Tools for providing a seamless education for pre-K-3 learners.

By Sam Oertwig and Sharon Ritchie
Development is at the heart of most conversations about children prior to their entrance into kindergarten, but it is consistently absent from discussions about children’s success beyond age 5. Although development slows down with each passing year, it continues well into adulthood and plays a significant role in teaching and learning, especially for children in grades pre-K-3.

Significant changes naturally occur in children’s bodies, brains, and feelings, and educators best serve their students when they maintain a holistic view.

Educators should consider questions such as:

- How long can a beginning first grader retain information in working memory before it must be used and committed to long-term memory?
- How do teachers change their classroom environments to respond to the developmental changes students will undergo during the course of the school year?
- What types of learning experiences best engage boys at the kindergarten level?

The answers to such questions play an influential role in scaffolding powerful learning experiences that ensure student success.

**Seamless Education**

There are countless ways to think about seamless education. For the purposes of this article we will emphasize just two: the significance of incorporating a developmental perspective in viewing children as they grow and progress through school, and the importance of looking at classroom environments and instructional practice. The content should grow and change in multiple ways in response to children’s backgrounds and their emerging skills, knowledge, and ability.

As researchers with years of experience as teachers, teacher educators, school administrators, and state leaders, we joined legions of colleagues all struggling with our persistent inability to ensure success for minority and low-income students, despite a genuine commitment to serving them well.

In response, we developed First-School, a public school and university partnership dedicated to improving pre-K-3 experiences and outcomes for black, Latino, and low-income children. Our work during the past four years in high-minority and high-poverty schools and districts has taken a unique approach and yielded noteworthy results.
In an effort to provide educators with the ability to see how children’s experiences change as they progress through school, we used data from classroom observation measures (see page 11) to view children’s experiences across the pre-K-3 continuum, rather than simply focusing on individual classrooms or grade levels.

The data illustrate the stark shifts in children’s experiences as they move from pre-K to kindergarten. For example, there is a dramatic change between pre-K and kindergarten in the amount of time children have opportunities for choice (37 percent in pre-K versus 6 percent in kindergarten). Choice activities are often replaced by time spent in whole-group instruction (24 percent in pre-K versus 45 percent in kindergarten).

Choice in a pre-K environment is primarily offered through the use of developmental centers that children access at will. During this time, they have opportunities to select with whom they work, what materials they use, and generally what they will do within the scope of the center. In contrast, whole-group time is usually one of the least flexible times in a kindergartener’s day since it is largely controlled by the teacher and generally characterized as a time to “sit and listen.” Thus, pre-K students move from an environment valuing autonomy and self-reliance to one that tends to restrict movement and value compliance.

Yet, we know that choice helps children meet their innate need to feel competent, belong, and have some degree of freedom or autonomy. Incorporating choice in the classroom environment enables children to have more flexibility and to work from their areas of strength and personal interest. They’re then more likely to feel invested in their work and to draw personal meaning from it.

Throughout the pre-K-3 span, principals should ensure that teachers look for meaningful opportunities for students to select their location for doing work, the materials they use, and the learning content and context, as well as ways to represent their learning. Doing so also encompasses Common Core expectations that children collaborate and talk with one another about how they achieved their final result.

**Framework for Optimal Learning**

To keep instructional conversations focused on seeing children as complex and multifaceted, FirstSchool organized 10 research-based practices into a framework centered on establishing classroom cultures of caring, competence, and excellence.

A culture of caring is foundational to children’s success because it ensures that the optimal social-emotional environment is in place to support learning. A culture of competence ensures that each child becomes a productive, successful, and contributing member of the classroom community. And a culture of excellence empowers each learner to excel beyond minimal standards.

Within each of these cultures are instructional practices that have been identified as especially beneficial for black, Latino, and low-income children in pre-K-3 environments.

- **Culture of caring**—nurture positive relationships, strengthen self-efficacy and racial/cultural identity, and develop the whole child;
- **Culture of competence**—prioritize communication, promote peer interactions, develop self-regulation, and encourage independence; and
- **Culture of excellence**—balance teaching approaches, integrate and balance curriculum, and build higher-order thinking skills.

Although these practices will benefit all children, their absence has a particularly strong negative impact on children of color and those from families of low socioeconomic status. These instructional strategies function as a complete package. Thus, the actualization of all 10 is what ensures academic and social-emotional success for each child.

For each of these instructional practices, FirstSchool provides data and research from peer-reviewed journals so that teachers become well-versed in why these approaches are so critical and to what degree they are provided for their students. Armed with this information, they become capable of making critical pedagogical decisions that translate into students who are happier, are more involved as partners in their own learning, and experience higher levels of success. An additional benefit is that the teachers also become much better communicators with their colleagues, parents, and administrators, as well as strong advocates for their students.

Let’s examine these practices, starting with prioritizing communication. The authors of “What Children Living in Poverty Do Bring to School: Strong Oral Skills Let Them Talk!” explain that a classroom emphasis on oral language development has been identified as one of the premier instructional strategies for ensuring the success of children, especially those from low socioeconomic communities. In addition, a study published by Stacy A. Torch and Grover J. Whitehurst in the November, 2002 issue of *Developmental Psychology* explains that vocabulary proficiency is a predictor of academic achievement beginning as early as the third grade.

Yet, teachers of young children tend to emphasize didactic instruction, spending the vast majority of their teaching time providing information.
Data Measurement Tools

FirstSchool works to create a mindset of continuous improvement and a culture of collaborative inquiry. This environment supports educators to safely explore challenges together, while increasing their motivation and skill to examine their teaching and make changes to better support student needs.

Data from two classroom observation measures—the FirstSchool Snapshot and the Classroom Assessment Scoring System (CLASS)—are the basis for inquiry into practice and a way to illuminate habits and routines that both hinder and support students. The Snapshot offers teachers a minute-by-minute view of children’s experiences in their classrooms with a detailed focus on children’s exposure to instructional settings, content areas, and teaching approaches. The CLASS provides a global view of the emotional climate, classroom organization, and instructional support that teachers provide for their students.

describing, and demonstrating while spending a small portion of time asking open-ended questions, scaffolding instruction, or engaging children in higher-order thinking.

It is not at all unusual to find that our initial data collection at a school shows that up to 90 percent of teaching time is accomplished through didactic instruction, especially during the teaching of math. Other regular findings indicate that only about eight minutes of the day is spent engaging children in vocabulary development and as little as 12 minutes of the day on oral language development.

At first, teachers are stunned by these results, but as they go back into the classroom, they begin to notice just how much they are talking and how little the students are expressing their thoughts. In light of how important these elements of teaching are to the success of their students, they begin to collaboratively plan lessons that include higher levels of vocabulary development, increased oral language development, more scaffolding, and increased opportunities for higher-order thinking—each a process emphasized in the Common Core. Their results are clearly reflected in the next round of data collection but, more importantly, in the improved learning and higher levels of student engagement.

The Role of School Leaders
To ensure that these quality instructional practices thrive in pre-K-3 classrooms, principals and other instructional leaders must work collaboratively with staff. FirstSchool recommends a four-step process to ensure a seamless experience for everyone in the school community.

1. School leaders must develop a parallel process in which they create for the adults the same type of environment they want adults to create for their students. Everyone in the school environment must be viewed as a learner for whom the cultures of caring, competence, and excellence are cultivated.

   Important aspects of accomplishing this goal are fostering and sustaining a culture of collaborative inquiry, which includes valuing teacher expertise and professionalism; the provision of relevant best practice research; and support for teacher-initiated changes supported by research, data, and experience. These measures must be coupled with the establishment of a collective mindset of continuous improvement so teachers can focus on perfecting practice without fear of censure.

2. Adopt curricula that focus on depth and breadth, and emphasize the Common Core State Standard goals of developing the abilities of students to clearly express their thoughts, feelings, and ideas; to reason abstractly and quantitatively; and to construct viable arguments and critique reasoning. A full, rich student learning experience should be the overarching goal, rather than stripping learning expectations down to only what will be tested.

3. Maximize opportunities for teachers to see effective practice in action. This can be accomplished by arranging visits to model classrooms, organizing peer observations, or obtaining classroom videos to view and discuss.

4. Put in place data systems that enable teachers to critically examine their own practices. The FirstSchool Snapshot and the CLASS provide rigorous data that illuminate practice, but schools without access to these measures can collect similar data by using various lenses to look at practice. These could include assessing how much time is spent in didactic instruction during literacy and math blocks, recording and examining the types of questions teachers ask, or taking note of the integration of science and social studies into the literacy block.

   By facilitating an environment in which teachers are comfortable moving away from pedagogy that relies solely on didactic instruction, providing educators with models on which to base changes in their practice, and giving them the tools with which to track their progress, school leaders can have a profound impact on creating a seamless educational environment that best meets the needs of young learners.

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