



REPORT

Understanding Cross-Systems Transitions from Head Start to Kindergarten: A Review of the Knowledge Base and a Theory of Change

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Overview

Introduction

Transitions between two educational settings can bring about new experiences and expectations for children and their families. In the early care and education (ECE) context, when children transition from Head Start to kindergarten, they are confronted with different places, people, activities, and relationships. This transition also occurs between two distinct educational systems, with differing and often contradictory governance structures, philosophies, and accountability metrics. To date, much of what is known about supporting children's transition to kindergarten narrowly attends to practices provided by ECE programs and kindergarten teachers, with little attention to the organizational conditions that support or hinder those practices.

To promote ongoing learning and build upon early successes fostered by Head Start, both ECE providers and K-12 local education agencies (LEAs) must consider each other's roles and coordinate their efforts through alignment of transition goals, approaches, and practices. The current report summarizes a review of the literature, highlights key informant perspectives, and presents a theory of change for transition strategies and coordinated transition practices intended to support teachers, families, and children moving between systems.

Research Questions

1. What existing literature and knowledge is there that focuses on the transition from Head Start to kindergarten for children, their families, and their teachers?
2. What does this literature say about how coordinated perspectives, policies, professional supports, and practices across Head Start and K-12 support the transition from Head Start to kindergarten?
3. Based on the current knowledge base, how can a theory of change be conceptualized to help support successful transitions?

Purpose

The purpose of this review is to identify, from the literature and key informant interviews, key contributors to more successful kindergarten transitions from Head Start by understanding the broader systems-level supports needed, including strategies:

- within Head Start,
- within elementary schools, and
- coordinated across the two systems.

Key Findings and Highlights

The literature includes studies about specific, concrete transition practices that teachers and/or program or school staff implement. However, we know much less about the broader supports in place for educators and families, such as policies and professional supports to align perspectives and identified roles throughout the transition process. We also know little about the mechanisms through which those strategies would support key short- and long-term outcomes for teachers, families, and children. Despite these emerging themes from key informants and a small body of existing literature, gaps remain about policy implementation and what facilitates and hinders that implementation in the area around Head Start (or any ECE program) to kindergarten transitions.

The existing research and knowledge, while limited, led to the development of the HS2K theory of change, which provides a framework for understanding systems-level approaches that can lead to successful transitions from Head Start to kindergarten. The theory of change illustrates the two-sided nature of transitions in which there is a sending side (Head Start) and a receiving side (kindergarten). Both within and across the organizational systems, we posit that four main factors (the 4Ps) influence children’s transition experiences. The first three Ps — (1) Perspectives, (2) Policies, and (3) Professional supports—intersect to influence the quantity, quality, and coordination of the fourth P, (4) Pactices. Head Start and kindergarten systems, as well as child development processes, are all influenced by external sociocultural, historical, and other contextual factors. The report discusses key findings organized by the 4Ps, including:

- **Perspectives:** While preschool and kindergarten teachers have aligned perspectives on the role of parents in facilitating successful transitions, they differ on expectations for and perspectives on their own roles. When there are more misaligned perspectives across key actors in the transition process, children fare less well.
- **Policies:** Overall, there is a lack of research examining how the implementation of policies is related to teacher-, family-, and child-level outcomes. However, theory suggests that policies that are aligned across systems—and have the support of

strong leadership—are more likely to result in coordinated transition practices through improved cross-system communication.

- **Professional Supports:** While research on alignment of professional supports is limited, shared professional development, opportunities for ECE teachers to observe kindergarten teachers, and transition summits attended by multiple stakeholders seem to foster aligned perspectives, connections across systems, and trust.
- **Practices:** While the most common transition practices are at the classroom level, research shows coordinated efforts across Head Start and elementary schools result in better short-term initial school adjustment, long-term social and emotional development, and academic outcomes for children.

Methods

In order to conduct our literature review, we built upon existing compilations of research and identified peer-reviewed publications, book chapters, dissertations, and grey literature related to the four types of shared approaches (the 4Ps) articulated in the theory of change. Additionally, we conducted 45- to 60-minute interviews with seven key informants, which included both practitioners and federal staff. The literature review and findings from the key informants supported the development and refinement of the TOC.

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Executive Summary

The transition from Head Start to kindergarten can bring about new experiences and expectations as children and families are confronted with new places, people, activities, and relationships. These experiences occur within a broader context of disparate systems and policies, with differing—and often contradictory—governance structures, philosophies, and accountability metrics. To date, much of what is known about supporting children’s transition to kindergarten narrowly attends to practices that are provided by early care and education (ECE) programs and kindergarten teachers, with little attention paid to the organizational conditions that support or hinder those practices.

We know that children’s early development can set the stage for ongoing learning. Research findings support Head Start’s comprehensive approach, which aims to foster school readiness by providing high-quality education, health supports, and early intervention services. To promote ongoing learning and build upon early successes, both ECE providers and K-12 local education agencies (LEAs) must consider each other’s roles and coordinate their efforts in supporting children and families throughout the kindergarten transition. These coordination efforts include alignment of transition goals, approaches, and practices, which can set the stage for successful longer-term outcomes.

Purpose & Primary Research Questions of the Literature Review

The goal of the broader *Understanding Children’s Transitions from Head Start to Kindergarten* (HS2K) project is to better understand how to improve children’s and families’ transitions from Head Start to kindergarten. The project’s research questions focus on the common strategies and approaches that Head Start and kindergarten staff implement to support transitions, cross-system coordination to support transitions, and the key outcomes of strong transition supports.

This report summarizes a review of the literature, highlights key informant perspectives, and presents a theory of change for transition strategies and coordinated transition practices intended to support teachers, families, and children moving between systems. The purpose of this report is to catalogue current literature and knowledge on these topic areas and to build a theory of change that operationalizes successful

transitions from Head Start to kindergarten. This report addresses the following research questions:

1. What existing literature and knowledge is there that focuses on the transition from Head Start to kindergarten for children, their families, and their teachers?
2. What does this literature say about how coordinated perspectives, policies, professional supports, and practices across Head Start and K-12 support the transition from Head Start to kindergarten?
3. Based on the current knowledge base, how can a theory of change be conceptualized to help support successful transitions?

This review identifies key contributors to more successful kindergarten transitions by understanding the broader systems-level supports needed, including strategies (1) within Head Start, (2) within elementary schools, and (3) coordinated through relationships across systems.

Conceptual Approach

Situated within an understanding of the complex, multilayered systems and multiple stakeholders that support children’s transitions to kindergarten, the HS2K project is organized around four prominent mechanisms (“4Ps”) that can influence the transition experience: **p**erspectives, **p**olicies, **p**rofessional supports, and **p**ractices.

The 4Ps used in this report were adapted from literature related to both effective school leadership and implementation science. In the school leadership research base, successful school leaders focus on four core components: setting direction and vision, redesigning the organization, developing people, and improving instructional practices. Similarly, implementation science focuses on core drivers or components of the infrastructure needed to support change. We adapted these two different research-based approaches to change—adding an alliterative flair—to examine how transitions to kindergarten are strengthened and to consider the ways in which Head Start and K-12 can align their efforts.

Defining Perspectives, Policies, Professional Supports, and Practices

Perspectives

Perspectives are different stakeholders' (child/family, teacher, administrators/schools/centers) visions, values, and beliefs about transitions to kindergarten, including their and others' roles in supporting transitions to kindergarten. What does it mean to be ready for kindergarten? What is the role of the parent versus teacher versus administrator/school? What is the role of Head Start versus kindergarten?

Alignment of perspectives is the extent to which (1) each key stakeholder is a part of the process, and (2) there are shared and/or complementary understandings of kindergarten transitions among stakeholders, both within and across the Head Start and K-12 systems.

Policies

Policies are the explicit (written/formal) documentation of organizational regulations, standards, agreements, procedures, and guidance around supporting transitions to kindergarten (e.g., transition policies and structures such as records transfers, shortened days at the start of kindergarten).

Alignment of policies across systems is the extent to which Head Start and K-12 systems have explicit, substantive policies about transitions that complement each other (e.g., MOUs and interagency agreements, data sharing agreements, explicit accountability for discrete activities).

Professional Supports

Professional supports are professional development/learning opportunities and other resources that support teachers, site administrators, grantee/LEA administrators, and policymakers to enact strong transition approaches (e.g., professional development, coaching, dedicated planning time).

Alignment of professional supports is the extent to which Head Start and kindergarten sides (both across schools/centers within systems and across systems) provide explicit supports to promote adult learning related to enacting transition efforts that complement each other (e.g., joint professional development opportunities, data walks or other efforts that provide the opportunity for teachers to observe each other's practices in the classroom, other shared activities that bring together teachers and administrators across the two systems).

Practices

Concrete activities designed to support children/families during the transition to kindergarten. Transition practices can be enacted by Head Start or kindergarten separately or jointly through coordinated transition practices. They can also occur at various levels within/across each system (e.g., Head Start Grantee/LEA leadership, Head Start directors/principals, teachers, and staff).

Alignment of practices is the extent to which Head Start and kindergarten sides (both *across schools/centers within systems* and *across systems*) implement practices that complement each other, work in alignment, or involve communication within and between the two systems.

Key Findings

Findings from the literature review and key informant interviews are organized by each of the 4Ps (perspectives, policies, professional supports, and practices). Within each section, we summarize what we currently know and do not yet know from the literature on common approaches, associations with outcomes, and key mechanisms and moderators. Overall, we find that more research is needed around perspectives, policies, professional supports, and how they support coordinated policies.

Perspectives

Common Approaches

- Families view the transition period as a critical moment in time for their child and believe they themselves should play an active support role in academic and social-emotional readiness.
- Both preschool and kindergarten teachers believe home-based parent involvement is crucial for children's early learning and transition to kindergarten, but perspectives may differ on how each view their role in the transition. Some evidence suggests that preschool teachers see their role as helping to facilitate children's school readiness, while kindergarten teachers see their role as sharing information with families about expectations for kindergarten.
- Little is known about administrator perspectives on the transition to kindergarten.

Associations with Outcomes

- One nationally-representative study found that greater misalignment in perspectives across preschool and kindergarten teachers predicted lower teacher ratings of children's social skills, teacher-reported approaches to learning scores, and math achievement scores.

Mechanisms & Moderators

- Children from socioeconomically disadvantaged backgrounds are more susceptible to the negative influence of misalignment. For them, greater misalignment is more strongly associated with lower achievement, weaker approaches to learning, and weaker social skills than for children from more advantaged backgrounds.
- Some research theorizes that strengthened relationships, communication, and trust may be mechanisms for aligning perspectives.

- Some literature suggests that shared professional development, teacher observations between systems, and involvement of multiple stakeholders in transition planning can influence the degree to which perspectives align.
- Aligned perspectives may improve teacher self-efficacy, which could improve instructional practices and ultimately student outcomes.
- Co-location of preschool and kindergarten may lead to more aligned perspectives, although existing research finds that co-location alone is insufficient to promote broader alignment.

Policies

Common Approaches

- Head Start programs have several transition-related requirements stated in the School Readiness Act of 2007 and the Head Start Program Performance Standards. Grantees are required to establish family and community collaborations, engage in appropriate learning environment activities, and provide additional transition services for children with an individualized education plan (IEP). Additionally, they must collaborate and communicate with LEAs and other entities, developing memoranda of understanding (MOUs) to ensure smooth transitions to kindergarten through coordination.
- For K-12 districts receiving Title I funds, the Every Student Succeeds Act (ESSA) includes specific transition requirements. One such requirement states that districts must enter into agreements with Head Start programs (and, if feasible, other ECE programs) where their students transition from in order to collaborate on improving the transition experience for children and families. ESSA allows LEAs and school leaders to use Title II funds to provide joint professional development between public school teachers and ECE educators. ESSA also requires LEAs that receive federal funds for the support of English learners to coordinate activities and share relevant data with Head Start and other ECE providers.
- Nearly half of all states in the U.S. have requirements related to the kindergarten transition, including policies requiring written transition plans, providing transition programs to children, developing clear expectations about kindergarten readiness, aligning standards and assessments, and requiring collaborative teams to articulate and oversee implementation of transition practices.
- There is little research on district-level or school-level policies regarding kindergarten transitions.

- There is also little research on the distinction between policies that are “on the books” and how those policies are implemented in practice.

Associations with Outcomes

- Effects of policy on practice are indirect, inconsistent, and highly influenced by local context, but there is little literature in this area.
- Overall, there is a lack of research examining how the implementation of policies is related to teacher-, family-, and child-level outcomes.
- While there is a lack of direct evidence linking policies to outcomes, some evidence does suggest an association between policies that encourage consistency in instructional practice across Head Start and kindergarten classrooms and children’s development of academic and social and emotional skills during kindergarten.

Mechanisms & Moderators

- Theory suggests that policies that are aligned across systems and have the support of strong leadership are more likely to result in coordinated transition practices through improved cross-system communication.
- Policies implemented at the federal and state level have led to the development and implementation of transition plans, cross-system collaborations, and professional development.
- A small number of studies find that policies are more likely to result in improved transitions when there is coordinated professional development and shared data practices.

Professional Supports

Common Approaches

- In one study, fewer than half of public-school preschool teachers had received guidance on ways to enhance transition services. Additionally, few kindergarten teachers reported receiving training on transition practices, and few elementary principals received professional development focused on early childhood.
- While research on alignment of professional supports is limited, shared professional development, opportunities for ECE teachers to observe kindergarten teachers, and transition summits attended by multiple stakeholders seem to foster aligned perspectives, connections across systems, and trust.

- However, we know little about the types of transition-related professional supports staff receive, particularly those that are coordinated across systems.

Associations with Outcomes

- Research finds that pre-kindergarten and kindergarten teachers who received specialized transitions training reported using a higher number of transition practices than those without training. These included individualized practices before the start of school, whole-class practices before the start of school, individualized practices after the start of school, whole-class practices after the start of school, and coordination with preschool programs and the community.
- Implementation of evidence-based practices around curricula and instruction is strengthened when teachers have individualized training and coaching, which results in increased teacher knowledge and self-efficacy.

Mechanisms & Moderators

- Greater interaction with peers through shared professional development opportunities is associated with changes in administrators', staff members', coaches', and teachers' instructional beliefs over time. Teachers identify stronger relationships and a greater understanding of the importance of transitions as key mechanisms in supporting transition practices.
- There is little research on the moderators that influence the associations between professional supports and teacher, parent, and student outcomes.

Practices

Common Approaches

- The National Center on Early Childhood Development organizes transition practices within the following four categories: (1) **Head Start–School**, (2) **Child–Program/School**, (3) **Family–Program/School**, and (4) **Community–School**.
- To date, the literature has largely examined the *quantity* of specific transition practices asked about using surveys. On average, Head Start teachers reported employing more transition practices than their kindergarten counterparts.
- Collaborative practices (**Head Start–School** practices) tend to be more time-intensive than individual staff practices, sometimes extending across several months before and after kindergarten entry with the goal of alignment and providing continuity of experience.

- The most common cross-system practices (**Head Start–School**) reported by Head Start programs include participating in individualized education program meetings with schools for special education students, providing schools with Head Start records, and holding meetings with kindergarten teachers at school.
- The most common **Family–Program/School** practices reported by Head Start programs include discussing transitions with parents, providing parents with information about the school their child will attend, sending home informational letters on the transition, teaching parents child advocacy skills, and scheduling a parent visit to their child’s next school.
- The most common **Family–Program/School** and **Child–Program/School** practices reported by kindergarten teachers include sending home information about the kindergarten program, inviting parents to attend an orientation prior to the start of school, inviting parents and/or children to visit prior to the start of school, arranging for preschoolers to spend time in the classroom, and offering shortened school days at the start of school. Few teachers report home visits.
- There is minimal research on common **Community–School** practices that support the Head Start to kindergarten transition.

Associations with Outcomes

- Research suggests that the most common practices (e.g., classroom-based practices such as sending information home to families, inviting families to orientations and open houses, arranging preschool classroom visits, etc.) may not be the most effective at achieving outcomes.
- Practices that involve **Family–Program/School** connections are associated with children’s overall positive adjustment to kindergarten, as well as increased achievement in reading and math.
- Although home visits are one of the least-used **Family–Program/School** practices, Head Start children who receive home visits targeted toward parent training and math skills acquisition exhibit more academic improvement in their kindergarten year than their peers who received only mail-home math games.
- Children who have kindergarten teachers who engage in a greater number of **Family–Program/School** transition activities with parents have higher language skills in kindergarten.
- Children whose pre-kindergarten and kindergarten programs share information regarding individual child needs and curricular issues are likely to have more advanced social skills; fewer incidences of challenging behavior in kindergarten;

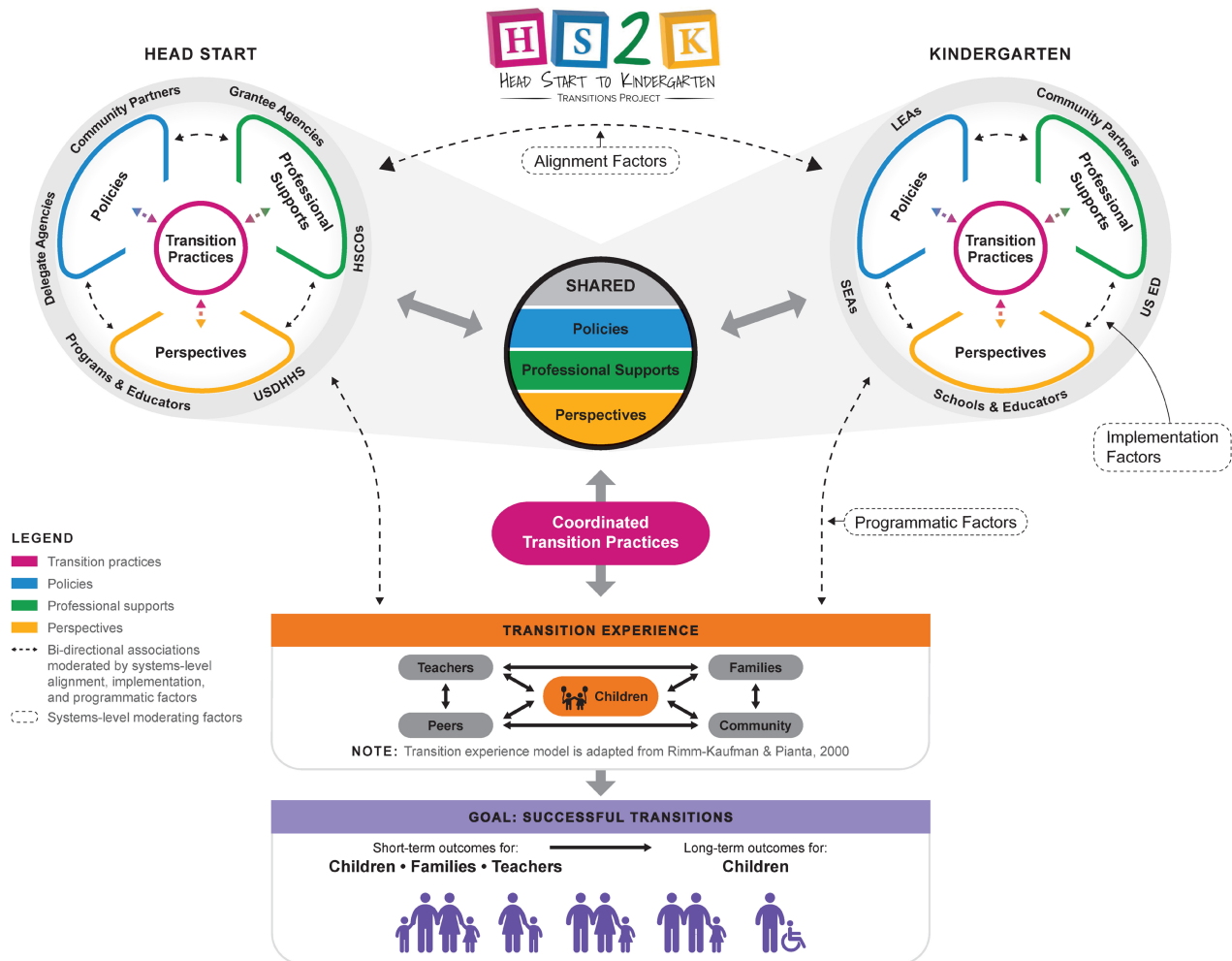
and greater growth in reading, writing, and math scores than children whose programs do not engage in these practices.

Mechanisms & Moderators

- Research suggests a direct association between transition practices and **Child–Program/School** relationships, where transition practices themselves result in improved relationships and increased individualized instruction in the classroom, which directly associate with children’s outcomes.
- Coordinated efforts (**Head Start–School** practices) result in better short-term initial school adjustment, long-term social and emotional development, and academic outcomes for children. This occurs through the greater continuity in environments and experiences that emerge from the cross-system coordination and relationships developed among teachers in preschool and kindergarten.
- There is an indirect effect of practices on child outcomes through stronger **Family–Program/School** connections and relationships, which ease the stress of the transition for families and build parent self-efficacy. These parental outcomes, in turn, result in greater family involvement in their child’s education, which increases attendance and engagement and ultimately improves academic outcomes for children.

HS2K Theory of Change

The HS2K theory of change was developed based on findings from the literature review and key informant interviews. It provides a systems-level framework that organizes the factors that explain and predict successful transitions from Head Start to kindergarten. Further, it illustrates the two-sided nature of transitions in which there is a sending side (Head Start) and a receiving side (kindergarten).



The TOC's Key Elements & Assumptions

- Both within and across the organizational systems, the four main mechanisms (the 4Ps) influence children's transition experiences.
- The first three Ps—(1) **p**erspectives, (2) **p**olicies, and (3) **p**rofessional supports—intersect to influence the quantity, quality, and coordination of the fourth P, (4) **p**actices.
- Implementation of transition practices is a function of individual organizational systems (both Head Start and kindergarten), cross-system coordination, and independent initiation by families, educators, and community partners.
- Transition practices that are coordinated across the systems are more likely to lead to the most successful transitions for teachers, families, and children.
- A child's transition experience is also independently influenced by those closest to them—namely teachers, families, and community partners.

Methods

The process for conducting the review consisted of searching for relevant literature and summarizing key information about each study. Our two-tiered approach consisted of:

1. Identifying existing literature reviews and meta-analyses related to the transition to kindergarten.
2. Systematically searching for recent literature not included in reviews and meta-analyses.

We identified peer-reviewed publications, book chapters, dissertations, and grey literature (e.g., reports from federal and state government and organization-sponsored publications) related to the four types of shared approaches (the 4Ps) articulated in the HS2K theory of change. To identify both existing reviews and additional literature, the research team used bibliographic databases and websites such as: PsycINFO (ProQuest); Child Care and Early Education Research Connections; Google Scholar; National Center on Parent, Family, and Community Engagement (NCPFCE); Office of Head Start; Administration for Children and Families; and Education Commission of the States. We also conducted broad Google searches with variations of “transition to kindergarten” and “report,” and followed up with searches of organizations (e.g., New America) whose work was identified. We used the same search strategies and terms described below to review relevant websites of these organizations.

Literature searches were restricted to research published in the United States, unless an international publication was broadly applicable and was either a key/oft-cited study or filled an important gap. We used search terms to identify both recent reviews and meta-analyses and literature that were not included in recent reviews. Out of the total 228 articles identified, 80 received a full review. These included a mix of quantitative, qualitative, theoretical, and mixed methods research.

This report also highlights findings from seven key informant interviews. Key informants represent both practitioners and federal staff identified as those likely to think broadly about kindergarten transitions, and they represent various organizational levels and systems (Head Start and K-12) present in our theory of change. Key informants were also selected with an eye towards the ability to represent the views of a group of stakeholders.

Key informants were presented with guiding questions, a conceptual framework depicting our systems-level approach to transitions, and an emergent theory of change upon which to reflect and react. These interviews helped fill gaps in the literature based on informants’ knowledge of what is occurring in practice and policy, including the most

common and innovative approaches seen in the field. Their experiences navigating within- and across-systems facilitators and barriers to implementing effective transition practices provided valuable perspective on how organizations and systems understand and engage in transition-related work.

Implications & Next Steps

This report identifies key gaps in our understanding of the transition to kindergarten, documents existing evidence, and provides a systems-level framework through which to engage with transitions work moving forward. Gaps in knowledge around the 4Ps within and across the Head Start and K-12 systems, and how they relate to coordinated practices and outcomes, will be examined further in future project activities. This includes a comparative multi-case study, the development of new measures, identification of future descriptive research designs, and secondary data analyses.

The HS2K Project will soon embark on a comparative multi-case study to better understand how effective transition strategies are supported on the ground and how children, their families, and their teachers experience those supports. This will provide evidence for how strong transition supports play out in practice and how they relate to perspectives, policies, and professional supports in both Head Start and LEAs. Importantly, it will allow us to begin testing aspects of the theory of change by documenting contextual differences and exploring how those relate to systems-level implementation of the 4Ps.

Glossary

Alignment: In this report, we focus on alignment at the organizational level. Alignment refers to the enactment of a complex array of organization-level strategies and actions intended to strengthen the coordination between Head Start and K-12 and create meaningful similarities across the systems. Coordinated efforts are those that work together well; alignment of efforts is the process through which strategies become coordinated. Alignment can be applied to a range of variables, including leadership teams, professional learning opportunities, data systems, learning standards, assessment approaches, transition activities, family engagement strategies, and more (Kauerz, 2018). Successful alignment creates greater continuity and coherence between children’s and families’ experiences prior to elementary school.

Continuity: Continuity is an outcome of alignment strategies and is exhibited by the creation of predictable sequencing and progression of experiences across grade levels. Continuity is most likely to occur when there is an alignment of organization-level variables, standards, curricula, instructional practices, student assessment, and teacher professional learning (Kauerz, 2019; Kauerz & Coffman, 2019).

Early care and education (ECE): An umbrella term to encompass the range of learning-oriented programs and settings that children may experience before entering kindergarten. This includes Head Start, school-based pre-k, state-funded pre-k, center-based child care, and family child care.

Perspectives (about kindergarten transitions): Different stakeholders’ (child/family, educator, administrators/schools/centers) vision, values, and beliefs about transitions to kindergarten, including their and others’ roles in supporting transitions to kindergarten.

Policies (around kindergarten transitions): Explicit (written/formal) documentation of organizational regulations; standards; agreements/Memoranda of Understanding (MOUs); procedures; and guidance around supporting transitions to kindergarten.

Practices (focused on kindergarten transitions): Concrete activities designed to support children/families during the transition to kindergarten. Staff in Head Start or kindergarten can enact transition practices separately or jointly through coordinated transition practices. Practices can also occur at various levels within/across each system (e.g., Head Start grantee/local education agency (LEA) leadership, Head Start directors/principals, teachers, staff).

Professional supports (for kindergarten transitions): Professional learning and other resources (e.g., training materials, shared planning time) that support teachers, site

administrators, grantee/LEA administrators, and policymakers to enact strong transition approaches.

Successful transition practices: Concrete transition practices that meet the intended goal of supporting children/families during the transition to kindergarten. Successful transitions are those whereby teachers, families, and children have positive outcomes throughout the transition process and after the transition. For example, one outcome of successful transition practices is the *maintenance* of parent-teacher communication and parental involvement in school-based education when children enter kindergarten.

Transition to kindergarten: The period starting from the year prior to kindergarten entry, through entry into kindergarten, until the end of the kindergarten year. The transition itself is not considered an individual event, but a process that teachers, families, and children experience in preparation for, entry into, and adjustment to kindergarten.

Introduction and Purpose

Transitions between two educational settings can bring about new experiences and expectations, which in turn may create challenges for children and their families. In the early care and education (ECE) context, when children transition from Head Start to kindergarten, they are confronted with different places, people, activities, and relationships. Children and families also encounter different expectations for how they should behave, with whom they should interact, and how they should spend their time. Moreover, kindergarten transition experiences occur within a broader context of disparate systems and policies, with differing and often contradictory governance structures, philosophies, and accountability metrics (e.g., Kagan & Tarrant, 2010; Pianta et al., 2007). Even positive transitions can cause disequilibrium and challenges, particularly for young children who benefit from routines. Thus, children and families face challenges when transitioning from Head Start (and from other ECE settings) into elementary schools (Cowan et al., 2005; Purtell et al., 2018; Rimm-Kaufman et al., 2000).

Focusing on Head Start to kindergarten transitions is crucial if we want to sustain positive effects on children's outcomes. Head Start's comprehensive approach has been shown to promote school readiness by providing high-quality education, health supports, and early intervention services (e.g., US Department of Health & Human Services [DHHS], 2005). However, while evaluations of Head Start find numerous short-term benefits (Bitler et al., 2014; Bloom & Weiland, 2015; Shager et al., 2013; HHS, 2010), researchers find limited sustained benefits beyond the preschool years (Puma et al., 2012). These unsustainable effects raise questions about how to support children and families in the post-Head Start years (e.g., Pearman et al., 2019). However, aligned and consistent high-quality practices *between* ECE and kindergarten may maximize early education effects (Stipek et al., 2017). Under the right circumstances, children's early development sets the stage for ongoing learning (e.g., "skills beget skills"; Bailey et al., 2017; Heckman, 2006). Theoretically, these circumstances may be set when instructional practices and support routines are aligned and are of high quality and developmentally appropriate across both grade levels. However, if teacher practices and beliefs (Abry, Latham, Bassok, & LoCasale-Crouch, 2015) and curriculum and instructional practices (Engel et al., 2013) across ECE and kindergarten are inconsistent with one another, children and families can be faced with jarring changes upon kindergarten entry that may not build upon their strong experiences in Head Start. This highlights the need to carefully consider the roles that both Head Start and elementary schools play—including alignment of goals, approaches, and practices to support

children and families across this transition—for successful longer-term outcomes (Reynolds et al., 2004; Zhai et al., 2012).

There may be reasons why children enrolled in Head Start have unique needs during the transition process (Cook et al., 2019; Mashburn et al., 2018; Rimm-Kaufman et al., 2000), even after benefiting from the rich experiences and foundations that were built during their time in Head Start (Deming, 2009; U.S. DHHS, 2005). Head Start, by design, serves children from families who live at or below the federal poverty line, come from historically marginalized racial and ethnic backgrounds, and have special education needs. A guiding principle of Head Start is that children are best supported using culturally-grounded practices that align with the values of their families and communities (Office of Head Start, 2020). While Head Start is a targeted program, public schools, in contrast, serve all children—regardless of socioeconomic status, race, ethnicity, or ability. Head Start and K-12 education have different histories, governing infrastructures, funding mechanisms, and accountability systems (Doucet & Tudge, 2007; Kauerz, 2018; McCabe & Sipple, 2011). As a result, Head Start and school systems may have different perspectives around kindergarten readiness and the transition to elementary school. These differences trickle down to affect children’s and families’ experiences. For instance, children can face inconsistent classroom environments, daily schedules, learning activities, expectations for their behaviors, and teacher beliefs (Brown et al., 2019; Timmons, 2018; Wright et al., 2017). Therefore, a better understanding of how key transition strategies help align expectations and practices across Head Start and elementary schools is particularly important for children served by Head Start.

In the present study—Understanding Children’s Transition from Head Start to Kindergarten, or the “HS2K Project”—our team of researchers focus on understanding how to improve supports for teachers, families, and children throughout the transition to kindergarten. This report summarizes a literature review on the transition to kindergarten, findings from interviews with key informants, and a theory of change on the transition from Head Start to kindergarten.

Understanding Head Start to Kindergarten Transitions

Defining the Transition to Kindergarten

Many researchers have conceptualized the transition to kindergarten as a process rather than a single event. Eckert (2007) describes the transition to kindergarten as a complex and dynamic process during which children and families experience shifts in settings and experiences, novel roles, and new relationships as children enter the formal school setting. Several authors (Bohan-Baker & Little, 2004; Petriwskyj et al., 2005; Rimm-Kaufman & Pianta, 2000; Rosenkoetter et al., 2009; Stormont et al., 2005) note that transitions should not be recognized as a discrete event that happens to children and families, but rather as a process that occurs over considerable time, including both the preparation for and subsequent adjustment to the new experiences. Moreover, the range of partners that influence connections across contexts also experience transitions. The HS2K Project adheres to this definition of kindergarten transition as a process with multiple stages.

There is preparation for the transition, the moment when entry into a new space begins, and a period of processing and adjusting to that new space. Specifically, we define the kindergarten transition period as spanning from the beginning of the school year prior to kindergarten, through entry into kindergarten, until the end of the kindergarten year. Under such a definition, the transition to kindergarten is a process that lasts approximately two years.

The HS2K Project defines the kindergarten transition period as spanning from the beginning of the school year prior to kindergarten, through entry into kindergarten, until the end of the kindergarten year.

How We Conceptualize Successful Kindergarten Transitions

The primary goal of the current project is to better inform what Head Start can do to support successful transitions. This requires a deep understanding of relationships within and across Head Start and K-12 systems; therefore, our findings are intended to inform both systems. We also theorize that practices that are coordinated across these two systems are those that are most likely to result in successful transitions. We posit that successful transitions are those that prepare teachers to support children and families before and after entering kindergarten. This, in turn, promotes optimal short- and long-term outcomes for children. Here, we provide a high-level overview of what research tells us about how transition practices and approaches relate to child, family, and teacher outcomes.

Some research has shown small positive benefits of both the sending programs' (Head Start and ECE) and elementary schools' transition practices on child outcomes in kindergarten (Cook & Coley, 2017, 2019; Little et al., 2016; LoCasale-Crouch et al., 2008; Shulting et al., 2005). The practices typically studied include, but are not limited to:

- **Practices initiated by Head Start and other ECE programs** such as sharing information with families, helping to register children for school, organizing visits to elementary schools, conducting home visits, sharing child assessment data with families and elementary schools, meeting with elementary school personnel, and engaging in joint trainings around transitions;
- **Practices initiated by elementary schools and local education agencies (LEAs)**, such as sharing information with families, arranging for visits to their schools and classrooms, hosting parent orientations, conducting home visits, staggering school start dates, and having shortened days during the first week of school; and
- **Coordinated transition practices** involving both ECE settings and elementary schools, including joint trainings and professional development, classroom visitations by teachers and administrators, data sharing across systems, and Head Start and elementary schools coordinating events for families such as registration and classroom visits.

Findings suggest that effective transition supports can lead to children's positive adjustment and social and emotional well-being in kindergarten (e.g., Cook & Coley, 2017; LoCasale-Crouch et al., 2008; Schulting et al., 2005); readiness for school, including cognitive, self-regulatory, social and emotional skills, and approach to learning skills (Mashburn, 2018); positive learning trajectories and growth over time (e.g., Bogard & Takanishi, 2005; Engel et al., 2013; Mashburn, 2018; Reynolds et al., 2004); and the reduction of longstanding achievement gaps among children (e.g., Mashburn, 2018). It is likely that the associations between transition practices and child outcomes exist because successful transition approaches influence teachers as well. For example, research has found that effective transition strategies can promote teachers' increased self-efficacy, increased knowledge about transitions and child development needs, increased use of transition practices, improved teacher-child relationships, increased engagement with families, and decreased stress levels (e.g., Arneson, 2016; Gooden & Rous, 2018; Pears, 2018; Schulting, 2009). These, in turn, allow teachers to provide stronger supports to children in their classrooms. Indeed, transition perspectives, policies, professional supports, and practices may indirectly lead to successful transitions for children through positive teacher outcomes.

Similarly, effective transition practices can create positive outcomes for families. These family outcomes include increased family-teacher communication, increased family

engagement in both school and home learning activities, increased parental agency around children’s transitions, increased comfort with the transition to school, increased social capital, and decreased stress (Kemp, 2003; McIntyre et al., 2007; Pears et al., 2015; Pianta & Kraft-Sayre, 1999; Prigg, 2002; Rosenkoetter et al., 2009; Rous et al., 2007; Schulting et al., 2005). Currently, research suggests that while home-based parental involvement increases as children transition from pre-k to kindergarten, parental school-based involvement and parent-teacher communication *decrease* during this period (Sheridan et al., 2019). Given the importance of family involvement in school-related activities for child outcomes, successful transition practices may also include those that help *sustain* the levels of parent-teacher communication and parental school-based involvement as children enter kindergarten.

A Systems Approach to Studying the Transition to Kindergarten

In studying the transition from Head Start to kindergarten, the HS2K Project team takes a systems approach that recognizes that effective transitions require coordination between *both* the sending programs (Head Start) and receiving programs (elementary schools). Further, transition strategies and approaches—particularly those that are coordinated—must be implemented at multiple levels within and between those systems: among classroom teachers in Head Start and kindergarten, families and teachers, elementary school principals and Head Start directors, Head Start grantees and school districts, and state and federal agencies. While much of what we currently know about supporting children’s transition to kindergarten narrowly attends to activities and practices experienced by children and their families, our approach broadens the field’s understanding to include the organizational conditions that enable or hinder those practices to occur.

Another facet of our systems approach is the recognition of the complexity of implementation. Meaningful implementation requires not only the existence of transition practices, but also:

- strategies and organizational infrastructures that ensure educators, administrators, and other staff receive adequate professional development and supports;
- policies that provide clear guidance and accountability; and
- aligned perspectives (i.e., philosophical and conceptual understandings) around child development and each person’s role in supporting children’s transitions.

In short, both Head Start and K-12 strategies are influenced by the intentional and targeted organizational priorities and perspectives, policies, and supports provided to teachers and other professionals around kindergarten transitions. Therefore, this project is situated within an understanding of the complex, multilayered systems and multiple

stakeholders that support children’s transitions to kindergarten through what we highlight as four types of shared approaches: **perspectives, policies, professional supports, and practices** (the “4Ps”; expanded upon in *Theory of Change Built from the Current Knowledge Base*).

The 4Ps used in this report were adapted from literature related both to effective school leadership and implementation science. These fields suggest several key components that successfully support quality improvement efforts. In the school leadership research base, successful school leaders focus on four core components: setting direction and vision, redesigning the organization, developing people, and improving instructional practices (see, for example, Leithwood, 2012). What is compelling in this typology of influences on school improvement is the comprehensive attention to multiple levers for change: stakeholders’ beliefs, the organizational context, supports provided to adult learning, and implementation of practices directly experienced by students and families. Implementation science also focuses on core drivers or components of the infrastructure needed to support change. In this literature, drivers are typically grouped into three types that, when used collectively, ensure sustainable implementation of a reform (see, for example, Metz, Halle, Bartley & Blasberg, 2013). Competency drivers focus on developing and improving teachers’ and administrators’ skills and abilities; organization drivers develop the supports and systems that create hospitable environments for change; and leadership drivers include attention to changing philosophy, values, and beliefs in order to build consensus.

We drew upon these research fields focused on change (educational leadership theory and implementation science) to develop four constructs and added an alliterative flair—the 4Ps. These represent core components of the systems hypothesized to support successful transitions; they help us examine how transitions to kindergarten are strengthened and consider the ways in which Head Start and K-12 can align their efforts. These four constructs are:

1. the range of **perspectives** or beliefs about transitions to kindergarten, mirroring the notions of setting direction and vision and leadership drivers;
2. organization- and systems-level **policies** designed to support children’s transition from Head Start and other ECE programs to kindergarten, mirroring the notion of redesigning organizations and organization drivers;
3. organization-level **professional supports**, mirroring the notion of developing people and competency drivers; and
4. transition **practices** and activities experienced by children, their families, and teachers, mirroring the notion of improving instructional practices.

Kindergarten transitions exist within larger preschool through grade 3 (P-3) approaches

Supporting successful kindergarten transitions is just one approach to increasing and sustaining the positive effects of children’s early childhood experiences, as described in *Introduction and Purpose*. Other approaches take even longer than the two years we focus on herein. Indeed, a robust history of reform efforts has focused on multiple years of children’s ECE experiences, in addition to their first four years of elementary school (kindergarten through grade 3). Generally, these approaches fall under the broad umbrella of preschool through grade 3 (P-3) efforts, which aim to reform the structures, policies, curriculum, standards, and supports that underlie children’s classroom experiences to create more alignment across time.

The evidentiary base for P-3 efforts suggests that alignment across more than two years (i.e., preschool and kindergarten) may help support positive school adjustment, sustain children’s achievement gains, and increase family involvement (e.g., Kauerz, 2018; Reynolds et al., 2010). These efforts include policies that support transitions but do not exclusively focus on the pre-k and kindergarten years. Examples include programs such as the Chicago Child-Parent Centers (Ou, 2019; Reynolds et al., 2006, 2010, 2017), which involve a more comprehensive set of policies, professional supports, and practices than those specifically focusing on kindergarten transitions. Because the HS2K Project bounds the kindergarten transition from the year before kindergarten through the kindergarten year, we consider the kindergarten transition to be a *piece* of these broader P-3 approaches.

The project acknowledges that the transition to kindergarten is a critical point in the P-3 continuum, and therefore we explore the P-3 literature as directly related to the transition to kindergarten. In this review, we attend to the *alignment efforts* that exist between these two grade levels (Head Start and kindergarten) specifically; however, we do not include an extensive review of the ways in which P-3 programs or efforts may result in successful *outcomes* for teachers, families, and children.

Defining alignment and continuity for kindergarten transitions

As in the P-3 literature and theoretical discussions, the terms “alignment” and “continuity” are pervasive when discussing kindergarten transitions. However, these terms are not clear-cut, nor are they entirely distinct from one another. Even scholars do not agree on common definitions. Still, the concept of alignment is central to the HS2K Project’s theory of change, which is presented and described in more detail under *Theory of Change Built from the Current Knowledge Base*. Here, we provide a brief overview of our definitions of alignment and continuity as part of our understanding of kindergarten transitions.

The HS2K Project considers alignment to be the enactment of a set of system- or organization-level strategies that strengthen the coordination of efforts between the two systems involved in kindergarten transitions: ECE (or Head Start, in the case of our project) and K-12. Coordinated efforts are those that work together well; alignment of efforts is the process through which strategies become coordinated. Alignment efforts can be applied to a range of variables, including leadership teams, professional learning opportunities, data systems, learning standards, assessment approaches, transition activities, family engagement strategies, and more (Kauerz, 2018). Continuity may be another result of strong alignment. A number of authors (e.g., Bogard & Takanishi, 2005; Brock et al., 2017) describe continuity as the similarity, complementarity, coordination, or sequencing of educational components from grade to grade, building on children's prior experiences and skills. Mashburn and colleagues (2008) make the case that continuity is not only coordination among systems but also a progression of learning and expectations from one age to the next (such that learning environments, instruction, and content are progressively richer and more complex as children develop increasing capacities). From these definitions, one distinguishing factor of continuity is that it focuses on sequencing and progression across grade levels and describes the kinds of learning environments that children experience. Those experiences, however, are most likely to occur when standards, curricula, instructional practices, student assessment, and teacher professional learning are aligned (Kauerz, 2019; Kauerz & Coffman, 2019). In sum, system-level alignment efforts are necessary, but not sufficient, for creating conditions that provide teachers, families, and children with experiences characterized by continuity.



Goals of HS2K Project

The goal of the HS2K Project is to better understand how to improve children’s and families’ transitions from Head Start programs to kindergarten. As discussed briefly in the prior section, much has yet to be systematically studied—including how children and families experience kindergarten transition supports, as well as the conditions under which organizational alignment across the Head Start and K-12 systems is most likely to occur and be most effective. Better understanding these understudied areas can provide key evidence to policymakers and technical assistance partners around how to help strengthen within-system conditions and supports, cross-system coordination, and ultimately transition experiences for teachers, families, and children. The HS2K Project has four sets of research questions:

1. What strategies and practices are Head Start programs implementing to support children as they transition from Head Start to kindergarten? What is the content, quality, and quantity of these strategies and practices? How are they experienced by children, families, teachers, and other direct service providers?
2. What strategies and practices are elementary schools implementing to support children as they transition from Head Start to kindergarten? What is the content, quality, and quantity of these strategies and practices? How are they experienced by children, families, teachers, and other direct service providers?
3. What characterizes relationships among Head Start programs, elementary schools, and other community partners that support children’s successful transitions from Head Start to kindergarten? What are the specific facilitators of, and barriers to, successful transitions?
4. What are the key short- and long-term outcomes of successful transition strategies and practices for children, families, Head Start teachers, and

kindergarten teachers? What are the key contextual factors and mechanisms that result in these key outcomes?

To address these research questions and goals, the HS2K Project includes the results of activities outlined in this report: a review of the literature, interviews with key informants, and development of a theory of change (TOC). Broader project activities include a review of data sources and measures, a comparative multi-case study, and secondary data analyses. Through these activities, the HS2K Project aims to advance transition approaches for the Head Start and K-12 fields in several ways. First, the project catalogs current transition approaches, operationalizes successful practices, and situates those practices in various community and organizational contexts. Second, the project identifies short- and long-term goals of effective transitions from Head Start into kindergarten for children, their families, and teachers. Third, the project examines and extends the existing literature on transitions to include a broader view of collaboration, coordination, and policy implementation by studying these in the context of Head Start to kindergarten transitions. Fourth, the TOC provides a framework for examining existing evidence (and where evidence is lacking) and practice knowledge about effective Head Start to kindergarten transition approaches that includes hypotheses about the particular pathways and conditions enabling successful transitions. In this way, the TOC will guide future study and measurement of the TOC where evidence is lacking. The resulting insights from the full project will identify promising kindergarten transition strategies; inform changes to practices, professional supports, and policy in Head Start, other ECE settings, and elementary schools; and guide future research.

Purpose of This Report

This report summarizes a review of the literature and key informant interviews about transition strategies and coordinated transition practices intended to support teachers, families, and children throughout the Head Start to kindergarten transition (1) within Head Start, (2) within elementary schools, and (3) through relationships across systems. The literature review and key informant interviews informed ongoing refinements of a TOC, resulting in the version presented in this report. Throughout this report, we highlight where existing evidence is strong and where gaps persist in the hypothesized linkages between components within the HS2K TOC. We aim to achieve two goals: (1) to present a current understanding of the knowledge base that corresponds to the project's research questions, and (2) to present a theory of change that represents how transition approaches and strategies can be implemented in ways that contribute to successful transitions for teachers, families, and—ultimately—children.

This report addresses the following specific research questions:

1. What existing literature and knowledge is there that focuses on the transition from Head Start to kindergarten for children, their families, and their teachers?
2. What does this literature say about how coordinated perspectives, policies, professional supports, and practices across Head Start and K-12 support the transition from Head Start to kindergarten?
3. Based on the current knowledge base, how can a theory of change be conceptualized to help support successful transitions?

We collected the evidence presented in our review of the current knowledge base through two techniques. First, our literature review examined existing literature on kindergarten transitions from 2000 to 2020. Building on recent compilations of research, we reviewed the literature to summarize what we do and do not know from research about effective transition strategies and the structures in place to support them. Our review approach follows from our understanding of the kindergarten transitions landscape (see *The Landscape for Understanding Transitions to Kindergarten*) and was designed to inform our TOC. As such, our approach was—and thus the findings in this report are—organized around understanding the 4Ps: perspectives, policies, professional supports, and practices (see *Theory of Change Built from the Current Knowledge Base*). It also focused on understanding the conditions that evidence suggests make the enactment of each P more successful, the mechanisms through which each P leads to outcomes (both intermediate and distal), and how these approaches vary for children with different needs.

Our second source of information was interviews with key informants. Because much of the work around kindergarten transitions is not being systematically studied, key informant interviews helped fill gaps in the literature based on informants' knowledge of what is occurring in practice and policy, including the most common and innovative approaches seen in the field. Key informants brought new ideas and insights that were not identified in our literature search, because their contributions derived from their lived experiences navigating within- and across-systems facilitators and barriers to implementing effective transition practices. Additionally, the interviews brought in perspectives on how organizations and systems understand and engage in efforts to guide and implement transition efforts that are “working.” We know that a lot of work is happening in Head Start and elementary schools around improving transitions; therefore, key informants were a primary source for learning more about on-the-ground transition work happening at various levels of the Head Start and K-12 systems (i.e., grantee/LEA, school/center, and classroom/teacher). Throughout the key informant interviews, the HS2K Team sought feedback on our conceptualization of Head Start to

kindergarten transitions so that we could determine how in line we were with key leaders in the field.

Findings from both the literature review and key informant interviews are simultaneously presented throughout this report, and—together—they have informed the development of our TOC. Although the TOC emerged *from* our understanding of the literature, key informant interview themes, and our own and a panel of experts' knowledge about kindergarten transition approaches and organizational structures, we have organized this report to share the TOC *first*. This allows readers to see how each section of literature fits within the TOC as they progress through the review. We conclude with a summary that brings all the information together and highlights where the current knowledge base is strong and where more research is needed. This, in turn, will inform other activities of the HS2K Project, including (1) the design of a comparative multi-case study and the instruments used to collect information during the case studies, and (2) potential future tasks, including design options for a descriptive study, development of new measures, and testing of new pathways and models that have not yet been explored in existing secondary data.

Intended Audiences for This Report

This report is intended to provide researchers and the ECE field with a detailed review of the literature and highlight gaps to be addressed in future research. Our TOC presents what we hypothesize—based on existing literature and practice knowledge—are the foundations for successful kindergarten transitions for teachers, families, and children. We also intend this report to be a resource for program-level decision-makers aiming to better understand the field's knowledge about effective transition strategies and the supports needed to implement them. This, we hope, will inform changes to policy, professional supports, and practices in and across Head Start, other ECE settings, and elementary schools.

Finally, we expect that pieces of this report—either in this form or in future shorter formats—will be useful to program administrators and other policymakers, as it provides deep attention to organization- and system-level factors. Whereas past reviews have focused primarily on activities and practices experienced directly by children and families, this report helps to better articulate the organizational conditions that influence those practices and ultimately children and families' experiences.

Landscape for Understanding Kindergarten Transitions and a Theory of Change

The Landscape for Understanding Transitions to Kindergarten

The HS2K Team began this work with a practical, field-informed understanding of the landscape for transitions from Head Start to kindergarten. This perspective (Exhibit 1, The HS2K Landscape) guides the objectives and overall project approach, including how we structured the literature review, framed questions for our key informants, and developed key components of the TOC. This depiction of the two sides of the transition is intended to be descriptive, not theoretical, providing a visual representation of the complexity of answers to questions such as, “Who needs to collaborate with whom in transitions to kindergarten?” Our TOC, by contrast, theorizes processes and pathways through which effective transition approaches and practices occur and which outcomes they lead to.

The Head Start to kindergarten transition landscape is informed by the experiences of teachers, Head Start directors, and elementary principals across the country. Our depiction captures the complex, two-sided, multilayered systems, as well as the multiple stakeholders that support children’s transitions from Head Start to kindergarten. Although based in practicality, this type of perspective has been written about in research and theory around the transition to kindergarten (e.g., Rimm-Kauffman & Pianta, 2000; Yelverton & Mashburn, 2018) and cross-sector collaboration (e.g., Geiser et al., 2013; Kauerz, 2018, 2019).

The Two Sides of the System and Diverse Populations Experiencing Kindergarten Transitions

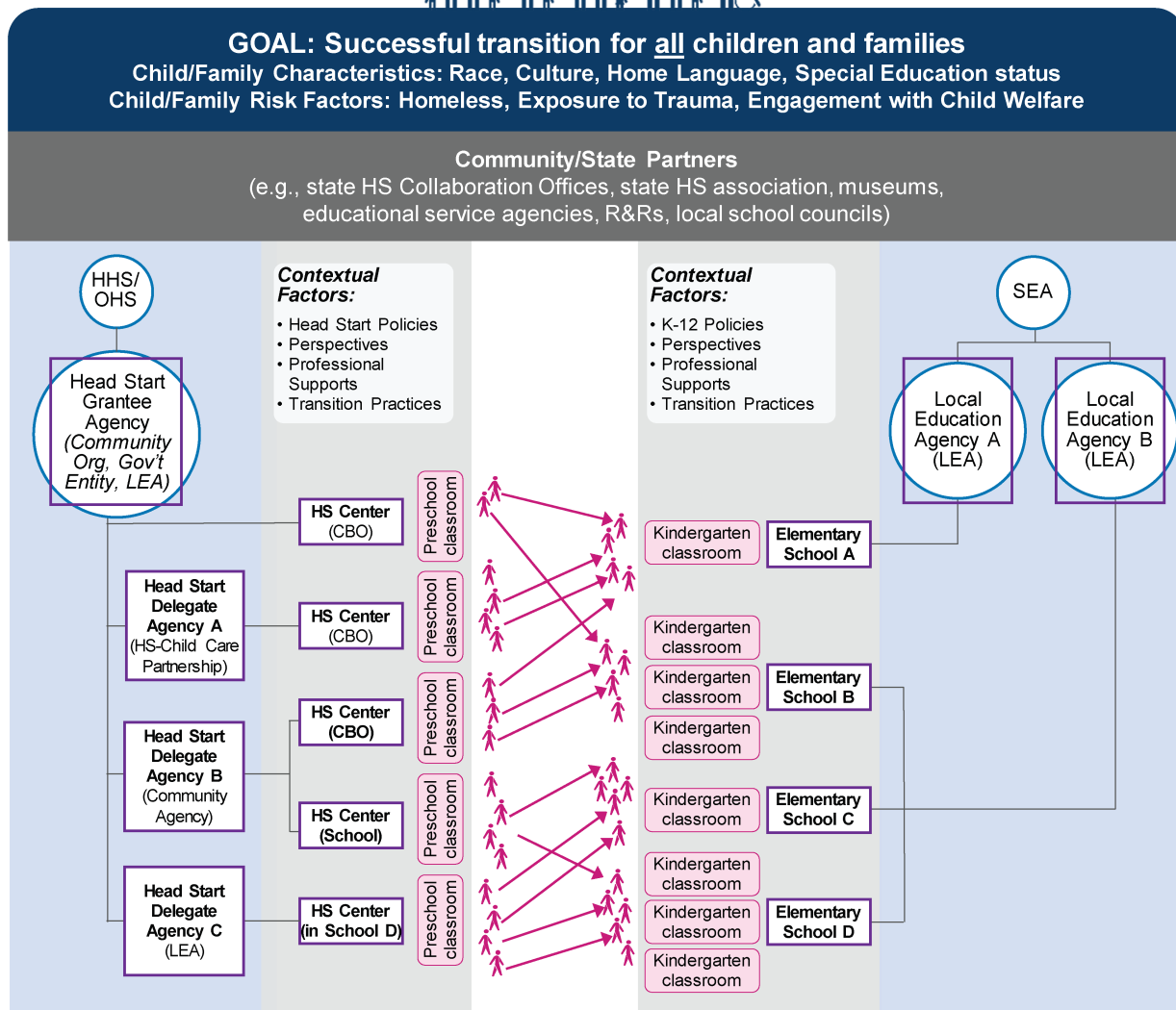
Exhibit 1 depicts our recognition that transitions involve two sides: the sector that sends children (Head Start) and the sector that receives children (kindergarten). We acknowledge that each side has its own goals and perspectives, effective practices, supports for teachers and other professionals, and policies that influence the work across different levels (e.g., classroom, school, district, state). All these pieces are important to—and are reflected in—our depiction of the landscape.

In the green rectangle at the top of the Exhibit 1 landscape, we acknowledge the diversity of children’s familial, cultural, and linguistic backgrounds, as well as the variety of factors and experiences (e.g., exposure to trauma, special education needs, engagement with the child welfare system) that influence the kinds of supports they may benefit from most.

Diverse Local Contexts and Feeder Patterns between Head Start and LEAs

Moving downwards to the grey rectangles, we next recognize that transitions between Head Start and elementary schools take place within diverse local contexts, with a range of community partners engaged in supporting young children and their families. At the center of the landscape are the children who make the transition from Head Start to kindergarten. Arrows between children in Head Start and kindergarten classrooms represent the complex array of pathways that exist, with children who attend the same Head Start classroom transitioning to multiple kindergarten classrooms, elementary schools, and/or LEA.

Exhibit 1. Head Start to Kindergarten Transition (HS2K) Landscape



An individual child can go from one HS program to various kindergarten classrooms within various schools within various LEAs. There are also other children (non-HS) entering those kindergarten classrooms. This means that kindergarten teachers may be receiving children from many HS (and non-HS) programs. Children can also move and leave their locale.

- Teacher Collaboration Needed
- Administrator Collaboration Needed
- Agency Collaboration Needed

Rarely, if ever, do all students from one Head Start classroom transition into the exact same kindergarten class; geography, family choice, family mobility, and neighborhood school assignments are contributing factors. It is also important to note that these pathways are neither fixed nor pre-determined, as families may move residences between Head Start and kindergarten. In addition, family choices may be constrained by existing feeder patterns and school enrollment options. There is little research on the complex feeder patterns from ECE to elementary schools; however, some research has shown that even when children are in public school pre-kindergarten programs within an

LEA, more than 20% transition to a different school for kindergarten (Greenburg, Hines, & Winsler, 2000). Inherent in this reality, yet not often explicitly articulated, is the recognition that while a local Head Start program may establish shared transition practices with one particular elementary school or LEA, if their Head Start children disperse into multiple elementary schools/LEAs, many of the children in their program will not experience those shared transition practices. The extent of this dispersion and the number of relationships between Head Start programs and elementary schools may vary according to community characteristics (e.g., some small, rural communities may have less dispersion than a large, urban community). These are factors we intend to address in our future project activities, such as our case studies.

Organizational Systems that Influence Kindergarten Transitions

Moving from the center to the left and right edges of the landscape are depictions of the organizational levels of systems in each sector that influence one another and influence transitions to kindergarten. For example, on the right side (the K-12 side), kindergarten classrooms and teachers have the agency to influence transitions to kindergarten (e.g., by initiating communication with families of incoming kindergarteners). Those teachers' efforts, though, are situated within elementary schools that have their own agency to influence transitions (e.g., by hosting annual open houses or tours for entering kindergarteners and their families). The efforts of elementary schools are situated within the context of LEAs, which also have agency to influence transitions (e.g., by actively publicizing kindergarten registration dates and making materials available in multiple formats). Further, LEA's efforts are situated within the context of a state department of education that has its own agency to influence transitions (e.g., by requiring memoranda of agreement between school districts and Head Start programs). By explicitly including each of these levels in the landscape diagram, we illuminate the multiple ways that a variety of stakeholders can influence the transition from Head Start to kindergarten.

Organizational levels of systems in each sector (the sending Head Start and receiving elementary side) influence one another and influence transitions to kindergarten.

Finally, the image acknowledges that both within and across these organizational levels are contextual factors that influence both the sector-specific and the cross-sector efforts to implement transition practices. As described earlier, these constructs are the 4Ps: perspectives, policies, professional supports, and practices. These constructs are described more under *Theory of Change Built from the Current Knowledge Base*, but they are also included in our understanding of the landscape to anchor one of the central tenets of this project—namely, that alignment of perspectives, policies, professional supports, and practices across the two sides is necessary. To make more

explicit where, and by whom, collaborative and alignment efforts are desired, the color-coded legend in the lower right corner of the diagram identifies the particular stakeholders to be engaged. The application of the color codes in the image itself reinforces the two-sided nature of this work. For example, teacher collaboration is needed on both the Head Start and K-12 sides. Further, the color codes emphasize the multi-level nature of this work; collaboration and alignment are needed at each level of both systems.

Theory of Change Built from the Current Knowledge Base

Our TOC provides a systems-level framework that organizes the factors that explain and predict successful transitions from Head Start to kindergarten. The main goal of this TOC is to unpack the complex factors that promote coordinated transition practices among Head Start programs and elementary schools, which ultimately lead to successful transitions for teachers, families, and children. Understanding the factors that support coordination across Head Start and kindergarten can inform improvement processes. The TOC illustrates the two-sided nature of transitions depicted in the HS2K landscape (Exhibit 1), in which there is the sending side (Head Start) and a receiving side (kindergarten). It also represents the multiple levels of each side. On the Head Start side, systemic influencers include the federal Office of Head Start (OHS) in the U.S. DHHS, Head Start collaboration offices, grantee agencies, delegate agencies, programs and educators, and community partners (including, but not limited to, state Head Start associations). On the kindergarten side, systemic influencers include the U.S. Department of Education (ED) and its Offices of Elementary and Secondary

Our overarching hypothesis is that transition practices that are coordinated across the systems will lead to the most successful transitions for teachers, families, and children.

Education and Special Education Programs (OSEP) at the federal level, as well as state education agencies (SEAs), LEAs, elementary schools and educators, and community partners (including, but not limited to, membership organizations for school administrators and school principals and parent-teacher associations [PTAs]).

Together, the two sides present the practical reality of transitions and how we theorize that alignment efforts supporting kindergarten transitions occur.

While both Head Start and kindergarten implement transition practices specific to their systems, our overarching hypothesis is that transition practices that are coordinated across the systems will lead to the most successful transitions for teachers, families,

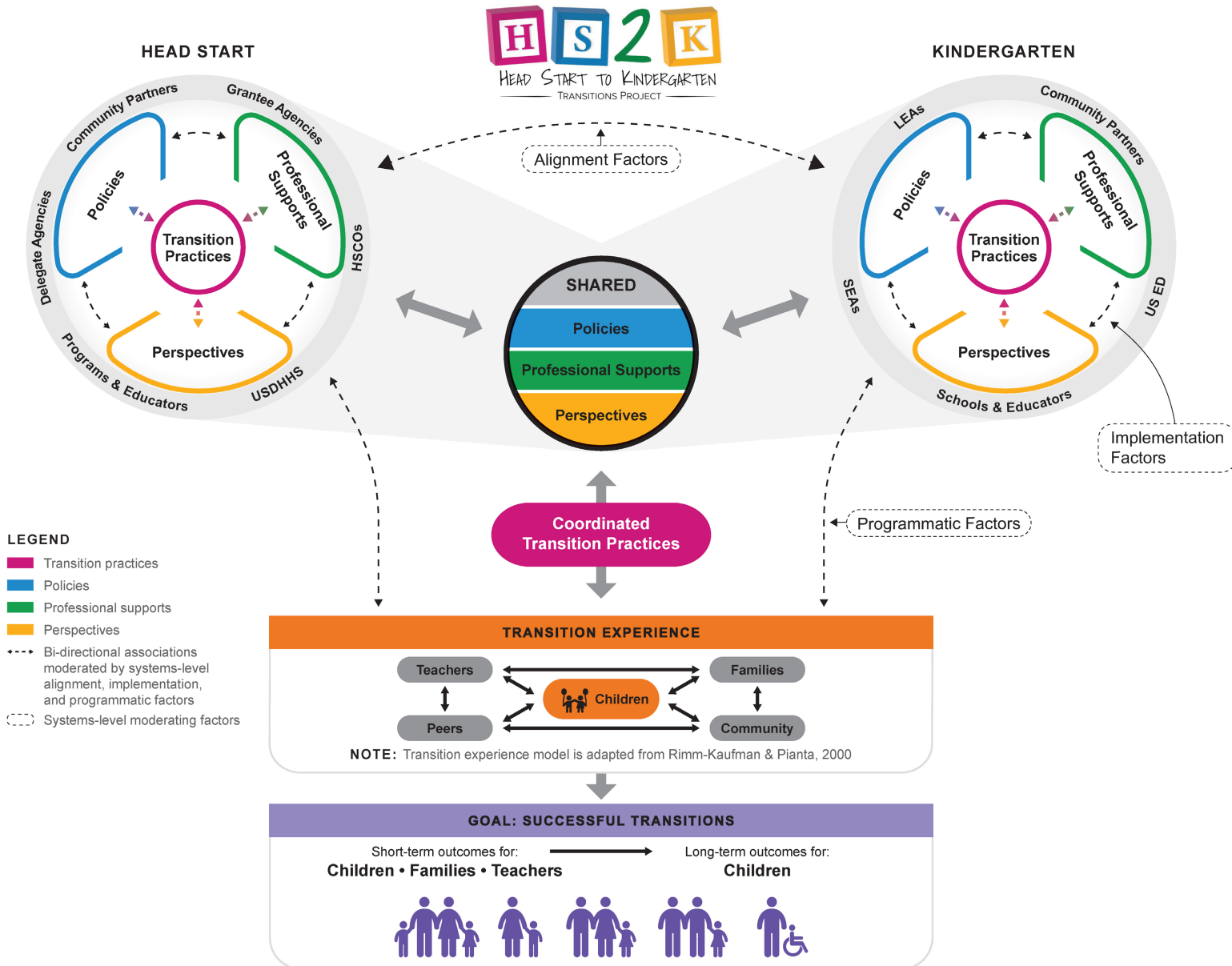
and children. For example, a Head Start program may implement a transition practice to share student assessment data with local elementary schools. However, if those data are not aligned with what schools want to know about young children, and further, if schools are not implementing a coordinated process to intentionally review and use the Head Start data, the practice will be one-sided and unlikely to influence how children and families experience the transition.

In order to interpret the visual in Exhibit 2, it is important to note some key assumptions. As reflected in our description of the landscape (Exhibit 1), pathways from Head Start classrooms to kindergarten classrooms vary. Given these varied patterns, coordinated transition efforts require attention to a complex web of organizations and stakeholders that exist within two distinct systems (Head Start and K-12). Within each organizational system, multiple factors directly or indirectly influence transition practices. Both within and across the organizational systems, four main factors (the 4Ps) influence children's transition experiences. The first three Ps—(1) **P**erspectives, (2) **P**olicies and procedures, and (3) **P**rofessional supports and leadership—intersect to influence the quantity, quality, and coordination of the fourth P, (4) **P**ractices. Lastly, and in accord with the ecological model of transition represented in this TOC (adapted from Rimm-Kaufman & Pianta, 2000), Head Start and kindergarten systems, as well as child development processes (depicted in the lower circle), are all influenced by external sociocultural, historical, and other contextual factors.

Organizational Systems Represented in TOC

Head Start and kindergarten classrooms are nested within complex organizational systems. The TOC aims to unpack systemic factors and variables functionally related to Head Start- and kindergarten-specific transition practices and transition practices coordinated across Head Start and kindergarten. In Exhibit 2, the circles on the top left and top right represent the organizational systems that encompass Head Start and kindergarten classrooms. There are different governing levels within each organizational system. These agents are written on the outer edge of the organizational system circles, including those noted above (e.g., OHS, DHHS, ED, LEAs).

Exhibit 2. HS2K Theory of Change



The 4Ps: Perspectives, Policies, Professional Supports, and Practices

As discussed above and drawn from the literature on both school leadership and implementation science, we characterize the prominent mechanisms that can influence children's, families', and teachers' experiences of the transition from Head Start to kindergarten as the 4Ps (perspectives, policies, professional supports, and practices). These mechanisms may function independently, but when they are aligned, we expect they will create more robust and meaningful approaches to transitions both within and across Head Start and kindergarten systems. Definitions of the 4Ps are provided in Exhibit 3 and in the glossary.

Exhibit 3. Defining Perspectives, Policies, Professional Supports, and Practices

Perspectives

Perspectives are different stakeholders' (child/family, teacher, administrators/schools/centers) visions, values, and beliefs about transitions to kindergarten, including their and others' roles in supporting transitions to kindergarten. What does it mean to be ready for kindergarten? What is the role of the parent versus teacher versus administrator/school? What is the role of Head Start versus kindergarten? Alignment of perspectives is the extent to which (1) each key stakeholder is a part of the process, and (2) there are shared and/or complementary understandings of kindergarten transitions among stakeholders, both within and across the Head Start and K-12 systems.

Policies

Policies are the explicit (written/formal) documentation of organizational regulations, standards, agreements, procedures, and guidance around supporting transitions to kindergarten (e.g., transition policies and structures such as records transfers, shortened days at the start of kindergarten).

Alignment of policies across systems is the extent to which Head Start and K-12 systems have explicit, substantive policies about transitions that complement each other (e.g., MOUs and interagency agreements, data sharing agreements, explicit accountability for discrete activities).

Professional Supports

Professional supports are professional development/learning opportunities and other resources that support teachers, site administrators, grantee/LEA administrators, and policymakers to enact strong transition approaches (e.g., professional development, coaching, dedicated planning time).

Alignment of professional supports is the extent to which Head Start and kindergarten sides (both across schools/centers within systems and across systems) provide explicit supports to promote adult learning related to enacting transition efforts that complement each other (e.g., joint professional development opportunities, data walks or other efforts that provide the opportunity for teachers to observe each other's practices in the classroom, other shared activities that bring together teachers and administrators across the two systems).

Practices

Concrete activities designed to support children/families during the transition to kindergarten. Transition practices can be enacted by Head Start or kindergarten separately or jointly through coordinated transition practices. They can also occur at various levels within/across each system (e.g., Head Start Grantee/LEA leadership, Head Start directors/principals, teachers, and staff).

Alignment of practices is the extent to which Head Start and kindergarten sides (both *across schools/centers within systems* and *across systems*) implement practices that complement each other, work in alignment, or involve communication within and between the two systems.

Within the Head Start and kindergarten systems (the upper circles), the small double-sided arrows represent the complex, bidirectional influence of the first three Ps (perspectives, policies, and professional supports) on the fourth P (practices). The small double-sided arrows with dashed lines represent the bidirectional influences of the first three Ps (perspectives, policies, and professional supports) among themselves. Within each system, programmatic and implementation factors moderate the proximal influence of these constructs on each other and on Head Start- and kindergarten-specific transition practices (represented by dotted lines; see more under *Moderators*). Furthermore, across the two systems, shared perspectives, policies, and professional supports can directly influence coordinated transition practices (the fourth P). Alignment factors—represented by the upper-most dotted line towards the top of the TOC—moderate the coordination across Head Start and kindergarten systems, and the large, dotted double-sided arrows between the shared 3Ps and Head Start and kindergarten represent the relative alignment of efforts between the two systems. The TOC suggests that these alignment factors operate directly through Head Start and kindergarten systems and indirectly on coordinated transition practices.

The TOC assumes that implementation of transition practices is a function of individual organizational systems (both Head Start and kindergarten), cross-system coordination, and independent initiation by families, educators, and community partners. To understand different types of transition practices that can comprise a transition experience, we have adapted a taxonomy used by the OHS/Office of Child Care National Center on Early Childhood Development Teaching and Learning (NCECDTL: family-program/school, child-program/school, Head Start-program/school, and community-program/school [Exhibit 4]). The TOC also assumes that transition practices have a bidirectional influence with the higher-level Ps of perspectives, policies, and professional supports (both within and across Head Start and kindergarten). Put differently, the implementation of transition practices may produce changes to perspectives, policies, and professional supports from both the top down and the bottom up. For example, a local Head Start center may establish its own transition practice such as organizing visits to a local kindergarten classroom. This practice may be so successful and appreciated by children and families that the Head Start grantee decides to scale it by providing professional learning (i.e., professional support) to all of the teachers in its delegate agencies and centers and by working to develop an MOU

The HS2K theory of change assumes that implementation of transition practices is a function of individual organizational systems (both Head Start and kindergarten), cross-system coordination, and independent initiation by families, educators, and community partners.

(i.e., a policy) with school districts that ensures the practice of visits to kindergarten classrooms becomes the rule, not the exception.

Exhibit 4. Examples of Kindergarten Transition Practices

Family-Program / School	Child-Program / School	Head Start-Program / School	Community-Program / School
<ul style="list-style-type: none"> ● Collaborate on orientation events before and during the beginning of the kindergarten year to build relationships with children and their families in the new learning setting ● Arrange for families to receive kindergarten registration materials in their home language(s); provide support for completing registration forms and enrollment requirements ● Seek to understand and support the diverse cultural perspectives that families contribute and how they influence family expectations 	<ul style="list-style-type: none"> ● Organize visits to kindergarten classrooms and visits from kindergarten teachers ● Incorporate familiar activities or routines from the early learning setting into the kindergarten year ● Make books and interactive materials about kindergarten accessible to children, both at home and in the early learning environment 	<ul style="list-style-type: none"> ● Familiarize and comply with the Memorandum of Agreement or Understanding established between state early learning and K-12 education departments ● Coordinate joint professional development opportunities for education staff from Head Start programs and kindergarten classrooms ● Participate in meetings between Head Start and kindergarten educators ● Seek out and review strengths-based child progress data, including information provided by families 	<ul style="list-style-type: none"> ● Identify and promote the community's hopes and expectations for children ● Engage in joint events and partnership activities between Head Start programs and receiving elementary schools ● Identify and partner with community organizations, such as medical offices, grocery stores, libraries, popular restaurants, or meal programs, that could offer resources for families, children's books, or activities about kindergarten

Notes: Categories come from NCECDTL; Additional resources from NCECDTL available at <https://eclkc.ohs.acf.hhs.gov/transitions/article/transition-kindergarten>.

Further, as described in this example, the TOC highlights that each of the 4Ps directly and indirectly supports the other Ps, including within- and across-system transition practices. The double-sided, dashed arrows among perspectives, policies, and professional supports within each organizational system and across systems depict the direct and mediated influence of those Ps on each other and on transition practices.

There are several examples of how perspectives, policies, and professional supports may directly influence transition practices, both within and across systems. For instance, policies such as the federal requirement in the Head Start Reauthorization Act of 2007 for Head Start agencies to establish MOUs with LEAs might result in Head Start-initiated transition practices. This represents a top-down pathway of enacting

transition practices. Similarly, absent any specific policy directive, an LEA may choose to provide focused professional development to kindergarten teachers about transition; this might result in kindergarten-initiated transition practices. Further, an individual kindergarten teacher may hold a personal perspective that meeting with a child's preschool teacher is important; this may result in teacher-initiated transition practices.

There are also countless pathways of indirect or mediated influence that perspectives, policies, and professional supports may have on transition practices, again within and across systems. Policies might also result in the provision of professional supports and, in turn, those professional supports may influence Head Start-specific transition practices. Perspectives, or the beliefs and vision of individual stakeholders, may have a bottom-up influence on the adoption of transition practices. For example, a belief held by one or more motivated teachers that home visits are important to entering kindergarteners' families may lead to a school- or district-level adoption of a transition practice that connects schools to families.

Moderators

Both within and across Head Start and kindergarten systems, hypothesized moderators shape the direct and mediated influence of perspectives, policies, and professional supports on transition practices. These are represented by dashed arrows in the TOC in Exhibit 2. Key places where potential moderators may influence associations are represented by dotted lines. We organized examples of hypothesized moderators into three categories: programmatic, implementation, and alignment factors (Exhibit 5). Programmatic and implementation factors represent system-specific moderators that impact the relative strength of the connections among the 4Ps within the Head Start and kindergarten systems, and alignment factors represent hypothesized cross-system moderators. We acknowledge that the full set of factors that may be influential likely have not been fully articulated.

- **Programmatic factors** include how specific characteristics of Head Start and kindergarten programs may moderate the ways in which children, families, and teachers experience the 4Ps. We hypothesize that these factors include (but are not limited to) cultural relevance, active engagement of family voice and expertise, specific needs of the population served, funding types, program size, auspice, and use of evidence-based approaches. Reflecting back to the green rectangle at the top of the Landscape of Transitions (Exhibit 1), the goal is for transitions to be effective for all children and families. Programmatic factors such as those identified in Exhibit 5 may affect the degree to which transitions are found to be meaningful and effective by different sub-populations of children and families.
- **Implementation factors** refers to implementation and improvement science constructs related to strengthening the ties among the 4Ps. Changing adult behaviors

is critical for these moderation processes. For example, effective technical and adaptive leadership practices can strengthen the reciprocal effects of professional supports on educators' perspectives of Head Start to kindergarten transition. Likewise, enhancing the quality of professional supports through the infusion of adult learning strategies can increase the impact of these supports on transition practices. Other implementation factors that could strengthen transition strategies include dosage and quality of implementation efforts focused on transitions, the relative scale and intensity of supports for adults working in each system, interpersonal relationships, and practices that foster continuous improvement around the transition to kindergarten.

- **Alignment factors** moderate the strength of cross-system coordination of transition practices. Alignment factors also moderate the reciprocal influence of Head Start- and kindergarten-specific practices and child developmental processes. We hypothesize that these include having time, resources, leadership commitment; explicit collaborative mission and decision-making processes; trusting relationships between stakeholders; system thinking; family agency/engagement; and continuity of curriculum, learning environments, and assessment approaches. All of these factors and more could influence cross-system coordination.

Exhibit 5. Examples of Hypothesized Moderators within the HS2K Theory of Change (System-Specific and Cross-System)

Programmatic Factors	Implementation Factors	Alignment Factors
<ul style="list-style-type: none"> ● Cultural relevance ● Active engagement of family voice and expertise ● Evidence-based approach ● Differentiation for special populations 	<ul style="list-style-type: none"> ● Dosage of transition strategies ● Quality of transition strategies ● Scale of transition strategies ● Leadership (adaptive and technical) to oversee and facilitate transition strategies ● Relationships within a system 	<ul style="list-style-type: none"> ● Time, resource, leadership commitment ● Explicit collaborative mission and decision-making processes ● Trusting relationships between stakeholders across systems ● System thinking ● Family agency/engagement throughout ● Continuity of curriculum, learning environments, assessment approaches



Outcomes of Transition Practices

The relationship between the Head Start and kindergarten organizational systems and children's developmental processes is foundational to the TOC. The "Transition Experience" depicted towards the lower half of the TOC in Exhibit 2 includes proximal agents supporting children's transition from Head Start to kindergarten. Because teacher, family, and community partners can operate as both a function of Head Start and kindergarten systems and independently from those systems, their transition practices and mediated perspectives are depicted in relation to children's developmental processes.

The developmental model used to inform the outcomes section of the TOC is largely based on Rimm-Kaufman and Pianta's (2000) ecological and dynamic model of transition; however, some key adaptations were made. Neighborhood was substituted with community because community influences in the case of transitions to kindergarten may extend beyond neighborhood bounds. In addition, the interactions and continuity within and across Head Start and kindergarten systems are represented in the top half of the TOC, as these are key areas of interest for this project. Lastly, we decided to depict the child model once (rather than twice, as they did) because these influences are independent of the Head Start and kindergarten systems that are the main focus of the TOC.

While the primary intention of the TOC is to highlight system- and organization-level factors that support successful Head Start to kindergarten transitions, our intention is not to overlook the outcomes that are desired for teachers, families, and children (see Exhibit 6 for examples of outcomes). Both within and across Head Start and kindergarten systems, transition practices directly and indirectly influence teacher, family, and child transition experiences and outcomes. For example, joint professional learning between Head Start and kindergarten teachers may directly result in improved communication between Head Start and kindergarten teachers and shared knowledge

about the expected outcomes of transition practices. Further, that joint professional learning may influence Head Start and kindergarten teachers to have similar communications with families about the transition from Head Start to kindergarten, thereby increasing parents' comfort level with the process, an example of an indirect effect of professional supports. Likewise, coordinated transition practices may result in less family stress about elementary school registration processes and other logistics (a direct effect), and lower family stress levels may positively support children's initial adjustment to kindergarten (an indirect effect).

Exhibit 6. Example Outcomes of Successful Transition Practices for Teachers, Families, and Children

Teachers	Families	Children's Short-Term	Children's Long-Term
<ul style="list-style-type: none"> ● Increased self-efficacy ● Increased knowledge about transitions, child development needs ● Increased implementation of evidence-based transition practices ● Increased engagement in coordinated transition practices ● Improved relationships between teachers across systems ● Improved teacher-child relationships ● Increased engagement with families ● Decreased stress level 	<ul style="list-style-type: none"> ● Increased family-teacher communication ● Increased family engagement in school and/or child's learning activities at home ● Increased agency around child's education and needs ● Decreased stress level ● Increased family comfort and preparation for school transition ● Increased social capital 	<ul style="list-style-type: none"> ● Increased child academic adjustment in kindergarten ● Increased child social and behavioral adjustment in kindergarten ● Better child academic skills ● Better child social skills ● Better child approaches to learning and work habits ● Increased attendance ● Positive dispositions towards school 	<ul style="list-style-type: none"> ● Better ongoing child academic skills ● Better ongoing child social skills ● Better ongoing child approaches to learning and work habits ● Increased attendance over elementary and later grades ● Ongoing positive dispositions towards school

Role of the Theory of Change

The HS2K TOC was developed based on findings from our review of the literature and interviews with key informants, as detailed below. It will also guide future project activities, including case study data collection and analyses. In this way, the future case studies will help flesh out areas of the TOC that are less supported by research. They will also help us better understand whether and how the TOC represents real-life practice under different contextual conditions.

Methods

This section describes the methods used in exploring the knowledge base, including a review of the literature and interviews with key informants. The project team developed the HS2K TOC over multiple iterations while conducting these activities. The final version of the TOC is based on learnings from the literature and interviews with key informants, as well as feedback from an external technical expert panel.

Literature Review

The HS2K Team has conducted a review of the literature on transition and coordination practices between Head Start and elementary schools, building on recent compilations of research. The literature review informed the refinement of the TOC (presented in this report) and highlights TOC components where the existing evidence is strong and where there are gaps.

We identified peer-reviewed publications, book chapters, dissertations, and grey literature (e.g., reports from federal and state government and organization-sponsored publications) related to the four types of shared approaches (the 4Ps) articulated in the theory of change. In order to build on and not duplicate prior work in the field, our literature search first identified existing reviews of the literature and meta-analyses related to the transition to kindergarten. We supplemented this with a more systematic search to identify literature not included in recent reviews (e.g., literature published after the most recent review or literature that fell outside the scope of prior reviews but is relevant for our purposes of identifying additional mechanisms or outcomes of the transition process).

To identify both existing reviews and additional literature, the research team used the following bibliographic databases: PsycINFO (ProQuest), Child Care and Early Education Research Connections, and Google Scholar. To identify grey literature publications, the research team conducted searches on the following websites: National Center on Parent, Family, and Community Engagement (NCPFCE); OHS, Administration for Children and Families; and Education Commission of the States. We also conducted broad Google searches with variations of “transition to kindergarten” and “report,” and followed up with searches of organizations (e.g., New America) whose work was identified. We used the same search strategies and terms described below to review relevant websites of these organizations.

Literature searches were restricted to research published in the United States, unless an international publication was broadly applicable and was either a key/oft-cited study

or filled an important gap. We used search terms to identify both recent reviews and meta-analyses and literature that was not included in recent reviews. Appendix A presents search terms, full inclusion criteria, data extraction processes, and details of the analyses of the literature.

We found a total of 228 articles through our literature search. One hundred and forty-eight articles did not receive a full review. These included (1) articles that were included in previous reviews of the literature; (2) articles that focused on school readiness but did not touch on any policies, professional supports, or practices to specifically support the transition to kindergarten or perspectives related to the transition to kindergarten; (3) theoretical articles that did not address a key gap in the literature; (4) organizational reports that did not address a key gap in the literature; (5) dissertations; (6) articles that did not include U.S. samples; and/or (7) articles/book chapters that were not available electronically.

A total of 80 articles were given a full review. Exhibit 7 displays the breakdown in terms of methods used in the articles that received a full review, and Exhibit 8 breaks down the quantitative and mixed-methods studies in terms of design.

Exhibit 7. Methods Employed in Research Reviewed

	N	%
Quantitative	37	44%
Mixed Methods	14	16%
Qualitative	24	28%
Theoretical/non-empirical	10	12%
Total	85	100%

Exhibit 8. Research Designs for Quantitative and Mixed-Methods Studies Reviewed

	N	%
Descriptive	15	18%
Correlational	16	19%
Correlational with controls for bias	12	14%
Quasi-experimental	4	5%
Randomized control trials	4	5%
Total	51	60%

Interviews with Key Informants

We conducted interviews with a total of seven key informants, including both practitioners and federal staff. Interviews lasted 45-60 minutes over videoconference. A research analyst summarized each interview. Individual findings, broad themes, and patterns from these key informant interviews informed ongoing revisions to the TOC.

In identifying our initial informants, we focused on people/organizations who were likely to think broadly about kindergarten transitions and allow us to gain new perspectives and insights to inform our developing TOC. We also identified people and organizations who represent the various organizational levels and system sides (Head Start and K-12) that are represented in the Landscape and theory of change. We prioritized individuals who could represent the views of a group of stakeholders, including individuals who could speak on behalf of parents and the needs of children with disabilities. The key informant interview sample was iterative, meaning we added other key informants that were mentioned or recommended during our first few interviews.

We shared guiding questions, our understanding of the landscape, and our emergent TOC beforehand so that key informants had time to think about and prepare for the conversation. Appendix B includes the guiding questions for the first five key informants. For our last two key informants, we shifted the interviews to focus on areas the project team was looking for more clarity on; in particular, we asked about policies and professional supports that help lead to alignment and collaboration across systems and their thoughts on the implications of COVID-19 on transitions. Participants were informed that the conversations were confidential and that summarized findings would be distributed without names or other identifiers. All interview participants provided verbal consent to participate.

Findings From Literature Review and Key Informant Interviews

Findings from the literature review and key informant interviews are organized by each of the 4Ps that are embedded in the HS2K TOC: Perspectives, policies, professional supports, and practices. Within each section, we summarize the literature on common approaches, associations with outcomes, and key mechanisms and moderators. Together, this helps us see where the evidence for the TOC is more fully fleshed out and where more research is needed. Where relevant, we supplement our literature review findings with responses from key informants.

Perspectives

The inclusion of perspectives in our TOC is largely centered in the vast literature about cognitive sense-making (see, for example, Spillane, Reiser, & Reimer, 2002), which suggests that individuals' implementation of policy and practice is driven by their existing knowledge and beliefs, their situational context, and their interpretation and ideas of what specific policies or practice initiatives mean or are intended to do. These three dimensions interact to influence implementation and change in practice. As this applies to kindergarten transitions, the literature suggests that the ways in which stakeholders conceptualize their relationship to the practices and processes of the transition to kindergarten—which subsequently shape their beliefs and attitudes around those approaches—ultimately relate to social and academic outcomes. Therefore, the definition of perspectives we employ (see Exhibit 3 and the glossary) encompasses different stakeholders' (child/family, teacher, administrators, policymakers) visions, values, and beliefs about transitions to kindergarten, including how they understand their role and others' roles in supporting transitions to kindergarten. The literature examining perspectives related to kindergarten transitions has two foci:

1. How families, teachers, and administrators view their roles in supporting the transition to kindergarten; and
2. How people in various roles think about children's learning and development over this time period, which includes perspectives on kindergarten readiness and best practices for instruction.

As described in detail below, the literature suggests there can be divergent, if not sometimes oppositional, perspectives of families and stakeholders in ECE¹ and K-12 (Abry et al., 2015; Brown et al., 2019; Doucet & Tudge, 2007; Kauerz, 2018, 2019; McCabe & Sipple, 2011). Therefore, we share what is known about the perspectives of families, teachers, and administrators on the transition to kindergarten and highlight where they are similar and different. We know that children moving from Head Start to kindergarten may be transitioning between two systems with contrary pedagogical orientations and views of developmentally appropriate practice and instruction. Therefore, we discuss those systemic differences of perspective in each section and note where there is evidence of alignment and misalignment. This includes beliefs about what constitutes kindergarten readiness and appropriate approaches to instruction, which emerge as key factors influencing stakeholder perspectives on each other's roles and what makes a successful transition to kindergarten. We then discuss how aligned perspectives around kindergarten transitions are related to outcomes and the key mechanisms and moderators through which those associations exist.

The definition of perspectives the HS2K Project employs encompasses different stakeholders' visions, values, and beliefs about transitions to kindergarten, including how they understand their role and others' roles in supporting transitions to kindergarten.

What are Common Perspectives around Head Start to Kindergarten Transitions and How Aligned Are They?

In this section, we provide an overview of families', teachers', and administrators' perspectives around their roles in supporting children's transitions to kindergarten. We then focus on perspectives around kindergarten readiness and instruction and developmental support. Throughout, we discuss where there is alignment and misalignment—both across groups and within the two systems (ECE and kindergarten). This helps us to address ways relationships may be characterized among stakeholders and some of the barriers and facilitators to successful transitions (RQ 3).

¹ Throughout the literature review and key informant interview findings, we use the terms that were used by the original sources related to early childhood education and care; these include ECE, pre-K, state pre-K, preschool, and Head Start.

Perspectives on key stakeholders' roles in supporting children's transition to kindergarten

Family views of transitions and their role. Qualitative research on Head Start families' perspectives about the transition to kindergarten suggest that they view the transition as a critical moment for their child, and that they should (and often do) play an active role in supporting their children—mainly through ensuring academic and social-emotional readiness (Barberis, 2008; Jarret & Coba-Rodriguez, 2018). Indeed, in one study of 132 parents and caregivers of children who were transitioning to kindergarten from a variety of ECE programs, McIntyre et al. (2007) found that the majority of parents wanted even more involvement in transition planning.

That being said, several studies have found that parents have some discomfort around their lack of familiarity with school expectations and systems (e.g., Barberis, 2008; Hatcher et al., 2012). For example, Hatcher et al.'s (2012) interviews with 16 parents across three ECE programs (including one Head Start) found that parents varied with respect to their knowledge of kindergarten expectations, and many had anxiety about their child's readiness. Another study found that Head Start parents valued information that helped them navigate the logistics of the transition, helped them understand and prepare for what the kindergarten setting would be like, and provided concrete ways for parents to be involved in the transition process (Malsch et al., 2011). Parents expressed that support from Head Start staff helped to reduce their anxiety around the transition process and helped them build the skills and confidence to advocate for their children during the transition process. Similarly, in Hatcher and colleagues' (2012) interviews, parents reported that informal communications and individual conferences with preschool teachers, assessment information, and developmental progress reports helped them understand their child's readiness level.

How teachers view families' role in the transition process. Gill's (2006) mixed-methods study reported how pre-kindergarten and kindergarten teachers perceived the role of parents in the transition process. In alignment with parents, pre-kindergarten and kindergarten educators perceived parents as having a key role in facilitating their child's transition process. Teachers believed this occurred through home-based support of their child's development and school readiness, participation in orientation activities and being aware of the expectations for kindergarten, proactively seeking information, communicating with the school, and advocating for their child. Some also noted communication between family and school was an area of challenge. These findings are consistent with Puccioni (2018), who, using the Early Childhood Longitudinal Study-Birth Cohort (ECLS-B) data, also found that both preschool and kindergarten teachers believed home-based parent involvement was crucial for children's early learning and transition to kindergarten.

Teachers also felt it was part of their role to actively engage parents in transition practices and to encourage and support parent involvement at home and with the school. They noted using both formal (conferences, orientations) and informal (texts, email, one-on-one conversations) communication to do this (Puccioni, 2018). However, Gill's (2006) mixed-methods study found differences in what pre-kindergarten and kindergarten teachers felt their primary responsibilities were around the transition. Pre-kindergarten teachers saw their role as helping to facilitate children's school readiness, while kindergarten teachers saw their role as sharing information with families about expectations for kindergarten.

What Did Key Informants Say?

Key informants also noted differences between preschool/Head Start and kindergarten teachers' perspectives. One informant observed a difference in how Head Start teachers—compared to their kindergarten counterparts—thought about parents and their involvement in the transition process. This person described family engagement as being “baked in” to the job description of Head Start teachers. They wondered whether educators on both sides of the equation believe that it is their job to engage families and whether there was training for this purpose. Another informant perceived different perspectives on the role of families in children's education: “I am consistently challenged by the lack of respect automatically afforded to incoming parents. Families are partners within Head Start and preschool. This is one of the rude awakenings from Head Start parents, realizing that their input and partnership is not as valued [on the K-12 side].” This sentiment was not unique among our informants, and although this quote represents a Head Start perspective, key informants with roles in the K-12 system also commented on this gap.

Administrator views of transitions and their role. There is limited research on the perspectives and roles of both Head Start and K-12 administrators in the transition to kindergarten. One study on Head Start directors and one on elementary school principals shed some light on the topic. Cook and colleagues (2019) interviewed Head Start directors on their views of the benefits and challenges of coordination with elementary schools to support kindergarten transitions. They found that Head Start administrators spent substantial time, effort, and resources on supporting successful transitions to school. They believed these efforts, which included sharing information about programming, curriculum, and assessments with elementary schools and serving as a bridge to connect children and families to elementary schools, have broad benefits. While they were able to cite specific benefits for families, they struggled to express specific benefits for children.

In one dissertation study, Snyder (2016) sent surveys to all principals in the state of Nebraska and conducted interviews with a purposeful selection of elementary principals. He focused some questions on transition plans—or plans that are designed to vary to meet children’s individual needs and “promote the preparation of children for the change from a pre-k setting to that of kindergarten.” Snyder found that the principals interviewed held strong beliefs that transition plans would help to promote (1) school readiness by exposing children to routines, expectations, and basic skills; and (2) communication and collaboration among all parties in the transition process. Nonetheless, a number of principals indicated they did not regularly reach out to local ECE centers to discuss transition processes, citing lack of time and the large number of ECE programs in their area.

Very few studies have examined alignment of administrator perspectives. Those that exist are limited to a K-12 lens. Koppich and Stipek (2020) and Coburn et al. (2018) interviewed district leaders and staff across diverse school districts in California that housed a preschool program within at least one of their elementary school campuses. They found no alignment or systemic commonalities in administrator perspectives on what constitutes high-quality and developmentally appropriate instruction or the purpose of pre-k. From our review, we also found no known links between the alignment of administrator perspectives and outcomes for children, families, and teachers.

What Did Key Informants Say?

Several key informants spoke about the importance of administrators’ perspectives and priorities around kindergarten transitions. One—a former principal—noted that cultivating long-term, ongoing relationships between elementary principals and early care providers should be a crucial role of principals. This informant noted that when they were an elementary principal, they first thought that paying attention to preschool children was “keeping track of someone else’s kids.” But eventually, they shifted their perspective to encompass the reality that all their community’s children would be in their school one day and that what happens early on in children’s lives will impact them when they are in the K-12 system.



Perspectives on kindergarten readiness and appropriate instructional and developmental supports

Representing both sides of the kindergarten transition, studies indicate that parents, preschool teachers, and kindergarten teachers are aligned in that they all believe that children's academic skills *and* social and emotional skills are important developmental areas to focus on (Gill, 2006; Lara-Cinisomo et al., 2011; Piotrkowski et al., 2000). For example, Hatcher and colleagues' (2012) qualitative study found general agreement among parents and Head Start/ECE teachers about the skills that were important for kindergarten readiness. Both parents and teachers believed social and emotional skills, language/literacy, and school-related behaviors and regulatory skills were important for kindergarten readiness. Gill (2006) also found alignment between pre-kindergarten and kindergarten educators' belief that developing academic, social and emotional, and interpersonal skills was crucial to school readiness.

However, there are also differences in the emphasis different stakeholders place on what is most important. Through a survey of parents, preschool teachers, and kindergarten teachers about school readiness, Piotrkowski and colleagues (2000) found that while parents and teachers agreed on the importance of academic, social, and emotional skills for school readiness, parents placed more emphasis on academic skills and the ability to comply with teacher authority than teachers. In terms of alignment among teachers across ECE and kindergarten, there are inconsistent findings. In some studies, such as Piotrkowski et al. (2000), preschool teachers were found to be more focused on academic skills than kindergarten teachers. This is somewhat consistent with more recent research by Abry and colleagues (2015), who examined alignment of beliefs across preschool and kindergarten teachers about the importance of various skills for kindergarten readiness. Using data from the nationally representative ECLS-B, they found that both groups rated interpersonal and self-regulatory skills as more important than academic skills. However, preschool teachers rated children's academic skills as more important than did kindergarten teachers (as in Piotrkowsky et al., 2000).

On the contrary, Lara-Cinisomo and colleagues' (2011) surveys suggest that while preschool and kindergarten teachers were in agreement around the areas needed for a child to have a successful transition to school, kindergarten teachers reported slightly higher beliefs about the importance of early academic activities than did preschool teachers. Preschool teachers were more likely to favor child-directed activities, while kindergarten teachers favored teacher-directed activities.

What Did Key Informants Say?

Key informants also noted that teachers in the Head Start and kindergarten systems often have different values, beliefs, and perspectives on what is developmentally appropriate learning at each age (including the value of social, emotional, and academic learning) and the value of data sharing across the systems. They said, "Upon entering the K-12 system, there is a dynamic shift in perceptions of children. Preschool teachers and staff tend to talk about children holistically. Within the K-12 system, it becomes, 'The student knows this, and the student does not know that.' It's almost as if they say, 'It's on you, 5-year-old, to get the most out of your education.'"

Overall, the literature seems to suggest that while families, teachers, and administrators have similar goals for children during the transition period between ECE and kindergarten, there are also differences. In particular, differences emerge in terms of how families can support their children (and how teachers can best support families in this effort) and what should be emphasized in terms of development and learning.

Which Outcomes are Associated with Aligned Perspectives about Transitions?

Aligned perspectives are hypothesized to help support positive transitions (Kauerz, 2018), although there is limited research on the topic. Abry and colleagues (2015) conducted a quasi-experimental analysis of whether the alignment of pre-k and kindergarten teacher beliefs regarding the importance of various skills for kindergarten readiness predicted children's academic, social, and behavioral adjustment in kindergarten. Using ECLS-B data, they included 2,650 students with responses from both preschool and kindergarten teachers. They found that greater misalignment in beliefs

There is limited research on which contextual factors lead to aligned perspectives, although aligned perspectives are hypothesized to help support positive transitions.

across preschool and kindergarten teachers predicted poorer teacher ratings of children's social skills, approaches to learning, and lower math achievement, even after accounting for preschool (baseline) measures of reading and math ability. They also found that children from socioeconomically disadvantaged backgrounds were more susceptible to the negative influence of misalignment; for them, greater misalignment was more strongly associated with poorer achievement, approaches to learning, and social skills than for children from more advantaged backgrounds. This work helps us consider possible short- and long-term outcomes of successful transitions and the contextual factors and mechanisms related to perspectives (RQ 4).

What are the Key Mechanisms and Moderators?

The link between aligned perspectives and child outcomes (reviewed in the prior section) may or may not be direct. For example, Puccioni's (2018) qualitative study exploring how kindergarten teachers' beliefs about parent involvement and efficacy shape their transition practices suggests that aligned parent and teacher perspectives could improve teacher self-efficacy. This self-efficacy could, in turn, help improve their instructional practices, which may then lead to improved student outcomes. Aligned perspectives may also work through other mechanisms, such as strengthened relationships, communication, and trust (Emfinger, 2012), which tend to be stronger when people share similar beliefs. With these in place, educators and parents can work more closely to support each other and children throughout the transition process.

There is limited research on which contextual factors lead to aligned perspectives and, therefore, may be considered moderators. Some areas suggested in the literature include shared professional development and teacher observations between systems (Emfinger, 2012; Loewenberg, 2018; Spillane et al., 2018; Valentino & Stipek, 2016), and involvement of multiple stakeholders in transition planning (Patton & Wang, 2012). In addition, co-location may be a contextual factor or moderator that could lead to more aligned perspectives (McCabe & Sipple, 2011; Purtell et al., 2019). Clark and Zygmunt-Filwalk (2012) noted that the lack of communication between ECE programs and elementary schools was slightly less for co-located programs, but that issues still remained. Cook and colleagues (2019) also heard from Head Start directors that relationships built with elementary school staff when they were co-located often remained even if they were no longer co-located. Through interviews with 44 pre-k teachers and administrators in central North Carolina, Little (2020) found that co-location of preschool programs in elementary schools alone was insufficient to promote P-3 alignment, although it did set the stage to do so.

The research on perspectives outlined above provides insights into whether perspectives vary by different child and family characteristics. There is a small amount of research on how family perspectives do and do not differ based on background

characteristics and experiences. For example, one study that surveyed 461 parents of children attending 25 community-based and 2 public school preschools in a mostly Hispanic and Black high-need urban school district asked what parents believed readiness for kindergarten meant. They found that parents believed academic readiness and social and emotional skills were important and emphasized the importance of being able to comply with teacher authority and to communicate in English (Piotrkowski et al., 2000). In this study, parental beliefs did not differ significantly by race/ethnicity or educational level. However, in terms of the level of involvement in children's preparation for kindergarten transitions, one study found that families with fewer financial resources reported less involvement in transition activities than families with more resources (McIntyre et al., 2007).

In sum, the perspectives of key stakeholders in the transition to kindergarten matter. As literature suggests, transition policies and practices are driven by these stakeholders' existing knowledge of, beliefs about, and interpretations of each other's roles, the definition of kindergarten readiness, and what constitutes a successful transition. The state of the literature on these perspectives is uneven, with more attention having been paid to some stakeholders—such as parents and families—over others. To date, researchers have documented overlap in perspectives among families, teachers, and administrators, but they have also noted key misalignments. Although emerging research has demonstrated links between greater misalignment and poorer social-emotional and academic outcomes, these links between perspective alignment across stakeholders and outcomes are understudied. Little is known about how aligned perspectives lead to child outcomes, including what mechanisms and moderators may play intermediary roles, making them promising avenues of future research.

Policies

In this section, we examine policies that specifically address kindergarten transition practices. As a construct, policies have various definitions in the literature. For example, Kagan & Tarrant (2010) define policies as the establishment of a durable infrastructure to support the direct services children receive. From our own technical expert panel, we heard another way of thinking about policies, defined as an expressed intent to tie together mission, vision, values, and culture into clearly written and easily accessible documents for all to understand. For our purposes, we combine the essence of both these meanings to define policies as a deliberate effort to document principles that guide decision-making within an organization or among organizations (see Exhibit 3 and glossary).

Policies are a specific articulation of expectations and principles used to establish a shared understanding among stakeholders and to define standards of practice to guide implementation. These can explicitly support transitions to kindergarten through formal documentation of organizational regulations, standards, agreements, memoranda of agreements (MOAs) or memoranda of understanding (MOUs), procedures, and guidance. Numerous examples of policies, which we detail below, emerge from the literature and address various aspects of the transition to kindergarten. For instance, transition policies may:

- focus on the articulation of how families should be partners in making decisions through program and school governance structures;
- include mandates about how different organizations must collaborate with one another;
- establish guidelines for sharing information within and between programs and schools, as well as with families; or
- require that specific content addressing coordination across systems be included in professional development for leaders, teachers, and other staff to support transitions for children and families.

In reviewing the literature, we acknowledged that the *existence* of policies is distinct from the *implementation* of policies. In fact, many policies exist “on the books” but are not implemented in practice. In this study, the existence of policies is an essential part of our TOC, as policies reflect the intentions of governance bodies and senior leadership in systems/organizations to codify what they deem important and valuable. To this end, we focus this section on the articulation of policies themselves, with the outcome being the degree and fidelity of *implementation* (which, in turn, become the professional supports and practices around transitions).

Policies themselves can be either system-specific (e.g., federal Head Start Program Performance Standards [HSPPS], which only apply to Head Start programs) or cross-system (e.g., the federal requirement in the Every Student Succeeds Act [ESSA] that

The existence of policies is distinct from the implementation of policies. We focus on the articulation of policies themselves, with the outcome being the degree and fidelity of implementation (which, in turn, become the professional supports and practices around transitions).

requires LEA to enter into MOAs with Head Start programs). We envision common or shared policies to mean that both the existence and enactment of explicit, substantive policies about transitions for Head Start and kindergarten—both *within systems* and *across systems*—complement each other and ensure two-sided engagement in the transition process. These could include interagency agreements focused on transitions or data-sharing agreements that

allow for coordinated information (e.g., about children, families, teachers, classrooms) across systems.

Policy is enacted at different levels—from the federal government down to individual classrooms. The federal government authorizes and holds accountable Head Start grantees and agencies. State policies license private child care programs, accredit public schools, appropriate funds, and set learning standards and other accountability mechanisms for ECE programs and K-12 schools. Local policies turn state and federal funding into brick-and-mortar programs serving children and, in some cases, appropriate additional funds (Sandfort, Selden, & Sowa, 2008; Stipek et al., 2017). We share a description of common policies at each of these levels in the next section, which serve as transition strategies (RQ1 & 2). This is followed by a discussion of the outcomes associated with transition-focused policies, as well as the key mechanisms and moderators that research has found to relate policies to outcomes (RQ 4).

What are Common Policies Related to Supporting the Transition from Head Start to Kindergarten?

Federal Policies

At the furthest level from children’s transition experiences, several federal policies address the transition to kindergarten. These include transition requirements in the Head Start for School Readiness Act of 2007 (and the most recent iteration of the HSPPS for the Head Start system), ESSA for K-12 systems, and Individuals with Disabilities Education Act (IDEA)—which has stipulations for both systems. They also include policies that regulate fiscal opportunities towards supporting transitions.

ESSA requires school districts receiving Title I funds to enter into agreements with Head Start programs (and, if feasible, other ECE programs) that feed children into the districts to collaborate on improving transitions for children and families. ESSA explicitly permits LEAs and school leaders to use Title II funds to provide joint professional development between public school teachers and ECE educators. ESSA also has language requiring LEAs that receive federal funds for the support of English learners to coordinate activities and share relevant data with Head Start and other ECE providers.

Head Start has several policies that address kindergarten transitions. The Head Start for School Readiness Act of 2007 is the most recent reauthorization of the Head Start Act (HSA). It requires Head Start grantees to collaborate and communicate with public and private entities, including LEAs, and to develop MOUs with school districts to ensure smooth transitions into kindergarten. The HSA also requires Head Start grantees to involve parents in children’s transition to kindergarten. Head Start grantees must meet the HSPPS, which further specify these requirements. Part 1302.71 of these

standards requires all programs to implement transition strategies and practices for children entering kindergarten in the following year. Programs must:

- establish family and community collaborations,
- engage in appropriate learning environment activities, and
- provide additional transition services for children with an individualized education plan (IEP).

Within each of these stipulations, HSPPS dictates the minimum objectives that strategies and activities must achieve. For instance, transition-related family engagement must acclimate parents to navigating the K-12 system of services and supports and facilitate communication with teachers and administrators in receiving schools. Engagement with LEAs must coordinate the transfer of relevant records, communicate with school staff to ensure continuity of learning and development, and participate in joint training and professional development when possible. HSPPS also require Head Start programs to provide children with disabilities—including those who may be eligible for services under IDEA—access to the full range of activities and services.

While IDEA does not incorporate language specific to the kindergarten transition, it does address enrollment for children with disabilities in a new school, IEP development and coordination, and general transition services.² For all children with an IEP who are enrolling in a new school district, IDEA requires the LEA to provide comparable services to those provided under the previous IEP until the adoption of a new IEP, developed in consultation with the child’s family and pursuant to federal and state law. Additionally, IDEA requires the child’s new school to “promptly obtain” records from the previous school, which is required to “promptly respond.” (IDEA, Statute 1414.d.2.C.i.1).

Fiscal policies influence the amount of money available for certain purposes, as well as the eligibility criteria to access those funds. Indeed, research has documented how states have used various funding streams for planning and supporting transition efforts. These include funding from federal policies listed above as well as the Child Care and Development Block Grant; HSA; Maternal, Infant, and Early Child Home Visiting program; IDEA; Preschool Development Grant, Birth through Five; and Race to the Top-Early Learning Challenge (Bornfreund et al., 2019).

² IDEA defines “transition services” as a “coordinated set of activities for a child with a disability” designed to: (1) improve “academic and functional achievement,” as well as child independence and “community participation” in a “results-oriented process”; (2) accommodate a child’s strengths and individualized needs; and (3) include “instruction, related services, [and] community experiences” that promote the development of “daily life skills”

State-level Policies

Based on the literature reviewed, there are common examples of policies put in place at the state level that relate to kindergarten transitions. These include policies requiring written transition plans, providing transition programs to children, developing clear expectations about kindergarten readiness, aligning standards and assessments, and requiring collaborative teams to articulate and oversee implementation of transition practices. Bornfreund and colleagues (2019) report that nearly half of states (including Washington, D.C.) have requirements for transition planning in statute or regulatory code, but the extent of the requirements varies widely.

Some states articulate the establishment of transitional kindergarten or summer kindergarten transition programs (such as in California and Massachusetts; Atchison & Pompelia, 2018). In California, the focus on transition programming requires school districts that offer public preschool programs to provide “educational continuity from preschool through K-3” (Bornfreund et al., 2019). Massachusetts also requires that transition plans be included in the evaluation system, while West Virginia requires the development of a comprehensive framework for school readiness to support common expectations of what children should be prepared to do at the start of kindergarten (Atchison & Pompelia, 2018).

Loewenberg (2017, 2018, 2019) describes actions taken by four states to improve the transition process. These include written transition plans, opportunities for families to visit upcoming kindergarten classrooms, information for families around registration and kindergarten expectations, requirements to use particular assessment tools that are consistent across ECE and kindergarten to understand children’s strengths and development, and the establishment of collaborative transition teams with multiple stakeholders. Patton and Wang (2012) also highlight policies in six states intended to support transitions:

- state requirement that all districts submit a transition plan,
- aligned standards and assessments,
- summer enrichment programs,
- required developmental screenings, and
- interactive website for parents that offers information and activities.

District-level Policies

There is limited research on the extent to which different policies related to transitions are put in place by school districts. However, literature does point to policies that practitioners describe as being helpful. For example, Purtell et al. (2019) conducted interviews with 69 school-related personnel (teachers, principals, district superintendents, board members) from 11 school districts across the state of Ohio. Findings from these qualitative interviews suggest the following policies support transitions to kindergarten:

- designating a district leader who oversees transition plans and practices, and
- requiring systems to communicate and share data among preschools, elementary schools, and parents.

In addition, while we cannot discern from the study whether an explicit district-level policy about curriculum alignment was in existence, Sarama and Clements (2018) found that students assigned to receive aligned curricular activities in kindergarten on top of their enhanced preschool math experience had stronger math skills at the end of kindergarten than students who had received only the enhanced preschool curriculum. The effect was equivalent to 2.5 months of additional growth in math skills. This suggests that if policies required the alignment of curriculum, and that alignment was implemented well, students might reap academic benefits. Similarly, in a study described by Mashburn and Yelverton (2019), consistency in instructional practice (i.e., amount of time spent doing literacy/language, math, whole-group, and child-chosen activities) across Head Start and kindergarten classrooms was associated with children's development of academic, social, and emotional skills during kindergarten.

Comprehensive Sets of Policies

Although distinct from the types of policies we just discussed, there also exist broader, more comprehensive efforts to support alignment and continuity across a longer time span than just the transition to kindergarten, extending out through third grade. In these, not only are one or two discrete policies enacted, but an array of policies, technical assistance, and resources that create a systemic effort to influence children's learning opportunities. These types of policies include those described in *A Systems Approach to Studying the Transition to Kindergarten*, which focus on broader P-3 approaches. However, a deep exploration into these more comprehensive sets of policies, which often include transitions but do not specifically focus on them, was beyond the scope of this review.

Which Outcomes are Associated with Establishing and Implementing Policies around Kindergarten Transitions?

While our TOC assumes a connection between policies and practices, we consider these connections indirect and moderated by other organizational and contextual factors. This aligns with what the broader field of policy implementation deeply understands—namely, that effects of policy on practice, much less child outcomes, are indirect, inconsistent, and highly influenced by local context (see, for example, Honig, 2006). We could not identify research within our search that explicitly investigated the pathways from an existing policy of transition to kindergarten being put into place through its implementation to children’s lived experiences.

Despite the lack of evidence linking policies directly to child-level outcomes, given the federalist system of government and the multiple layers of organizations depicted in our HS2K landscape (Exhibit 1), the influence of policies can have a cascading effect. For example, collections and reviews of existing policies suggest that those implemented at the federal and state levels have led to the development and implementation of transition plans at the school and district level (Atchison & Pompelia, 2018; Loewenberg, 2017; Patton & Wang, 2012). In this instance, district-level transition plans might be considered both an *outcome* of the federal policy *and* a district-level policy that, in turn, can influence the creation of transition practices at school, program, and classroom levels. Other organization-level outcomes of policies that we identified in the literature include:

- cross-system collaborations to support transitions (Loewenberg, 2017);
- professional development opportunities (Loewenberg, 2017);
- alignment of curricula, standards, and assessments (Loewenberg, 2017; Patton & Wang, 2012); and
- transitional kindergarten or summer kindergarten transition programs or summer enrichment camps (Atchison & Pompelia, 2018; Patton & Wang, 2012).

What are the Key Mechanisms and Moderators?

Multiple mechanisms influence the extent to which policies can lead to effective transition practices. Several political theories, applied across various fields, explore how policies are implemented. However, few scholars apply these theoretical perspectives to ECE, much less the specific issue of the transition to kindergarten. Here, we summarize relevant, albeit emergent, efforts to apply policy implementation theories to this context.

McCabe & Sipple (2011) applied several existing theories to the context of implementing policies regarding pre-kindergarten in public schools. Their analysis highlights the importance of:

- shared ideas about the urgency and credibility of the policy itself;
- aligned regulations, professional standards, and philosophies; and
- the organizational complexity of agencies.

Our TOC depicts these issues, highlighting the interrelationship of shared perspectives, policies, and professional supports as moderators—and potential mechanisms—that affect transition practices. Similarly, in one review of research in Australia, Dockett & Perry (2012) conclude that policies that promote cross-system partnerships improve reciprocal communication across systems, which is critical for successful transitions. This maps onto our TOC in which the policies within each system, when aligned and moderated by strong leadership, can increase the likelihood of coordinated transition practices. Purtell and colleagues (2019) reached similar conclusions in their study of 11 school districts. They found that explicit, intentional connections between preschool and elementary schools, coupled with conscious decision-making and communication about these connections, facilitated the implementation of transition practices. Lastly, Little and colleagues (2020) recently examined how the use of Kindergarten Entry Assessments moved from policy to practice in North Carolina. Their findings are largely consistent with the broader literature on policy implementation, noting that professional development and shared data practices are important mechanisms. Keen attention to the variability of local contexts is also critical, given how those local contexts can be a key moderator to how policies are enacted.

The HS2K theory of change highlights the interrelationship of shared perspectives, policies, and professional supports as moderators—and potential mechanisms—that affect transition practices.

Despite these promising investigations, more research is needed on policy implementation that is specific to bridging ECE and K-12 around kindergarten transitions. For example, in an ethnographic study of pre-k policy implementation in a school district, Wilinski (2017) highlights the separate systems and expectations among ECE and K-12 stakeholders, calling for greater efforts to better understand how to reconcile differences between policy discourse (i.e., what the policy states) and the actual enactment of partnerships between ECE and K-12 (i.e., policy implementation). Purtell and colleagues (2019) also note the need for future research to study whether new policy changes (e.g., requirements under ESSA to create formal plans around how districts coordinate with local Head Start and other ECE programs) lead to more cross-system coordination and ultimately improvements in kindergarten transitions for children and families. Further, more research is needed to gather evidence of the conditions under which enacted policies focused on kindergarten transitions are implemented effectively or, more concretely, in ways that create positive impacts for children and

families. For example, based on our TOC, if meaningful policy implementation occurs, one would expect to see increased professional supports that, first, bring together teachers from within and across systems to increase their shared understanding, knowledge, and skills about transitions to kindergarten. Then, one would expect teachers to enact practices that influence positive outcomes for children and families. Our future case studies will include questions to understand better what these links are and the mechanisms that best facilitate them.

More research is needed on policy implementation that is specific to bridging ECE and K-12 around kindergarten transitions, including research on the conditions under which enacted policies focused on kindergarten transitions are implemented in ways that create positive impacts for children and families.

Again, there is limited research on what promotes better implementation of policies. Vitiello et al. (2019) noted that school-based and center-based preschools might have very different policies and, thus, vary considerably with respect to alignment with kindergarten settings. However, this only speaks to the variation in policies, not whether the implementation of policies may look different under different contexts. Purtell (2019) concludes from interviews with teachers and administrators in 11 school districts that there is potential for funding to be a key incentive and facilitator for how well policies are implemented. These include policies with federal funding that are tied to new practices (e.g., ESSA requirements for the creation of formal coordination plans around transitions); participation in Quality Rating Improvement Systems (QRIS), which focuses on quality improvements in ECE settings; and state-level policies and funding.

In this report, we defined policies as deliberate efforts to document principles that guide decision-making within or among organizations while maintaining the distinction between the mere creation of a policy and its implementation. The federal nature of the U.S. education system has given rise to a patchwork of kindergarten transition policies at the federal, state, district, and agency levels that can interact and cascade in complex ways. The assumption in our theory of change is that policies that are aligned across these levels lead to more coordinated transition practices; this, indeed, is supported by existing literature. However, more work is needed to investigate the intricacies of policy implementation across these levels in ECE, specifically relating to the transition to kindergarten.

Professional Supports and Organizational Models

In the HS2K TOC, robust professional supports focused on transitions are one of the pathways to successful transition practices both within and across systems. The HS2K Project defines professional supports (see also Exhibit 3 and glossary) as professional learning activities and other resources that support teachers, program and center administrators, grantee/LEA administrators, and policymakers to enact strong transition approaches. Where kindergarten transitions are most successful, we hypothesize, are those places in which both elementary schools and Head Start centers have implemented aligned professional supports that share a common purpose. When conceptualized in this way, professional supports are not only aimed at teachers but are available for personnel at all system levels. These may include (but are not limited to) professional development or training, coaching, resources or models, dedicated paid planning time, dedicated paid time to contact families or other Head Start program/school teachers and staff, pay for work outside of the regular school day or year, and leadership programs focused on supporting children and families' transitions into kindergarten.

Thus, aligned professional supports represent the extent to which the Head Start and kindergarten sides (both *across schools/centers within systems* and *across systems*) provide professional support focused on transitions that complement each other and work in alignment. Examples include joint professional development opportunities, joint efforts to understand data, and other shared activities that bring together teachers and administrators within and across the two systems. Professional supports can be implemented as transition strategies in Head Start (RQ 1), elementary schools (RQ 2) and in support of better relationships across the systems (RQ 3). Short-term and long-term outcomes and mechanisms are discussed (RQ 4). As with previous sections, we share findings of common professional supports that focus on the kindergarten transition, outcomes found to be related to transition-related professional supports, and the mechanisms through which those relations exist.



What are Common Professional Supports Focused on the Transition to Kindergarten?

Professional Supports for Transitions within Head Start and ECE Settings

The existing literature is not flush with research around professional supports within Head Start and other ECE settings that focus on the transition to kindergarten. However, Rous and colleagues (2010) used national data from the National Center of Early Development and Learning (NCEDL)'s Transition Practices Survey, which focused on whether teachers received any training around transitions and found that fewer than half of those surveyed (N = 2,434 public school preschool teachers) had received guidance on ways to enhance transition services.

Professional Supports for Transitions within Kindergarten Settings

As noted by our definition, professional supports can be provided at various levels within a system—for teachers, directors/principals, and district-level staff. Based on teacher reports, the number of professional supports that target kindergarten transitions is not high. For example, Curby and colleagues (2018) found that only 24 percent of kindergarten teachers reported having ever received training in transition practices. Similarly, Early and colleagues (2001) found that only 22 percent of kindergarten teachers reported having received “specialized training to enhance children’s transition into kindergarten” using national data from the NCEDL’s Transition Practices Survey (N = 3,595 public school kindergarten teachers).

Teachers may also be supported by their principals, who themselves may also need training on transitions. Although not specifically about transitions, a voluntary survey of elementary school principals who had an early learning program in their school found the majority had participated in district-funded professional development with an early childhood focus, but fewer than half had participated in state-funded professional

development with an early childhood focus, and very few had received professional development from associations with an early childhood focus (Abel et al., 2016). While it is encouraging that some principals are increasingly being trained on the importance of early childhood, this does not indicate whether any of the training focused on transitions.

Other research has focused on the roles principals and other school leaders play in the transition. Little and colleagues (2016) found that elementary school principals commonly used readiness assessments to aid teachers in their efforts to individualize instruction and identify children in need of additional supports as they transitioned into kindergarten. School psychologists might offer another resource for kindergarten teachers, particularly for children and families who need extra supports. However, even support from school psychologists is not readily available to most teachers; a survey of school psychologists' involvement in supporting the transition to kindergarten found that almost half of them (48 percent) did not view involvement in kindergarten transition activities as part of their job description. School psychologists were more likely to be involved in kindergarten transition activities if they were employed in an urban locale or a large- to moderate-sized school setting (McIntyre et al., 2014), pointing to the possibility that other types of resource or contextual factors might influence psychologists' ability to support teachers, families, and children during this period.

While most professional supports may be thought of as coming from the school, classroom, or teacher level, some approaches to supporting transitions do occur at the district level. Indeed, Loewenberg (2018) reviewed the steps states have taken to support successful transition planning and implementation at the district level. The study found that designated funds, along with tools and guidance for transition planning, were useful for district-wide implementation. Supports for individual teachers and administrators that came from the district included tools and guidance for transition planning; structures and systems for collecting, transferring, and interpreting data; and joint professional development. Patton and Wang's (2012) description of promising district-level transition practices across six states also includes shared professional development, systems for data sharing and transfer, and designated transition teams.

Alignment of Professional Supports for Transitions across ECE and Kindergarten Settings

While professional supports within each system—Head Start and the K-12 elementary school—are critical to improving the transition process for children and families, the strongest pathway to improved transitions may occur when those systems work together. One study examined which professional supports existed in a community where ECE programs and schools worked together to ensure successful transitions for their families. Emfinger's (2012) qualitative study found that shared professional

development, opportunities for ECE teachers to observe kindergarten teachers, and a transition summit attended by multiple stakeholders were beneficial for fostering aligned perspectives, connections across systems, and trust. The transition summit was a meeting that brought together kindergarten teachers from elementary schools in the community, some administrators, a parent education coordinator, and parents and teachers from a variety of preschool settings, including child care, Head Start, early intervention, and public school pre-k to jointly develop a transition plan with a focus on school readiness. Although there is some emerging research evidence of aligned professional supports that improve kindergarten transitions, more work is needed in this area.

What Outcomes are Associated with Professional Supports Focused on the Transition to Kindergarten?

Professional supports can lead to various positive outcomes. The most proximal outcomes hypothesized represent mediating pathways between professional supports within and across programs/schools and the implementation of effective, coordinated transition practices represented in the middle of the TOC. For example, we hypothesize that teacher training or professional development relates to teachers' implementation of particular practices. These professional supports might also influence teacher beliefs—or perspectives—as well as teachers' relationships with other teachers and families. These represent short-term outcomes for teachers in our theory of change. Indeed, this is what the literature finds. However, we found limited literature on (1) the links between professional supports for Head Start or K-12 staff aside from teachers (e.g., for

While professional supports within each system—Head Start and the K-12 elementary school—are critical to improving the transition process for children and families, the strongest pathway to improved transitions may occur when those systems work together.

directors, principals); (2) how professional supports other than training lead to any changes in outcomes; and (3) professional supports provided across systems such as joint professional development. Here we summarize the existing literature in this arena, focusing on the outcomes of trainings for teachers centered on the transition to kindergarten.

Many of the professional supports mentioned above were found to be related to changes in teacher perspectives and practices, a positive outcome for teachers that may lead to positive outcomes for children. For example, Rous et al.'s (2010) study using national data from the NCEdL's Transition Practices Survey found that pre-kindergarten teachers who received training reported using a higher number of transition practices (out of 25 specific practices listed) than those without training. Early et al.'s (2001) research using the same dataset found that the 22 percent of kindergarten teachers who received specialized training in enhancing children's

transition to kindergarten reported using more of all types of transition practices compared to teachers without specialized training. These included individualized practices before the start of school, whole-class practices before the start of school, individualized practices after the start of school, whole-class practices after the start of school, and coordination with preschool programs and the community. Curby et al. (2018) showed similar findings for kindergarten teachers. Those who received training around transitions had greater use of specific transition practices (e.g., arranging a classroom visit, having regular meetings with early childhood staff in the community) after the training.

Trainings and other professional supports also seem to be associated with other teacher-focused outcomes. For example, Gooden & Rous (2018) summarized research showing that implementation of evidence-based practices around curricula and instruction was strengthened when teachers had individualized training and coaching, resulting in increases in teacher knowledge and self-efficacy. Moreover, when professional development addressing transitions is aligned and shared across preschool and kindergarten teachers, it facilitates the development of relationships along with teacher-level knowledge and implementation outcomes. Arneson (2016) described the perspectives of preschool and kindergarten teachers in two counties, one of which implemented a year-long shared professional development opportunity. Teachers in the county who received the shared professional development believed that it led to stronger relationships between the preschool and kindergarten teachers, a greater understanding of the importance of transitions, a stronger overall focus on transition practices, and purposeful and consistent implementation of those practices.

What are the Key Mechanisms and Moderators?

The literature on pathways through which professional supports specific to kindergarten transitions may lead to outcomes is thin. However, there is relatively broad agreement in ECE and K-12 about the elements of effective professional development for teachers that support positive outcomes for teachers and children. Hamre and colleagues (2017), reflecting on their work across Head Start and state-funded preschool programs, summarized these elements to include targeting specific, focused, and clearly articulated evidence-based practices; providing sufficient intensity and duration to promote changes in practice; and using professional development approaches that promote changes in teacher behavior.

From the K-12 literature, Spillane, Hopkins, and Sweet's (2018) mixed-methods study found that administrators, staff, coaches, and teachers who participated in professional learning communities as part of a district-wide redesign of their math curriculum gave them the opportunity to interact around the proposed curricular and instructional changes. Greater interaction with peers was associated with changes in their instructional beliefs over time. In Arneson's (2016) case study described above, teachers believed the shared professional development led to stronger relationships between preschool and kindergarten teachers and a greater understanding of the importance of transitions. Teachers in the study believed that these were the mechanisms that led to a stronger overall focus on transition practices and purposeful, consistent implementation of those practices and led to fewer reported difficulties with transitions.

The literature on pathways through which professional supports specific to kindergarten transitions may lead to outcomes is thin. However, there is relatively broad agreement in ECE and K-12 about the elements of effective professional development for teachers that support positive outcomes for teachers and children.

Qualitative research suggests that policies implemented at the federal and state levels have led to the development and implementation of transition plans at the district level (Atchison & Pompelia, 2018; Loewenberg, 2017; Patton & Wang, 2012); cross-system collaborations to support transitions (Loewenberg, 2017); and professional development (Loewenberg, 2017). However, there is little research that sheds light on the moderators related to transition policies and the implementation of successful transition practices.

In sum, professional development related to kindergarten transitions can occur at several levels: among teachers, administrators, and support staff—such as school psychologists. Existing literature suggests that transition-related professional development among these actors is limited, but that transition-related within- and cross-system professional development activities could lead to positive outcomes for teachers. Alignment of these activities can also occur at several levels. Aligned professional development can mean physically gathering staff from both sides (the Head Start and kindergarten sides) for the purpose of learning together and building relationships. Aligned professional development can also mean that staff on both sides of the system engage with the same content. There is little research on existing alignment of professional supports, and additional work is needed to develop strategies around how to do so.

Practices

The HS2K Project defines practices as concrete activities designed to support teachers, children, and families during the transition to kindergarten. Head Start or kindergarten professionals can engage in transition practices separately or jointly through

The HS2K Project defines practices as concrete activities designed to support teachers, children, and families during the transition to kindergarten. Head Start or kindergarten professionals can engage in transition practices separately or jointly through coordinated practices.

coordinated practices. They can also occur at various levels within/across each system (e.g., Head Start grantee/LEA leadership, Head Start directors/principals, teachers and staff). Literature suggests that transition practices are directly related to teacher, family, and child outcomes. Accordingly, these practices are the most proximal outcomes of interest in this study, which we hypothesize are supported by strong, coordinated, and systemic

approaches among the first 3Ps (perspectives, policies, and professional supports).

In the HS2K theory of change, we organize examples of transition practices following the categories adapted from the NCECDTL (OHS, 2020):

- Head Start-School³
- Child-Program/School
- Family-Program/School
- Community-School

As we review the literature on practices that occur within and across systems, we will articulate where those practices fall within the NCECDTL framework.

What Transition Practices are Most Commonly Identified in the Literature and Cited by Key Informants?

Transition Practices within Head Start or Other ECE Programs (RQ 1)

Within Head Start and ECE settings, programs tend to use multiple transition practices. Analyzing the Head Start Family and Child Experiences Survey (FACES) dataset, Abry and colleagues found that Head Start directors reported using an average of 5.26 out of 6 transition practices they were asked about in a survey (Abry, Taylor, Jimenex, Pratt, & LoCasale-Crouch, 2018). Most common among them were discussing transitions with parents (99 percent); providing parents with information about the school their child will

³ We will refer to these as “Program/School” practices, since some of the research is not specifically focused on Head Start.

attend (98 percent); sending home informational letters on the transition (97 percent); teaching parents child advocacy skills (89 percent); and scheduling a parent visit to their child's next school (82 percent; Abry et al., 2018). All of these practices fall within the NCECDTL category of Family-Program/School activities. In a study of state pre-kindergarten teachers' transition practices (e.g., teachers visiting each other's classrooms, contact with kindergarten teachers about curriculum or specific children, orientations for families), LoCasale-Crouch and colleagues (2008) found that teachers reported six out of nine Family-Program/School and Program-School practices asked about in the survey, with variations across pre-kindergarten classrooms. It was most common to report sharing written records with elementary schools and less common to visit pre-k classrooms.

What Did Key Informants Say?

All key informants mentioned the prevalence of one practice in particular: a one-time meeting at the end of the Head Start year that can integrate several of the more common transition practices. This "event model" (as it was called by one of the key informants) often focuses primarily on families' options for elementary school and summertime kindergarten readiness screenings.

Transition Practices within Kindergarten (RQ 2)

Kindergarten teachers use multiple practices as well, albeit fewer than teachers in ECE settings (Early et al., 2001; Pianta et al., 2001). Using nationally representative data from the Early Childhood Longitudinal Study- Kindergarten Cohort 2011 (ECLS-K:11), Little and colleagues (2016) found that kindergarten teachers employed an average of just over three out of six transition practices they were asked about in a survey. Abry and colleagues (2018) reported that kindergarten teachers of former Head Start children engaged in just 2.84 out of 6 practices (although the practices surveyed across ECLS-K:11 and FACES differed).

While the specific percentages of kindergarten teachers who reported engaging in different practices varied from study to study, the most common practices tended to be sending information home or orientations and open houses. Abry et al. (2018) found that the most common transition practices reported by kindergarten teachers of children who had attended Head Start included sending home information about the kindergarten program (87 percent); inviting parents to attend an orientation prior to the start of school (79 percent); inviting parents and/or children to visit prior to the start of school (75 percent); arranging for preschoolers to spend time in the classroom (39 percent); and offering shortened school days at the start of school (14 percent). Curby

et al. (2018) similarly reported that kindergarten teachers were most likely to send information home (89 percent after the start of school, 67 percent before the start of school) or host an open house (82 percent before the start of school, 81 percent after the start of school). The least common practice reported by teachers was conducting home visits. Only five percent of teachers reported conducting home visits at the beginning of the year (see also Cook & Coley, 2017; Little et al., 2016; Zulfiqar et al., 2018). Most of these practices, again, fall under NCECDTL’s category of Family-School Practices, with one also being a Child-School Practice.

What Did Key Informants Say?

Findings from literature were consistent with what key informants told us. Almost all informants mentioned that elementary schools will often invite families to observe and take part in the classroom, as well as participate in focused educational activities with their children and other parents (with a focus on kindergarten skills and standards). Some of the more robust approaches of the event model mentioned by key informants included a “transition week” for incoming pre-kindergarten students that include a day or evening for all families to collectively tour the school, hear from kindergarten teachers, and participate in explicit programming about what to expect. However, among this group, the most mentioned activity was kindergarten readiness screenings.⁴

Coordinated Transition Practices across ECE programs and Kindergarten (RQ 3)

Less commonly observed are transition practices rooted in and resulting from cross-system collaboration (or those that fall within the NCECDTL category of Program-School practices). Practices that involve connections and communications *between* publicly funded pre-kindergarten and elementary schools are less prevalent than discrete practices within those systems, and a lack of connection and communication inhibits alignment and coordination—even when pre-kindergarten and kindergarten classrooms are co-located (Purtell et al., 2019). Collaborative practices tend to be more time-intensive, sometimes extending across several months before and after school entry (Hartley et al., 2012; Petriwskyj, 2013) with the goal of alignment and providing continuity of experience (Einarsdottir et al., 2008).

⁴ Note that while some key informants discussed screenings as practices, the HS2K Project does not include it as a transition practice in and of itself. *How* information is used from those screenings to inform instruction and engagement with families may be considered a transition practice.

Before exploring the literature on collaborations that focus on supporting kindergarten transition, we first share a perspective on the various levels of collaboration. Mandell et al. (2017) conducted five focus groups and 40 interviews with members of five human service integrative initiatives to explore experiences of cooperation, coordination, and collaboration across systems. The findings indicate that respondents conceptualized *cooperation* as representing the starting point or base level of inter-organizational relationships, with cooperation associated with a lower level of intensity in the relationship between parties, as well as the expectation for reduced effort and input. *Coordination* was presented as having an instrumental function, where organizations were required to work together via already established mechanisms. *Collaboration* was perceived as a more intensive process that required closer relationships, connections, and resources—and even a blurring of the boundaries between agencies. More specifically, practitioners (87.5 percent) and strategic policy personnel and key informants (80 percent) identified the development of shared goals, joint dialogue, and a higher level of trust as being the primary indicators of collaborative action or a collaborative relationship. These progressive categories are consistent with those presented by Himmelman (2002), which adds one category—networking—as a step prior to cooperation.

Practices that involve connections and communications between publicly funded pre-kindergarten and elementary schools are less prevalent than discrete practices within those systems, and a lack of connection and communication inhibits alignment and coordination—even when pre-kindergarten and kindergarten classrooms are co-located

Shifting to the transition literature, research has examined the types of coordination and collaboration occurring among Head Start and kindergarten systems. Analyzing the Head Start FACES data, Cook and Coley (2019) examined the coordinated practices Head Start directors initiated with the schools that children would be transitioning to. They found that 91 percent of children had directors who reported participating in individualized education plan meetings with schools for special education students, 86 percent had directors who provided schools with Head Start records, and 76 percent had directors who reported meeting with kindergarten teachers at school. Less than three quarters had directors who reported sharing curriculum information (74 percent), expectations (73 percent), and program policy information (69 percent). The least reported practice was participating in joint trainings with school personnel (65 percent).

Kindergarten transition practices reported on large-scale surveys may over-represent the universality of coordinated practices, and more variability exists in terms of how frequently they are implemented and under what conditions. While directors may report practices, in reality, not all children may experience those practices.

However, more than half of directors did report they engaged in joint trainings. Directors reported engaging in six out of eight of these practices on average. They found that Head Start centers/sites under the same umbrella Head Start agency reported practices differently, indicating that there is much local variability that may be driven by different relationships with different LEAs (Cook & Coley, 2021). These practices primarily fell into the Head Start/Program-School NCECDTL practices category.

In qualitative interviews, Head Start directors reported that the coordinated practices they initiated with schools varied by children’s and families’ needs as well as the school system the child was transitioning to (Cook et al., 2019; Cook & Coley, 2021). This suggests that the practices reported on large-scale surveys may over-represent the universality of these coordinated practices, and more variability exists in terms of how frequently they are implemented and under what conditions. In effect, directors may report practices, but in reality, not all children may experience those practices.

For kindergarten-initiated Program-School practices that involved teacher coordination and collaboration, Curby et al. (2018) found that just 21 percent of kindergarten teachers conducted regular meetings with early childhood staff in their community. In this same study, kindergarten teachers relayed that they reserved some transition practices—such as reviewing written records of prior experiences (50 percent) and having preschool teachers visit classrooms with children (25 percent)—for targeted students only (see also Early et al., 2001; Rimm-Kaufmann & Pianta, 2000).

What Did Key Informants Say?

The findings from the literature are consistent with what we heard from a key informant, who noted that it was less common to implement the event model described above as joint events between Head Start centers and elementary schools. One exception was in the case of children with IEPs: “Head Start programs are very well set up to manage that process to ensure that IEPs are up-to-date and in place over the summer so children are ready to go in September at their new elementary school.” One other type of Program-School (and Family-School) practice noted by key informants was coordinated by Head Start with representatives from feeder-pattern elementary schools to give parents more in-depth previews of kindergarten expectations. Often, this event is explicitly for kindergarten registration.

Which Practices would be Considered “Best Practices,” “Innovative Practices,” or Have Evidence that they are Related to Child Outcomes?

Evidence suggests that some of the transition practices cited in the research above may lead to positive outcomes for children (RQ 4). Correlational research of large-scale nationally representative datasets has shown that practices that involve Parent-School connections (e.g., parent orientations, teacher call or letter) are associated with children’s overall positive adjustment to kindergarten, as well as increased achievement in reading and math (Cook & Coley, 2017; Schulting et al., 2005). Although home visits are one of the least-used practices, in one experimental study, children in Head Start who received home visits targeted toward parent training and math skills acquisition exhibited more academic improvement in their kindergarten year than their peers who received only mail-home math games (Bierman et al., 2015). In addition, Cook and Coley’s (2019) analysis of Head Start children found that children who had kindergarten teachers who engaged in a greater number of parent-school transition activities had higher language skills in kindergarten. Research has shown that the most common practices may not necessarily be the most effective at achieving outcomes.

While less common than acquainting practices or event model transition strategies, research evidence suggests that the most effective transition practices are those that foster connections and relationships between systems. Similar to what is highlighted in the NCECDTL framework, these include connections prior to kindergarten between children and kindergarten teachers (Child-School connections); between preschool and kindergarten teachers (Program-School connections); and between teachers and families (Family-School connections; Rimm-Kaufman et al., 2000). Multiple correlational studies have shown that preschool and kindergarten teacher coordination of transition activities and information sharing are particularly important. Children whose pre-kindergarten and kindergarten teachers share information regarding individual child needs and curricular issues are likely to have more advanced social skills and fewer incidences of challenging behavior in kindergarten than children whose teachers do not engage in these practices (LoCasale-Crouch et al., 2008). Two international studies⁵ showed similar results with children whose ECE and first-year teachers shared information about curriculum and specific children, demonstrating greater growth in reading, writing, and math scores (Ahtola et al., 2011), as well as smoother teacher-reported academic and social school adjustment in the kindergarten year (Cook et al., 2017). In a study specifically about coordination practices between Head Start programs and elementary schools, Cook & Coley (2019) found that when Head Start directors reported meeting with kindergarten teachers at school, children who attended their program had higher language skills at the end of kindergarten (even when controlling for

⁵ The focus of the literature review was on research in the United States. However, two recent international articles were included given their direct relevance to the topic.

kindergarten teacher transition practices, which were also significantly related to child language skills).

What Did Key Informants Say?

In addition to our literature review on the most effective transition practices, key informants shared their perspectives on what they believed were some of the most effective and innovative practices being implemented. Key informants consistently cited relationship building as the common thread of these transition strategies and best practices. Exhibit 9 features their statements; note that all of them highlighted relationships and partnerships among people involved in children's transitions to kindergarten. It is also notable that very little information about community partners was gleaned from key informant interviews. Although none of the key informants were community partners (e.g., local non-profit organizations, libraries, museums, social services agencies), the interview protocol included questions explicitly about the role of community partners in the transition.

Exhibit 9. Key Informant Perspectives on Innovative Transition Practices and Strategies

Topic	Description ^a	Type(s) of Connection
School simulation to help children get comfortable with kindergarten	Preschools who construct mock cafeteria environments, provide exposure to lockers, and practice boarding a school bus as a part of the transition process reduce child anxiety.	Child-School
Kindergarten teacher and elementary principal site visits	Schools sometimes send kindergarten teachers and principals to Head Start programs to familiarize kids in the spring. Head Start and elementary co-location sites are where you see most of this.	Child-School Program-School
Alignment of pedagogy and family engagement	Practices that bridge the pedagogical gap between the two systems—in the classroom, but also in educating and engaging families via the more holistic approaches to learning found more on the Head Start side. This is important because moving from play-based, developmental approaches to learning in Head Start to things like kindergarten’s “3 Rs” and testing culture of elementary school is difficult.	Program-School Family-Program/School
Alignment of assessments paired with family engagement	Shared standardized assessments (such as Teaching Strategies GOLD) and training by common coordinators can provide more seamless transitions. Requirements to incorporate families into this prior to kindergarten starting promotes partnership.	Program-School Family-Program/School
Curriculum alignment through “audits”	Conducting horizontal and vertical audits to better understand who is teaching what, at what time, to children. These led to more motivation among teachers to collaborate and build upon what others are teaching children (rather than replication).	Program-School
Intentional parent-to-parent activities to promote sense of community and social capital	Welcoming events for new parents organized by PTAs promote parent-to-parent connections. This complements the other family engagement-focused transition practices driven by the professional side (e.g., Head Start or elementary school organized). Family-to-family connections build support systems and increase social capital.	Family-School
Accommodations for kindergarten registration	Setting up kindergarten registration drives at local manufacturing, distribution, and agricultural worksites accommodates odd-hour parent shifts. In communities with these types of job sites, parents often cannot get to school events. This accommodation allows teachers and school staff to walk parents through the registration process during breaks.	Family-School

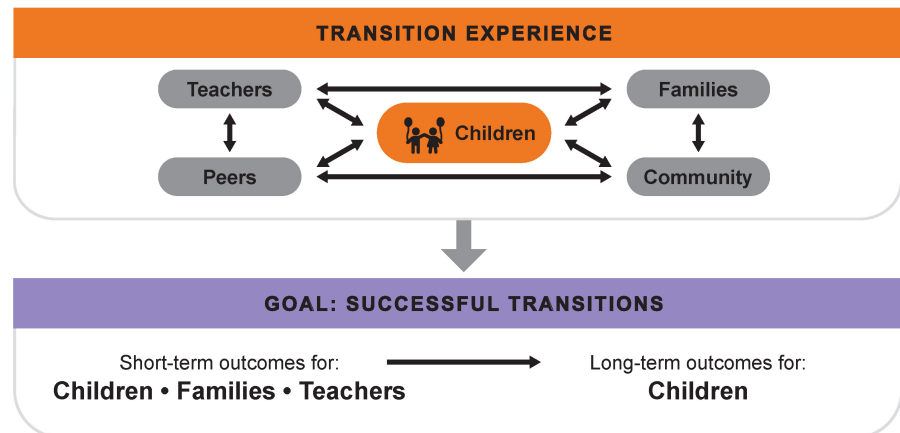
^a Descriptions are summarized and paraphrased across Key Informants.

What are the Key Mechanisms through Which Transition Practices Lead to Optimal Outcomes?

In the previous section, we highlighted evidence that perspectives, policies, and professional supports converge to support transition-focused practices. Those particular transition practices

are then associated with positive child outcomes. This can happen either directly (from practices to children) or indirectly (through changing either teacher or family outcomes) through key mediators. The key

mediators that emerged from our literature review are summarized in this section and help us better understand what may be occurring within the bottom circle of the TOC and between that circle and child outcomes. (Due to the large amount of literature on the links between practices and outcomes, we separately discuss key moderators—or conditions—of successful practices in the section that follows this one.)

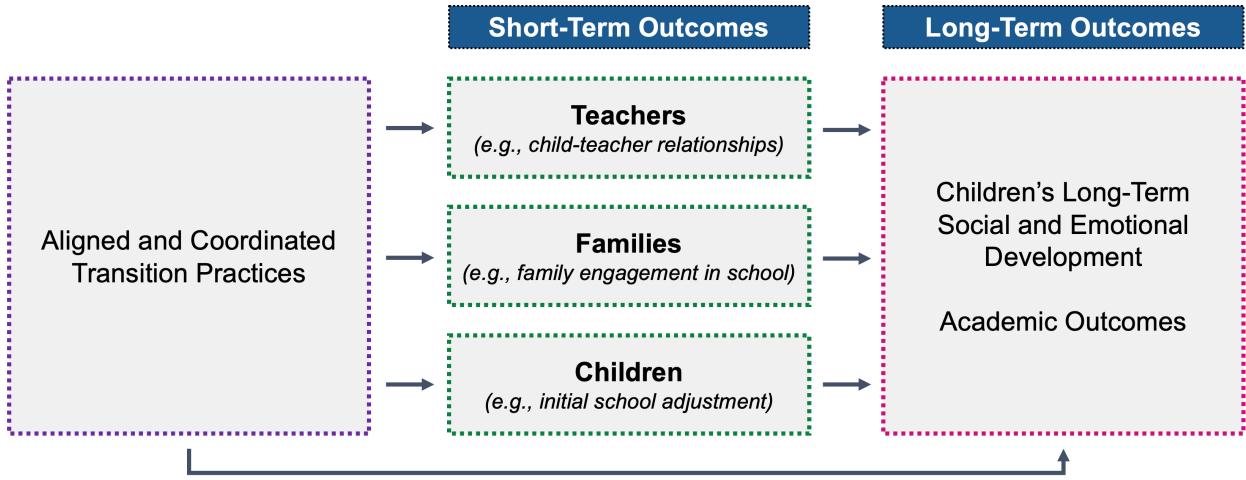


The child outcomes that emerge from transition supports can be considered short-term and/or long-term outcomes. Indeed, transition strategies that lead to positive child outcomes are ones that successfully promote effective relationships among the various participants involved in supporting children’s development, growth, and learning throughout the transition and beyond. Direct and indirect pathways are shown in Exhibit 10 using examples from the literature. Evidence highlights how transition practices lead to child outcomes through three main pathways (RQ 4):

- **Direct association between practices and Child-School/Teacher relationships**, where transition practices themselves result in improved relationships and increased individualized instruction in the classroom, which directly associate with children’s outcomes;
- **Indirect effect of practices on child outcomes through Program-School, or Teacher-Teacher, coordination and relationships** through greater continuity in environments and experiences for children, which in turn lead to better short-term initial school adjustment, and long-term social and emotional development, and academic outcomes for children; and

- **Indirect effect of practices through stronger Family-School connections and relationships**, which ease the stress of the transition for families and build parent self-efficacy; these, in turn, result in greater family involvement in their child’s education, which increases attendance and engagement and ultimately improves academic outcomes for children.

Exhibit 10. Indirect Association between Transition Practices and Longer-term Child Outcomes



Pathway through Child-School/Teacher Relationships

Effective relationships between children and teachers directly lay the foundation for more positive academic and social-emotional student outcomes. The development of strong, positive relationships between children and teachers is a key mechanism through which transition practices lead to optimal child outcomes. Enhanced, early development of relationships with kindergarten teachers through transition practices is associated with elevated child success (Hamre & Pianta, 2001; Jerome & Pianta, 2008; Rimm- Kaufman & Pianta, 2000). This occurs through teacher knowledge and understanding of children’s needs during the transition and greater use of developmentally appropriate practices (LoCasale-Crouch et al., 2008; Mantzicopoulos, 2005). Transition practices promote closeness between kindergarten teachers and children, and teacher-child closeness is related to increased progress in language, literacy, and math reasoning, as well as increased social competence and reduced problem behaviors (Rosenkoetter et al., 2009; Zulfiqar et al., 2018). Positive child-teacher relationships are associated with increased child engagement through participation in planned activities and cooperation with peers and adults (Robinson & Diamond, 2014), while negative child-teacher relationships are linked with children’s disengagement and poor adjustment to school (Ladd et al., 2006).

Pathway through Program-School (“Cross-System”) Relationships

Effective relationships between teachers and administrators in and between each system are achieved through greater communication, professional support, coordination, and alignment among systems. These ultimately lead to a shared vision of child development, early learning, and best practices (Bogard & Takanishi, 2005; Geiser, Horwitz, & Gerstein, 2013), which, as described above, can lead to better child outcomes.

Transition activities that involve Program-School connections can result in more aligned environments and experiences between preschool and kindergarten; this continuity, in turn, promotes children’s successful adjustment and ongoing learning (Bogard & Takanishi, 2005; Kagan & Kauerz, 2007). Consistent high-quality and developmentally appropriate care and classrooms for young children are associated with better academic outcomes, work habits, and social adjustment after the transition to the next setting (Rosenkoetter et al., 2009). One international literature review found that schools can help children be more prepared to start school by helping them develop specific skills and dispositions that are aligned with the expectations of their new environments (Yeboah, 2002). A match between sending and receiving environments and teaching skills across systems results in more successful adjustment and positive outcomes after transition, such as academic skills, work habits, and social adjustment for young children (Rosenkoetter et al., 2009).

Kindergarten transition strategies that lead to positive child outcomes are ones that successfully promote effective relationships among the various participants involved in supporting children’s development, growth, and learning throughout the transition and beyond.

In addition, research suggests that the transfer of information by pre-kindergarten teachers is beneficial (Cook et al., 2017; LoCasale-Crouch, et al., 2008). When kindergarten teachers have information about the programs children are transitioning from or information about specific children, children have positive outcomes in kindergarten (Ahtola, 2011; LoCasale-Crouch, 2008). The research is less clear about why this may be the case, but it could be hypothesized that teachers who have more information about specific children’s needs before the start of school may be able to tailor their instruction early to meet these needs. They also may be able to build relationships with children and families more quickly, leading to a more positive adjustment to school for both the child and their family. This is also a beneficial process for teachers, who are more prepared for the school year and can build better relationships with children and families.

Pathway through Family-School Relationships

Effective relationships between families and teachers or schools lead to greater communication and alignment of instructional practices and supports with families' individual needs. In turn, this fosters greater parent engagement in the transition process and their child's education when they are in kindergarten (e.g., Pears et al., 2015; Rous et al., 2007; Schulting et al., 2005). Both families and teachers indicate that positive relationships developed over time are the most important factor to successful transitions (Kemp, 2003; McIntyre et al., 2007; Pianta & Kraft-Sayre, 1999; Prigg, 2002; Rosenkoetter et al., 2009). Interactions between families, schools, and communities can form positive dispositions toward school (Dockett & Perry, 2009) that ease the stress of the transition and build parents' sense of self-efficacy, which is associated with greater school-related parent involvement.

Practices geared at connecting schools and families then improve children's school success (Dearing et al., 2006). As noted above, this results from increased family engagement which is related to significant learning outcomes for children (Rosenkoetter et al., 2009). When families become more engaged in their child's experiences with school, it promotes effective parent-child relationships that support children's ongoing learning. This is driven by deeper parent knowledge and understanding of their child's needs during the kindergarten transition (e.g., Harbin et al., 2015) and increased parenting practices that support and sustain their child's development and school readiness (Pears et al., 2015). Outside the transition literature, Galindo and Sheldon (2012) also found that schools' efforts to communicate with and engage families predicted greater family involvement in school and higher levels of student achievement in reading and math at the end of kindergarten.

Another pathway through which increased parent engagement can lead to improved child outcomes comes from the literature that does not focus on transitions. Some research highlights how schools' positive relationship-building work with families can support higher attendance in school (Ehrlich & Johnson, 2019), which in turn also leads to better student outcomes (Ehrlich, Gwynne, & Allensworth, 2018). Given that parent involvement in their child's school and education mediates the effects of transition practices on child outcomes (Epstein & Sheldon, 2002; Ma et al., 2016; Schulting et al., 2005; Sheldon, 2007), leveraging transition strategies that build affirming and cooperative relationships between parents and their school community is integral to both short- and long-term child outcomes.

When families become more engaged in their child's experiences with school, it promotes effective parent-child relationships that support children's ongoing learning.

What Did Key Informants Say?

We asked our key informants to describe what successful transitions for teachers, families, and children meant to them. For teachers, key informants expressed that when transitions are successful, teachers have an increased understanding that families are part of a student's educational success and therefore increase engagement with (not just outreach to) families. Teachers also are less anxious or stressed when they start the new school year. One informant noted that when successful transition practices are in place, kindergarten teachers are able to learn from Head Start teachers particular techniques that have worked well with children who have behavior challenges.

Key informants described that for families, successful transitions lead to family-family connections, which in turn build support systems and increase social capital. Further, successful transitions provide families with a sense of agency in co-constructing success for their children and enable parents to be more aware of kindergarten expectations and who to talk to if they have questions.

When successful transition practices are in place, families, schools, and children are all working in tandem to achieve better holistic child outcomes. There is also alignment across settings in terms of expectations of children and how they spend their day learning at school. Lastly, at the systems level, an outcome (or evidence) of successful transitions includes an increased understanding of each side's activities and goals to come together towards more common goals.

What are Key Moderators?

In this section, we share literature findings on key moderators that could support effective practices. We first discuss moderators that promote collaboration across systems, since as described in *Which Practices would be Considered "Best Practices," "Innovative Practices," or Have Evidence that they are Related to Child Outcomes?*, one of the key outcomes of aligned perspectives, policies, and professional supports are practices that are coordinated across systems. Those coordinated practices across systems then support implementation of practices at the classroom/teacher level. We focus the second portion of this section on moderators that may influence the effectiveness of practices that more directly reach children and families.

Key Features that Promote Collaboration across Systems for Successful Transition Practices

For cross-system collaboration to lead to positive outcomes, key features need to be in place. Chien et al. (2010) highlight some of these key features, including:

- norms that shape interactions among stakeholders;
- inclusion of stakeholders who represent a wide variety of viewpoints and interests;
- authenticity of the authority to make decisions and solve real problems;
- equality in stakeholders' opportunities to influence the decision-making process;
- adequate support and resources (financial, information, administrative) to make meaningful decisions;
- willingness of stakeholders to balance the interests of their home organizations with those of the entire collaborative; and
- a shared understanding of the purpose of the collaborative.

Note that some of these moderators reference the other 3Ps themselves, such as shared perspectives.

From literature outside the education sphere, Austin and Seitanidi (2012) describe how true integrative collaboration is a condition that promotes more collaboration, creating a reinforcement cycle. They described how integrative collaboration enables partners to work together successfully and develop deeper relationships. As a result, partners become more aligned with their missions, values, and strategies (note how here, aligned perspectives are the outcomes of strong collaborations). True collaboration results in the identification of linked interests and synergistic value creation; reconciliation of different "value creation logics" in terms of the nature of resources and how they are used (with resources being combined and additional resources being co-created, such as professional supports); and the recognition of intangible assets that are produced (e.g., trust, learning, knowledge, communication, transparency, conflict management, social capital). These characteristics set the stage for more effective collaboration and are also outcomes of good collaboration.

District-level conditions can also help facilitate more or less successful transitions through collaborative practices. Patton and Wang (2012) highlight promising district-level transition practices in six U.S. states: (1) transition teams that involve multiple stakeholders/service providers, (2) articulation teams that are focused on continuity of instruction, (3) preschool/school partnerships and student data/portfolio sharing, (4) shared professional development, (5) use of surveys to gather data from multiple stakeholders to inform decision-making, and (6) ongoing/year-round activities that understand transition as a process, not a one-time event. In addition, activities that

foster alignment, such as preschool and kindergarten teacher collaboration and alignment with curricula and support services, are particularly important for more effective transition practices (Ahtola et al., 2011; LoCasale-Crouch et al., 2008).

What Did Key Informants Say?

To facilitate alignment among the 4Ps, several key informants also expressed the need for coordinating bodies, coalitions, or councils within school districts and Head Start centers that institutionalize knowledge transfer between Head Start centers and elementary schools. Many of the same key informants, and others, also said that giving teachers shared, intentional time and space—something that could be done through aligning teacher in-service days—to coordinate and collaborate on transition activities is invaluable.

Citing another moderator, a few key informants noted that leadership is a determining factor in how well transition approaches (including collaboration across systems) are implemented. One noted how important superintendent and principal buy-in are for setting up conditions that promote strong kindergarten transition strategies and produce positive outcomes. “From a systems angle, thinking about school districts working well versus those who aren’t, it is less about mechanisms within the system and more about the leadership. In most places in [STATE], school districts with superintendents who buy into the importance of learning and the partnership are the places you’ll see strong transition practices.

Moderators of the Association between Classroom/Teacher-level Practices and Child Outcomes

Dosage. Some studies suggest that dosage is a key moderator of how effective transition practices can be on child outcomes. Children who experience more transition activities see benefits in kindergarten. In addition, Head Start children whose kindergarten teachers reported engaging in more transition practices, even when controlling for coordinated transition practices reported by Head Start, had higher language skills at the end of kindergarten (Cook & Coley, 2019). Children whose pre-kindergarten teacher reported more transition practices demonstrated more advanced social competence and fewer behavior problems (LoCasale-Crouch et al., 2008). They also had lower stress levels, greater self-confidence, more enjoyment of school, and higher overall happiness (Hubbell et al., 1987). In one study, there was no association between the implementation of more transition activities by kindergarten teachers and children’s attention skills, positive adjustment, or reading and math skills. However, implementing more transition activities was predictive of enhanced prosocial skills in

kindergarten (Cook & Coley, 2017). Yet, using a similar dataset, Shulting and colleagues (2005) found that more practices reported by kindergarten teachers was predictive of academic skills at the end of kindergarten. Rous and colleagues (2010) also found that even low-intensity, whole-group efforts have a measurable effect.

Other studies, however, highlight the complexity of dosage, providing evidence that more is not always better. Rather, the implementation of specific types of practices individually leads to better outcomes for children. For example, Cook & Coley (2017) found that parent orientations were predictive of enhanced reading and math skills in kindergarten, although a greater number of total transition practices was *not* predictive of these skills. Little (2017) also found similar null findings with child outcomes. Both Shulting et al. (2005) and LoCasale-Crouch et al. (2008) found that more practices were related to better outcomes; however, they also identified that this was based on individual practices. Particular practices, such as sharing information between pre-kindergarten and kindergarten on curriculum and using those practices for specific children, were driving the overall findings (LoCasale-Crouch et al., 2008). Similarly, Cook and Coley (2019) found that more coordinated transition practices between Head Start and kindergarten were not related to increases in child outcomes, but the specific practice of Head Start meeting with kindergarten teachers was predictive of children's language skills in kindergarten.

Timing. Beyond dosage, there is evidence that timing may also moderate the effect of transition activities. Individualized transition practices that take place *prior* to the start of school provide the greatest benefit to parents and children (LoCasale-Crouch et al., 2008; Schulting et al., 2005). The most effective transition practices are sustained throughout the transition period, are individualized, and involve communication and coordination between preschool and kindergarten settings. For example, Fabian (2002), Pianta and Kraft-Sayre (2003), and Dockett and Perry (2003) recommend implementing transition practices *as part of a multilayered process* rather than a single practice or moment in time. They argue that practices facilitate adjustment between home-school contexts or ECE-school contexts, which occurs over a period of time.

Additional child and family moderators can help explain how effective transition practices are on outcomes. These are discussed in *Benefits of Transition Practices to Meet Specific Children and Family Needs*.

In our TOC, we distinguish “practices” from the other 3 Ps because we hypothesize that strong, coordinated, and systemic approaches among the first 3 Ps (perspectives, policies, and professional supports) will lead to the most successful transition practices. Thus, transition practices are the most proximal outcomes of interest in this project. Much of the literature surrounding transition practices is concerned with discrete, system-specific practices, often at the classroom or teacher level. Studies have

documented both the quantity of transition practices enacted in specific contexts as well as the most common activities that both Head Start programs and elementary schools engage in. Evidence suggests that some of the more commonly-cited practices in the literature are associated with more positive social-emotional and academic transition outcomes. We know much less about collaborative transition practices across systems and their links to positive outcomes for children, families, and teachers.



Benefits of Transition Practices to Meet Specific Children and Family Needs

The transition to school has been found to magnify existing disparities in children's early skills and behavior. Small differences in early skills and behavior at kindergarten entry can impact teacher and peer expectations, class/grouping assignments, children's own self-evaluations, and interactions with families in ways that shape ongoing progress (Entwisle, Alexander, & Olson, 2005). Children with disabilities may particularly benefit from being taught specific behavioral, social, communication, and cognitive skills, and from receiving specific instruction about what to expect in their next setting. They are also likely to benefit most from more individualized and intensive services, written policies about the roles/responsibilities of everyone involved in the transition process, coordination and alignment of services between sending and receiving programs, and staff who are specifically trained to support transitions for children with diverse needs (Gooden & Rous, 2018).

Children who have experienced early adversity may particularly benefit from practices that focus on promoting: strong positive relationships among administrators, teachers, parents, and children; the development of children's self-regulatory skills; continuity of rules and routines; teacher knowledge (i.e., through professional supports) of how adversity impacts children and their families; parenting practices and support for child development; and parent engagement (Pears & Peterson, 2018).

Using national data from the ECLS-K, Ansari and Crosnoe (2018) found that English language learners enter kindergarten up to a year behind their monolingual English-speaking classmates. During the transition, English language learners may particularly benefit from practices that acknowledge and embrace children's diversity and culture, communication with parents, and parent engagement in both systems as well as the transition process (Ansari & Crosnoe, 2018; McCrae et al., 2000; Podmore et al., 2002; Sauvao et al., 2000).

Students who exhibit problem behaviors may also benefit from targeted support, including early identification and support, proactive procedures, principal support and involvement, and early family involvement (Stormont et al., 2005). Interviews with Head Start directors found that they often provide informal additional transition practices for children who have specific needs such as behavior challenges, family trauma, and other experiences that may lead to challenges with the transition to kindergarten (Cook, Coley, & Zimmermann, 2019). Directors often described these practices as direct personal outreach to the new school to discuss the specific child and how to help meet the child's and family's needs.

Some programs are specifically designed for low-income children who have not had preschool and/or a quality preschool experience prior to entering kindergarten. Nikolchev and Ponce (2018) present findings from a supplemental spring to summer program that helps prepare children and their families for a smooth transition through academic programming for children, professional development for teachers, and classes for parents. Results indicate growth in children's literacy and mathematics skills, and families reported being more prepared and comfortable in the transition to school.

Barriers

Our literature review, review of theory pieces, and key informant interviews identified multiple barriers to aligned perspectives, policies, professional supports, and implementation of effective transition practices. Starting with perspectives, empirical evidence and theory suggest that one barrier to aligned perspectives between preschool and K-12 teachers and administrators is a history of seeing each other as separate entities with differing professional education and certification systems (Bruner,

2013; Coburn et al., 2018; Desimone & Stuckey, 2014; Kauerz, 2018, 2019; Koppich & Stipek, 2020; Purtell et al., 2019). Koppich and Stipek (2020) also suggest that different licensing requirements, as well as different salaries and job expectations, can be a barrier to aligned perspectives. Even preschools and elementary schools that are co-located may face structural barriers to meaningful collaborations when pre-kindergarten directors are not included in the district's administrative structure or decision-making (Koppich & Stipek, 2020).

Some authors also note that an additional challenge to alignment is the tension between those who advocate for a developmentally appropriate approach and those who advocate for a strong academic instructional approach (Halpern, 2013). These perspectives on the nature of education across systems may impede aligned perspectives on the transition.

What Did Key Informants Say?

Almost all our key informants echoed this sentiment. Some even predicted potential negative consequences of a push for transition activity alignment. One informant suggested that there may be pushback within Head Start if efforts to align transition activities leaned too heavily on an academic instructional approach. Head Start teachers may feel like they are being asked to “teach to the test” and incorporate too many kindergarten activities, which they may view as developmentally inappropriate, in the spring prior to kindergarten. Given this tension, all key informants emphasized the need to incorporate coordinated transition activities into the broader continuum of children's development.

The majority of our key informants also suggested that a lack of understanding about what the other system does is a barrier to aligned perspectives. One informant explained that “Most elementary school principals have very little understanding of what is happening in [any type of] community pre-kindergarten settings. They may not even know what Head Start does, how Head Start can benefit them. For instance, Head Start collects immunization records, and if that could be shared, then that is one less thing for elementary schools to worry about.”

If aligned perspectives result from opportunities to build relationships across settings, barriers to opportunities for cross-system meetings and collaborations are another obstacle to aligned perspectives. Administrators encounter significant barriers at the systems level, including a lack of tracking mechanisms available for children's experiences prior to kindergarten; entrenched perspectives that see Head Start and elementary schools as distinct and separate entities; uncertainty with respect to

enrollment related to part-time only kindergarten offerings, school choice, and charter schools; differing professional education and certification systems; and multiple systems and funding streams (Brandt, 2013; Desimone & Stuckey, 2014; Purtell et al., 2019). In interviews about transition practices, Head Start directors cited barriers to coordination with elementary schools that included time, resources, scheduling, and relationship building (Cook et al., 2019). They noted that policies such as MOUs were not enough and that even when all parties signed MOUs, it did not always lead to coordinated practices.

What Did Key Informants Say?

According to most key informants, the biggest limiting factor to intentional engagement with and execution of best practices is time—even more so than dollars. “There are eight hours on the professional development calendar and five days on the transition week; there’s a lot to cover and a lot of competing interests fighting for time.”

Lack of training at the administrator level was also a challenge for one-third of respondents in a study that included 125 elementary school principals from 114 of Nebraska’s 245 public school districts. These respondents had not completed any coursework or attended any trainings or conferences related to kindergarten transitions (Snyder, 2016). Respondents also reported the following barriers: lack of cross-system communication, lack of alignment of perspectives, and lack of resources (financial, time, facility, and/or human resources).

Logistics and resources are also hypothesized to be barriers for aligned perspectives among families and schools. For example, a mixed-methods, descriptive, and interview-based study found that parent work schedules can inhibit parent-teacher and parent-school communication (La Paro et al., 2003). Additional research based on both surveys and qualitative analyses suggest that lack of parent participation in open houses, difficulty in connecting with hard-to-reach families, and difficulty communicating with non-English speaking families are additional barriers to creating aligned perspectives between families and school staff (Arneson, 2016; Curby et al., 2018; La Paro et al., 2003). These barriers prohibit the ability to understand each other’s perspectives and become more aligned. For teachers, logistical constraints such as the class list being generated too late and lack of dedicated time necessary to support family outreach, are considered barriers (Early et al., 2001).

What Did Key Informants Say?

As one key informant noted, Head Start/pre-kindergarten centers and elementary schools “fumble the handoff” when it comes to family engagement. In that pivotal transition, families are sent a message about their limited role in the K-12 system, making it difficult to increase family engagement later on.

Lack of aligned perspectives may also lead to a lack of aligned policies. Holcomb and Sudol (2014) studied the challenges and successes in developing school-community partnerships as New York City’s universal pre-kindergarten unfolded through surveys and interviews. They note that one barrier to implementing policies that support kindergarten transitions is a lack of understanding of the other system (note the relation to Perspectives, described above) or the policies that govern that other system. Holcomb and Sudol (2014) also note that school administrators and community-based educators alike mentioned that finding predictable, stable funding poses another challenge to implementing policies.

Holcomb and Sudol’s research also suggests that bridging these two worlds (the two systems in our TOC) will require policies that focus on partnerships—or those that promote shared perspectives and shared professional supports. Through policies, more cohesion will develop around the delivery of early education services. But in order for that to happen, they suggest that more resources, technical assistance, and professional supports are needed to address the differences in perspectives and knowledge.

What Did Key Informants Say?

Research is consistent with a statement by one key informant, who noted that training and guidance need to be provided to all actors on the spectrum. Otherwise, policies may be seen as setting up accountability metrics rather than truly leading to practices that help prepare families for the kindergarten transition.

Key informants for the HS2K Project also often cited the complexity of the K-12 decision-making system as an obstacle for reciprocal communication. Complexities of district relationships and decision-making, which influence how policy and practice are set in kindergarten, make it difficult for Head Start centers to effectively plan for transitions. A lack of institutionalized knowledge transfer can reflect a deeper lack of understanding on both sides of what is happening in kindergarten

and Head Start classrooms. A key informant noted one other barrier to schools' or districts' policy implementation—the complexities of transitioning children from different ECE contexts (e.g., child care centers, Head Start, home-based care), many of which have their own policies in place around transitions. The uncoordinated nature of the ECE field presents its own challenges as districts seek to align perspectives and policies and implement policies addressing kindergarten transitions.

Although limited, some research discussed the barriers to implementing systemic, effective professional supports across systems. For example, Cook and colleagues' (2019) qualitative work shows that Head Start directors found it challenging to engage in joint professional development with elementary schools given their different daily schedules, calendars, and set professional development days. Several key informants also spoke about this.

What Did Key Informants Say?

One key informant pointed out a general lack of understanding of what best practices for professional supports actually look like. This key informant also noted that a lack of time and financial resources prevented the successful implementation of effective training and professional development.

Several other key informants suggested that one way to create more space for coordinated professional development would be to align professional development time or teacher in-service days between K-12 and Head Start programs in a community. This could be an effective policy shift for fostering connections between preschool and kindergarten educators and aligning transition practices.

All of these challenges and barriers to successfully aligned perspectives, policies, and professional supports serve as barriers to successfully implementing high-quality, aligned transition practices.

Summary of Evidence Supporting the TOC

This section seeks to summarize the state of evidence around effective transition strategies—as historically thought of (e.g., teacher practices) and as we more broadly envision transition strategies (i.e., inclusive of the 4Ps in the HS2K theory of change). At a 10,000 foot level, effective transition strategies include a range of practices sustained

over time (including both prior to, during, and after the transition), are individualized, and involve communication and coordination between preschool and kindergarten settings. These broader transition strategies engage multiple partners in reciprocal relationships that take into account different perspectives. They are also bolstered by professional supports and training and are part of a systematic effort to align pedagogical approaches, expectations around kindergarten readiness, standards, curricula, and assessments between preschool and kindergarten settings. The literature suggests that we know quite a bit about specific, concrete practices – at the classroom and program level and across Head Start and elementary schools (RQs 1 & 2). However, we know much less about the broader supports for educators and families, such as policies and professional supports to improve transitions and efforts to align perspectives and identified roles throughout the transition process (RQ 3). And because we know less about those facilitators of successful transitions, we also know little about the mechanisms through which those would support key short- and long-term outcomes (RQ 4). Throughout this section, we highlight key findings from the literature and note where more evidence is needed to better understand how to support children, families, and teachers throughout the Head Start to kindergarten transition.

Practices that Support Kindergarten Transitions



Research literature primarily focuses on individual transition practices that typically occur at the classroom/teacher level or program/school organization level.

In the center of the HS2K theory of change is a pink box representing coordinated transition practices. This is the lynchpin of the TOC, which brings together the higher, systems-level strategies within and across Head Start and K-12 and connects them to the ground-level interactions among teachers, children, families, and their local community partners. Indeed, as shown in the TOC, strategies to support children's kindergarten transition can occur at multiple levels—all the way from federal and state policies down to Head Start grantee and K-12 LEA strategies, to organizational (program- and school-level) strategies, and to classroom/teacher practices dealing directly with children and families. Of all these levels, the research literature primarily focuses on those individual transition practices that typically occur at the classroom/teacher level or organizational level and involve meaningful, concrete activities designed to support children/families during the transition to kindergarten.

Research indicates that Family-School/Program practices are very common (Cook & Coley, 2017, 2019, 2021;; Little et al., 2016; Pianta et al., 2001; Puccioni, 2018; Rathbun & Hausken, 2001; Tarullo et al., 2020). These can range from parent orientations, classroom visits, and sending home informational letters; to parent-teacher communications about individual children's development, school readiness, and

expectations in kindergarten; to more intensive practices such as home visits. Research shows that Head Start teachers and administrators tend to engage in more of these practices overall compared to kindergarten teachers. In addition, some studies suggest that Head Start teachers and administrators may be more likely to engage in practices that focus on children's school readiness and prepare families for the expectations of kindergarten, while elementary teachers are more likely to engage in practices that acquaint families with the new environment.

The other types of practices that emerge in the literature are Program-School practices that foster connections *between systems*. These include teacher meetings or classroom observations, information sharing, and holding joint professional development sessions (Cook & Coley, 2019; Tarullo et al., 2020; Emfinger, 2012). Both the sending program (Head Start) and the receiving school (kindergarten) can initiate these practices. However, programs and schools engaged in these approaches less commonly than the School-Family practices noted above, likely because they are time-intensive and require systems and supports in place to make and maintain relationships between systems.⁶



Research is limited on the extent to which organization-level practices occur and the quality of practices.

Both Head Start programs and elementary schools can also engage in more organizational-wide strategies to support children's transitions. These strategies can include the development and provision of professional supports (e.g., training, coaching, dedicated time and resources, systems/procedures for sharing data, logistical considerations such as earlier distribution of class lists) and policies (written transition plans, mandated practices, designation of a district leader) that establish norms and priorities for transition practices, promote cross-system communication, and support effective implementation of transition practices. While we know these are occurring in some locations, the literature is limited on the *extent* to which Head Start programs or elementary schools are using these organizational-level strategies. The research that does exist suggests that fewer than half of preschool teachers and fewer than a quarter of elementary teachers receive any type of training on transitions, which is one of the most cited organizational strategies used (Abel et al., 2016).

There is also little research on the quality of these transition strategies. While research does suggest that *more* strategies are related to better child outcomes, we would hypothesize that higher-quality implementation would yield the greatest benefits for teachers, parents, and children. In addition, research has also shown that specific practices may drive the findings on better outcomes, including practices that directly connect families, teachers, preschool programs, and schools. However, more research

⁶ Note that our findings include both Head Start-specific research and those focused on broader ECE settings. However, we bring all of this together to focus on the Head Start to kindergarten transitions, as does the goal of the HS2K Project.

is needed to better understand the quality of practice implementation and how that quality relates to experiences that children and families have.



Research is also thin on how children, families, teachers, and other direct service providers experience transition strategies.

Qualitative research suggests that parents value informal conversations about their child’s development and readiness. Parents also shared that the information that teachers, programs, and schools sent to them did help them better understand and prepare for what the kindergarten setting would be like for their child. Despite appreciating the information they received, parents wanted more—to be more involved in transition planning and to know how they could do more to prepare their child for kindergarten. Qualitative research also suggests that teachers and administrators appreciate and learn from both professional development opportunities and cross-system collaborations. Parents, teachers, and administrators also acknowledged challenges, which we note below.

However, this is another area where the field could strengthen research. While there are several smaller qualitative studies, broader research could gain a sense of how teachers, families, and other service providers (e.g., Head Start disability coordinators and family support specialists, school counselors, and other community organizations that partner with programs and schools) experience the transitions process and how they feel about their role in supporting it. Future work may seek to gather more information on roles throughout the transition that would best support their work in preparing for transitions, improve experiences throughout the transition into kindergarten, and describe what effective transition strategies look like.

Relationships are a Key Ingredient for Positive Kindergarten Transitions



Evidence suggests that cross-system collaboration is most effective when relationships are formed.

In order for coordinated transition practices to be implemented, staff within and across Head Start and K-12 must work together—with each other and with families. The work among staff is denoted in the upper portion of the HS2K TOC. As noted in the previous section, these cross-system strategies (Head Start-School practices) are less frequent than classroom/teacher practices (School-Family practices). However, research suggests they are more likely to exist when relationships exist among partners involved in the transition process. Our key informants also noted relationships as being one of the most important ingredients for a successful transition. Relationships are critical for the two different systems (Head Start and K-12) to better understand each other’s structures, expectations, values, and practices so they can become more coordinated.

Our key informants also highlighted the need to take a community approach in which all actors who are involved in children’s education work together to support those children and families. Within a community approach are community partners. While there is limited research on community partners in children’s transition to kindergarten (perhaps due to low, limited partnerships between programs and community organization), more work should focus on this. For example, what roles can and do health care systems, social services, and libraries play, as they are already connected with families and children?



Research emphasizes that relationships are also a crucial pathway through which teachers and families’ efforts lead to positive child outcomes.

The implementation of coordinated transition practices—the center of the HS2K TOC—is likely what leads to positive family and child outcomes (see Exhibit 2). Some evidence suggests that the pathway through which this happens is the development of key relationships. Specifically, Child-School and Child-Teacher relationships become stronger, and research suggests that those relationships encourage growth in learning skills and a reduction in social and emotional struggles. Coordinated transition practices also promote stronger Family-School connections and relationships. These partnerships may increase parents’ knowledge of what to expect in kindergarten and how to support their child through it, ease parents’ stress about the transition, and build parent self-efficacy. In turn, parents may be more involved in their child’s education through kindergarten, which is likely to increase students’ attendance and improve their academic and social and emotional outcomes. Lastly, Program-School connections lead to greater continuity in the environments that children and families experience as they transition from Head Start to kindergarten. These, too, have been shown to lead to better social adjustment, work habits, and academic outcomes among children.



Supporting Cross-System Coordination and Relationship Building

Building the relationships that make cross-system collaboration most effective requires funding and dedicated time and resources for professional supports. True collaboration (versus coordination or cooperation) includes shared norms and commitment to the collaboration and the involvement of a wide range of stakeholders, each of whom have an authentic role in the process. From literature and especially key informants, we learned that leadership enables these partnerships. Leadership is most effective when leaders value the development of relationships across systems, have a point person responsible for setting the expectations of collaboration, and see all children in their community (compared to only those in their programs or school) as part of their responsibility. Literature also suggests that collaboration and relationship building across ECE and K-12 systems is bolstered by structures that more easily allow for data and information sharing and co-location of preschool within the school buildings (including Head Start and state-funded pre-k). In this section, we highlight key factors that research suggests facilitates the development of relationships and implementation of coordinated practices.



Federal and state-level funding and policies can result in transition planning teams (a coordinated professional support) and/or district-level transition policies.

Key contextual factors that influence the strength of the connection between higher-level policies and program/district-level policies include local political context, community resources, and a shared belief in the importance of supporting children's transitions across systems (perspectives). These are represented in the upper circles of the HS2K TOC, and in particular, the cross-system moderators that link the Head Start and kindergarten circles together. These program/district-level transition policies support the development and implementation of transition plans at the district level, allowing for cross-system collaborations and professional development and supports. In

the literature, it is suggested that these also lay the groundwork for alignment of curricula standards with assessments and can lead to cross-system practices such as transitional kindergarten or summer kindergarten transition programs (Atchison & Pompelia, 2018; Patton & Wang, 2012). Together, all of these strengthen culture and norms that prioritize transitions, which lead to more consistent implementation of practices supporting teachers, families, and children throughout the kindergarten transition. Shared involvement in transition planning then leads to more aligned perspectives, highlighting the bidirectional or circular nature of mechanisms within our TOC.



Professional supports are a necessary component of implementing coordinated transition practices between Head Start and kindergarten.

Another piece of the HS2K TOC – professional supports for kindergarten transitions – lead to increased administrator and teacher knowledge of child development and how to directly support families and children throughout that transition. Increased knowledge is a mechanism through which educators then express increased self-efficacy, which in turn promotes increases in the implementation of a wider variety of transition practices. When professional supports are shared across systems (the “shared professional supports” in the HS2K theory of change), they foster a deeper sense of knowledge around what the other side of the system is doing and the policies that guide their practices. When implemented well, these shared professional supports help to develop trust and stronger relationships between Head Start and K-12 systems, more aligned perspectives and coordinated goals, and ultimately stronger cross-system collaborative transition practices.



Aligned perspectives, in and of themselves, offer a key mechanism through which policies and professional supports result in coordinated transition practices.

Aligning perspectives is a crucial underpinning of coordinated transition practices. The HS2K Project considers aligned perspectives as those in which each partner (administrators, teachers, other staff, community partners, and parents) takes part in the transition process. When there are aligned perspectives, there is also a shared or complementary understanding *across partners within Head Start and K-12 systems and across systems* about how they can each contribute to supporting teachers, families, and children through the transition. When Head Start and kindergarten teachers, along with parents, hold common understandings of their roles and responsibilities in working together to support children through the transition to kindergarten, their own communication, trust, and connections strengthen, their self-efficacy increases (for both teachers and parents), and therefore, the use of and engagement in transition practices increase.

Existing Barriers to Cross-system Relationships

Our literature review focused on the supports and barriers of creating common or shared perspectives, policies, and professional supports—all in the service of bolstering coordinated transition practices that lead to positive teacher, family, and child outcomes. The barriers exist at different levels, starting from the highest system levels to organization levels to classroom/teacher/family levels.

As noted above, aligned perspectives can lay the groundwork for coordination across systems. However, in the literature and key informant interviews, we learned that perspectives are often not aligned in terms of expectations for kindergarten readiness and which developmentally appropriate pedagogical practices are based on knowledge of child development. Key barriers to creating more alignment around perspectives include different sets of policies and expectations around the purpose of pre-Kindergarten (including Head Start) and kindergarten, particularly due to a history of those systems seeing each other as (and being funded as) separate entities. There is also a lack of dedicated time and resources to support cross-system engagement activities (or professional supports). Aligning perspectives between practitioners and parents is also important, but parent work schedules can inhibit parent-teacher and parent-school communication and parent participation in transition activities. This makes it difficult to come to a common ground on how to best support children through the transition to kindergarten.

Research on the key barriers to having policies that are aligned with one another is limited. However, ideas emerged from our key informant interviews. These included the lack of funding or the different funding streams that drive each system (Head Start and K-12), the lack of understanding of the other system's policy context, and the lack of aligned perspectives of personnel who work in different systems. The limited literature also points to structural policies such as aligning schedules in order to allow for joint professional days and time for teachers to visit each other's programs (Patton & Wang, 2012). Despite these emerging themes from key informants and a small amount of literature, there is considerable room for more research on policy implementation and what facilitates and hinders that implementation in the area around Head Start (or any ECE program) to kindergarten transitions.

A Need for More Research

In sum, the research literature of key facilitators and barriers of coordinated policies, professional supports, and perspectives—which then bolster coordinated transition practices—is thin. However, there are ideas about what facilitates and impedes relationships across systems that emerged from grey literature or theories, and we should test those theories through more rigorous research. These ideas suggest that sustained, meaningful relationships across systems require professional supports that,

at minimum, complement each other and work in alignment with one another. To facilitate direct relationship building, those professional supports may actively bring together administrators, teachers, and other staff from across the two systems. Barriers to these aligned or coordinated professional supports may include not knowing what sorts of professional supports would be useful or effective, lack of time and financial resources, and lack of aligned policies or in-service days across systems. As we learn more about the facilitators and barriers to implementing aligned perspectives, policies, and professional supports on each side of the system as described in the HS2K TOC (see Exhibit 4), we are likely to better understand how intertwined those Ps are. Based on this theory of change, attention to all these Ps is necessary to create cross-system coordination that will best lead to effective coordinated practices. Ongoing research is needed to fully understand these interactions, how they relate to strong implementation of these coordinated transition practices, and the impacts those have on teachers, families, and children.

Conclusion and Next Steps

Throughout this report, we presented the current evidence of how to best support the transition from Head Start to kindergarten. Overall, multiple quantitative studies with large sample sizes (some nationally representative) link Head Start/ECE program transition practices, kindergarten transition practices, and coordinated transition practices to positive teacher, family, and child outcomes. In addition, there is some evidence that professional supports lead to more transition practices, which in turn are theorized to relate to better teacher, family, and child outcomes. However, many of these studies use similar measures of transition practices and contain gaps in the types of strategies programs and schools may be taking. Additionally, many surveys ask only yes/no questions about practices, which fails to provide detailed information that might contextualize and differentiate various practices. Future work on measure development could address these shortcomings.

In many cases, there was limited research—especially on understanding the broader systems- and organization-level influences on transition practices. There is substantially less research (and mainly from small qualitative studies) on how policies and perspectives support successful transitions and how policies, perspectives, and professional supports for kindergarten transition interact and form pathways among and between one another. Thus, much more research is needed to understand better (1) the interplay of transition policies, perspectives, and professional supports; (2) how they interact with other moderators to support coordinated transition practices; and (3) how these relationships form the foundation for practices that successfully influence positive child outcomes.

The HS2K Project laid out a theory of change that incorporated these broader organization-level constructs, which we hope will guide future research. As noted by Ehrlich et al. (2019), what a teacher does inside a classroom is *not* independent of the supports and climate outside the classroom, within programs and schools. Strong supports for kindergarten transitions are most likely to exist when strong relationships are built—from the systems level down to the classroom level, within programs and schools and across them, and with families and community partners. Future development of instruments and possible descriptive studies across the nation could help fill in these gaps.

Over the next several years, the HS2K Project will embark on a comparative multi-case study to better understand how effective transition strategies are supported on the ground, as well as how these strategies are experienced by children, their families, and their teachers. This will provide research on how strong supports play out in practice and how they relate to perspectives, policies, and professional supports in both Head Start and LEAs. In addition, they will begin to test aspects of the theory of change by documenting contextual differences and exploring how those relate to the implementation of the 4Ps. Our aim is to identify concrete examples of how Head Start programs and LEAs work together and to share promising practices with other programs and LEAs across the country.

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Appendix A: Details of Literature Review Methods

Search Terms

We identified **recent reviews and meta-analyses** by conducting a search specifically for reviews of the literature and meta-analyses related to transitions to kindergarten published in the United States since 2010. Searches initially included the terms “kindergarten transitions” or “transitions to kindergarten” and were constrained to include only reviews of the literature or meta-analyses (either through limiters, e.g., in PsychINFO [ProQuest], or through the addition of terms such as “AND ‘review of the literature’”). The following search terms were used in conjunction with the above terms: “Head Start,” “Pre-K,” “preschool,” “collaboration,” “alignment,” “continuity,” “perspectives,” “practices,” “professional development,” and “policies.” For information on how we extracted data from the reviews, please see the Data Extraction section below.

Search Strategies

Following a review of existing reviews of the literature, we conducted a more systematic search to identify **literature that was not included in recent reviews**. For the areas of the TOC that were adequately represented in prior reviews of the literature, searches were conducted for U.S.-based literature published within two (2) years before or anytime following the most recent systematic review of the literature. This was to capture any literature published right before or after a review came out and therefore did not make it into the most recent review.

For the areas of the TOC not represented in prior reviews or where less or no evidence exists, we conducted more specific searches within U.S.-based literature. The time frame was initially constrained to literature published since 2010 and specific to Head Start (primarily) or ECE (secondarily). If we found limited literature initially, we broadened the search to other sectors examining similar constructs that could be applied to transition practices of interest for our study. For example, if there was limited literature on data sharing or shared curriculum planning between Head Start and elementary schools, we would have looked for literature that examined data sharing or shared curriculum planning across different programs within the mixed-delivery ECE system (e.g., Head Start and state-funded pre-k, or Head Start and center-based child care), as well as between those other ECE programs and elementary schools. If that still resulted in limited research, we may have expanded to even broader areas of education research that included elementary schools and programs outside of

traditional K-12 governance (e.g., out-of-school time), or to organizational collaboration literatures that include the K-12 system (e.g., collective impact; school-based health centers).

Search terms (Exhibit A-1) were developed and organized around the 4Ps: perspectives, practices, professional supports, and policies. Within and across each of these domains, the search terms capture the range of constructs presented in the HS2K landscape and emerging TOC: strategies and mechanisms (in the form of practices, professional supports, and policies) implemented at various levels (teacher or classroom, organizational, and system) to support children as they transition from Head Start or other ECE programs to kindergarten. We also included search terms to capture literature that addresses key contextual factors that can influence kindergarten transitions, such as organizational structure and resources, community and state partnerships, as well as child and family characteristics.

We then conducted searches with each term or combination of terms in three steps: (1) in conjunction with “Head Start,” (2) in conjunction with ECE terms specified below, and (3) in conjunction with terms developed to ensure the literature included research relevant to populations that may benefit from targeted support for successful kindergarten transitions.

Exhibit A-1. Literature Review Search Terms

Search terms	
Perspectives	<p>Transitions to kindergarten, kindergarten transitions, school entry, preschool to kindergarten continuity</p> <p>Note: <i>Each of the terms below will be used alone and in combination with the following: parents, families, teachers, administrators</i></p> <p>Beliefs about transitions to kindergarten, attitudes about transitions to kindergarten, beliefs about school readiness, attitudes about school readiness, benefits of transition to kindergarten, challenges of transition to kindergarten, beliefs/attitudes about kindergarten transition process</p>
Transition practices	<p>Kindergarten transition practices, kindergarten transition activities, kindergarten classroom visits, kindergarten teacher home visits, kindergarten orientation, kindergarten visit, kindergarten open house, kindergarten entry assessment use, kindergarten screenings, kindergarten staggered entry, parent-teacher conferences in kindergarten, sharing assessment data with parents in kindergarten</p> <p>Note: <i>Each of the terms below will first* be used alone and in combination with the following: kindergarten AND (Head Start OR child care OR pre-k**)</i></p> <p>Teacher-to-teacher conferences, teacher collaboration, coordination practices, information sharing, sharing child records, sharing assessment data, teacher classroom visits, teacher classroom observations</p>
Organization-level models and professional supports	<p>Kindergarten transition guides/handbooks; kindergarten transition plans, kindergarten transition programs; kindergarten transition teams; kindergarten transition liaisons; professional development on kindergarten transitions</p> <p>Note: <i>Each of the terms below will first* be used alone and in combination with the following: kindergarten AND (Head Start OR child care OR pre-k**)</i></p> <p>School-community partnerships, professional supports for transition practices, shared space, Head Start in public school buildings, co-location of early childhood education programs, joint training, shared curriculum planning, support for collaboration, administrator collaboration</p>
Systems-level policies	<p>Ready schools, kindergarten transition policies, kindergarten entry assessment</p> <p>Note: <i>Each of the terms below will first* be used alone and in combination with the following: kindergarten AND (Head Start OR child care OR pre-k**)</i></p> <p>District/LEA/grantee coordination, alignment of standards, alignment of assessments, shared data across systems, information sharing across systems, transition policies, policy alignment, cross-sector collaborations</p>

Step 1: AND “Head Start” (where not already specified)

Step 2: AND “Pre-k,” “preschool,” “early childhood,” “child care” or “early care and education” (where not already specified)

Step 3: AND Low-income, migrant, immigrant, disabilities, special needs, homeless, trauma, dual language, low socio-economic status (SES), vulnerable, at-risk

* If we do not find sufficient literature using the above combination of terms, we will combine the terms specified with broader limiters (e.g., substituting “elementary school” or “K-12” for “kindergarten” in the above search combinations). We hope to not venture too far from the education field, but if needed, we could also look at school-community collaboration (e.g., school-based health, family centers, etc.).

** A combination of terms will be used to capture other ECE arrangements, including “pre-k,” “preschool,” “early childhood,” “child care,” or “early care and education.”

Review for relevance

Our research team screened the abstracts of search results for relevance. We selected U.S. publications since 2000 that addressed at least one of the 4Ps in the context of supporting children's transitions from one setting (e.g., Head Start) to another (i.e., kindergarten) for full-text review. Priority was given to literature that was explicitly about the transition from Head Start or other ECE contexts to kindergarten. We flagged articles to indicate whether they were theoretical or empirical in nature.

Data extraction

To describe the literature on kindergarten transitions, we reviewed publications selected for full-text review and compiled data into a summary table. For review of articles and meta-analyses: if the review or meta-analysis summarized anything about one or more of the 4Ps, we relied on the overall conclusions; if not, we went back to individual studies cited in the review or meta-analysis to mine findings for our specific purposes. We extracted information for each of the following dimensions, which we chose specifically for their alignment with our understanding of the landscape, TOC, and research questions we intend to address:

- Article citation
- Article type (review of the literature, meta-analysis, individual empirical article/report, or theoretical article)
- Conceptualizations, uses, or definitions of transitions, coordination, and/or alignment
- Description of transition strategies examined
- Which 4Ps are addressed (perspectives, practices, professional supports, policies)
- Content/substance of strategies identified/examined at each level (classroom/teacher, organizational, system). For example, if we identified an organizational level policy, we will note what, specifically, the policy intended to accomplish (e.g., all principals maintain lists of local ECE programs), what kind of policy it was (e.g., school board enacted; superintendent's decision)
- Head Start-initiated, ECE-initiated, kindergarten/elementary school-initiated, cross-system strategy
- Role of each entity
- Key characteristics of setting/contextual factors
- Whether there is a focus on sub-populations in need of targeted support (specify specific sub-populations)

- Key stakeholders involved (e.g., are school principals AND teachers involved? Head Start family support specialist AND teachers?)
- Organizational context (e.g., models such as co-location, feeder models)
- Relevant systems and/or policy circumstances (e.g., school district practice was enacted in response to a community priority or state policy not specifically studied/examined in the article)
- Identified barriers and facilitators to successful transitions (if any)
 - Barriers
 - Facilitators
- Findings with respect to short and long-term outcomes (if examined) of transition strategies for:
 - Children
 - Families
 - Head Start teachers
 - Kindergarten teachers
- Mechanisms identified (if any)
- Methodological considerations/level of rigor (Note: Each of the categories were adapted as needed for review articles/meta-analyses)
- Purpose of study (what were they trying to address/understand?)
- Sample (sample size, representativeness, unit of analysis)
- Design
 - Quantitative, qualitative, or mixed-methods design
 - (1) descriptive/correlational, (2) correlational with controls for bias, (3) quasi-experimental, or (4) RCT
- Datasets and other sources
- Measures used (noting name of measure, reporter of data, information about reliability or validity, citation)
- Measures/constructs used for the 4Ps
- Outcome measures
- Control variables (including sociodemographic context)
- Additional notes regarding methodological or analytic technique (e.g., appropriateness of design for answering research questions)

- Limitations (e.g., in research design or study execution, data analysis, etc.)
- Additional notes

The above dimensions, as well as subdimensions, were refined in collaboration with the Core Leadership Team and were modified based on feedback from the expert panel.

Analysis of key themes

Following the extraction and compilation of information from the publications selected for full review, the research team analyzed key themes and patterns in order to discern an overall portrait of what is known about Head Start and other ECE transitions to kindergarten. This informed the refinement of our working TOC that reflects specific transition activities, processes, key outcomes of interest, and contextual factors for Head Start programs and families, as well as for teachers, schools, organizations, and systems.

The key construct behind our conceptual model is that HS2K transitions engage two separate systems (Head Start and K-12), each with its own governance, finance, data system, history, and philosophy. Similar conditions apply to the transitions children experience from state-funded pre-kindergarten programs (in most states) and/or child care into kindergarten. For this reason, venturing into the literature that addresses the mixed-delivery ECE system was relevant. To the extent that this literature did not adequately address our questions, we explored the literature around how K-12 systems collaborate with other systems, such as health care (e.g., school-based health); family support (e.g., family centers); and community organizations (e.g., collective impact). By remaining in the various literatures that directly address the K-12 system's collaboration with other systems, we ensured that we did not stray from the unique characteristics that define K-12, such as limited federal authority, highly decentralized decision-making, and a goal of improving child outcomes.

The following main questions we elevated during the review map directly onto the project's overall research questions:

- How do teachers and administrators view transitions and their role in supporting transitions? (Teacher and administrator perspectives)
- What are the transition approaches used by Head Start, centers, schools, and LEAs, as reported in the literature? What is the content, quality, quantity, and directionality of these practices? (RQs 1 & 2)
- Classroom- and teacher-level **practices** that are actually experienced by children and families

- **Professional supports** intended to better prepare teachers, administrators, families, family engagement staff, school counselors, or other staff and adults engaged in transition approaches
- Organization or system-level **policies**
- What are key characteristics of settings/relationships (e.g., organizational and community conditions) that facilitate effective transitions? What are some of the barriers to effective transition practices? (RQ 3)
- What are the key short- and long-term outcomes of transition strategies? (RQ 4)
- How does the existing evidence support our proposed theory of change? How does the existing evidence modify our proposed theory of change? Where is the evidence strongest? Where are there gaps in knowledge?

Appendix B: Key Informant Interview Guiding Questions

Introduction

Hi, my name is [NAME] and I'm a [POSITION]. Thank you again for agreeing to talk with me about how we are conceptualizing the Head Start to kindergarten transition landscape. The goal for this interview is to get your reactions, ideas, and perspectives on our conceptual framework⁷ and emergent theory of change. In an earlier email, I sent you these two documents as well as the interview topics we will be covering today. Did you have a chance to review those documents? [If YES, then continue. If NO, say we will review these documents together throughout the interview].

Before we begin, I wanted to remind you that this interview is confidential and we will not use your name in any written summaries. Also, as we mentioned in our email, we will be audio recording this interview to accurately keep track of the information and ideas you share with me today. Do you have any questions before we begin?

I'd like to start out by learning a little bit more about you.

1. Please tell me a little bit about your background. What is your role in your organization?

Our conceptual framework and theory of change highlight our thinking about the Head Start to kindergarten transition and the way we are approaching our project. For the next set of questions, I will ask you about different components of these visualizations and get your perspectives and ideas. [Share screen with these visuals]

2. We are defining transition from the time when students enter Head Start, through their entry into kindergarten, until the end of their kindergarten year. In your experience, what are the most common types of transition practices engaged in by Head Start and elementary school?
 - a. What are some of the best and/or most innovative examples you have seen or witnessed in the field? What do children and their families actually experience, e.g., do they engage in an activity? Do they receive materials?
 - b. Probe for both at the Head Start and at the elementary levels, as well as the community level, and what those practices look like, and where they are happening.

⁷ Throughout this interview protocol, we referred to our understanding of the landscape, as presented in this report, as our "conceptual framework."

Thank you for sharing that information. I'd now like to talk about outcomes and how we and others in the field think about what may result from transition efforts.

3. We often talk about the success of Head Start and transitions in terms of child outcomes. What other types of positive outcomes do you think are most influenced by effective transitions? Are there any potential negative outcomes you can think of?
 - a. Probe both positive and negative: What would that look like for families? For Head Start teachers? For kindergarten teachers? For administrators? For elementary schools and early childhood programs as a whole? For a community?
4. How do you define a successful Head Start to kindergarten transition? Given the ways that you define success in terms of transitions, are there specific outcomes we should consider adding or emphasizing in our theory of change?
5. One area that we highlight in both the framework and the theory of change is the multilayered stakeholders that are engaged on Head Start and elementary school sides. Are we missing key players, organizations, or other stakeholders, on either the Head Start or elementary sides? If so, what are they and where might they fit within our theory of change?
 - a. What do you see as key roles/responsibilities of [different levels that are relevant to key informant – state, Head Start grantee/LEA, Head Start director/elementary principal]?
6. In the conceptual framework, we listed a number of contextual factors (policies, community and organizational conditions, pre-existing values and mindsets, resources, management structures and support) that influence and shape the transition landscape.
 - a. Do you have any ideas or suggestions for how we could incorporate these factors into our emergent theory of change?
 - b. Are we missing any important factors?
7. Another important factor we include in our framework and theory of change is the coordination and collaboration across these two systems. What are your reactions to how we have conceptualized coordination and collaboration?
 - a. What is missing or confusing with how we've visualized or thought about these pieces?
 - b. What do you think is needed to help improve coordination/communication across these systems in order to have effective Head Start to kindergarten transitions?

- c. What gets in the way of having better coordination and communication across these systems?
8. As part of this project we will be conducting case studies of Head Start to kindergarten sites to document successful transition approaches and practices. Do you have any recommendations for specific places we should consider for our case studies?
 - a. We want to visit places that are doing Head Start to kindergarten transitions well, and/or creatively and in systemic ways. Where have you seen examples of anything we've talked about so far working well?
9. In what ways, if any, would our theory of change look different for specialized populations of families or students (special education needs, cultural/linguistic variations, exposure to child welfare system, exposure to trauma, etc.)?
 - a. Are there specific needs or contextual factors that need to be added or addressed? What are some examples?
10. In thinking about Head Start specifically, where are key levers to ensure successful transitions to kindergarten at scale? For changes that better support transitions?
 - a. Probe for:
 - i. Resources (financial/material)
 - ii. Partners to help facilitate coordination
 - iii. Professional Support (e.g., professional development for teachers)
 - iv. Policies or guidelines
 - v. Shared vision/values
 - vi. Specific practices or strategies
11. For Head Start, where are the major barriers to effective transitions?
12. In thinking about the elementary schools and school districts, where are our levers for supporting and/or facilitating effective transitions?
 - a. Probe for:
 - i. Resources (financial/material)
 - ii. Partners to help facilitate coordination?
 - iii. Professional Support (e.g., professional development for teachers)
 - iv. Policies or guidelines?
 - v. Shared vision/values?
 - vi. Specific practices or strategies?

13. For elementary schools, where are the major barriers for effective transitions?
14. If you could do anything to change the way that that the Head Start and elementary school systems currently operate around transitions, what would it be? What are potential levers for change?
15. Is there any seminal or new work, such as research projects, approaches, practices, and/or field-based reform efforts, happening right now that we should be exploring that could help inform our theory of change? If yes, do you know who the contact person is for this work?
16. Are there any other things that we should be considering or thinking about as we revise our theory of change?

Those are all of the questions I have. Is there anything else you would like to share with me today?

Thank you for taking the time to speak with me today. If we have additional questions, is it okay to follow up with you by email?