

Preparing Children for Kindergarten: Skills for Whole Class Instruction

Early School Readiness Series

Rimm-Kaufman, Pianta, and Cox reported in 2000 that 40% of young children were simply unprepared for the demands of kindergarten classrooms. Recent interviews with kindergarten teachers and elementary school principals in Indiana suggest this statistic holds true a decade later.

Over the past four years, we investigated early education practices that promote school readiness and contribute to successful school outcomes. As a result of these studies, we have developed a series of papers identifying the skills and routines associated with successful school readiness for all children.

This paper is part of a series of briefs that examine 4 common kindergarten routines: arrival, whole class instruction, seat work, and learning centers. The briefs describe the routines and the critical skills children need to successfully engage and learn in them. They also suggest strategies early educators can use to bridge preschool practices with kindergarten expectations.

Jayden, Michael, and the other children find their spots on the carpet, then look at their teacher Mrs. Anderson. She holds up the book they read the day before. "Let's see what we remember. Jayden, what are the names of the characters in our story?" He answers, and Mrs. Anderson says, "That's right. You gave the names of two characters. Were there others?" Michael and several other children raise their hands. The teacher continues the discussion and then rereads the story. "Now let's read our 'Amazing Words.' Michael, you are first this time. Look at this 'Amazing Word,' read it, and then point to the picture." Michael reads the word "kayak" and points correctly. After each child completes the task, Mrs. Anderson moves to the next step in her whole class instruction.



Learning the essential skills is important to a child's ability to succeed in whole class instruction. One essential skill that children need at the beginning of whole class instruction is to follow classroom routines. The vignette presented children using this skill in behaviors such as moving promptly to the carpet or chairs, sitting down in assigned

spots, and waiting quietly for the teacher to begin. Table 1 presents the skills and associated behaviors that were essential to whole class instruction in the classrooms we observed.

During this time of the kindergarten schedule, the teacher led the entire class through a series of instructional activities in which each child was expected to participate. The teacher in the vignette, Mrs. Anderson, identified this instructional format as "large group time." In the classrooms we observed, teachers called whole class instruction by a variety of terms, including large group, carpet time, or morning meeting. Whole class instruction took place in two formats: a "see-listen-answer" format; and a "see-listen-do" format. In each format, children were expected to pay attention to the teacher to remember and use the information in practice.

The physical design of the see-listen-answer format was revealed when the teacher called children to the carpet. Children sat in assigned spots around the edge of the carpet or in a cluster around the teacher. The teachers sat in a chair or rocker, ensuring that the children could see them and their books and other materials and that they could listen and answer questions.

We observed the see-listen-do format when the teacher sent the children to their assigned seats at tables. Each child sat individually and focused on the common task while the teacher took the group step-by-step through the work. In this format, the teacher stood and moved among the children to watch them follow directions. Examples of such tasks were applying new printing skills on worksheets or sounding out and writing words on individual whiteboards

Table 1
Essential Skills for Whole Class Instruction

Skill	Examples of Behaviors	
Follows classroom routines	 Sits crisscross at the right place. Waits quietly for the teacher to begin. Listens and pays attention to the teacher. Raises hand to answer, waits to respond. Reads, sings, or counts with everyone. Waits to be excused. 	
Listens to gather information	Listens to directions to: Learn the steps of what to do next. Be ready to take a turn. Know what to bring from home. Listens to learn about: Letter sounds, stretching words, punctuation, new words Counting by fives and tens.	
Follows simple classroom rules	 Sits in the chairs safely. Watches and listens to the teacher. Replies when the teacher asks for an answer. Keeps hands to one's self. 	

Skill	Examples of Behaviors	
Understands and follows directions	 Move to a new place on the carpet, stand in a circle, or sit on chairs as directed. Listens, stretches, and writes the word, then shows the teacher. Turns to specific page and follows steps in instructions. Tip-toes back to seat on request. 	
Uses speech that is understandable	 Describes a drawing. Asks a question to understand a task. Sounds out words. Talks with peers. 	
Stays on adult-directed task for > 10 minutes	 Plays Bingo as teacher calls the letters. Completes a printing task as teacher directs. Takes part by describing the weather, reading the word list, and talking about the "letter of the week." 	
Accepts guidance and limits	 Sits and keep hands to self. Moves to a new activity when asked. Complies with teacher requests. 	

Of all whole class instruction periods we observed, the most time was spent in the see-listenanswer format, with a session often lasting 30 minutes. The length of a single session did not, however, reflect the importance of the whole class instruction routine, which was used an average of three times each morning (range of 1 to 5). This translates to children sitting for about 90 minutes before they had lunch and recess.

The social design of whole class instruction involves the expected behaviors among peers, toward the teacher, and regarding approaches to learning. Behavioral demands were high, and children were expected to follow such classroom rules as taking turns, responding to teacher questions, waiting to be called-on before answering, and staying in their own spaces. Teachers stressed the importance of the rules to children, stating that they should not take up valuable class time with misbehavior and prevent other children from learning. Whole-class instruction offered few opportunities for peer-to-peer social interaction.

Occasionally during the see-listen-answer format, a teacher asked children to pair-share or tell their neighbor about a favorite item from home, the reason they liked a story, or what picture they were going to draw.

Instructional design addresses the range of teaching methods to be used, including direct instruction, practice, exploration, and problem-based learning. Literacy was the primary curricular focus of whole class

instruction on the mornings we observed. We noticed a significant variability in the types of activities used to promote learning in reading, phonics, vocabulary, and writing. Other whole class instruction was used for math skills such as number recognition, counting, or calendaring. During our observations of the see-listen-answer format, children watched as teachers read or

talked about books and then answered closed or open-ended questions individually or as a group. Children listened to teachers as they demonstrated "stretching words" and then followed along as the teacher repeated the stretch. When a child was uncertain or unable to answer a question, teachers used scaffolding to support the child's thinking or moved to another child after waiting for a response. Teachers also used rote practice, songs, or chants to learn the days of the week, vowels, or number sequences.

Instructional activities in the see-listen-do format were predominately paper-pencil focused. For example, children were given paper for printing practice. The teacher would show children where on the page to put their names. While waiting for children to finish, the teacher observed their work and guided individuals. Then the teacher would show them where they were to start a new line of print. Children were asked to wait until they had listened to instructions such as: "Please remember to put a capital on the first word and punctuation at the end. The sentence is, 'I have a cat.'"

Teachers completed the instruction and told children what would take place happen next. Children put away any materials they had used. Sometimes they were told simply to go to the next location. At other times, children were asked to line up to go down the hall to the bathroom or to lunch.

Whole Class Instruction in Preschool¹

Aden, Sam, and the other children hear the teacher sing, "Circle time, circle time, let's all come to circle time." The children pick a place on the circle to sit. Ms. Weaver sits with the children and leads them in the finger play "Open, shut them, open, shut them." Then she asks, "Do you remember our theme for this week?" Several children call out, "Food." She agrees and asks, "What is your favorite thing to eat? Let's go around the circle. Aden, go first." Aden responds, "Pizza." Each child replies. Then she introduces and reads two books, Green Eggs and Ham and the nonfiction Vegetables. After a brief discussion of the books, the teacher says, "Let's sing a song and then we'll be ready to go to our small groups where we will taste new foods. Who has a song?" Sam answers, "Goin' on a bear hunt." They sing and then go to their small groups.

The preschool version of whole class instruction is usually called circle or group time. The physical design involves children sitting on the carpet. The teacher may use carpet squares or tape marks on the carpet to help children stay in position, but children generally choose the spots in which to sit. Teachers sit on the floor or on low chairs to help children remain engaged. The social design of preschool whole class instruction revolves around children learning to listen and participate with each other. Teachers commonly use a predictable routine to support participation. For example, children are drawn into the circle time with a song or finger play. In addition, a predictable routine supports children's ability to shift focus to the teacher. The routine is often based on a quiet/active/quiet/active pattern that helps children to regulate their own behavior and participate throughout the planned activities. Circle time content may

be driven by the teacher's knowledge of child development, state instructional standards, themes, a curriculum, or children's interests. The instructional design will likely include a variety of strategies such as direct instruction, scaffolding, closed and open-ended questions, and modeling. Teachers also tie learning activities to children's home experiences.

There are differences between preschool and kindergarten whole class instruction related to physical design. In preschools, children usually choose where to sit, most often on the carpet. In kindergarten classrooms, we observed that children typically sat in assigned spots. We also know that the duration and frequency of whole class instruction differs between preschool and kindergarten. Preschool whole class instruction lasts about 20 minutes to meet the developmental characteristics of younger children, and it usually takes place only once in the morning and once in the afternoon. In contrast, kindergarten whole class instruction averages 30 minutes and occurs multiple times during the morning. The differences in the social design of whole class instruction between preschool and kindergarten relate to teacher expectations for behavior. Listening, staying engaged, and not interfering with neighbors are examples of behaviors representing essential skills needed by kindergarten children for accessing learning activities. These behaviors are expected and we observed that children needed to adopt the requested behaviors quickly. Because of their young development, preschool children are given more latitude in the way they behave as well as how quickly they need to change their actions.

The whole class instruction routine of both preschool and kindergarten uses an instructional design that is centered on supporting children's learning using the see-listen-answer form. With kindergarten, the focus is academic and follows the scope and sequence of the literacy and language arts curricula to build skills and concepts. This translates into activities with specified outcomes, such as learning that the first letter of the sentence is capitalized and that punctuation is needed at the end. In preschool, the outcomes are likely to be more global, as in exposure to a range of early childhood books, enjoyment in reading, and introduction to the alphabetic principle. The see-listen-do form of whole class instruction does not often occur in preschool.

¹ For brevity, preschool refers to all early care and education programs—preschool, pre-kindergarten, and child care.

Strategies Bridging Preschool and Kindergarten Whole Class Instruction

To support a successful beginning in kindergarten, preschool teachers need to take a careful look at the physical, social, and instructional design of their routines and the status of children's essential skills. This assessment should take place at the middle of the preschool year to ensure adequate time to make necessary incremental changes in the ways they provide whole class instruction. Preschool teachers also need to understand the skills and related behaviors that will be expected of children when they reach kindergarten. Table 3 summarizes the physical, social, and instructional design strategies of whole class instruction in preschool and kindergarten and the bridge between them.

Following are three key strategies for teachers to bear in mind when making the transition in whole class instruction:

Prepare to increase the duration and frequency of whole class instruction.
 Kindergarten classrooms conduct whole class instruction on average 30 minutes, three times a day—this is a significant increase from the 20-minute, single session typical of a preschool morning. Circle time can be lengthened in increments of no more than five minutes at a time, so children can be engaged for the entire 30 minutes by the end of the school year. The other change that be easily made in preschool is to add a second whole class instruction time in the morning. This could be as simple as bringing the

children back to circle later in the morning for a quick story or game.

- Directly teach and provide direct feedback to children about use of expected kindergarten behaviors. This can be as simple as saying, "In kindergarten, the teacher will ask you questions. If you want to answer, raise your hand like this. Now I'm going to ask you a question and if you want to answer —what do you do? That's right. Ready? What is your favorite story? Let's see who raised a hand to answer. Everyone's hand is up. When I say your name, you can answer. Listen for the name. Sarah. That's right, Sarah, I did call on you. What is your favorite story?"
- Shift to specific academic outcomes and boost the pace of the teaching-learning interactions. This will prepare children for the higher level of instructional intensity they will experience in kindergarten. It is important to make a careful decision about whether to adjust one aspect at a time or to adjust both the focus and pace incrementally. Reviewing the state standards for preschool will provide information on the outcomes to be achieved by the end of the school year. One way to increase the pace of teacher-learning interactions is to add unison responses for practicing number or letter recognition. A second strategy is to use close-ended questions about content knowledge.

Summary and Implications

Teachers can make incremental changes in the physical, social, and instructional design elements of their whole class instruction activities to help children make a smooth transition from preschool to the more demanding educational environment of kindergarten. Teachers should focus on the essential skills that enable children to attend to instruction, integrate skills and knowledge, and practice what is being taught. Strategies for bridging to kindergarten-level activities require the preschool teacher to carefully plan the introduction of new skills and expectations. The preschool teacher can review the delivery of whole class instruction and the skills of the children to determine a plan of action. Among the elements of the transition plan might be adding an additional period of whole class instruction to the preschool schedule, gradually increasing its pace and length, while adopting a literacy curriculum to guide instruction.

Preschool teachers prepare children for their next big step into school by bridging the differences between preschool and kindergarten. Pianta, Cox, & Snow in 2007 and Pianta & Cox in 1999 identified key elements that bring about successful transitions into kindergarten. One element is the need to establish shared expectations about children among preschool teachers, kindergarten teachers, and families. When expectations for children's entry into the physical, social, and instructional demands of kindergarten are shared, the likelihood is greater they will achieve success in that future setting.

Table 2
Strategies for Bridging Differences in Whole Class Instruction between Preschool and Kindergarten Settings

choice of chair or spots on the carpet. The teacher sits on the floor with the children to help them pay attention. Physical Design Physical Design Physical The whole class instruction time lasts about 15 to 25 minutes for a class of fourand five-year-olds. There is one whole class instruction in the morning. Sit in their assigned spots on the carpet or chairs at tables. Teach circle time from a chair or rocker. Plan activities that require children to get learning materials and return to the group. Include more activities to extend circle time gradually to 30 minutes. Begin to add another (brief) whole class instruction time to the morning schedule. Sit in their assigned spots on the carpet or chairs at tables. The teacher sits on a chair or rocker in front of the children. The teacher sits on a chair or rocker in front of the children. The teacher sits on a chair or rocker in front of the children. The teacher sits on a chair or rocker in front of the children. The teacher sits on a chair or rocker in front of the children. The teacher sits on a chair or rocker in front of the children. The teacher sits on a chair or rocker in front of the children. The teacher sits on a chair or rocker in front of the children. The teacher sits on a chair or rocker. The teacher sits on a chair or ro
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Social Design	Preschool Setting Children are given significant verbal support for maintaining attention on the teacher instead of talking with peers. Children are assisted in allowing their neighbors to be engaged in the whole class instruction and not bothering them. Children, individually and as a group, are encouraged to respond when their teacher asks a question.	Bridging Strategies Discuss the reasons for listening and watching the teacher, then Practice by listening for the "magic words" in a story or by playing games like Simon Says. When children bother others during circle, provide positive feedback to those who ignore the disruption. Discuss and practice with children raising hands to let the teacher know they would like to answer a question.	Kindergarten Setting Children are to shift their attention to the teacher from peers. Children are to allow their neighbors to be engaged in the whole class instruction and not bother them. Children are to raise their hands to answer the teacher's question. Children are to promptly change their behavior on the teacher's direction.
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Instructional Design	Preschool Setting Daily learning activities in language and literacy are guided by child development, themes, or children's interests. Teaching methods include reading books, asking closed and openended questions, leading songs and finger play chants, directing large motor games, and offering children choices of books, songs, activities, etc. Children may complete a teacher-directed step-by-step task only in a small group.	Bridging Strategies Adopt a preschool literacy curriculum that can be implemented throughout the year. Increase the use of "correct answer," closeended questions that children answer individually. Practice unison response by having children identify letters of the alphabet. Introduce and practice whole-class table tasks with the teacher directing children step-by-step as each completes a worksheet.	Exindergarten Setting Daily learning activities in language and literacy are guided by standards and a formal curriculum that teachers are expected to follow. Teaching methods include close-ended questions to be answered individually, open-ended think and respond questions, listening to books, reading practice of sentences, reporting on activities, and counting in unison. Children complete teacher-directed step-by-step worksheets during whole class instruction.
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Summary of our Research

Over the past four years, we have been investigating early education practices that promote school readiness and contribute to successful school outcomes for all young children. Our work has focused on determining what early childhood programs can do to effectively prepare children for the social, physical, communicative, and instructional rigors of kindergarten. In October 2006, we wrote a series of briefs in which we identified skills that the research literature suggests are important for children to learn as they enter kindergarten.

Building on our previous work, we conducted a series of small studies (2007-2010) to validate the skills that kindergarten teachers identified as important and *essential* for children to have when they enter kindergarten. The results indicated 74 skills that kindergarten teachers ranked as important and 22 skills they told us were critical. Table 3 presents those 22 skills in alphabetical order.

Table 3
Essential School Readiness Skills Their Frequency of Occurrence Across Kindergarten Routines
(Percentage of observed routines)

		Learnin		Whole	
		g	Seat	Class	
	Arrival	Centers	Work	Instruction	Total
Skill	N=14	N=12	N=16	N=33	N=75
Accepts guidance and limits	64%	83%	56%	64%	65%
Asks for help	43%	67%	50%	24%	40%
Communicates needs and wants	79%	67%	44%	39%	52%
Controls feelings of frustration	43%	67%	38%	48%	48%
Copies or writes own name	43%	58%	63%	18%	39%
Disposes of bodily wastes	7%	17%	19%	21%	17%
Follows basic health and safety rules	50%	33%	50%	42%	44%
Follows classroom routines	100%	100%	94%	94%	96%
Follows different rules/routines	14%	25%	31%	30%	27%
Follows simple classroom rules	93%	92%	100%	85%	91%
Gives name, age, and gender	14%	17%	13%	9%	12%
Listens to gather information	64%	92%	88%	91%	85%
Recognizes five colors	29%	8%	25%	27%	24%
Recognizes own name in isolated					
print	21%	17%	13%	6%	12%
Resolves conflicts	21%	75%	25%	24%	32%
Sees a simple task to completion	86%	100%	81%	58%	75%
Stays on adult-directed task 10 or					
more minutes	29%	92%	81%	82%	73%
Takes care of toileting needs	36%	67%	6%	55%	43%
Understands and follows directions	86%	92%	81%	85%	85%
Uses speech that is understandable	100%	92%	75%	85%	87%
Washes hands and face	7%	42%	19%	12%	17%
Watches/listens to stories	14%	17%	13%	42%	27%

We also began to examine the importance of these skills in the context of children's successful engagement in typical kindergarten routines. In our most recent study, we observed children in kindergartens to determine whether they demonstrated these critical skills as they navigated routines such as arrival, whole class instruction, seat work, and learning centers. This latest work further validated the importance of the 22 observed skills and highlighted the significance of looking at common kindergarten classroom routines as important units of analyses. Table 3

presents data summarizing these observations. It presents the percentage of observations each skill was observed during the four different kindergarten routines mentioned. For example, the first skill in Table 3, *Accepts guidance and limits*, was occurred in 64% of all observed *arrival* routines (N=14). That same skill was observed to occur in 65% of all instances of the four kindergarten routines we studied (N=75). *Follows classroom routines* was the most frequently observed skills, occurring in 96% of all observed routines.

References

PIANTA, R. C., COX, M. J., & SNOW, K. L. (2007). SCHOOL READINESS AND THE TRANSITION TO KINDERGARTEN IN THE ERA OF ACCOUNTABILITY BALTIMORE: BROOKES PUBLISHING COMPANY

PIANTA, R., & COX, M. J. (1999). THE TRANSITION TO KINDERGARTEN. NEW YORK: BROOKS-COLE.

RIMM-KAUFMAN, S. E., PIANTA, R. C., & COX, M. J. (2000). TEACHERS' JUDGMENTS OF PROBLEMS IN THE TRANSITION TO KINDERGARTEN. EARLY CHILDHOOD RESEARCH QUARTERLY, 15(2), 147-166.

Early Childhood School Readiness Series 2

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Essential Skills for Successful School Readiness Research Project

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