

Essential Skills for Successful School Readiness

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Michael Conn-Powers, Ph.D - Principal Investigator

Alice F. Cross, Ed.D, Research Associate - Co-Investigator

Susan D. Dixon, M.S., Project Consultant - Co-Investigator

Elizabeth K. Traub, M.Ed., Research Associate - Co-Investigator

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Essential Skills for Successful School Readiness: Research Summary

Intro: Rimm-Kaufman, Pianta and Cox (2000) reported that 40% of young children are simply unprepared when it comes to the demands of kindergarten classrooms. Kindergarten teachers, facing increased academic demands, do not have the time to gradually orient all children to the rules, roles, and routines of kindergarten. If we want all children to be learning the moment they start kindergarten, then they need the skills and experiences that will prepare them. The purpose of our research was to determine the skills that children need to successfully negotiate the physical, social, communication, and instructional demands of common kindergarten routines

Prior Work: In October 2006, staff at the Early Childhood Center wrote a series of briefs, All Children Ready for School, in which we explored the notion of ready children, ready families, and ready schools. In the six briefs concerning ready children, we identified a number of skills that the literature suggested might be important for children as they enter kindergarten. These skills were organized into five domains: Approaches to Learning; Cognition & General Knowledge; Communication, Language, & Literacy; Health & Physical Well-Being; and Socio-Emotional Development.

Study 1: In 2007, we conducted an online survey of 229 kindergarten teachers throughout Indiana. In that survey, we presented 115 skills across five developmental areas identified as theoretically important in the early school readiness literature (briefly described in our Prior Work). The kindergarten teachers were asked to rate each skill on a Likert Scale from 1 (Not important) to 4 (Important and critical). The results from this study helped us to identify what kindergarten teachers expressed were the most important/critical skills for children to have upon entry into a kindergarten classroom.

Study 2: In 2008, we conducted a second online survey of 38 kindergarten teachers in Indiana. In that survey, kindergarten teachers were presented with 27 skills (identified from the first survey) and asked them to identify those classroom routines (from a list of 9) in which the skill was critical. The results from this study helped us to further prioritize the 27 skills by the

number of routines in which teachers indicated their importance. It also helped us to begin looking at differences across kindergarten routines.

Study 3: In 2009/10, we conducted a series of observations in 13 kindergarten classrooms in six schools. The schools were part of four Indiana school districts. Each school offered Title 1 services. Each kindergarten classroom was observed twice during the morning hours (with one exception), from the time children arrived until they went to lunch. Using laptop computers, we noted the classroom routines taking place and checked which of 22 skills (identified from the previous studies) children were using in each routine. In addition, each observer was asked to type in a brief description of each observed routine and skill. The results from this study helped us to further prioritize the importance of the 22 skills observed; and to create a framework of looking at common kindergarten classroom routines as important units of analyses in the context of school readiness.

Research Results

The study data was analyzed using a combination of qualitative and quantitative methods. The results are presented in three formats: percentage of classroom routines in which essential skills were observed, four classroom routines found in common across the observation settings, and examples of behaviors demonstrated the essential skills within the four classroom routines.

1. Percentage of Observed Routines (by Routine and in Total) in Which Skills Were Recorded

The first table (page 4) presents the percentage of routines in which the essential skills were observed. For instance, of the 75 observed routines, 16 were identified as seat work. Examples of the essential skill, "Accepts guidance and limits," were observed in 54% of the 16 seat work routines.

2. Four Classroom Routines Found in Common Across the Observation Settings

We defined a routine as being an instructional period with a set of specified characteristics, including teacher's instructional interactions (direct instruction as compared to oversight and support of children's independent work), child's focus (on the teacher or on the assigned work), grouping (whole class, small group, or individual), and children's seating/working location (table, floor, learning center, or cubby area).

3. Examples of Behaviors Illustrating the Essential Skills Within the Four Classroom Routines

Children demonstrated the skills in various depending on the routine in which they were engaged. For example, a child "Follows simple classroom rules" by raising his hand before responding to a teacher's question, waiting for a turn at the listening center, or walking rather than running in the classroom.

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Percentage of Observed Routines (by Routine and Total) in Which Skills Were Recorded

	Arrival	Learning Center	Seat Work	Whole Class 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 5 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 ten 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%

Skill	Arrival n = 14	Learning Center n = 12	Seat Work <i>n</i> = 16	Whole Class Instruction $n = 33$	Total <i>n</i> = 75
Watches/Listens to stories	14%	17%	13%	42%	27%

Arrival

1. Description

The arrival routine is the most consistent routine for kindergarten children, since all children arrive and transition into the classroom activities. All of the children enrolled in the schools where we observed entered their classroom, hung up coats and went directly either to their assigned place to do worksheets, or to a common meeting place. In our observations, arrival time was approximately 20 minutes in length. The shortest arrival routine took just over 5 minutes and the longest routine almost an hour.

2. Physical design

All classrooms had space reserved for coats and miscellaneous items such as backpacks. The majority of the rooms had cubby areas (designated area divided by hooks) but two had what the teacher called a 'locker', wooden closets was built into one wall of the classroom. All of the arrival spaces were located near the door where children entered and exited the classroom. Workspace for "morning work" included tables with assigned places for each child or workspace in a common area such as a carpeted meeting space.

3. Instructional design

a. Beginning

Most children entered the classroom at the same time, often having met first in an auditorium or large common space. Some children did arrive in small groups. Teachers welcomed children to the classroom, often using their names and sometimes making comments that are more personal. Children were expected to go to their assigned area and complete the activity laid out for them. When the child was expected to complete a worksheet, it was for the most part self-explanatory so that children could finish without teacher instruction or assistance.

b. Implementation

As children arrived in the classroom, and during the few minutes after they hung up coats etc. the teacher may have offered specific instruction on the worksheet to be completed. If children had questions or needed additional materials, they would ask the teacher for assistance. For this initial routine of the child's day, children, for the most part, acted independently.

c. Wrap up and Transition

Children appeared to be mostly self-guided during this routine; hanging up their coat, putting materials away, picking up work to be completed or proceeding to common meeting area. As children completed their worksheet, they placed in a designated location in the classroom or moved to the next location indicated by a verbal command by the teacher.

4. Social Design

Arrival is an opportune time for social engagement between both the teacher and children and among the children. We always observed some talk among children and most often with their teacher, initiated by either the teacher or the child. Children talked about their homes, how they felt, their homework assignment or where to place an item they brought into the classroom. To one another, they shared information about common experiences, or other people.

Essential Skills in the Classroom Routine of Arrival

Skill	% Routines	Examples of behaviors illustrating the skill Children are expected to:
Follows classroom routines	100	 Enter classroom and put away coat put papers from home in assigned spot respond to teacher greeting say pledge get out materials for "morning work" complete morning work put materials away
Uses speech that is understandable	100	Use understandable speech when: •Responding to the teacher •Speaking with classmates •Asking for assistance •Saying the pledge
Follows simple classroom rules	93	Walk Wait their turn Ask permission to use the bathroom Stop work and listen to announcements and pledge Remain seated in chairs Return books so others can use them
Sees a simple task to completion	86	Complete tasks involved in putting away coat, mittens, paperwork that came from home Complete "morning work" (usually worksheets)
Understands and follows directions	86	Follow directions for tasks such as: •Put your mittens in your sleeve •Put your name on your paper •Put your pencil down •Raise your hand if you are eating lunch today

Skill	% Routines	Examples of behaviors illustrating the skill Children are expected to:
		•Take this folder to the library
Communicates needs and wants	79	Ask permission to use the restroom Requests to borrow a crayon from another child Asks teacher where to put book from home he has brought to share
Accepts guidance and limits	64	Abide by classroom rules when reminded by teacher Receive encouragement for the day ahead Complete projects and/or tasks when reminded
Listens to gather information	64	 Listen for teacher cue (bell) that indicates instructions will be given -listens for updates during all-school announcements in AM. Listen to teacher directions about what they are to be doing, including what is involved in their "morning work"

Whole Class Instruction

1. Description

Whole class instruction is named many things: reading block, large group, carpet time, or morning meeting. During this time, the teacher leads the entire class through a series of instructional activities in which every child is expected to participate. In our observations, there were two different forms of whole class instruction. One involved children seated together and focused on the teacher and the book or other materials she used. The other had each child seated individually focused on a task, such as a worksheet while the teacher took the group step-by-step through the work. There was whole class instruction at least once each morning for about 30 minutes, however most classrooms had whole class instruction two or more times each morning. The longest session was more than 80 minutes while the shortest was 4 minutes. Whole class instruction was the most common instructional approach.

2. Physical Design

Whole-class instruction was most often held on the carpet with the teacher seated in front of the class. Children usually had assigned spaces on a carpet. They sat in a circle or in a cluster facing the teacher and materials displayed on an easel or a wall. At other times children sat at their assigned seats at tables or desks for teacher-directed instruction involving the whole class.

3. Instructional Design

a. Beginning

Teachers called children to the carpet or to their seats. Children were expected to sit down in their assigned spots and wait quietly for the teacher to begin.

b. Implementation

Literacy was the primary focus of the whole class instruction on the mornings we observed. Activities focused on reading, phonics, vocabulary, and writing. Other whole class instruction was used for math skills, such as number recognition, counting, or calendaring. During our observations, teachers read or talked about books, used closed and open questioning approaches, asked children to respond individually and as a group, and used other techniques such as "stretching words" and flash cards. When a child needed support to answer a question, teachers used scaffolding or went 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 sequence.

c. Wrap up and Transition

Teachers completed the activities and told children what happened next in the schedule. Children put away any materials they had used. Sometimes children were simply told to go to the next location. At other times, children were asked to line up for going down the hall to the bathroom or to lunch.

4. Social Design

Whole-class instruction offered little opportunity for peer-to-peer social interaction. Children were expected to follow the social rules of their classrooms such as taking turns, responding to teacher questions, waiting to be called on before answering, and staying in their own space.

Essential Skills During the Classroom Routine of Whole Class Instruction

Skill	% Routine	Examples of behaviors illustrating the skill Children are expected to:
Follows classroom routines	94	 Move to the carpet or table Sit criss cross at the right place Get materials out Wait quietly for teacher to begin the activity Pay attention Listen to the teacher Answer when asked a question Read, sing, or count with everyone Wait to be excused Put away materials
Listens to gather information	91	Listen to directions to: •Learn the steps of what to do next •Be ready to take a turn •Know what to bring from home Listen to learn about: •Letter sounds, stretching words, punctuation, new words • Books • Counting by fives, tens, to 100
Follows simple classroom rules	85	 Use quiet voices Sit in the chairs safely Watch & listen to the teacher Answer when the teacher calls on them Keep hands to one's self
Understands and follows directions	85	Follow directions to: • Rearrange how they sit on the carpet, stand in circle, or sit on chairs as directed

Skill	% Routine	Examples of behaviors illustrating the skill Children are expected to:
		 Listen to the word, stretch the word, write the word, and show the teacher Turn in the workbook to page 9 and follow instructions to put an "x" on the picture that starts with the sound of /b/ Put away materials and get into line Tip-toe back to seat
Uses speech that is understandable	85	 Say the date aloud together Answer questions with complete sentences Sound out words Talk in conversations with other children
Stays on adult- directed task for more than ten minutes	82	 Listen to a story and answer questions Complete a printing task Take part in the morning meeting by giving the day of the week & date, describing the weather, reading the word list, listening to the Alpha Tales© story, talking about the letter of the week
Accepts guidance and limits	64	 (with one reminder) Sit & keep hands to themselves Share materials Follow directions Comply with teacher requests Do tasks in a timely manner Clean up messes

Seat Work

1. Description

There are times during a kindergarten child's day in which he or she spends time at a table or desk doing individual work. This instructional period often begins with teacher-led group time during which children are presented with a lesson. Following this, children leave the large group and go to their tables, desks or other work area and complete individual seat work (also called "table work") that directly relates to the original lesson. This is time when children review and practice the content of the large group lesson. During our observations, we saw predominantly literacy-focused lessons (phonics, reading and writing), with a couple math lessons interspersed. Seat work sessions lasted an average of half an hour, with one lasting only a little over ten minutes, while the longest was just over 50 minutes.

2. Physical Design

Large group time typically occurred on a rug, with children sitting on the floor looking toward the teacher. After the content of the lesson, the teacher gave instruction as to what should be done individually, and the children moved to their assigned spots at tables. In our observation settings, children were seated either at tables of between four and eight children, or in a large "U"-shaped table at which all children faced the center.

3. Instructional Design

a. Beginning

The teacher presented a lesson to the group as a whole, then gave instructions as to what was to happen individually when the children moved to their tables. The number and complexity of directions children were asked to follow depended on the activity.

b. Implementation

Children were seated at tables with between four and eight classmates. They were expected to have gathered their materials, begin work immediately (since instructions were given prior to moving to tables), and continue until finished. If they had questions, they were to raise their hands and wait for adult attention. There was some variation between classrooms as to how much teacher interaction was present, with children being expected to independently complete their seatwork in all settings.

c. Wrap up and Transition

The teacher cued the class that it was time to finish their work and put away materials. Children were expected to finish their work, clean up and put materials away, and move to the next activity, which was typically a large group time. In some classes, an adult checked student work before it was put away.

4. Social Design

There were varying degrees of interaction between teacher and children, and between classmates during this phase. The opportunity for children to interact with one another varied across classrooms. While the children were getting instruction, which preceded the individual practice at their tables, they were in large groups quietly listening to the teacher. Once at their tables, children in some classes were allowed to talk to one another about their work, while in other classes they were reminded to be quiet while working.

Essential skills in the Classroom Routine of Seat Work

Skill	% Routines	Examples of behaviors illustrating the skill Children are expected to:
Follows simple classroom rules	100	 Use quiet voices Remain seated in their chairs Be respectful of materials Use materials safely Put materials away when done Walk through the classroom Raise hands for teacher attention
Follows classroom routines	94	 Listen to instructions from the front of the room Move quietly to assigned seats Get out materials Complete work Put away materials when finished
Listens to gather information	88	Listen to directions: •How to do assigned seat work •How make a specific letter •What to do next in the schedule Listen to learn about: •Phonics •Writing in journals •Counting & identifying numerals
Sees a simple task to completion	81	 Complete assigned worksheets Complete assigned artwork Complete project before moving on to next activity Put away materials

Skill	% Routines	Examples of behaviors illustrating the skill Children are expected to:
Stays on adult- directed task >ten minutes	81	Listen as teacher explains how to do the seat work activity
Understands and follows directions	81	Follow directions for specific activities such as: •waiting for papers to be handed out and getting pencils to start work •moving from one area of the room to another •going to the assigned table •picking up and putting away materials •turning in papers Follow directions when: •answering questions •turning to a specific page •following along as the teacher explains a workbook page •sounding out a word •drawing a picture
Uses speech that is understandable	75	Use understandable speech when: •responding to questions •asking for clarification • talking among themselves. •they read what they have written to the teacher, to the whole class, or to each other
Copies or writes own name	63	Write their names on all work

Learning Centers

Description

Learning centers is a common classroom routine in which the kindergarten teacher sets up four or more centers or workstations for children to complete any of a number of teacher-planned tasks. The specific tasks we observed focused on primarily on literacy skills, and ranged from independent work on worksheets, completing work folders, matching games, book reading (silently or in pairs), or manipulatives (e.g., puzzles, magnetic letters). Often, the teacher was observed leading a small instructional group for one of the centers, while children were expected to manage their work/activity at the other centers. At specific intervals, children were expected to complete their work at one center and then move to a new center to complete the assigned work there. On the average, learning centers lasted approximately one hour, but ranged from 25 minutes to 80 minutes in length.

Physical Design

Learning centers generally occurred at tables with children seated in small groups, or at floor activities with children either seated on the floor or standing. Upon cue, children moved to and among the learning centers.

Instructional Design

a. Beginning

Teachers introduced each of the learning centers and described the tasks or activities that were to be completed. Then, either randomly or purposefully, the teacher assigned each child to a specific center.

b. Implementation

The teacher typically instructed a small group of children at one of the centers, and monitored the other centers to insure all children were at their assigned center and working appropriately. When needed, the teacher would interrupt her instruction and provide guidance to children at the other centers. Children at the other centers were expected to independently manage themselves and complete the assigned task/activity. If they had questions or needed to have their work checked, they would either raise their hand or go to the teacher. Often, there was another adult/teacher present to assist with the tasks of teaching and providing guidance and assistance.

c. Wrap Up and Transition

The teacher cued the class that it was time to finish their work. During this time, children were expected to finish their work, clean up and put materials/worksheets away, and proceed to the next activity. The teacher monitored and provided guidance where needed. She also used this time to check individual children's work.

Social Design

Social engagement among children during learning centers varied considerably. There were learning centers that involved independent work with very little social interaction (e.g., completing worksheets, reading a book), except to ask for assistance. Other learning centers involved activities in which children were expected to work together, such as reading to one another, engaging in a literacy game, or manipulating with the materials set up at the table.

Critical Skills During the Classroom Routine of Learning Centers

Skill	%	Examples of behaviors illustrating the skill
Skill	Routine	Children are expected to:
Follows classroom routines	100	 Listen to teacher introduce each center and go to the assigned center Work independently to complete a task or worksheet, work with other children to complete the assigned task, or work with the teacher Take their work/worksheet to the teacher to check, or raise their hands for the teacher to come to them Complete their work, put materials away, and rotate to the next center when cued by the teacher
Sees simple task to completion	100	 Complete tasks such as: Reading a book or reading in pairs Spelling words using magnetic letters Completing a puzzle
Follows classroom rules	92	 Walk Work quietly Put away materials Sit in chairs with all feet on the floor
Listens to gather information	92	 Listen to the teacher's descriptions and expectations for each center Listen to the lesson at the center with direct teacher instruction Listen when the teacher provides additional information or guidance after centers have begun
Stays on adult- directed task	92	Attend to and participate in the lesson at the teacher-directed center
Understands and follows directions	92	 Follow directions concerning the tasks/activities they are to complete. Some activities require remembering earlier directions and following several steps Follow directions at the end of the routine of finishing their work, putting their materials away, putting their names on their work, and moving to the next activity/area.
Uses speech that is understandable	92	 Use understandable speech when: Asking peers or the teacher for help Talking with peers as part of a common activity or game
Accepts guidance and limits	83	Stop what they are doing and do what the teacher asks regarding: using quiet voices Cleaning up

Skill Routine Kexamples of behaviors illustrating the skill Children are expected to:		
		 Going to assigned centers Waiting patiently for teacher
Resolves conflicts	75	Resolve conflicts that arise when working together with other children and in close proximity: • sharing materials • Sharing space (someone bumps into me) • Getting agreement about how to complete a task • Taking turns
Asks for help	67	 Raise their hands or take their work to the teacher to ask for help if they were stuck or not sure what to do Ask classmates for help if needed
Controls feeling of frustration	67	 Wait for the teacher to provide assistance or check their work Complete difficult work Cooperate with peers in getting needed materials to complete task

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