

Maximizing Classroom Time to Promote Learning

Learning How Individual Children Spend Time in Pre-Kindergarten Classrooms

Studies consistently show that high quality pre-kindergarten (pre-k) programs make a positive difference for preschooler's success in kindergarten. Little is known, however, about how *individual children spend their time in pre-k programs*. To find out, this study explored how children's use of time in pre-k varied based on three demographic characteristics frequently associated with low academic achievement: ethnicity (African American, Latino, and White), gender, and family income. More notable than demographic differences in children's use of classroom time, however, was learning that a significant portion of each child's pre-k day involved learning through didactic instruction and waiting for the next activity. This means teachers' interactions with children are not being maximized for children's benefit, and opportunities are being missed for promoting children's development and school readiness. Given that state-funded pre-kindergarten programs represent a primary strategy for addressing income and ethnic disparities in school achievement, this is an especially troubling finding for children in the greatest need of pre-k's social and academic benefits.

Children's Use of Time in Pre-K Classrooms

An overview of the study. Children of different ethnicity, gender, and family income levels were observed throughout their pre-k day. To be exact, observers watched 2061 children in 562 pre-k programs in 11 states.

Teachers' interactions with children also were observed. Specifically, to what extent did teachers' interactions with children involve didactic (direct) instruction? To what extent did teachers use scaffolding (supporting and expanding children's thinking and understanding through techniques like open-ended question-asking) to promote children's learning? Both types of interactions are important and support different learning outcomes. Yet we know that scaffolded learning is an especially effective teaching technique with young children.

Measuring children's use of time while in classrooms. Classroom observers used the *Emerging Academics Snapshot* (Snapshot) to capture children's use of time, as well as their interactions with teachers.

The Snapshot is a moment-by-moment observation measure that describes children's classroom experiences. Throughout the day, each 20-second "snapshot" was coded according to a list of social and early-academic activities such as writing, math, art, science, and gross and fine motor activities. When not engaged with any of the listed activities at any time during the snapshot, the child's time was recorded as a "no coded learning activity."

Learning Settings

Free choice activities. Children select what they would like to do. Free choice activities include block building, dramatic play, and use of materials like puzzles.

Teacher-assigned activities. Teachers select what children do. This includes activities such as morning meetings, circle time or a teacher-assigned task.

Meals and other routine activities. Meals, snacks, and routines such as standing in line, waiting between activities, and using the bathroom.

What the Study Found

- Children spent almost 30% of their time in free choice activities and about 37% engaged with a teacher-assigned task. They spent approximately one-third of the day (34%) eating meals and participating in personal and classroom routines such as using the bathroom, waiting for the next activity, and cleaning up. *Delving deeper revealed that 19% of free choice, 23% of teacher-assigned time, and 87% of meal and routine time involved no coded learning activity.*

- Children spent about one-third of their time in didactic interactions with teachers. *Teachers prompted learning through scaffolding less than one-tenth of the time.*
- Limited differences were found among individual children based on their ethnicity, family income, or gender in terms of how their time was used while in pre-k. *This said, children in classrooms with lower proportions of Latino and African American children and higher family incomes tended to have more stimulating learning experiences.*

These findings reveal that children spent close to half of their day in “no coded learning activity”; during this time children were not engaged in any activity that could be coded as social or academic learning. Said differently, almost half of children’s time in pre-k was devoid of learning that promoted their social and academic development. Rather, time was spent waiting in line, transitioning between activities, or engaged in personal care routines such as using the bathroom or washing hands. Children’s learning was not optimized during free-choice and teacher-assigned activities, either. Finally, by offering less stimulating learning experiences to the poorest children and children of color, the achievement gap between children from different income and ethnic groups is potentially being enlarged still further.

The Most Important Finding for Classroom Practice

More notable than demographic differences in children’s use of time was learning that almost half of each child’s pre-k day lacked activities and interactions that promoted social and academic learning. This means opportunities for building on children’s interests and expanding learning are being overlooked.

Linking Research to Practice

Based on the early care and education field’s broad-based definition of learning activities, pre-k children spent slightly more than half of their day (56%) in some type of early academic activity. The remainder of children’s time was spent not engaged in activities. Two critical points of practice emerge from these findings:

1. Pre-k teachers need to be more attentive to opportunities for expanding children’s knowledge and understanding throughout the pre-k day by asking questions, introducing new ideas, and extending a child’s line of thinking. Target didactic instruction to transmitting information and, given the beneficial impact of scaffolded learning, make it a more prominent pedagogical approach in pre-k classrooms.
2. While meals, transitions, and personal care activities obviously are necessary and important parts of the pre-k day, transform them into occasions for facilitating children’s learning to avoid by-passing opportunities for expanding on children’s interests and extending academic and social competence.

Consider ideas such as the following to maximize learning during the pre-k day:

- Seize opportunities to scaffold children’s learning. Almost all activities, regardless of the learning setting, offer opportunities for scaffolding children’s learning. Consistently seek them out by asking questions (e.g., in block building: “The doorway into your garage is narrow. How can you make sure all of your cars can get inside to park?”) and extending thinking (e.g., during dramatic play: “Tell me how the doctors helped your baby to feel better.”).
- Turn classroom routines, such as meals and transitions, into times for expanding learning. During meals and snacks, for example, explore food characteristics and invite conversations about where food comes from and how food is prepared, as well as invite discussions about home life and families. Meals and snacks offer endless conversation possibilities. Transitions, in turn, can be used to promote classroom responsibilities. They can foster learning and also shorten the time needed to move from one activity to another. For example, in preparation for snack, children can distribute napkins or count the number of juice cups that are needed so every classmate has one, fostering one-to-one correspondence. During clean-up, children can return materials to their proper place by matching items to pictures or can organize building blocks according to shape and size.

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