Introduction

Decades of research and practice in social, emotional, and academic development have left us with a foundational body of knowledge that tells us: (1) social, emotional, cognitive, linguistic, and academic development are deeply intertwined in the brain and in behavior and together influence school and life outcomes including higher education, physical and mental health, economic well-being, and civic engagement; (2) social, emotional, and academic competencies, habits, and attitudes grow, and are fostered, in rich and supportive relationships and are influenced by the experiential and contextual landscape of human development; and (3) there exists an array of programs and approaches that have been shown to be effective in cultivating and supporting this body of competencies that can be adopted by and implemented in formal and informal learning environments from early childhood through
This body of evidence derives from many disciplines, spans qualitative and quantitative research, correlational and longitudinal studies, quasi- and fully experimental trials, and fundamentally reflects a robust and rigorous science of human development in context. We recognize that learning happens in a variety of environments, both formal and informal. For the purposes of this document, we focus primarily on schools from early childhood through secondary because those settings are a central hub connecting the other major contexts of human development.

With such a strong foundation, what comes next? In the pages that follow we present an illustrative set of research questions for the next generation that build from what we currently know and represent an agenda for transactional research that, by its nature and in its execution, forges a dynamic, bidirectional connection between research and practice. Getting to such a forward-thinking research agenda that is deeply connected to practice requires both looking back and looking forward. In looking back, we draw on a collection of bedrock theories that undergird much of the knowledge base in the applied sciences to identify five primary areas for a next generation research agenda on social, emotional, and academic development. These theoretical perspectives are summarized below, along with a summary of our process for identifying and describing the questions, and draw from developmental and educational psychology, cognitive and behavioral neuroscience, social and behavioral economics, to name just a few. In looking forward, we articulate not only a core set of specific questions for the next generation, but also a compilation of essential principles that serve as guideposts for our work in the future. The audience for this document certainly includes those engaged in building knowledge — those who view themselves primarily as researchers, but it is also designed to be used by other key stakeholders including those in the funding, policy, and practice communities.

Taken together, the principles summarized below are in service of the broader goal of integration — that is, weaving social, emotional, and academic development together and into the fabric of formal and informal learning opportunities. We focus on integration here because, as noted above, we already have a science that tells us in general terms what competencies are important and whether programs and interventions can work. What’s needed now is a new scientific enterprise that pushes these boundaries toward questions of how do social, emotional, and cognitive competencies grow and change over time and in key contexts, do strategies and practices work in the real-world conditions of children, parents, educators, and communities today, why are some approaches or strategies more or less effective than others, who is critical to this work, and what are the conditions in settings that optimize outcomes.

What does it mean to innovate in research in this field? Does it necessitate something completely different — a transformation in how we think and act? In our field, we have decades of knowledge grown from basic and applied research. We also have a deep and rich well of practice-based wisdom and experience about the work of schools and schooling. Innovation in our field builds from these roots, and instead of reflecting a new concept, strategy, or practice, is a transformation in how research gets done. As such, in our recommendations at the end of this document, we propose an approach that emphasizes collaborative action research, requiring the direct participation of multiple stakeholders including researchers, educators, community members, parents and other key adults, as well as policymakers; builds research to respond to practical questions that arise from the work on the ground; and situates the research endeavor in the field.

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1 Jones & Doolittle, 2017; Jones, Kahn, & CDS Aspen SEAD Commission
2 Osher, Cantor, Berg, Steyer & Rose, 2018; Cantor, Osher, Berg, Steyer & Rose, 2018
This document is organized in four primary sections, beginning with a brief description of our process for developing this brief. We then articulate seven foundational principles to guide research for the next generation. The principles are not intended to be exhaustive or definitive, and do not necessarily represent new ideas. They are intended instead to serve as a form of checklist – a way to think about what’s necessary in next generation research to ensure that it is applied, impactful, and action-oriented, serving as a guide to future research- and practice-based inquiry that holds as its ultimate goal, improving the educational experiences and life chances of each and all children and youth in all learning contexts.

We then describe a set of key research questions for the next generation organized into five primary areas. In each area, we provide a brief overview of what we currently know and then articulate major research themes and illustrative research questions that represent our view of what’s next. Across the five areas important issues of equity, context, representation and reflection of multiple populations, and measurement and assessment, are included. In the final section we present our recommendations for a new paradigm for research in social, emotional, and academic development for the next generation.

Developing This Brief

The process for developing this brief began with dyad discussions between members of the Council for Distinguished Scientists (CDS) and the Council for Distinguished Educators (CDE). It also was informed by a careful review of the CDS consensus statements of evidence (The Evidence Base for How We Learn), which are based on a thorough distillation of the evidence-base for infusing a focus on social, emotional, and cognitive development into teaching and learning. In addition, in September 2017 members of the CDE and CDS met together for a 1-day convening during which the group brainstormed and came to consensus on the major domains that should be covered in a research agenda for the next generation. In addition, the group identified a number of specific and illustrative concrete questions that represent each of the five major areas. These conversations also seeded the idea that a set of basic principles that underlie research in all the domains exist and should be made explicit. These sources of “evidence” (the dyad discussions, the notes from the September meeting, and the existing briefs and materials) were transcribed and organized so that our team of authors could review them, discuss and brainstorm, and condense them into the ideas that are presented below. In doing this work we also drew on existing research as well as on the major theoretical frameworks from different disciplines that have served as guideposts for work in this area to date.

With those frameworks in mind, and following the core idea of Bronfenbrenner’s bio-ecological systems model, we organized the questions for a next generation in a rough hierarchy to represent the idea of nested systems (individual, classrooms, schools, adults, and eventually districts and broader systems). In each section, we tried to emphasize a number of key concepts: that human development occurs through developmental interactions and in dynamic intersection with settings and contexts; and that questions for the next generation must represent the reality, experiences, and perspectives of each and all, whether that is children, youth, adults, or one type of school, setting, community, culture, geography or another.

Principles to Guide Research for the Next Generation

1. Research that has impact embodies both rigor and relevance.

Research that is rigorous embodies basic scientific concepts including careful and transparent study design that incorporates guidelines for statistical power and hypothesis testing, the use of valid and reliable measures and tools, analytic methodologies that are closely aligned to research questions, and honest and clear reporting of positive, null, and negative effects and associations. To date, we have achieved a
body of evidence that is rigorous. **Research for the next generation of practice in social, emotional, and academic development is both rigorous and relevant.** It responds to, and is situated in, the real-world, contemporary problems that arise from the practical work on the ground. It also incorporates lessons from the expanding science of implementation. Moreover, research that is relevant is **timely** – it happens in a manner that is quickly shared and easily translated for practical application. This means research is conducted in vivo, with and by practitioners. It therefore reflects the questions that practitioners, educators, and policy-makers want and need to be addressed in order to make strategic decisions, improve practice, effectively serve a broad and diverse population, and cultivate and support the profession. Building a relevant science of social, emotional, and academic development necessitates the tried and true longitudinal and experimental methods – incorporating qualitative and quantitative measures – that have provided the rich evidence base we have today. It also relies on newer methods and approaches including for example, participatory action research, as well as smart and adaptive designs that are response in short cycles to new information.

2. **A dynamic, bidirectional relationship between research and practice demands precision.**

In a close relationship between research and practice, there is a clear link between research on one particular outcome or competency (the evidence), how we plan to foster that competency or set of skills in children, youth, and/or adults (the strategy), and how we will measure it to determine if our efforts were successful (the evaluation). The relationship is iterative, forming a research-to-practice cycle that both facilitates evidence-based practice and enables us to learn from our efforts and add to what we know about the field as a whole. Importantly, it is the **words** we use – the specific terms and the meaning, or definitions, we ascribe to them – that maintain those connections. When outcomes, constructs, or competencies have multiple names and definitions as they do in the broader field that encompasses social, emotional, cognitive, character, personality, moral, and academic development (described as the jingle-jangle fallacy where one term has multiple meanings, and different terms have the same meaning), it becomes much harder to sort through such an extensive body of research to determine where the links between evidence, strategy, and evaluation really exist. **Research for the next generation of social, emotional, and academic development employs terminology that is transparent, precise, and specific ensuring that stakeholders work with a common and shared understanding of the core constructs and ideas.** In emphasizing precision and transparency, our field will grow a better understanding of which skills and competencies are the same, which are different, and which overlap across disciplines, ultimately allowing us to move beyond fads and quick fix approaches to closer alignment between research and evidence, programs and strategies, and assessment and evaluation. It is important to note that precision does not apply only to constructs and outcomes, but is equally relevant to practices and strategies (e.g., what is actually meant by “project-based learning”) and settings (e.g., what is a common and shared definition of “school climate”). Getting precise and transparent means putting our own biases and belief systems as researchers with different interests, varied training, and diverse disciplinary traditions on the table.

3. **Assessment is a tool for continuous improvement and capacity building, not high-stakes accountability.**

There is tremendous interest in identifying and deploying measures and assessments of social, emotional, cognitive, and character skills and attributes so that practitioners and policymakers can easily take the temperature of the children and youth they serve and make decisions about what practices, strategies,

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3 E.g., Bryk, Fixen, Fullan
and policies to implement. Using data to drive continuous improvement is not new, and continuous improvement implies a form of accountability (i.e., information should inform action and there is accountability tied to action), but unless we (1) have tools that we are confident adequately capture these skills, competencies, and attributes in ways that are sensitive to age, stage, and context, and (2) are organized around a commitment to using assessment to inform continuous improvement, we risk holding educators and systems accountable to things that we aren’t actually supporting them to do. Research for the next generation of social, emotional, and academic development prioritizes the development and use of assessment and measurement as instruments of formative improvement and capacity building, not simply accountability. This includes, as well, the development and integration of school-wide systems and norms that adequately support the use of data in this way. Data employed with these purposes honor the institution of schools, and the processes of schooling, as the central hub in our society that is focused on learning, serving as a nexus of growth and change for children and adults alike.

4. **Theory of change** is the glue that links research and practice – it is a common blueprint to action in both arenas.

Theory of change (ToC, or theory of action, logic models, etc.) is an explicit, and agreed upon, theory about what, how, and why a program, strategy, or intervention will work. Theory of change is also used as a tool for organizing a system of variables or constructs, depicting a set of hypotheses about how they influence each other. In both cases, the ToC serves as a map to the core assumptions, specific goals, near and distant outcomes, concrete activities, and mechanisms guiding the work. Building directly from the adage, “there’s nothing so practical as a good theory,” ToC can be used as a blueprint for bringing stakeholders together, program and research planning, program implementation, assessment, and evaluation. Research for the next generation of social, emotional, and academic development employs Theory of Change as a tool to align researchers and practitioners in a common, and agreed upon, plan for action. ToC works to do this by making explicit the assumptions, actions, and reactions expected in any program, initiative, and/or research endeavor.

5. **Average effects are important, but scaling effective practices requires we know the active ingredients and how they work together.**

Documenting the average effects of complex, multi-faceted programs generates a critical signal about what can work in the field. However, a singular focus on the signal draws attention away from the noise. Noise in this case represents variation in take-up, response, and impact that are essential to tailoring supports, practices, and strategies to individual needs and opportunities. Similarly, average effects of multi-component programs limit our understanding of underlying mechanisms and effective, or active, ingredients (the how and why programs work). Because one approach or type of program is unlikely to work or be meaningful and/or desired in all settings, it is essential that we prioritize a focus on illuminating mechanisms and active ingredients that themselves can be replicated and scaled, but in way that is resonant with different contexts and settings. Research for the next generation of social, emotional, and academic development seeks to understand mechanisms and active ingredients.

6. **Understanding variation is a key to customizing for different developmental needs, experiences, and settings.**

Just as average effects obscure critical information about the active ingredients of programs and practices, using averages to represent whole groups – whether they are groups defined by socio-demographic

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4 Lewin, 1943
characteristics like race/ethnic background, or specific experiences or contexts – assumes uniformity in human development that ignores the reality and complexity of setting, culture, and experience-based variation. Concretely, capturing or understanding variation pushes us beyond overly simplistic depictions of groups toward a more thoughtful and actionable understanding of what’s needed in our classrooms and schools and when and how to tailor strategies to best meet the needs of each and all children, youth, and adults today. Research for the next generation of social, emotional, and academic development moves beyond averages to represent and act on variation. This principle and the one prior are not unrelated. In truth, better understanding variation is part of understanding how and why programs and strategies work. But understanding variation is also foundational to more basic questions of, for example, how variation in experience shapes developmental trajectories. Taken together, the two principles suggest that documenting average effects is important, but scaling effective practices requires that we know the underlying mechanisms of change and have a sense of how practices might be tailored to reflect variation that stems from a host of factors, within and between populations.

7. **Structures and processes go hand in hand – focusing on one without the other impedes integration and meaningful change.**

Structures are the tangible, concrete parts of any plan, strategy, program or intervention. They are the concrete elements that serve as the pillars or core components of practice and typically are visible in everyday work. Structures might include curricular materials, ongoing assessments, staff and educator training or professional development and support. Processes, on the other hand, are not tangible—not easily seen—but they are what make structures effective. They are the interactions, relationships, and essential practices that result from using a structure well. It is therefore the processes and the structures together that are tied to change and improvement, and these are often what is depicted in a theory of change (see #4 above). However, in many cases, the emphasis has been placed on structures alone, making the assumption that simply putting a structure in place, or documenting its use – e.g., a curriculum or new practice -- will result in change. Research for the next generation of social, emotional, and academic development addresses both structures and processes to support integration and meaningful, lasting change.

**Research Questions for the Next Generation**

**1. What matters, when, and how does it vary?**

There is a strong body of evidence indicating that social, emotional, and cognitive competencies develop throughout our lives and are essential to success and well-being at school, home, work, and in the community. In this section, we focus on deepening our understanding of how these competencies develop by addressing foundational issues related to establishing, for any given age and/or developmental period, what the most salient social, emotional, and cognitive competencies and attributes are (e.g., self-regulation, emotion knowledge, perspective taking, self-efficacy, motivation, integrity), how they are linked together within and over time, how they vary based on experience and context, and how they are tied, independently and in combination, to success.

**What We Know**

A broad area of research such as this has much embedded within it that is essential to building a deeper and better coordinated understanding of social, emotional, and cognitive development in key and
The evidence base for how we learn suggests that there are at least a dozen key skills that decades of research and practice indicate are important, and these include:

1. **Cognitive skills** including executive functions such as working memory, attention control and flexibility, inhibition, and planning, as well as beliefs, attitudes, and attributes that guide one’s sense of self (e.g., integrity, honesty, identity, mindsets, efficacy) and approaches to learning and growth;
2. **Emotional competencies** that enable one to cope with frustration, recognize and manage emotions, and understand other’s emotions and perspectives; and
3. **Social and interpersonal skills** that enable one to read social cues, navigate social situations, resolve interpersonal conflicts, cooperate with others and work effectively in a team, and demonstrate compassion and empathy toward others.

There is an expansive body of research from many disciplines that demonstrates that this body of social, emotional, and cognitive skills and competencies are associated with many areas of human development in both the short and long-term, including learning, health, and general wellbeing. In addition, there is some work to suggest a developmental progression of skills highlighting the manner in which certain skills and competencies emerge and become salient at different periods. For example, self-regulation is one central task of the early childhood years, while identity development is a developmental task of early adolescence. We also know that classrooms function better and students learn more when children have the skills to understand and manage emotions, focus attention, persist in the face of difficulty, behave with honesty and integrity, and to navigate relationships with peers and adults. Indeed, evidence suggests that supporting young children’s social, emotional, and cognitive skills through social and emotional learning (SEL), character, and related interventions can improve classroom climate and buffer children against the negative effects of adversity, leading to improvements in their social, emotional, behavioral, and academic outcomes.

**What’s Next?**

With this broad body of knowledge, what’s left? What’s left in this area has, at its core, to do with building a coherent, synthetic, and indisputable distillation of what matters. This necessitates growing and deepening our understanding of these foundational skills and competencies, how they are shaped by experience and context, and how they are linked to future outcomes. With this in mind, the following questions provide a guideline for the next generation research agenda.

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<tr>
<th><strong>MAJOR THEMES TO ADDRESS</strong></th>
<th><strong>Illustrative Research Questions</strong></th>
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<tbody>
<tr>
<td>1. WHAT IS THE COMMON SET OF SKILLS AND COMPETENCIES (ACROSS)</td>
<td>• What is the range of functioning in these skills within and between individuals, and across developmental settings and experiences?</td>
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5 e.g., Jones et al., 2016; Jones, Kahn & CDS; Duckworth & Yaeger, XX; Kamenetz (NPR), 2017
6 Jones, Kahn & CDS, 2017, pg. 5
7 CCSR Report
SOCIAL, EMOTIONAL, COGNITIVE, CHARACTER DOMAINS) THAT ARE CRITICAL WITHIN AND ACROSS DEVELOPMENTAL PERIODS AND SETTINGS?

- What is the nature and developmental course of these skills and competencies over time, and to what extent is there cultural variation in the skills and competencies that are valued and developed?
- What are the important developmental windows – or sensitive periods – for the development and cultivation of which skills and competencies?
- Are there developmental interdependencies, or sequences, within and between skill areas that would inform the structures and practices of schools and schooling?
- What is the role of peers, and peers’ development, in these skills and competencies?

2. HOW ARE THE MAJOR SKILLS AND COMPETENCIES IN THIS DOMAIN SHAPED BY CONTEXT AND EXPERIENCE?

- What are the characteristics of settings (e.g., home, classroom, school, neighborhood), cultural contexts (e.g., norms, values, roles), developmental experiences (e.g., relationships, transitions, major life events), and adversity (e.g., trauma, stress) that support the development of these skills and competencies or that pose a threat to healthy development?

3. HOW ARE THESE SKILLS AND COMPETENCIES LINKED TO CONTEMPORANEOUS AND FUTURE OUTCOMES?

- Are there thresholds, or inflection points, that are reliably associated with specific future outcomes?
- What are the common and unique pathways from these skills and competencies in childhood and adolescence to life outcomes in adulthood and how do these associations vary by developmental experiences, settings, and adversity?
- Are there essential developmental markers of challenge or strength in these skills and competences that represent important opportunities for intervention?

Better understanding the landscape of this body of skills and competencies, their developmental moments and contexts, and the organization and interweaving of them over time, will drive a clear idea of which dimensions persist and remain important and which recede, laying the foundation for a developmental-contextual map of this domain, and ultimately for better aligned and targeted practices. Key to such a map is the related endeavor of identifying, and when needed, building relevant construct-specific measurement tools.

2. How does embedding social, emotional, and academic learning into classroom settings matter?

Schools are an important context in which to develop social, emotional, and academic learning, and these contexts and experiences can be shaped in ways that positively affect development – and much of young people’s school day is spent inside classrooms. However, little is known about the specific classroom structures and practices that promote positive development. In this section, we explore ideas for a future
research agenda on evidence-based practices, programs, and approaches to embedding and sustaining social, emotional, and academic learning into classroom settings.

What We Know

Although the majority of the research linking classroom characteristics to student outcomes is correlational, there is consistency in findings across studies. For example, students who report feeling supported by and connected to their peers and teachers are more engaged in learning, perform better academically, and are more likely to cooperate with peers and teachers. At the same time, the quality of relationships and the classroom climate influence teacher motivation and engagement.

Another important aspect of classrooms is the unique set of social, emotional, and cognitive skills that students and teachers bring and how these variations impact learning and development. For example, in a recent study, teachers who reported having greater ability to recognize and manage emotions had classrooms that were more positive and supportive than teachers who reported being less skilled in these areas. Likewise, students who score higher on performance-based tests of emotion skills also report enjoying school more, liking their teachers more, and demonstrate fewer learning and attention problems than students who score lower on emotional skills.

What’s Next?

While this body of evidence tells us that classroom settings are an important context in which to support students, much less is known about the specific classroom characteristics that effect meaningful change. Importantly, we must consider the experiences and needs of all children. This means learning more about the influence of gender, race, culture, socioeconomic status, and learning differences that impact learning and success. With this in mind, the following questions provide a guideline for the next generation research agenda.

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| 1. WHICH ASPECTS OF CLASSROOM ORGANIZATION, STRUCTURE, AND ROUTINES INFLUENCE SOCIAL, EMOTIONAL, AND COGNITIVE DEVELOPMENT? | • What are the specific affordances (e.g., multi-cultural nature of many classrooms today) and constraints (e.g., few supports for translating materials) that contribute to children’s development?  
• What are the influences of school and classroom rules, norms, and policies (e.g., behavior management supports)?  
• How can the physical space of a classroom (e.g., seating, size, materials, lighting, etc.) be designed to promote social, emotional, and cognitive development? |
| 2. WHICH CLASSROOM PRACTICES AND APPROACHES ARE BEST FOR PROMOTING SOCIAL, EMOTIONAL, AND COGNITIVE DEVELOPMENT, GIVEN EACH CHILD’S | • Which methods or models for embedding a focus on social, emotional, and cognitive development into classrooms are the most effective (e.g., explicit instruction, modeling, school-wide practices, etc.), how might this vary by construct, and what dosage is necessary for optimal results?  
• How long does it take for a specific SEL program or approach to effect social, emotional, and cognitive skills and |
UNIQUE DEVELOPMENTAL NEEDS AND CULTURAL BACKGROUND?

3. WHAT ASPECTS OF CLASSROOM CLIMATE (E.G., RELATIONSHIPS, ATTITUDES, ETC.) SUPPORT HIGH QUALITY IMPLEMENTATION OF PRACTICES AND STRATEGIES TIED TO SOCIAL, EMOTIONAL, AND ACADEMIC DEVELOPMENT?

- Which specific teacher-level constructs (including beliefs, dispositions, competencies, and behaviors) support high quality implementation of practices?
- What is the impact of intentionally integrating social, emotional, and cognitive development into the more traditional academic work of classrooms and classroom instruction, and how is this best accomplished?
- How do classroom peer communities influence the implementation and uptake of different approaches and practices in social, emotional, and character development, thereby influencing classroom dynamics, student learning, and healthy development?

3. How do schools contribute to holistic student development?

Schools are complex social organizations that include students, teachers, staff, administrators, parents and families, service providers, and members of the broader public. As such, school climate is shaped by the ways in which people and other resources are organized and interact across time. In this section, we focus on school-level structures, policies, processes, practices, and relationships that together constitute “school climate” and can powerfully influence the social, emotional, and academic development of all members of the school community.

What We Know

Prior research suggests a bi-directional relationship between overall school structures and processes and the social, emotional, and cognitive skills and competencies of the students and adults within them. Through the structures, policies, and practices they enact, schools communicate both explicit and implicit messages to students and adults that can either support or undermine their social, emotional, and academic development. In turn, students and adults have their own perceptions of school climate in terms of its safety, responsiveness, respect, support, and overall quality.

Intentionally promoting the social, emotional, and cognitive development of students and adults shapes not only educational outcomes, but also contributes positively to safe and well-functioning schools and classrooms, better relationships among and between adults and students, reduced behavior problems, and deeper engagement in learning. However, there is great variability across schools in the overall health and quality of school climates, and within schools, students can have very different perceptions and experiences. Students of color and low-income students are less likely than their peers to report high levels of support, safety, and trust in their schools, and they are more likely to experience punitive disciplinary practices. For this reason, efforts to improve school climate that intentionally seek to address

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8 Denham, 2006; Durlak et al., 2011; Farrington et al., 2012; Greenberg et al., 2017; Jones, Barnes, Bailey, & Doolittle, 2017; Jones & Bouffard, 2012; Merritt et al., 2012; Okonofua, Paunesku, & Walton, 2016; Okonofua, Walton, & Eberhardt, 2016; Schonert-Reichl, 2017; Sklad et al., 2012; Taylor et al., 2017; Weissberg et al., 2015.
inequitable practices and outcomes often show the largest positive effect on low-income students and students of color.

What’s Next?
Though existing evidence points to an important role for schools in the social, emotional, and cognitive functioning of members of a school community, we have much to learn about the specific mechanisms whereby school design, organization, culture, and climate support the positive development of students, teachers, and staff. With this in mind, the following questions provide a guideline for the next generation research agenda.

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| 1. HOW DO SCHOOL ORGANIZATION, DESIGN, CULTURE, CLIMATE, AND RESOURCE ALLOCATION INFLUENCE STUDENT DEVELOPMENT ACROSS GRADE LEVELS AND DIFFERENCES IN STUDENT BACKGROUND? | • What are the constraints and opportunities in different school models (e.g., traditional models and those emphasizing personalized, project-based, and/or competency-based learning) for supporting young people’s development at different age/grade levels?  
• What are the relative impacts of system-level inputs (e.g., arts access, sports programs, counselors, health services, after-school tutoring) on students’ social, emotional, and academic outcomes, and what information should guide school leaders in allocating limited resources?  
• What are salient micro-contexts (e.g., playground, cafeteria, hallways, main office, sports field, classroom, peer contexts) that shape students’ daily experiences and ongoing learning and development at school?  
• How do interactions and relationships between and among members of a school community (students, teachers, school leaders, school staff, parents) influence students’ social, emotional, and cognitive development?  
• How do systematic experiences shape patterns of group behavior? For example, if one subgroup of students experiences punitive disciplinary actions in response to behaviors that other students are not disciplined for, how does that shape their development and subsequent behavior? |
| 2. WHAT DOES IT MEAN FOR A SCHOOL COMMUNITY TO BE CULTURALLY RESPONSIVE IN ITS APPROACH TO STUDENT DEVELOPMENT? | • Which school features are most developmentally important in which environments or with which student populations?  
• What are common features (structures, policies, practices, messaging, principles, values) across school communities that successfully support the development of young people from a variety of cultures and backgrounds? |
What is the meaning and value of different perspectives on school-level phenomena (student, teacher, leader, parents, community), and how might multiple perspectives contribute to identifying and removing structural barriers that impede some students’ learning and development?

What are common developmental pathways for schools that have successfully improved their culture and climate and their support of students’ social, emotional, and academic development, and what are critical first steps in that journey?

What are reliable indicators of developmentally supportive schools?

What kinds of measures (of students, teachers, and/or school environments) are needed to shed light on specific school-level mechanisms of development?

3. WHAT ARE THE BEST INDICATORS THAT SCHOOLS ARE MOVING IN THE RIGHT DIRECTION IN SUPPORTING STUDENTS’ SOCIAL, EMOTIONAL, AND COGNITIVE DEVELOPMENT?

4. What is the role of adults?

As indicated by The Evidence Base for How We Learn, the field has focused considerable attention on the cognitive, social, and emotional competencies of children and youth as well as the content and contexts that foster them. However, less attention has been given to the critical role of adults in creating rich, equitable learning environments that ensure that all students achieve their fullest potential, regardless of background and circumstance. As such, a central concern of research for the next generation is to better understand what teachers, school leaders, and other adults need to know and do to promote the optimal cognitive, social, and emotional development for all children across developmental periods and contexts.

What We Know

We know that teachers are pivotal to creating classrooms and schools that provide the rich, transformative educational experiences that all children need and deserve. Yet, teaching is a demanding and stressful profession, with high turnover rates, especially in under-resourced schools and communities. Basic and applied research reveals that teachers’ social and emotional competencies are an important consideration in the quality of the educational experiences they offer their students. In addition, there is evidence that teacher identity and biases can have a negative impact on relationships and the quality of instruction and learning experiences afforded to students of color and those from under-resourced settings.

Given the critical role teachers play in shaping positive outcomes for children and youth, training and professional development opportunities are an important mechanism by which teachers develop the skills needed to deliver and sustain high-quality learning experiences for all children. However, many pre-service programs do not adequately attend to issues of human development and diversity, and can be slow to adopt new approaches. In-service professional development opportunities are ubiquitous, but are uneven in focus, quality, effectiveness and availability in across schools and districts. This can result in limited teacher exposure to innovations, variations in teacher uptake and in positive impact on classroom practices.
In addition to the importance of teachers, evidence points to the critical role that school administrators can play in deciding on and creating the conditions for classroom teaching and learning. For example, administrators are highly influential in setting priorities and goals; providing human and material resources; and establishing and sustaining social, emotional and academic development programs and practices.

**What’s Next?**
Despite the critical role of teachers, school administrators, and other adults, we know relatively little about what is needed to most effectively prepare adults to support the holistic development of all students, and to do so in a sustainable and measurable way. With this in mind, the following questions provide a guideline for the next generation research agenda.

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| 1. WHAT COMPETENCIES, BELIEFS, AND PRACTICES ARE MOST CRITICAL FOR TEACHERS ACROSS GRADE LEVELS AND CONTEXTS? | • What theoretical models have the most utility for articulating the requisite competencies for teachers of students at various grade levels? What are the key correlates of these competencies?  
• What are the best measures for assessing and supporting the development of teacher competencies? What are the most appropriate quantitative assessments? What is the role of qualitative measures and observations?  
• What are the connections and developmental sequencing among teacher beliefs and classroom practices, especially practices promoting social, emotional, and cognitive development across different ages?  
• Are the same or different teacher factors necessary and sufficient to successfully support the optimal growth of students across different cultural, socio-economic, and family backgrounds? |
| 2. WHAT KIND OF PREPARATION AND SUPPORT (E.G., CONTENT, STRUCTURE, FREQUENCY) IS NEEDED TO ADVANCE HIGH-QUALITY IMPLEMENTATION OF APPROACHES TO SOCIAL, EMOTIONAL, AND ACADEMIC DEVELOPMENT OVER TIME? | • What are the key features of teacher preparation programs that result in a high-quality implementation of approaches to social, emotional, and character development across diverse school settings?  
• What are the most effective marketing and recruitment strategies to improve the quantity and quality of undergraduate students enrolling in education programs?  
• What is the necessary preparation for teachers with limited experience who work with diverse populations in schools that serve communities of color and/or that are under-resourced? |
### 3. WHAT KNOWLEDGE AND RESOURCES DO SCHOOL LEADERS ACROSS CONTEXTS NEED TO SUPPORT AND MOTIVATE TEACHER LEARNING, TEACHER WELL-BEING, AND PRACTICES THAT FOSTER STUDENT’S SOCIAL, EMOTIONAL, AND ACADEMIC DEVELOPMENT?

- What types of coaching supports are most viable and effective for the continuous improvement of high-quality teacher practice?
- What policies and practices can school leaders use to reduce teacher turnover and increase teacher well-being and job satisfaction?
- What strategies and processes can school leaders employ to bring coherence and integration to potentially competing academic, social, and emotional learning demands, approaches, programs and practices?
- How can school leaders organize, encourage, and empower key stakeholders to align efforts and create synergies to maximize the social, emotional, and cognitive learning of children and youth, especially in under-resourced settings?
- How do schools develop and effectively employ a system of continuous improvement, reflection, and feedback to optimize teacher competencies and instruction?

### 5. What is the role of districts and other macro-systems?

District- and state-level supports are essential to maximizing the likelihood that schools are places where adults work together to promote the social, emotional, and academic development of each and every student. Yet, there is relatively little research on how district and state-level efforts can most effectively support healthy social, emotional, and academic development. Given the importance of leadership and the broader systems that impact daily practice and programming, there is a significant need for additional research in this area.

**What We Know**

Educational researchers from various sub-fields agree that school districts can be particularly influential with regard to the success and sustainability of educational innovations. Districts are well positioned to facilitate system-wide efforts by cultivating commitment and support among stakeholders, establishing and aligning programming, and building capacity for continuous improvement. Importantly, district leadership controls resources needed to support social, emotional, and academic approaches, programs, and practices, making their support crucial to implementation and sustainability. While there is a limited body of research on district-led innovations for improving learning and positive student outcomes, research suggests that systemic social and emotional learning and character development programs and approaches can be implemented successfully and are tied to a number of outcomes at the district level (e.g., positive system-wide climate, clarity of roles and responsibilities) and at the student level (e.g., increased attendance, academic performance, fewer disciplinary referrals).

Leadership at the state level also has the potential to be a powerful lever of change, yet there is little research on state-led approaches and practices aimed at supporting the holistic development of children and youth. While many states have policies that support local control by districts, federal policies like the Every Student Succeeds Act (ESSA) can provide important opportunities for states to think about how they...
can be more intentional about student social, emotional, and academic development. ESSA positions states as central actors in K-12 education by giving states greater control over school improvement and accountability for student outcomes. The emergence of state-level standards, policies, and guidelines (1) encourage greater understanding of the practices and programs that foster holistic development; (2) increase the demand and support for high-quality teaching and learning; and (3) boost funding to support professional development efforts that facilitate district- and state-wide adoption and sustainability.

What’s Next?
While leaders at the district- and state-levels are well positioned to support the social, emotional, and academic development of children and youth, we know very little about the specific activities and resources that are needed to maximize positive outcomes. With this in mind, the following questions provide a guideline for the next generation research agenda.

<table>
<thead>
<tr>
<th>Major Themes to Address</th>
<th>Illustrative Research Questions</th>
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| 1. WHAT ARE THE HIGH LEVERAGE ACTIVITIES NEEDED FOR INTEGRATION AND SUSTAINED IMPLEMENTATION OF DISTRICT-WIDE EFFORTS TARGETED TO SOCIAL, EMOTIONAL, AND ACADEMIC DEVELOPMENT? | • What types of knowledge and supports are needed for district leaders to effectively plan for holistic educational experiences for students?  
• What levers, resources, and processes can district leaders employ to support adult preparation for the implementation of social, emotional and academic learning efforts in schools and in classrooms?  
• What district-level policies, strategies, and resources are required to ensure that high-quality holistic educational experiences are provided equitably across diverse school communities?  
• How can districts use continuous improvement data to engage stakeholder groups (e.g., school administrators, teachers, school personnel, parents, and community organizations) to ensure high-quality implementation is achieved and sustained over time? |
| 2. WHAT ARE THE HIGH LEVERAGE ACTIVITIES NEEDED FOR INTEGRATION AND SUSTAINED IMPLEMENTATION OF STATE-WIDE EFFORTS TARGETED TO SOCIAL, EMOTIONAL, AND ACADEMIC DEVELOPMENT EFFORTS? | • What are the barriers and facilitators to states developing and implementing educational standards that are reflective of student’s social, emotional, and cognitive growth and development?  
• To what degree do certification and continuing education requirements for educators include training in the social, emotional, and cognitive development of students and adults?  
• How do states engage and support district leaders in the use of continuous improvement data within and across districts |
that would provide meaningful measures of social and emotional as well as academic development?

• How do state leaders ensure that K-12 educational innovations are offered equitably across diverse districts?

EDUCATION RESEARCH FOR THE NEXT GENERATION:
RECOMMENDATIONS FOR A NEW PARADIGM

Each spring, education researchers from around the world convene at the annual meeting of the American Education Research Association. In 2017, over 10,000 scholars presented their work in more than 2,500 separate sessions spanning six days. Similar research convenings bring together members of the Society for Research in Educational Effectiveness (SREE), American Psychological Association (APA), Society for Research in Child Development (SRCD), Society for Research on Adolescence (SRA), and dozens of other professional research associations, all addressing questions central to learning and development. Collectively, year after year, thoughtful, dedicated, hard-working education researchers are building an incredible knowledge base on topics spanning every conceivable aspect of schooling, learning, and development from early childhood through PreK-12 to higher education, including knowledge directly relevant to the social, emotional, and academic development of children and youth.

Meanwhile in schools around the country, impassioned teachers and leaders struggle to make sense of the latest fads and decipher new mandated programs, as they work to address the diverse learning needs and gifts of their students. Elsewhere, in central offices, dedicated district administrators attempt to improve or transform whole education systems, looking for evidence-based practices and solid research to inform their efforts. All of these education professionals are bombarded with a seemingly unending supply of possible “fixes” to their problems, yet too often they feel like they are shooting in the dark amid confusing or contradictory claims and information.

And through this all, schools and classrooms seem largely impervious to fundamental change, despite the glaring widespread realization that a 19th century approach to education is wholly inadequate to prepare children and youth for meaningful participation in the 21st century. What is wrong with this picture? As we think about an agenda for the next generation of research on child and adolescent social, emotional, and academic development in K-12 settings, we must take on two central challenges:

• Researchers build knowledge, but knowledge and evidence do not reliably inform meaningful changes in school practice or design.
• Teachers, school leaders, and district administrators search for guidance, but cannot easily access the information they need in a form that actually helps them.

To this end, we recommend a New Research Paradigm for the Next Generation, distinguished by who constructs knowledge/how research is conducted, how questions are prioritized, and how knowledge is shared. At the heart of this new paradigm would be meaningful professional learning communities in which researchers, school leaders, teachers – and ideally, also students, policymakers, and other members of an educational setting – engage in collaborative inquiry and learn together in real time. This idea is fleshed out in more detail below.
To be clear, in calling for a new research paradigm, our intent is not to replace the existing paradigm. We affirm the critical importance of “gold standard” experimental design research and of building foundational knowledge, such as work underway in the cognitive sciences, developmental psychology, or motivation research. We are quite confident that most of the education research conducted in the foreseeable future will continue exactly as the enterprise currently operates, with researchers engaged in basic science to build knowledge which is disseminated to the academic community through peer-reviewed research journals. Graduate students will continue to be apprenticed into these traditional modes of inquiry. What we argue for here is to also carve out significant space for innovation and a committed investment in training a next generation of education researchers who can operate productively in a new paradigm.

**Who Constructs Knowledge / How Research is Conducted**

Research-practice collaborative projects in this new paradigm would borrow heavily from both Design-Based Research (DBR) and Action Research principles and methodologies. To take on essential questions of concern to practitioners, a research paradigm for the next generation of social, emotional, and academic development engages researchers and practitioners in iterative, situated, collaborative, mixed-methods projects.

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**An ideal project team would be vertical, multidisciplinary, and diverse:**

- **Vertical:** Includes practitioners and policymakers from all relevant levels of practice, given the problem (e.g., teacher, school leader, district administrator)
- **Multidisciplinary:** Includes researchers with varied kinds of expertise relevant to the problem (e.g., adolescent development, adult learning, culturally-responsive practice, achievement motivation, systems change) and practitioners with different vantage points on the problem
- **Diverse:** At least one member of every team should reflect the relevant population(s) being studied (e.g., English language learners, LGBTQ students, African American males). If this is not possible, teams should create intentional structures and processes to regularly seek input from the relevant communities at key phases of an inquiry project: question formation, root cause analysis, hypothesis generation, study design, data collection, interpretation of findings, iterative rounds of inquiry, and dissemination of results.

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**As they engage in iterative, situated, collaborative, mixed-methods projects, project teams would:**

- Focus on a mutually agreed-upon problem of practice – one that is of immediate concern locally but that also has broad implications for the larger field;
- Jointly create a “practical theory of change” to unearth underlying assumptions across team members about the problem and its root causes, and generate theories about how best to address the problem, with researchers drawing on specialized knowledge from their relevant fields (e.g., child development, math pedagogy) and educators drawing on their practice experience and knowledge of the local context;
- Engage in “inquiry cycles” to learn together and test out proposed interventions, programs, practices, or other approaches to address the area of concern. Such cycles might include:
  - Design a small test of change (small scale, easy to implement) to apply this knowledge to the problem;
  - Anticipate what will be different if the test works, and identify measures to detect change;
Educators implement the test “on the ground” in their schools or classrooms; researchers observe both the results and the process, ideally drawing on multiple perspectives (qualitative and quantitative data collection) to create a robust picture of what happened;

- Project teams make sense of the data together, check their assumptions, revise the test, and try again – and then again... until local educators feel they have found an adequate resolution to their problem and researchers are able to develop “hunches” that may be more generalizable that they could test in other settings.

The benefits of this approach to research and to practice improvement accrue to all participants. Educators develop a deeper understanding of the research knowledge base through practical application, receive expert support and guidance in developing solutions to a pressing problem, and come to more deeply understand their schools, classrooms, school staff, or students. Researchers build knowledge of what works, when, for whom, and under what circumstances – beginning to unpack the question of why – as they glean more generalizable principles from local tests (to be further tested in other settings).

**How Questions are Prioritized**

For research to be directly useful to teachers, school leaders, and district administrators, it must address the central problems within their individual contexts. Traditional education research focuses on population-level relationships and generalizable findings, but educators in schools want to know, “What matters for my kids? What will make a difference in my school?”

A learning-focused agenda that responds to vital (local) problems of practice might simultaneously contribute to knowledge-building for more generalizable questions, such as:

- How do schools create cultures of learning and healthy social-emotional functioning among adults?
- What predictive elements are essential to have in place (e.g., mission/vision, hiring philosophy, discipline plan, norms) before implementing a school-wide initiative for integrating social, emotional, and cognitive development in large middle schools?
- With a limited school budget, what is the relative return of investing in more recess time vs. more art and music vs. a school social worker vs. a parent center if an elementary school principal wants to best support the social, emotional, and cognitive development of students? What factors should a school leader consider when making resource decisions for a particular population of students?
- How do teachers maintain a culture of high academic expectations when a large percentage of the adolescents in their high school are dealing with significant trauma?

In prioritizing the essential questions in any given focus area, researchers should ask:

- What are the relevant bodies of knowledge that should inform this question? (This will guide decisions about the kinds of expertise that should be included on a project team.)
- What factors currently impede progress in this area in practice? Once these barriers are identified, ask: Will the research questions we are pursuing address these barriers?
- How do we ensure that this research collaboration best reflects the integrated nature of learning and attends to social, emotional, and cognitive development and processes alongside academic growth?
How Knowledge is Shared (How Findings are Disseminated)

Traditional research publications are designed for an academic audience with substantive expertise in a topic, people who can readily situate the results from a new study within the larger body of evidence. Teachers, school leaders, and school administrators don’t usually have a deep substantive understanding of the research in a particular area – nor do they have the time to develop one – so they cannot make meaning of the results of individual studies in the way a researcher might. Rather than summaries of individual studies, what teachers, school leaders, and district administrators need are problem-focused translational products that summarize the evidence across studies and across disciplines in a way that both builds their capacity in understanding a phenomenon and enables them to take informed action in the immediate term. The broader education sector can create opportunities for researchers to describe what they know in ways that will be directly useful to classroom teachers, school leaders, district administrators, and state policymakers. Funders and other key actors in the education community can support the creation of structures and processes for developing these translational products and building avenues for easy access for practitioners.

Whether research findings come from the types of research-practice collaborations described above or from studies using more traditional research methodologies (experimental and quasi-experimental studies, for example), the products coming out of education research can be much more intentionally crafted to be relevant and accessible to educators and to district and state-level policymakers. Part of a new research paradigm includes taking the next step, beyond producing articles for academic journals, to also craft field-facing summaries that provide guidance for educators and call out specific applications in practice.

The Research Paradigm for the Next Generation builds upon the robust research infrastructure and methodologies that currently exist and provides new opportunities for researchers to engage in collaborative research-practice efforts that not only build generalizable knowledge about social, emotional, and academic development, but change facts on the ground in real school settings for real kids.

To support this agenda, there are specific roles for important actors in the education sector. Funders have a particularly important role to play in supporting the creation of infrastructure and opportunities for new research on social, emotional, and academic development.

Funders (including the federal government) can:

- Support the creation and dissemination of translational products to inform social, emotional, and academic efforts in schools and districts, for example:
  - Fund multidisciplinary teams of researchers to create translational research briefs (short, graphically-oriented, practice-focused) that distill key findings or principles that should inform practice efforts around a particular topic (e.g., disciplinary practices, effective math strategies for middle school) with a grounding in evidence on social, emotional, and academic development.
- Provide research funding and incentives for researchers and practitioners at every level of the system to participate in vertical, collaborative, multidisciplinary research-practice teams to work on key questions of practice – and be flexible in timelines, metrics, and reporting requirements as needed to allow researchers to engage in inquiry projects with practitioners.
- Invest in both the near term and the long haul: A comprehensive research agenda includes a portfolio of both quick turnaround projects and sustainable funding commitments for large-scale longitudinal...
studies to deepen our collective knowledge base on social, emotional, and cognitive development from early childhood through young adulthood, as well as the inter-generational aspects of such development (parent-child, teacher-student).

**Research universities, in collaboration with school districts, can:**

- Create training and mentorship opportunities for graduate students and early career scholars – particularly people of color – to learn to do practice-focused, collaborative research that supports holistic student development.
- Incentivize researchers in colleges and universities to serve on small, sustained teams to work with teacher preparation programs in their own institutions, both to inform the design and improvement of such programs to reflect key principles of social, emotional, and academic learning, and to use them as sites to conduct collaborative research projects on teacher preparation with program staff.
- Incentivize researchers in state colleges and universities to serve on advisory teams (on either an ongoing or ad hoc basis) to provide consultation to State Education Agencies (SEAs) or Local Education Agencies (LEAs) as they develop new initiatives to support social, emotional, and academic learning.
- Create a new practice-focused education research journal that would include both:
  - Translational summaries of key evidence (across studies and across disciplines) to inform particular problems of practice.
  - Research and practice results of collaborative projects, with articles formatted to build teacher and school leader capacity to act in their own context, in line with the best research evidence.

**The broader research and education ecosystems can:**

- Create a clearinghouse of what people are learning across collaborative research projects: reduce redundancy, make transparent, and build incrementally. What rises to the level of “We know this to be true” (e.g., what might we add to the CDS Consensus Statement of Evidence on How We Learn)?
- Develop necessary scaffolding and supports for this bidirectional translational bridge between research and practice. This includes creating processes for developing research-friendly practitioners and practice-focused researchers with expertise engaging with one another in this new research paradigm.