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PREK-12 IS THE NEW REALITY: HOW DO WE MAKE IT WORK?

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Preschool attendance is now the norm, and preschool is increasingly built into K-12 school systems. In many respects, as kindergarten has become the new first grade, preschool is becoming the new kindergarten. In this article, we draw on our four-year study of school district efforts to create more seamless pathways from preschool to elementary school. We offer a framework based on this and others' research for considering strategies to ensure the long-term benefits of investment in preschool and to improve student learning in the early grades.

There are good reasons for the expansion of preschool. High-quality preschool can help K-12 districts and schools be more effective overall and reduce the achievement gap which is typically substantial before children enter kindergarten (Reardon, 2013). Second, we know from neuroscience that there is substantial growth in brain functioning during the first five years. This growth, which is significantly affected by children's experiences, creates the foundation for later learning (National Scientific Council on the Developing Child, 2007). Third, there is ample evidence that high-quality preschool experiences, especially if followed by high-quality instruction in kindergarten and the early elementary grades, have long-term positive effects on students' success in school (Yoshikawa et al., 2013).

Preschool ecology is complex and fragmented, with children often coming to kindergarten from many different kinds of preschool or with no preschool experience at all. Increasingly, however, preschool is part of the district system, overseen by district staff and under the elementary school principal's leadership. District and school-level administrators throughout the U.S. are trying to figure out how to incorporate preschool productively and seamlessly into a system which until recently started with kindergarten.

There is no clear roadmap for how to incorporate preschool into district and elementary schools in terms of organization, staffing, curriculum, assessment, and so on. Much is written encouraging districts to embrace preschool and create continuity between preschool and third grade (Kauerz, 2006; Kauerz, Ballard, Soli, & Hagerman, 2021). But there is little research on how best to optimize the benefits of preschool as children progress through the elementary grades.

Ultimately what matters is providing children with a continuous educational experience in which each grade builds on what was learned in the previous grade, maximizing and sustaining the gains made in preschool to achieve better developmental and learning outcomes overall. To achieve this, skills taught in each grade must help children move toward the next step in achieving academic standards. Instruction is targeted just beyond students' skill levels using similar pedagogical approaches adjusted to be developmentally appropriate. Children are given

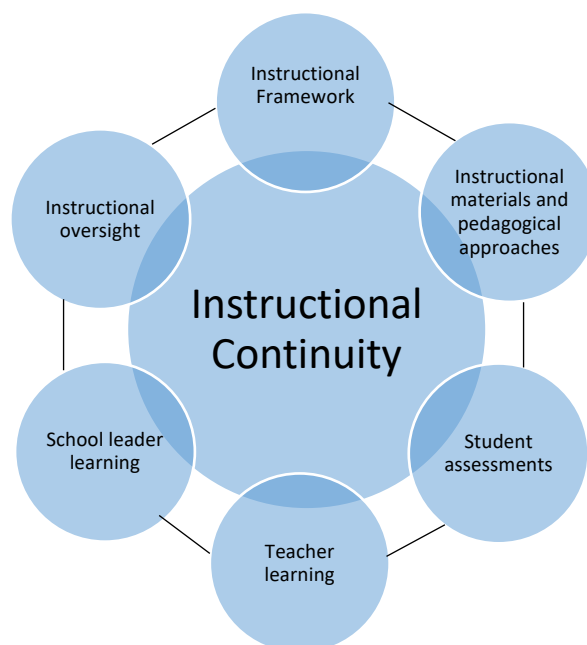
opportunities to broaden and deepen the skills they learned in the previous grade by applying them in novel and diverse contexts. This is what we mean by instructional continuity across grade levels.

Note that continuity in instruction can be achieved by implementing similar but ineffective instructional strategies throughout the grades. Thus, while seeking greater continuity in instruction, attention needs to be given to the quality and effectiveness of the instruction as well as how continuous it is across grades.

While the interactions between teachers and students within the classroom are what matter most, these are affected by myriad school and district policies and practices. Researchers have identified five elements that district leaders need to consider in their efforts to support effective instruction (Hopkins & Spillane, 2015; Hopkins & Woulfin, 2015). Our own research on P-3 continuity revealed that these same five components, plus an additional one that is specifically relevant to preschool (school leader learning), are critical to an aligned and continuous system that maximizes children’s learning and development.

These elements serve as a framework, depicted below, for reviewing practices and policies designed to achieve effectiveness and continuity. The lines connecting the elements denote the need for each element to be aligned with the other elements. While all these elements are essential, the specific strategies used in each to achieve continuity are likely to vary, depending on state policies, the size of the district, resources, students served, and many other factors. There is, therefore, no manual for this work. But the framework can guide conversations, informed by the local context. Because policies and practices interact to form a package, it is necessary to look both at the specific elements of the framework and at their connections to each other. It is the whole package—the way various policies and practices are aligned and reinforce each other—that matters. Next, we explain each of the elements.

Elements of a System to Support Instructional Continuity Across Grades



The first element is ***instructional framework***. Instructional frameworks provide a vision for specific subject areas and guidance on what to teach and how to teach. Some districts rely on state standards and mandates; others develop their own or elaborate on the state standards. To guide how teachers teach, one district we studied created instructional practice guides aligned with the Common Core Standards---an observation tool that specifies core mathematical practices across grade levels. This tool was useful in getting district and school leaders aligned with each other, and between administrators and teachers across grade levels. Another created what they called the Math Teaching Toolkit, which was also about pedagogical approaches.

Typically, school districts' instructional frameworks apply only to K-12 but not to preschool. Extending the framework applied in the early elementary grades to preschool can improve instructional continuity. Many practices that are appropriate for older children need to be adapted for young children, so care is needed to ensure developmental appropriateness. In some cases, frameworks that apply to preschool might be extended upward into the elementary grades. For example, self-regulation and social emotional development are typically central to preschool standards, but often overlooked in the elementary grades. This disconnect occurs despite evidence that many children in the early elementary grades could benefit, both academically and socially, from greater attention to these dimensions of their development. For example, classroom norms and practices that are similar across grades can facilitate classroom management. In one school the teacher raised her hand when she wanted children's attention. When children's saw the teacher's hand up, they raised their own, making it easy for all children to become aware of the need to become quiet and face the teacher. Preschool

children who had learned this practice had no need to be taught and adapt to a new practice in kindergarten.

Instructional materials and pedagogical approaches constitute the second element. Continuity in instructional materials is difficult to achieve because few commercially available curricula cover both preschool and elementary grades. Even if different curricula are used, however, they can be selected with a close eye toward their connections and the pedagogical approaches they promote. The kindergarten curriculum, for example, should build on the content of the preschool curriculum, using similar teaching strategies.

The curriculum provides guidance on the scope and sequence of skills. But how teachers implement the curriculum is at least as, if not more, important than the curriculum used. Instructional continuity requires a great deal of attention to the quality and consistency of pedagogical practices. Consistency in practice does not mean that the exact same strategies are used in every grade. The same pedagogical approach may look quite different depending on students' ages and skills. For example, while third graders might be able to verbally explain how they solved a math problem, younger children may need to explain by manipulating objects or drawing a picture. The general principle of having children explain their reasoning can apply across grades, but adjusted to be age-appropriate. Similarly, third graders may discuss a story they read themselves while preschoolers discuss a story that was read to them. The purposes and activity are similar, but adjusted to be appropriate to their respective skill levels. Being consistent with practices contributes to children's learning because they don't have to learn a whole new way of doing math or learning to read when they move from grade to grade. If the practices reflect what is known to be effective instruction, using them continuously will also boost children's learning.

Student assessments are the third element of the framework. The most important student assessment for guiding instruction is embedded in teaching. Teachers pay attention to what children understand and have mastered as they engage in instructional activities with them and they make appropriate adjustments to instruction in the moment. Some teachers keep a written record of what they observe. To make sure they have an accurate assessment of all children, they may give more systematic formative assessments at the end of a unit or time spent on a particular set of skills. These assessments need to be closely linked to the curriculum and can be used to guide instructional next steps for some or all children.

A second purpose of student assessment is to provide information to schools and districts about student progress toward meeting standards. These assessments can be used to assess the effectiveness of new policies and practices and to guide decisions about teacher professional development. Some districts aggregate the formative assessments teachers give to track overall progress and progress by different groups of students. More often, assessments directly aligned with standards are given two or more times over the course of the year.

Many states do not require student assessments until third grade, but most states and districts use some form of assessments before then. In our work with districts we find that the preschool assessment is rarely continuous with what is used in kindergarten, and few commercially available assessments span preschool and the early elementary grades. Continuity of assessments that track student progress between preschool and the early grades can help districts determine whether the policies they have implemented are working effectively to support children's progress and reduce the achievement gap. Ensuring continuity of assessments across grades has the added value of providing useful information on whether children are on track to meet expectations in the next grade or whether additional support needs to be provided. Given the typically wide span of skill levels in any grade, there should be some assessment overlap from the previous and subsequent grades. Ideally, assessment instruments are continuous, showing where children are on their learning trajectory regardless of their grade.

Assessments are only useful if they are made available to the people whose decisions they can inform, whether at the district, school or classroom level. For example, kindergarten teachers can use evidence on the skill levels of the children entering their class to plan initial instruction—to make sure that it builds on rather than repeats what children have already learned. Principals can use the information to determine whether specific resources will be needed to address the needs of particular children entering kindergarten.

The fourth element of the framework is the *system for teacher learning*. This includes professional learning programs and coaching, as well as opportunities for teachers to meet and learn with one another in professional learning communities. In general, preschool teachers are offered fewer professional learning opportunities than are teachers of older children, despite their critical role in creating the foundation for children's future learning. Including teachers from preschool and the early elementary grades in the same professional learning or having the same coach work with both groups can contribute substantially to instructional continuity while providing preschool teachers opportunities to develop their skills.

Teachers also benefit from meeting with each other across the grades. Preschool teachers need to understand the educational program for which they are preparing children and kindergarten teachers need to know what children are taught before they come to their classrooms. Research based on a national representative sample revealed that kindergarten teachers often repeat instruction on skills that children had already mastered before entering kindergarten (Engel, Claessens, & Finch, 2013). Further research showed that the more that teachers repeated content, the less children learned in kindergarten (Engel et al., 2016). This is a likely reason that studies often show “fade-out” in the effects of preschool; the advantage of preschool compared to children who did not have preschool fade over the first few years of elementary school. If children repeat in kindergarten what children learned in preschool rather than help them continue to develop their skills, children who did not have the advantage of preschool catch up. A better understanding of the preschool instructional program would help kindergarten teachers build on skills that children mastered.

Another reason for teachers meeting across grade levels is that the span of children's skill levels that teachers of different grades have in their classrooms is highly overlapping. Preschool teachers may have some children in their classroom who are sufficiently advanced in their learning to begin working on kindergarten-level skills. For preschool teachers to support children's continued development, they need to be familiar with the kindergarten standards and curriculum. Likewise, kindergarten teachers are likely to have some children in their classroom who have not mastered all the skills expected of preschoolers. They need to know how to provide these children with developmentally appropriate instruction.

For logistical reasons, it is often difficult for preschool teachers to meet with elementary grade teachers, and there are other common obstacles, such as differences in training, credentials, and pay that make collegial connections difficult (Koppich & Stipek, 2020; Stein & Coburn, 2021). Although not easy, there is considerable value to making efforts to bridge this divide.

The fifth element of the instructional guidance infrastructure is ***school leader learning***. Principals do not typically attend district or other workshops offered to teachers on instruction. Without substantial knowledge of what teachers are attempting to do, it's difficult for leaders to support and reinforce teachers for their efforts. Indeed, what teachers are learning in professional learning programs or from coaches is occasionally contradicted by school leaders, creating teacher frustration and confusion rather than instructional coherence. Principals and other school leaders clearly need to be deeply involved in any effort to improve teaching.

To take full advantage of preschool, school leaders need to learn how to support the preschool classrooms at their school site. A study of 25 districts in California revealed that principals typically limited their role to administrative or operational oversight because they lacked requisite knowledge about early childhood education (Koppich & Stipek, 2020). Preschool is neither part of principals' administrative training nor necessarily included in their district-offered professional growth and development. As a result, principals often defer to the teachers themselves or external learning opportunities rather than support them directly in developing more effective instruction that is continuous with kindergarten.

In our study of two districts' efforts to create better alignment between preschool and K-3, elementary school principals in both districts formally supervised the preschools on their campuses. In one district, principals were given the option of some training in early childhood education, which few availed themselves of, in part because their direct supervisor was not reinforcing the superintendent's emphasis on P-3 coherence. In the other district, all the principals attended an institute on early childhood education developed by the district, followed up by classroom visits that district leaders also attended. In the former district, principal interviews revealed low confidence in their ability to provide meaningful supervision and support, and some resentment of having to take on the additional work of preschools; they engaged with preschool mainly around operational issues (e.g., compliance paperwork, IEPs). In the district where school leaders received consistent messages about the value of preschool and training and support in early childhood education, principals were more likely to value

preschool, express a strong sense of responsibility for its success, and engage instructionally with the preschool classrooms.

The final element of the instructional guidance infrastructure is ***instructional oversight***. Instructional oversight is the way that districts monitor instruction and learning in classrooms. It includes practices such as instructional walkthroughs, routines for analyzing data on student performance, and teacher and school leader evaluations. Combining preschool with the elementary grades in these processes provides information on the connections between the two. When district leaders do walkthroughs, for example, they can examine instructional continuity across grades. Preschool can also be included in examinations of data on student learning, teacher turnover, or other indicators of the effectiveness of district, school, and classroom practices.

No amount of information or data or analysis at the district level is useful if it is not conveyed to teachers along with support to help them understand the implications for their practice. Learning that their teaching is not consistent with the district's instructional guidance may not affect their teaching without assistance in making the appropriate changes. Learning that a large proportion of their children are far behind grade level in February can demoralize rather than motivate teachers who are not given opportunities to develop the tools they need to be more effective. Instructional oversight is important, but only as a tool to identify teacher learning needs.

Efforts to productively incorporate preschool into elementary schools and create instructional continuity also raise questions about the organization of district leaders—the people who have responsibility for instructional oversight. If the director of early learning is not part of the leadership team that meets regularly, that person is not likely to be well informed of issues, policies, and practices that might be relevant to preschool, and does not have a regular opportunity to inform K-12 leaders of issues related to preschool. Making the person who is responsible for preschool an integral member of the leadership team also sends a clear message that preschool is a central part of a continuous educational program.

Aligning the Elements

While examining the ways in which preschool is incorporated into practices related to each of the elements in the framework, care needs to be taken to ensure that practices *across* elements reinforce each other. Clearly assessment instruments need to be aligned directly with both the curriculum and the standards. The curriculum needs to be consistent with the instructional framework. Instructional oversight needs to include assessment of how well pedagogical practices reflect the instructional framework, and so on.

Specific practices can also be designed to be synergistic. In one district we studied district and school leaders used the instructional framework to guide their walkthroughs, which included

prechool. They collected data during their walkthroughs that they used to plan teacher professional development. Another district created formative assessments that were embedded in the curriculum to inform teacher practice. They also aggregated the assessment data to use to track student progress and assess district policies and practices.

Conclusions

The framework we offer does not provide a manual for improving continuity between preschool and the elementary grades. Instead, it suggests issues that school and district administrators who want to invest in preschool and ensure its long-term benefits need to address in order to meet their goals. The actual strategies that districts and schools use will vary substantially. By monitoring the effects of district policies on teaching and learning, policies can be fine-tuned to have maximum benefit.

Integrating preschool into elementary school should not involve simply pushing down the elementary curriculum and teaching approaches into preschool, as many advocates of early childhood education fear. It is an opportunity to provide a developmentally appropriate educational program for children throughout the early grades, lay a strong foundation for learning, and sustain the social emotional and academic gains children make in preschool.

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