply connected to emotions and sensations, and is inherently social and cultural in nature (Gee & Zhang, 2022). Let's overlay some social and cultural context to our scenario with Maya. Maya is a multilingual learner, and she benefits from extra processing time to figure out the pronunciations of many English words. She is reading the text about how light travels not silently and alone at her desk, but aloud, in a small group with five of her peers and the teacher. The teacher has asked each student to read a paragraph in turn, going in a circle around the table in a procedure called "round robin reading."

Chances are, when you read that description, you instantly identified with it—it's deeply ingrained in many American elementary classrooms and has been for decades, despite evidence that other practices are more effective (Ash, Kuhn, & Walpole, 2009). Perhaps you remembered counting ahead to figure out which paragraph would be yours, silently rehearsing it while other students read instead of listening to their sections. Perhaps the description elicited an emotional response, immediately conjuring feelings of anxiety and apprehension if reading aloud was often a stressful experience for you, or if you were learning English as a second or third language; or perhaps it conjured confidence and calm if you regularly experienced reading success.

This is what we mean when we say that literacy practices are deeply connected to emotions. When we have repeated experiences, particularly when those experiences elicit strong and/or similar emotions each time,

we develop neural pathways in the brain that connect what we perceive in the world around us to the physical sensations and emotional responses we feel. These pathways act as shortcuts to help us process information more quickly; the more we use a pathway, the more ingrained it becomes, developing into a pattern.

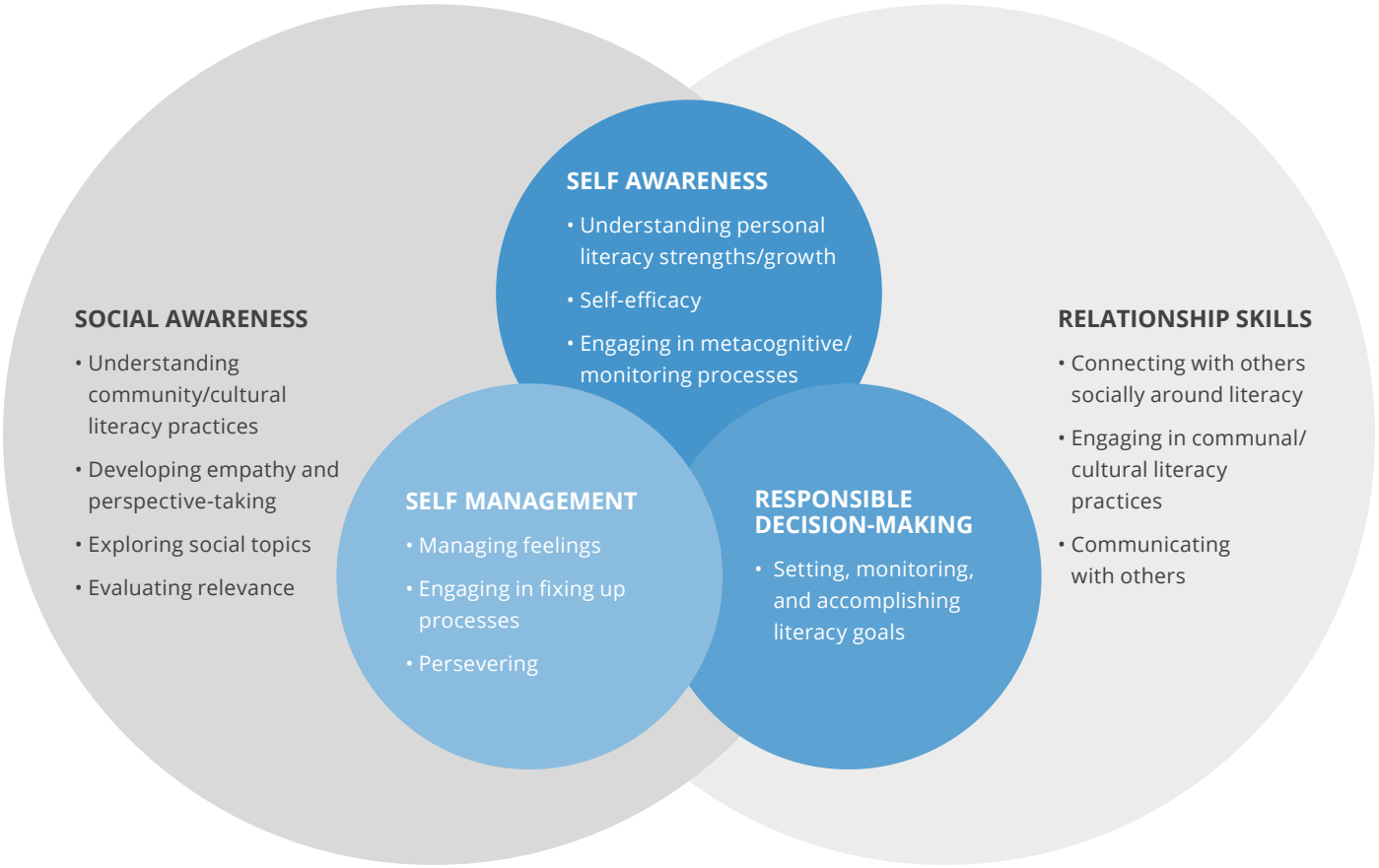
If Maya stumbles when she reads her paragraph and feels embarrassed, she will remember that experience and feeling the next time she is asked to read round-robin style. If it happens repeatedly, she may experience negative emotions every time she is called to the small group table, before she is ever asked to read—it may become a pattern. If this pattern goes on long enough, Maya may develop a disposition, an idea of who she is as a reader: someone who doesn't like to read aloud. Of course, Maya can also develop positive dispositions, particularly if she is positioned as someone who can be successful when reading aloud. For multilingual learners like Maya, that might include giving her dedicated time to "whisper read" her section to herself or a trusted partner before reading it to the group, or having her echo the passage back after a fluent peer or adult models how to read it. Both of these moves would reduce the risk of a negative emotional experience for Maya. The context can either help or hinder her development as a capable and agentic reader and writer.

As scholar Bronwyn T. Williams (2017) writes, "Our experiences accumulate, sediment, and, over time, form our emotional dispositions. It's worth reflecting, then, on the way school is set up, from primary school through university, in terms of emotional experiences. What traditions and practices result in often remarkably similar kinds of emotional experiences for students? What dispositions are formed from these experiences?" (p. 29).

With regard to social and emotional learning, it is important to note that such learning unfolds across multiple sites, with school being only one (C. D. Lee, 2010; C.D. Lee, 2017). Indeed, literacy practices are not limited to schooling. To the extent that how students experience literacy learning may differ across spaces, it is entirely possible that rather than having single static dispositions toward literacy, you can have adaptive dispositions that are responsive to the different contexts in which such learning unfolds. For example, Moje (E. B. Moje, 2000; E. B. Moje, Young, J.P., Readence, J.E., Moore, D.W., 2000) has documented differences in reading engagement of students she followed in Detroit between school and out of school contexts. The point here is that socio-emotional states and dispositions are not simply static and homogenous, but dynamic in response to experiences within and across settings. With this in mind, we turn now to consider more deeply the connections between reading, writing, and emotion through the relationships between literacy and social and emotional learning.

RELATIONSHIPS BETWEEN SEL CONSTRUCTS AND LITERACY CONSTRUCTS

There is considerable overlap between the five core competencies of SEL and the practices, competencies, and processes that readers develop. These points of overlap or synergy represent areas where building students' SEL may also support their literacy development, and vice versa. The five core competencies of SEL are: (1) self-awareness, (2) self- management, (3) social awareness, (4) relationship skills, and (5) responsible decision-making. As we go through each competency, we will organize points of synergy between SEL and literacy according to the questions that readers may pose to themselves or others related to that competency. The points of synergy are also summarized visually in the accompanying figure.



It is beyond the scope of this brief to explain each competency in robust detail; in this section we will outline how each competency applies to literacy development and practices. For a broader explanation of each competency, consult the CASEL framework. In this introduction, we will also not address specifically what SEL instruction can do to leverage these synergies, as this varies developmentally. Briefs two and three will take up the issue of what high-quality SEL instruction that supports literacy instruction can look like at the Pre-K through grade five and grades 6 through 12 levels, respectively.

SELF-AWARENESS

The SEL competency of self-awareness includes (but is not limited to) understanding one's personal strengths and weaknesses, feelings, and patterns of thinking and behavior. For example, I might develop an awareness that when I feel fearful or anxious, I often express anger and may even lash out at others. I cannot disrupt what may be a maladaptive behavior until I am aware of it. It is important to note that self-awareness (and all SEL competencies) are developmental in nature; adolescents have different capacities for being aware of their feelings than kindergartners. All SEL competencies must be interpreted through a developmental lens.

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? These first two questions are closely related and represent important areas of self-awareness readers and writers must develop. First, they must develop a sense of where they are already strong as a reader and/or writer, as well as where they have room to grow. Attaching formal labels to these strengths and areas for growth is not automatic, although school settings and other settings that value such explicitness can teach children to do so. For example, young students might recognize that they can read and write most consonant-vowel-consonant words (e.g., can, map, bin), and identify multisyllabic words as something to work on (although they might be more likely to use language like, "I can read short words but longer words are harder" to describe this recognition). Adolescents may realize that they are strong comprehenders of narrative text, but point to understanding and constructing compelling arguments as a target.

It is important that students not become overwhelmed or intimidated by identifying these areas for growth. They must possess a sense of self-efficacy, which is the belief that "I can be successful at a task" (Bandura, 1986), and which in educational situations can also include the belief that "even if I am not currently successful, I can learn to be successful at a task" (Schunk & Pajares, 2004). Carol Dweck's (2006) popular concept of growth mindset comes in here as well: a student with a growth mindset might say something like, "I don't know how to analyze literary themes yet, but I can and will learn."

Is what I am reading/writing making sense? Is it communicating my intended message or answering my questions/goals for reading? Also in the realm of self-awareness, students must develop metacognitive practices that support their continued literacy development. In reading, this means that they must continually monitor their comprehension of the text they are reading, noting what they glean from the text as well as where their comprehension breaks down and things stop making sense. They must assess whether the text they are reading is meeting their goals; for example, whether it is providing the kind of information they seek or whether it is of a complexity they can reasonably access (in other words, the text is not prohibitively challenging nor too simple to be helpful). In writing, students must frequently reread their own written text, evaluating the degree to which it makes sense and communicates their desired message. These metacognitive practices can help students realize when they may need more support or to make other changes to their reading/writing practices; more on these in the next section.

SELF-MANAGEMENT

Among other things, individuals demonstrate the SEL competency of self-management when they are able to regulate their emotions and actions. To continue the previous example, I would demonstrate self-management when I am able to interrupt the chain of fear-anger-lashing out, instead choosing to take a walk to cool down.

What can I do when I don't understand what I read, or when my writing doesn't communicate what I want? When, through the metacognitive practices described previously, students recognize a breakdown in their comprehension or in their communication of their desired message, they need procedures to fix up. These procedures fall under the umbrella of self-management; they are actions students can choose to take to ameliorate the issues they are experiencing. For a reader, fix-up processes might include rereading, asking clarifying questions, or determining the meaning of unfamiliar words that may be impeding comprehension. A writer might need to restructure a sentence, reorganize a paragraph or section, or adjust word choice to better communicate their intended meaning. Students may also realize that they need support from a teacher, other adult, or peer to fix their issues; recognizing and seeking this support is also a form of self-management.

How can I manage feelings that may come up during the reading/writing process (e.g., frustration, confusion, accomplishment, joy)? How can I persevere when reading/writing is challenging? Reading and writing entail emotions. Many of us have shared the experience of bursting into tears at the death of a favorite character, for example, or the satisfaction and joy of a well-crafted ending in which everything wraps up as it should. When reading informational text, we might experience wonder, surprise, curiosity, or even disgust at the new things we are learning. The process can be confusing, if comprehension proves elusive, or frustrating, such as when we struggle to find the right words to express our thoughts. This can be especially the case for students, who encounter classroom settings that do not recognize students' full repertoire of literacy practices and linguistic repertoires (Souto-Manning, Ghim, & Madu, 2021). Nearly everyone commands multiple linguistic and cultural repertoires, including people that might self-identify as monolingual speakers of American English (think of how you might phrase an idea differently or use different body language based on whether you are speaking to your boss at the workplace, versus your spouse at home), but classrooms generally favor only one, generally societally dominant, repertoire. Students must develop strategies to manage the gamut of emotions that may result from this experience, including the ability to persevere through frustrating moments, and (particularly as they get older), advocate for themselves if the practices of schooling fail to acknowledge their potential as readers and writers.

SOCIAL AWARENESS

The SEL competency of social awareness includes developing an understanding of the needs and perspectives of others, including what others value and how others may see the world in ways that are similar to and different from themselves. To continue with our example, I might become aware of how my fear-driven behaviors towards others have affected them.

How can reading help me explore the human experience and develop empathy and perspective-taking? How can reading help me safely explore challenging or controversial life topics? Reading, in particular of narrative text, is fertile ground for deep explorations of what it means to be human. Some of young children's earliest lessons about friendship, family dynamics, and what it means to be part of a community come from picture books, and those

lessons continue throughout the lifespan as the texts we read deepen in complexity. Through reading about the experiences of compelling characters, we can learn to put ourselves in others' shoes, developing empathy and an ability to understand situations and events from multiple perspectives. We can learn about our own cultural and community practices and get insight into others, a concept popularly known in the world of children's literature as using books as "mirrors" (to our own experience) and "windows" and even "sliding glass doors" (to others' experiences) (Bishop, 1990). These are crucial skills for anyone hoping to participate in the social contract of a democratic society, and for anyone to establish and maintain interpersonal relationships.

Literature offers opportunities to interrogate the conundrums of the human experience. Such opportunities are invited across the developmental range, from children's books to literature for older children, adolescents, and adults. These conundrums are often embodied in archetypal themes with which humans wrestle across time.

For adolescents in particular, this exploration of the human condition can take on a new dimension. Through reading, students can find a safe place to explore difficult, challenging, or potentially controversial social topics. Adolescents (and many adults!) often choose to read stories that feature themes of sexual assault, substance abuse, gang activity and other forms of violence, discrimination, incarceration, and more. Through books, students can learn about these themes—which are an unfortunate reality of the world and human experience—and explore their own reactions to them, without necessarily engaging in the behaviors described or experiencing similar events (Moje, 2008).

It is equally important to note the ways that reading informational texts can be personally relevant and useful for our abilities to engage in the civic sphere around topics that require content knowledge. For example, during the COVID-19 pandemic, knowledge of how viruses reproduce and spread, as well as knowledge of how to read data displays around virus spread, served as important contributors both to people's sense of both self-efficacy in navigating a complex societal level dilemma and to their social awareness of a public conundrum.

What is the relevance of reading/writing to my life and to others? How do I understand the world, and how is this similar to/different from how others understand the world? How can I learn from others' perspectives? Through considering these questions, students can dig into what they and others value. Relevance and value, the degree to which we see reading/writing as applicable to our own lives and experiences, are key constructs of literacy motivation. The more relevance and value we perceive, the more motivated we may be to engage in literacy activities. To determine relevance, students must first know what they value. Students may value a task due to its connections with their identities, for intrinsic reasons (i.e., pleasure and joy), or for its utility and connection to their goals (Wigfield, Muenks, & Eccles, 2021). This connects back to the SEL competency of self-awareness. At the same time, it is important to note that school-based instruction can also help shape what students see as relevant, can help shape what they value, and can open up new visions for students.

Equally important, however, is for students to find out what those around them value, and how it may be similar to and/or different from students' own ideas. A text that one student finds deeply poignant, returning to that text over and over again (a concept referred to as touchstone texts, Glenn, 2012), may hold no appeal to another. By investigating why that is, students can better comprehend the lenses through which the other views and experiences the world and what the other understands to be true. These understandings will improve their ability to work together effectively and pursue common goals.

RELATIONSHIP SKILLS

This SEL competency encompasses the skills needed to establish, evaluate, and maintain personal and professional relationships and to engage as a member of a community. For example, I might engage in repair work with others when I have harmed them by lashing out when I was, in reality, afraid.

How can I read/write together with others? How do I communicate my thoughts in writing? Reading and writing are inherently social activities, as mentioned previously. When we consume texts through reading, we naturally want to engage with others about them, whether that's through sending a link to a news article to a group chat or recommending a recently read novel to a friend. The book clubs popular with many adults are further evidence of our desire to discuss and process what we read with others. Most forms of writing (aside from personal journaling) are intended to communicate a message to an external audience, and contrary to the popular image of writing as a solitary activity, many forms of writing are collaboratively authored. It is also the case that even with solitary reading, Bahktin (1981) would argue that we are socially engaged, interacting with the ideas of others.

Reading and writing are no less social for children and adolescents than they are for adults. In school settings, students may have opportunities to engage socially around reading by giving book talks, or brief speeches introducing a book and offering an opinion on who might enjoy reading it, to their peers. They might also engage in regular book clubs, also termed literature circles, whether formally (i.e., during classroom time) or informally (i.e., at lunch or recess). These book clubs can be teacher-facilitated but are often student-led, and they offer valuable opportunities for students to deepen their literacy analytic skills while engaging socially with one another. Students can also be offered opportunities to write collaboratively, such as completing a report or presentation with a partner or small group. All these experiences require relationship skills to be successful. For example, book clubs may disagree about what to read next, and need to have the skills to arrive at a decision. Co-authors may have competing ideas about what to say or how to say it, and must negotiate how best to communicate their thoughts to their intended audience. It's also important to note that school settings may or may not afford opportunities for students to engage in other communal literacy practices valued by their cultural communities.

RESPONSIBLE DECISION-MAKING

Setting, monitoring, and achieving goals is an important part of the SEL competency of responsible decision-making. I might set a goal to journal each day to stay in better touch with my emotions and improve my ability to distinguish between feelings of fear and anger.

What goals do I have for reading/writing and what do I need to do to achieve them? All readers and writers, whether consciously or unconsciously, pursue goals embodied in their literacy activities. For early readers, these goals might include recognizing their own and friends' names, reading a favorite text independently for the first time, or finishing their first chapter book. As readers become more proficient, they might work to complete a series, pursue information of interest (such as reading everything they can get their hands on about sharks), or collect works by a favorite author. As noted previously, older readers often use reading as a way to safely explore difficult topics or relational issues they may encounter in their daily lives; they may also seek information to help them succeed at their hobbies. Writers might desire to master a particular genre or achieve a particular purpose, such as writing a persuasive essay so compelling it changes the principal's mind on a school policy. To best accomplish goals, students need to know what it is they want to do, determine what it will take to do it, and to evaluate their process along the way and adjust as needed; for example, by changing search parameters when the terms they have been using fail to yield relevant results online.

WRAPPING UP

This section has highlighted many possible points of synergy between the five core competencies of SEL and important literacy skills, practices, and processes. We believe that these synergies have applicability in both directions. For example, teaching relationship skills as a part of robust SEL instruction will benefit students' ability to collaborate during joint literacy activities, and the more students have opportunities to engage in those activities, the better their relationship skills will be. In the following two briefs, we will take up what specific pedagogical techniques can facilitate these points of transfer.

CIVIC GOALS OF PUBLIC EDUCATION AND THEIR RELATIONSHIP TO LITERACY AND SEL

The purpose of education is often framed as preparing students for college and career. While that is a worthy endeavor, we think education goes beyond this in its ultimate purpose. One of the goals of a public education, in our opinion, should be to foster the skills and dispositions necessary for students to actively participate in the construction and maintenance of a well-functioning democratic society. We say "construction and maintenance" because we understand the social contract of democracy to need constant attention and renewal to thrive.

The National Academy of Education recently created a comprehensive report, Educating for Civic Reasoning and Discourse (Carol D Lee, White, & Dong, 2021). The report argued that attention to preparing students across the grade levels to engage in civic reasoning and discourse is a responsibility of public education and that such preparation cannot be effectively constrained to courses in civics. Rather, the report documented how dimensions of civic reasoning and discourse are deeply embedded in learning across the core content areas—literacy, social studies/history, science, and mathematics. Of potential interest to readers of this brief, the Academy is also preparing a series of reports for practitioners illustrating how we can teach the dispositions entailed in civic reasoning and discourse while simultaneously teaching discipline-specific skills and knowledge.

The 2021 report includes a chapter (C.D. Lee, Nasir, & Smirnov, 2021) that summarizes how our understanding of the science(s) of human learning and development inform how we support the development of the following skills and dispositions central to civic reasoning:

- Knowledge – conceptual and procedural related to the topics that are addressed in the civic problem
- Epistemology – valuing complexity, resisting simplistic solutions to complex problems
- Ethics – values that are informed by not only perceptions of one's own needs, but also the needs of others; empathy for others; a belief in fairness; a desire for the health, happiness and well-being of others
- Dispositions – to question, to weigh multiple points of view, to value evidence, to listen to others, to empathize with others

The Center for Civic Education also identifies many dispositions relevant to the democratic project, including: civility, respect, individual responsibility, self-discipline, civic-mindedness, open-mindedness, compromise, appreciation of diversity, patience and persistence, compassion, generosity, and loyalty to the nation and its principles (National Council for the Social Studies, 2013). The field of social studies education further elaborates on the importance of instilling democratic principles such as equality, liberty, freedom, rights, and responsibilities (National Council for the Social Studies, 2023). **These skills and dispositions are central to civic reasoning and discourse.**

To summarize, we want children to develop into adults who can wrestle with complexity and nuance, who are capable of listening when those around them hold differing (and even seemingly opposing) perspectives to their own, who seek to understand what lies behind those perspectives so that an accommodating middle ground might be reached.

The fields of social and emotional learning and literacy education both have roles to play in accomplishing these goals. Briefly, SEL can help students develop the five core competencies of (1) self-awareness, (2) self-management, (3) social awareness, (4) relationship skills, and (5) responsible decision-making. Helping students develop self-management skills, for example, can contribute towards their development of the civic dispositions of civility and self-discipline. Teaching social awareness and relationship skills might further their open-mindedness, compassion, appreciation of diversity, and compromise, as well as their understanding of how to balance individual responsibility, rights, and collective responsibilities. For example, one heuristic developed for inclusion in published SEL lessons guides early elementary students to identify and act on issues of justice and fairness (Humphries, Ward, & McCormick, 2022). Literacy education can develop students' critical thinking skills, grow their compassion and their ability to consider and comprehend multiple perspectives, and teach students how to communicate their own perspectives and ideas with clarity and precision.

PREVIEW OF THE NEXT TWO BRIEFS

The next two briefs in this series will focus on how SEL can support literacy development in the early childhood and elementary grades (i.e., grades Pre-K through five; grades 6-12). These briefs will delve deeper into what is entailed in learning to read across the K-12 sector and how those processes connect to SEL. They will examine literacy and SEL curricula, identify programs that provide interdisciplinary support, make general pedagogical recommendations for supporting SEL and literacy concurrently (regardless of curricular program), and will offer final policy recommendations to further students' literacy development.

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