SECTION 2, CHAPTER 4

MAKING PREKINDERGARTEN CLASSROOMS BETTER PLACES FOR CHILDREN'S DEVELOPMENT

Dale C. Farran, Ph.D., Vanderbilt University

In this paper, I review four classroom elements that my own work and many other studies have found to be related positively to children's outcomes in prekindergarten classrooms: teachers' listening to children, quality of instruction, emotional climate in the classroom, and level of children's engagement. These aspects of classroom functioning all involve interactions between children and teachers, and they are somewhat independent of both the curriculum and other structural features of the classroom. We need to develop practical observational tools to assess these behaviors so that we can improve the environments in which vulnerable young children learn.

In 2016, according to the National Center for Education Statistics, 66% of 4-year-old U.S. children not in kindergarten were enrolled in pre-primary programs. As in years past, higher-income families were more likely than lower-income families to enroll their children in center-based care. Children from higher-income families often attend privately operated center-based child care programs, while children from lower-income families are likely to be enrolled in publicly funded programs such as Head Start and, more recently, state-funded prekindergarten programs (McFarland et al., 2017).

One consequence of this division is that segregation of experiences by income begins in preschool. Moreover, privately and publicly funded programs have very different expectations and regulations. The fundamental motivation for the two sets of programs differs as well: private child care programs are more concerned with "care" and being of service to parents, while the public programs are more concerned with compensatory education to remediate presumed deficits in children's preparation for school. This desire to offer compensatory education can lead to a greater emphasis on academic preparation and to more prekindergarten programs in public schools. An academic emphasis can have the unfortunate consequence of increased reliance on the sort of didactic instruction that may not lead to long-term child success (Lipsey, Farran, & Durkin, 2018).

COMPENSATION ORIENTATION

Beginning in 1965 with Head Start, a number of public programs for young children before formal school entry focused on compensatory education (Farran, 2007; Scarr & Weinberg, 1986). This trend continued with a 1987 amendment to the Elementary and Secondary Education Act that allowed Title I funds to be used for whole-school program improvement, ushering in the creation of Title I–funded prekindergarten classes in many school districts (Ewen, Mezey, & Matthews, 2005). Although they are administered through different agencies, Head Start and Title I are similar in that neither was intended to provide full-day care; they usually operate on the same schedule as public schools. Although some programs offer before- or after-school care that working families may need, many do not.

Over time, as many states either have begun providing state funds for early intervention prekindergarten programs for children from low-income families or have started to coordinate sources of funding for these programs at the state level, the number of children served has increased. In 2016, most states were funding prekindergarten programs, and a few were offering universal prekindergarten for all 4-year-olds (Barnett et al., 2017). These state-funded programs are primarily intended as compensatory education for children from poor families; all but a few of the states have income requirements for enrollment.

An ethical commitment to using education to remediate or prevent the effects of poverty was put into action in the late 1950s and early 1960s with a number of small experimental programs focused on young children from poor families (Darlington, Royce, Snipper, Murray, & Lazar, 1980). A belief in the efficacy of early education intervention remains a driving force behind the growth in prekindergarten programs (see Parker, Workman, & Atchison, 2016), as more recent data indicate that poverty is still associated with long-term poor school outcomes starting at kindergarten entry (Reardon, 2011).

Since their inception, however, the long-term effectiveness of these small experimental pre-school programs has been debated. Four decades ago, Darlington, Lazar, and others recruited eight of these early experimental programs, including the Perry Preschool Project, and organized a follow-up investigation of their effects (Darlington et al., 1980). The results of their work continue to shape expectations for prekindergarten programs today. They found that the large effects seen on tests given immediately after the programs faded over the next three to four years. However, they found longer-term effects on what they termed "meeting the requirements of school"; that is, students from these programs avoided both special education placement and grade retention at higher rates than did students who had not participated in such programs; the reduction in special education placement was the more robust finding. Expectations of decreased retention and lower use of special education services are featured in such current initiatives as Pay for Success, a program seeking private investment in prekindergarten programs (Isaacs, Massey, & Kreeger, 2016).

Perry Preschool, which began in 1962, is now referred to as a model. The other model frequently cited as evidence for the positive effects of prekindergarten is the Abecedarian program, which began in 1972. The long-term effects from these two programs are the ones most often cited to argue that cost savings will result from extensive investments in preschool (e.g., Heckman, 2006). Both programs served a small number of African American children from low-income families in a single location. Neither has been implemented in any version of a scaled-up statewide program. Each would cost much more per child than any state currently allocates. In today's dollars, Perry would cost $20,000 per child per year, and Abecedarian would cost between $16,000 and $40,000 (Minervino & Pianta, 2014). Moreover, these programs had features that are unlikely to be duplicated. For example, Abecedarian began when children were 6 weeks old, continued until kindergarten, and provided full-day care for 50 weeks of the year; Perry had a 1:7 teacher-child ratio and required that teachers conduct 90-minute weekly visits with families.

These model programs are also hard to replicate because it is not clear which of their components led to the effects. The most robust long-term outcomes for Abecedarian were positive health effects once the children became adults (Conti, Heckman, & Pinto, 2017). This is not surprising, given that two pediatricians and two nurse practitioners were housed in the same building as the preschool, on the same floor as the infant and toddler classrooms. We know less about other components of the treatment offered by the model programs. The HighScope curriculum emerged from the Perry Preschool program but was not solidified until some years after Perry was implemented (Weikart, 2004). Many of the early programs followed a general enrichment philosophy, providing an environment with lots of materials and caring adults. Abecedarian was a pioneer in group care for infants and toddlers, and the staff created a set of activities for teachers to follow with the youngest children (Sparling & Lewis, 1979).

Even when programs are well defined, have a coherent vision, and have more recent evidence of effectiveness, there are problems taking them to scale (Granger, 2011). In the case of statewide prekindergarten programs, for example, states are trying to scale up an idea, not a well-tested practice (Mitchell, 2001). The idea is that an intervention provided to poor children before kindergarten entry will change their developmental trajectories in major, positive ways, both immediately and into adulthood. Less well defined are the exact processes through which that intervention should be carried out.

Even when programs are well defined, have a coherent vision, and have more recent evidence of effectiveness, there are problems taking them to scale.

Having the goal of helping children from poor families be successful in school does not really constitute a vision for prekindergarten program practices (Farran, 2017). All states and the District of Columbia have adopted early learning standards for their state-funded prekindergarten programs (DeBruin-Parecki & Slutzky, 2016). These standards are meant to create a bridge between the prekindergarten and the K-12 system, driving and focusing instruction. Learning outcomes can be achieved in a variety of ways, and the standards do not dictate specific practices. States typically set other general requirements for districts that receive state funding to run prekindergarten classrooms. They must meet a certain adult-child ratio, implement a curriculum chosen from an array of possibilities, provide meals for the children and, in some states, provide a certain number of "hours of instruction." These types of requirements are known as structural features; I will review them next along with alternative indicators.

CLASSROOM QUALITY INDICATORS

Structural characteristics

Programmatic structural characteristics are the easiest to regulate and monitor, and this is where child care quality rating and improvement systems, Head Start programs, and publicly funded state prekindergarten programs overlap the most. Benchmarks specified by the National Institute for Early Education Research (NIEER), which many states use in expanding state funded prekindergarten programs, have historically emphasized these regulatory features. None of these benchmarks–for example, level of teacher education and number of formal degrees–relates to child outcomes either collectively or separately (Early et al., 2007; Mashburn et al., 2008). A recent thorough investigation of credentialing and early childhood education coursework for teachers (Lin and Magnuson, 2018) found negative effects on classroom quality and child outcomes if teachers had only a high school degree and no early childhood education coursework. However, they found no variation in quality linked to the higher end of preparation–that is, having a bachelor's degree and taking many early childhood education courses. Belief in teacher preparation as a key to providing better classrooms with better outcomes persists, however; new Head Start regulations specified in the 2007 reauthorization of the program required that at least 50% of all Head Start teachers have a bachelor's degree by 2013. Many but not all state prekindergarten programs require a teacher to have a B.A. and to be certified.

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What makes these structural characteristics so appealing to law- and policymakers is that they are concrete and measurable: for example, if the rule is a 10:1 child to teacher ratio for 4-year-olds' classrooms, programs can implement that and regulators can check on it. Even though these features are unrelated to children's outcomes, without measurable alternatives, scaled-up early childhood programs have little guidance for creating quality classrooms, despite calls for the early childhood policy field to focus more on increasing quality (Hamre, 2014).

Early childhood curricula

Many quality rating and improvement systems, the NIEER benchmarks, and state-funded prekindergarten programs require a specified curriculum. Many states have lists of curricula that programs can choose; they range greatly both in content and pedagogical strategies (Farran & Lipsey, 2016). When it established its Preschool Curriculum Evaluation Research Consortium in 2001, the Institute of Education Sciences energized the belief that curricula could encompass both the content to be taught and the approaches to learning important for children's growth.

This large experimental research endeavor found few differences in children's outcomes among the curricula assessed or between using a formal curriculum and conducting early childhood classrooms as usual (Preschool Curriculum Evaluation Research Consortium, 2008). The few short-term differences found were positive effects for more targeted curricula–specifically for the outcomes on which they were focused.

Researchers continue to assert the relative advantage of a targeted curriculum over a more global one (the latter often termed "developmental") (Coley, Votruba-Drzal, Collins & Cook, 2016; Nguyen, 2016). However, even targeted curricular approaches often fail to demonstrate effectiveness. The recent large-scale randomized controlled trial of the Building Blocks preschool mathematics curriculum in New York City found few positive effects compared to control classrooms at the end of the prekindergarten year (Mattera, Jacob, & Morris, 2018). Similarly, another comprehensive review identified few targeted approaches with positive effects that lasted into kindergarten (Chambers Cheung, & Slavin, 2016).

One reason that such curricula may have only short-term effects on the skills they target is that they do not change more fundamental classroom practices. Though teachers may conduct very different activities, as with the Tools of the Mind curriculum, their interactions with their students, the amount of positive feedback they give, and even the amount of time they spend talking and listening to children may be equivalent across different curricula (Nesbitt, Farran, & Fuhs, 2015). Importantly, those interactive elements are the classroom practices linked to children's outcomes in various domains and across curriculum conditions. By itself, no curriculum is likely to effectively or sufficiently drive the kinds of classroom practices that matter most for young children.

Process characteristics

So what should early childhood classrooms, especially scaled-up prekindergarten classrooms, focus on to encourage quality learning? Burchinal reviews global ratings of classroom practices elsewhere in this volume; her research and several other reviews have consistently found little relation between global measures of classroom quality and how children develop over the prekindergarten year. Experimental and descriptive work is currently being done in prekindergarten classrooms to identify more specific behavioral practices as an alternative to such global ratings (e.g., Farran, Meador, Christopher, Nesbitt, & Bilbrey, 2017). Many of the practices identified are components of such global instruments as the Classroom Assessment Scoring System (CLASS; Pianta, La Paro, & Hamre, 2008), but this new research disaggregates them from an overall rating of a dimension. Moreover, these approaches are often counts of certain behaviors rather than ratings. A record of the frequency of actual behaviors may offer coaches a clearer way to understand how to help teachers improve their practices.

The work reported by my colleagues and I (Farran, Meador, Christopher, Nesbitt, & Bilbrey, 2017) is the result of my four-year partnership among myself, a group of researchers in the Peabody Research Institute at Vanderbilt

University, and the Metro Nashville Public Schools. This work derived from an observation system developed for research purposes in the 1990s (Farran, Silveri, & Culp, 1991). Highly trained and reliable observers remained in classrooms for a full day, taking data throughout the day, several times a year. The system yielded important information about practices that mattered most for young children's growth over the year and even into kindergarten and first grade. The practices determined to be important for children's growth over the preschool year came to be called "the Magic 8" by teachers and coaches in the school system. The appendix contains an example of how one of the practices, reducing transitions, was translated into a tool for coaches to use in our continuing partnership with the district.

Four areas among the eight–teachers' listening to children, quality of instruction, positive climate, and child engagement–have also been investigated and found promising in several other studies.

Teachers' listening to children matters more than their talking to them. Language development, and specifically vocabulary, has been one of the hardest areas to improve in early childhood classrooms. In general, however, few links have been found between teacher talk and child outcomes. Our research has shown that the amount of time teachers spent listening to children was actually the stronger predictor of children's growth. While our various studies involving observations of teacher talk show that teachers routinely talk 70% of the time on average, and some talk even more, they spend only about 14% of their time listening to children, on average. Variations in that proportion were important–the more listening teachers did, the more children gained in both academic and social domains. Interestingly, in Dickinson and Porche's (2011) longitudinal study from prekindergarten to fourth grade, it was the ratio of teacher talk to child talk during free play that related to positive outcomes for both kindergarteners and fourth graders. A more even ratio indicated more actual conversations, in which teachers listened to children as well as talked.

In a very complex analysis of the linguistic environment in prekindergarten classrooms (Justice, Jiang, & Strasser, 2018), teachers' linguistic responsiveness–specifically, their facilitation of children's communication–was the only language dimension associated with children's gains in vocabulary. CLASS ratings, also collected, were not related to child outcomes. Justice and colleagues (2018) concluded that rather than trying to improve the global nature of a preschool classroom through such measures as CLASS, "professional development efforts provided to early educators should focus most intensively on helping them to both elevate and execute the precise, proximal behaviors that serve to engage children in productive conversations" (p. 89). They used transcripts of interactions with children to describe many dimensions of teacher language; their analysis indicated that teacher language, including grammatical complexity and linguistic diversity, was not related to children's gains across the year. Only the teachers' verbal interactions with and encouragement of children's language contributions mattered.

One issue with investigating the effects of teacher language may be the emphasis on teacher talk. Most research focuses on analyzing components of teacher language such as the richness and type of language the teacher uses in such activities as book reading. Books and literature constitute one obvious way to introduce varied and more complex vocabulary to children. Thus, many researchers have devoted considerable effort to investigating whether various strategies for book reading might be an effective mechanism for effecting gains in children's language development. One thorough review of book reading's effects concluded that the variation among the studies was too great to yield many recommendations for practice (Wasik, Hindman, & Snell, 2016).

The teacher's quality of instruction is as important as the student's acquisition of basic skills. "Productive conversations," especially teachers' asking questions and listening to children's answers, are components of a more general factor related to the quality of instruction. In a recent book, William Gormley (2017) makes a persuasive argument that encouraging critical thinking through inferential teacher-student interactions may be one of the most important experiences in helping children be successful. He also argues that children from disadvantaged backgrounds are less likely to have these kinds of experiences.

An extensive reanalysis of data from the State-Wide Early Education Programs Study and the National Center for Early Development and Learning Multi-State Study of Prekindergarten found that children from poor families were more likely to experience didactic teaching in prekindergarten classrooms (Valentino, 2017). Didactic teaching is characterized by "known-answer" questions, or "basic concepts" (Farran et al., 2017), such as "What color is this?" and "What letter is this?" Valentino (2017) has suggested that "while there is some evidence that directive instruction could actually improve achievement and narrow achievement gaps in the short term . . . , it is arguable that such an approach is still unfavorable in the long term" (p. 29). Indeed, results from a randomized controlled trial evaluation of the statewide Tennessee Voluntary Prekindergarten program support this hypothesis; despite significantly improved achievement upon entering kindergarten, by the third grade, children who had attended prekindergarten programs, primarily in the public schools, were performing less well than children who had not attended (Lipsey et al., 2018).

Quality of instruction has proven extremely difficult to change; in our four-year study, we were unable to change the level of instruction beyond an average of 1.9 on a 4-point scale. Our observational coding system, Teacher Observation in Preschool (TOP, Bilbrey, Vorhaus & Farran, 2007, revised in 2014) records instances of teacher instruction, defined in early childhood settings as any time teachers are engaged with children around a learning focus. In an early childhood classroom, this could include singing songs and helping with pasting and gluing, as well as reading books and practicing counting, among other activities.

When the teachers' task was coded as "instruction," the instructional level was rated on a scale from 1 to 4. Our definition of instructional quality is derived from research conducted by Tizard and colleagues (1980) and confirmed by classroom observations reported by Durden and Dangel (2008) and Hayes and Matusov (2005). A rating of 1 meant that a teacher was working with materials but not specifically teaching content (e.g., sprinkling glitter); a rating of 2 indicated basic skills instruction (e.g., "What color is the glitter?"); a rating of 3 indicated some inferential instruction, with the teacher asking at least one open-ended question ("This glue is sticky. What else is sticky?"); and a rating of 4 indicated a high degree of inferential instruction, in which the teacher used open-ended questions to sustain focus on a topic that resulted in several conversational turns between teacher and children (a discussion of multiple sticky things). Hayes and Matusov (2005) similarly defined conversational partnerships—our levels 3 and 4—as verbal exchanges of genuine inquiries, where the teacher does not know the answer ahead of time. They found these types of exchanges to be rare in classrooms for young children.

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The rating of 1.9—which we found in all four years of our partnership work with 26 classrooms—is characteristic of instruction at a basic skills level. For more inferential (higher-quality) interactions to take place, teachers have to create interesting learning activities that stimulate children's thinking. They have to interact with children for longer than one conversational round, and they have to be genuinely interested in the sense that children are making of the world (Durden & Dangel, 2008). These kinds of interactions are difficult if not impossible to carry out during whole group instruction, a common pedagogical practice in these classrooms, and teachers were not observed using center times or small groups as opportunities to initiate higher-level instructional interactions. From their observations in similar classrooms, Darden and Dangel concluded:

When the kind of activity is (a) guided rather than directed by the teacher, (b) authentic, and (c) exploratory, then the teachers' language changes. In these circumstances, the teacher's language (a) is more open-ended, (b) uses higher cognitive demands, and (c) includes functions such as encouraging thinking, making the nature of the conversation more child-initiated, reciprocal and genuine (p. 261).

Unfortunately, it would be difficult to help teachers create these kinds of authentic learning opportunities in many of the early childhood classrooms we have observed. Perhaps teachers interpret the increased focus on academic preparedness for kindergarten to mean that they should continually and specifically direct student learning. Engaging children in open-ended inquiry might seem counterproductive to the school readiness goal. In our partnership, we made little progress in this area despite working on it for four years.

Positive classroom climates promote learning, and the importance of a positive learning environment cannot be overestimated, especially for young, vulnerable children who may be having their first educational experience in a formal setting. The classroom climate is particularly important for at-risk children, who typically have had a higher than average number of adverse childhood experiences. To promote resiliency in such children, the classroom must promote a sense of belonging, with caring and nurturing adults (Sciaraffa, Zeanah, & Zeanah, 2017). A highly negative classroom can actually function as an additional adverse experience, contributing to rather than buffering the cumulative stress that results in long-term negative health and social outcomes.

Barbara Fredrickson's broaden-and-build theory of positive emotions asserts that a mindset broadened by positive approvals is linked to discovery—"discovery of new knowledge, new alliances, and new skills" (2013, p. 815)—the kinds of discoveries likely to be important for longer-term school success. Harsh, demanding environments can lead to increased immediate learning of concrete skills but not to the fostering of connections among ideas or to the delight in solving problems that are so important for learning in depth. In early childhood classrooms, children are also developing expectations for what being a student means and how learning occurs, and those expectations can color their attitudes toward school for years.

Other studies have also shown that a positive emotional climate is an important contributor to children's growth, especially their social-emotional development. At the end of prekindergarten, children who had been in classrooms with the "warmest" profile were rated the most socially competent (Curby et al., 2009). In a study of 60 prekindergarten classrooms in Tennessee and North Carolina, more teacher approvals, fewer disapprovals, and a more positive teacher emotional tone were collectively related to gains in children's self-regulation (executive function) skills over the prekindergarten year (Fuhs, Farran, & Turner, 2013). In our partnership observations, the same constellation of behaviors was linked to children's gains in academic areas as well. In more positive classrooms, children learned more across the year (Farran et al., 2017).

Recent neurological investigations of brain development in young children from differing socioeconomic backgrounds have found early and alarming differences among children from high-poverty backgrounds in brain regions related to language, memory, executive functioning and socioemotional processing (Ursache & Noble, 2016). These differences were apparent at three years of age. Ursache and Noble (2016) have posited that a causal factor is the stress young children experience in low-income families and neighborhoods. Experiencing frequent disapproval of their behavior in the classroom adds to that stress. In a study of the emotional climate in 139 classrooms serving children from low-income families, recently funded by the Preschool Development Grant Expansion, Durkin and I found high rates of

behavior disapproval—about three times the rate of approval (Farran and Durkin, 2017). Disapproval was especially frequent in classrooms in older public-school buildings without close bathroom or meal facilities. In those types of facilities, the amount of time spent in transitions or down time was greatly increased, and more time in transition was linked to more negative behavioral control (Farran and Durkin, 2017).

The effects of a positive or negative prekindergarten classroom extend into the early grades of school. Two longitudinal studies have demonstrated that the emotional climate of the prekindergarten classroom affects children's social skills into kindergarten and first grade (Broekhuizen et al., 2016; Spivak & Farran, 2016). Reducing behavior disapproval and increasing positive interactions will likely require intense coaching and intervention, as the levels of disapproval are currently quite high in most public prekindergarten classrooms.

Children's active engagement in learning is key, and engagement should not be confused with compliance. Children can be quiet and nondisruptive without being engaged. When children are actively involved in learning, they can be noisy (in a productive way). When young children are engaged, they are excited and highly attentive to the learning activity. Engagement is intertwined with all the other components described so far. For example, the level of positive emotional support in a classroom predicted children's level of classroom engagement (Castro, Granlund, & Almqvist, 2017).

Children's active engagement varies across classroom activities. When my colleagues and I observed children in the 26 prekindergarten partnership classrooms (Farran et al., 2017), we found a generally low level of engagement, particularly during whole group instruction. Greater engagement was observed during center-based activities. These findings were echoed in a study of Portuguese pre-schools that also served low-income children; engagement (or involvement) in learning was relatively low for all children (Coelho & Pinto, 2016). Powell and colleagues (2008) carried out extensive research on children's involvement in learning in an "eco-behavioral" investigation. Children were most engaged when teachers were positively affirming and children were with a peer group; they were least engaged during whole group instruction. Vitiello and colleagues (2012) found similar associations between context and child engagement; children were more engaged in situations that gave them some choice over their activities and learning processes.

These findings are important because children in prekindergarten classrooms spend quite a lot of time in whole group instruction and other activities such as transitions where they are under the direction of the teacher. The academic and basic skills orientation of a classroom is linked to greater reliance on whole group instruction and much less to discovery learning. Yet discovery learning is most likely to engage children's attention and keep them focused and involved. Setting up situations where children can be productively engaged in interesting activities requires teachers to act differently as well as to abandon their current understanding of learning.

CONCLUSION

Only recently has public education expanded to offer classrooms for 4-year-olds (McCabe & Sipple, 2011), often housed in public elementary schools. This extension of public education into the prekindergarten years for children from low-income families means that for many children, early childhood settings are now their first introduction to the world of more formal learning and to learning in a group. These early experiences are critical for establishing learning and dispositional patterns that may affect children's interactions with classrooms for many years. The transition to more public school prekindergarten classrooms has happened at the same time that the goal of kindergarten readiness has increasingly come to mean a focus on the mastery of concrete basic skills. Those skills are the very ones most likely to fade quickly in importance in the early grades (Bailey et al., 2016). The kinds of practices outlined in this chapter should be linked both to the mastery of basic skills and to developing more lasting dispositions to learning that will not fade.

In most states, scaled-up publicly funded prekindergarten programs target children from low-income families. Targeting has the unintended consequence of segregating children by income and often by race in their earliest school experience. School districts face a dilemma. They want to place prekindergarten classrooms where the need is—in neighborhoods with a high proportion of poor families and also in underperforming, high-poverty schools—because they believe that better prekindergarten preparation will help children succeed. Such classrooms, housed in buildings not set up for young learners, may then be highly stressful for both teachers and children, leading to more difficult interactions for the children (Gilliam & Reyes, 2018) and unanticipated long-term negative effects on later learning (Lipsey et al., 2018).

Recently, prekindergarten programs have begun moving away from a reliance on regulatory structural features to an emphasis on classroom processes. Yet we lack reliable, easily administered, valid measures for assessing classroom process quality. Many of the quality rating systems that states use, as well as those of current Head Start regulations, include a requirement that classrooms be observed with a rating system like the revised Early Childhood Environment Rating Scale or CLASS. These ratings can be consequential, causing Head Start programs to have to compete again and determining the number of "stars" a private program will receive in a state evaluation. Unfortunately, neither of the most commonly used systems has been shown to predict children's academic or social-emotional growth (Burchinal, 2017).

More recent efforts have focused on specifying the types of classroom interactions that are likely to be most important for children, primarily through behavioral counts instead of ratings. Those efforts have been reported here. They have led to the identification of a number of specific classroom practices that are beneficial for children's learning. The observational system used in the research is not easily exported for use by coaches, principals, or prekindergarten directors. It is complex and requires extensive training. However, the findings can be used to construct more practical and easy-to-use measures. Advances in the digital age should facilitate the collection of critical classroom information. As prekindergarten programs expand, it will become increasingly important to have a system that is practical and can be readily used by coaches, early childhood directors, and principals to assure that children's experiences in these settings are positive and likely to produce long-term benefits.

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Appendix

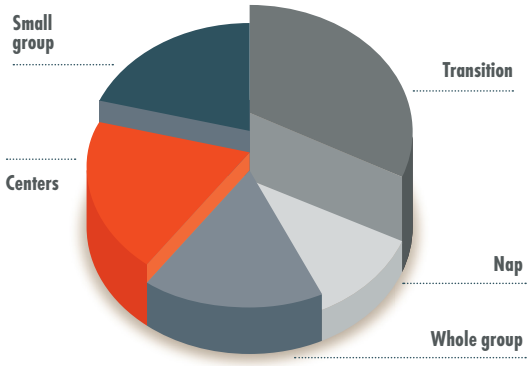
Reducing time spent in transition: What is a transition?

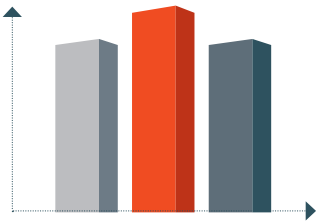
A "transition" is a prolonged period in which most of the class is not involved in a learning activity.

Common Types of Transitions

- Breaks when **one activity has ended but another has not yet begun.**
- Interruptions of activities that result from teachers **gathering materials or correcting behavior.**
- Times that children can't begin an activity because they are **awaiting instructions or materials.**
- Times that children are **moving to a new location** (i.e., going outside, lining up for restroom breaks)

Think of the time spent in a classroom as a pie chart in which every moment is accounted for. If a large "slice" of the day is spent transitioning, less time is available for other learning activities.





Reducing time spent in transition leads to:

1. Fewer instances of problem behavior.
2. Higher levels of involvement in learning.
3. **More time available for instruction.**

Data collected in MNPS Early Learning Center classrooms showed a strong relationship between time spent in instructional activities and children's achievement grains.

Certain parts of the day are beyond the teacher's control (e.g., how far the class needs to travel to the playground or the cafeteria). Intentional planning of transitions allows you to create routines that accommodate the classroom schedule and student needs.

Some transition time during the day is both normal and necessary—the goals for reducing transitions should be to:

1. Decrease the overall "wait time" between activities whenever possible.
2. Incorporate engaging instructional content when a transition is unavoidable.

Practical Strategies for Teaching Transition Routines

- Take time at the beginning of the school year to establish expectations for moving from one activity to another.
- Revisit these procedures periodically.
- Model appropriate cleanup behaviors.
- Act out a scenario in which you are cleaning up your area while thinking aloud and allowing children to help you problem solve. Try getting parts of the routine wrong on purpose—children will LOVE to "correct" you!

Troubleshooting Transitions

If you notice things are still not going smoothly, it may be a good idea to play detective! Sit back and watch as your students transition from one activity to the next. What do you notice?

Ask yourself:

- Do I spend a lot of time addressing behavior during transitions?
  - *Do I unnecessarily spend time redirecting harmless or minor behaviors?*
- Do children who finish transitioning first seem bored while they wait for their peers?
- Do we need to reset or review?
- Are there particular transitions that are stressful for me or for my students?
  - *Before the transition → Self-care (take a deep breath)*
  - *During the transition → Try the Practical Strategies to help minimize time spent in transition*
  - *After the transition → Make mental notes about what worked or didn't work*