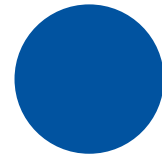




PILOT STUDY



Fall 2002

Minnesota  
School Readiness Initiative:  
Developmental Assessment at  
Kindergarten Entrance



Minnesota  
Department of  
Education

## Acknowledgements

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# Minnesota School Readiness Initiative: Developmental Assessment at Kindergarten Entrance Fall 2002 Pilot Study

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## INTRODUCTION

A large and growing body of research supports the critical relationship between early childhood experiences and successful life-long outcomes. In recognition of this, the Minnesota Department of Education included within their goal of “High Achievement for All Students” the indicator: **Increase the percentage of young children who are ready for school.** In order to make progress toward achievement of this indicator, it is the purpose of the Minnesota School Readiness Initiative to develop a system that assesses young children’s readiness for school. The specific objectives of this study are: (1) to pilot a system for assessing the school readiness of a sample of Minnesota kindergarten children and (2) to obtain a picture of the readiness of a sample of Minnesota kindergartners entering Minnesota elementary schools in the fall of 2002 through this piloted system.

## SCHOOL READINESS DEFINITION

For this study, school readiness is defined as the skills, knowledge, behaviors and accomplishments in multiple areas of a child’s development that children know and can do as they enter school. The areas of development include:

- physical well-being and motor development,
- social and emotional development,
- approaches to learning,
- language development,
- cognition and general knowledge and
- creativity and the arts.

Behavioral indicators related to each of these areas of development can be assessed in order to obtain a picture of a child’s development at kindergarten entrance. Thirty research-based indicators of a child’s development representing all of these areas of development were selected to define and assess school readiness for the Minnesota School Readiness Initiative.

## STUDY PROCESS

The Minnesota School Readiness Initiative study involved piloting use of a customized Minnesota Work Sampling System (WSS)<sup>®</sup> Kindergarten Entry Behavioral Checklist with a sample of 1,851 Minnesota kindergartners in a randomly selected sample of 31 elementary schools in the fall of 2002. Thirty

developmental indicators were selected from the WSS *Preschool-4 Developmental Guidelines* to include in the checklist in the domains of Personal and Social Development, Language and Literacy, Mathematical Thinking, The Arts and Physical Development and Health. These indicators were selected because they represent what children should be able to do at the end of the year before they enter kindergarten based on widely held developmental expectations.

Each domain and developmental indicator within the WSS developmental checklist includes expected behaviors for children at that age or grade level. For each behavioral indicator, teachers use guidelines to rate the child's performance as:

**Not Yet** - indicating that the child cannot perform the indicator, i.e., that the performance indicator represents a skill, an area of knowledge or a specific set of behaviors or accomplishments that the child has not acquired.

**In Process** - implying that the skills, knowledge, behaviors or accomplishments represented by this indicator are intermittent or emergent and are not demonstrated reliably or consistently.

**Proficient** - meaning that the child can reliably demonstrate the skills, knowledge, behaviors or accomplishments represented by this performance indicator.

## FINDINGS

Kindergarten children in the sample were most proficient in the area of physical development and health (62%), followed by personal and social development (49%) and the arts (48%) and were least proficient in the areas of language and literacy (44%) and mathematical thinking (42%). The most children were "in process" or inconsistent in exhibiting the skills, knowledge, behaviors or accomplishments in mathematical thinking (44%), followed by the arts (42%), personal and social development and language and literacy (38% each) and physical development and health (34%). Ten percent or more of the sample were not yet exhibiting the skills, knowledge, behaviors or accomplishments in four of the five domains. Language and literacy (18%) was the area in which the most children were rated "not yet", followed by mathematical thinking and personal and social development (13% each), the arts (10%) and physical development and health (4%).

Across the five domains, children in the sample were generally more proficient on the simpler, less challenging indicators. As skills, knowledge, behaviors or accomplishments become more complex and demanding, ratings declined.

## CONCLUSIONS

The Minnesota School Readiness Initiative pilot study of children's developmental assessment at kindergarten entrance gives a picture of the development of a sample of kindergarten children in the first weeks of school in the fall of 2002. The data yield baseline information on 30 indicators in five domains of development. These results will be useful to public school administrators and teachers and early childhood care and education service providers as well as parents, policymakers, community members and the general public as they work to improve children's opportunities for school success. This pilot study also provides an opportunity for testing a process for gathering these data and identifying the issues in conducting such a study as consideration is given to expanding it to a larger sample of kindergarten children.

### About Child Assessment Results

**Children entered kindergarten with a range of skills, knowledge, behaviors and accomplishments.** As is evident in observing any group of young children, there is great variability in their knowledge and skills in the different areas of development. This variability is to be expected. It is not appropriate to expect that all children will come to school with the same level of skills and knowledge in all areas of development.

In all of the developmental domains assessed in the study, a certain percentage of kindergarten children had not yet acquired the indicators of focus. Based on findings from similar studies in other states and national studies, these children are more likely than children who can perform the indicators to live in poverty or experience other risk factors making them vulnerable for school failure. Schools, early childhood care and education service providers, policymakers and community members have a particular responsibility to focus special attention and resources on these children if they are to catch up to their peers.

### About the Study Process

**Using authentic assessment such as the Work Sampling System is appropriate when working with elementary school principals and kindergarten teachers to assess children's readiness as they enter kindergarten.** Many kindergarten teachers are familiar with the WSS of child assessment because it is used to assess children in Title I in Minnesota. Therefore, these teachers are able to use the same observation and documentation skills to rate the school readiness of children as they enter kindergarten. These teacher ratings can in turn be aggregated and analyzed to provide a comprehensive and meaningful picture of the school readiness of a sample of Minnesota kindergarten children. Based on the pilot of the process used, a number of strategies have been identified for improving the process as it is expanded for use in the future with a larger sample.

## RECOMMENDATIONS

The findings from the Minnesota School Readiness Initiative pilot study in regard to the process and the data on the development of children at kindergarten entrance indicate that much was learned and much needs to be done to ensure that each Minnesota child enters school ready for success and is greeted by an environment that has the capacity to address the diverse needs of every child. These are the goals of the Minnesota School Readiness Initiative. The following are recommendations for action with regard to both the Minnesota School Readiness Initiative child assessment results and the pilot study process.

### About Child Assessment Results

**Support parents in their role as children's first teachers.** Parents are children's first and most important teachers and are critical to their children's success in school. Because of this they should have access to information and support regarding parenting. Providing information to parents about age and developmentally appropriate ways in which they can extend their children's learning through everyday activities and routines is one way this can be done. *The Minnesota Early Childhood Indicators of Progress: A Resource Guide*, which provides suggested strategies family members can use to facilitate children's development in all of the areas of learning studied, is a resource available to them for this purpose (<http://cfl.state.mn.us/ecfi/earlychi.pdf>). *Winning Ways to Learn, Ages 3, 4 & 5, 600 Great Ideas for Children* provides tips for parents and other caregivers to support the development of the skills children will need for kindergarten ([www.PearsonEarlyLearning.com](http://www.PearsonEarlyLearning.com)).

**Continue to increase schools' ability to respond to the varying needs of children as they enter kindergarten.** This study confirms that children come to kindergarten with variability in their skills, knowledge, behaviors and accomplishments. Although much can be done during the child's early years to enhance these skills, knowledge, behaviors and accomplishments, variability is normal for children entering kindergarten. Schools need to be prepared to address this variability, including both the children inconsistently or only sometimes demonstrating the skills, knowledge, behaviors and accomplishments and the children who enter school with low skills and are not yet able to perform many of the indicators.

**Continue to work with children who are progressing.** Children need continuous support and encouragement to maintain their developmental and learning momentum. Proficient ratings ranged from 42 to 62 percent in the five domains. These children need to continue to receive at least the same



level and types of home and community supports to maintain this level of readiness and thrive. Many children in each developmental area were showing the skills, knowledge, behaviors and accomplishments inconsistently only, ranging from 34 - 44 percent. These children are likely to need close observation and intentional teaching strategies from parents and teachers to move them toward proficiency in all or most of the indicators where they are not now consistently proficient.

**Continue to work toward improving the quality of all early childhood care and education programs in Minnesota.** Research tells us that children's development and learning is positively affected if early childhood care and education programs are of high quality. Quality early childhood care and education programming is of particular importance in helping to reduce the number of children who have inconsistently or not yet acquired the skills, knowledge, behaviors and accomplishments expected as they enter kindergarten.

**Focus on improving children's early language and literacy and mathematical skills.** The developmental data from this pilot study show that the sample of Minnesota kindergarten children are less proficient in the domains of language and literacy and mathematical thinking when they enter kindergarten than they are in the other three domains studied - physical development and health, personal and social development and the arts. Early language and literacy and math experiences that are age and developmentally appropriate should be more fully embedded within the everyday activities of children. These types of activities should continue as children enter the K-12 system, especially for children who are inconsistently or not yet exhibiting these skills. In doing so, however, care should be taken to avoid pushing academic activities for school-age children down to lower age levels inappropriately. It must also be remembered that the other areas of physical development and health, personal and social development and the arts continue to be critical to school success.

**Provide opportunities for parents and early childhood care and education teachers and providers to learn more about promoting improvement in children's early language and literacy and mathematical skills.** As indicated above, study data show that this sample of Minnesota kindergarten children is less proficient in the domains of language and literacy and mathematical thinking when they enter kindergarten than they are in the other three domains studied. There are a multitude of everyday, age appropriate learning experiences that can be provided to young children in the areas of language and literacy and mathematical

thinking that set the stage for school success, and there are a wide array of ways to make these learning opportunities available to children that can be easily learned and used by parents, teachers and caregivers (See *The Minnesota Early Childhood Indicators of Progress: A Resource Guide* (<http://cfl.state.mn.us/ecfi/earlychi.pdf>) and *Winning Ways to Learn, Ages 3, 4 & 5, 600 Great Ideas for Children* ([www.PearsonEarlyLearning.com](http://www.PearsonEarlyLearning.com)) mentioned earlier.

### About the Study Process

**Work earlier and more closely with principals and teachers involved in the study.** Identify elementary schools to be included in the sample as soon as possible. Once sample principals agree to participate, begin communication with the kindergarten teachers involved and continue communication with them until the study is completed. If possible, meet once face-to-face with the kindergarten teachers in order to discuss all study details. If teachers lack the training needed to effectively use the Work Sampling System, make needed training available. Work with principals and kindergarten teachers to identify ways in which they can make best use of the data they gather to enhance the curriculum and learning experiences of the kindergartners in their schools and to work more closely with parents and early childhood care and education teachers and providers. Consider inviting stakeholders – parents, elementary principals, kindergarten teachers, primary teachers, early childhood education teachers and caregivers, child advocates and policymakers – to comment and advise on the study process and results.

**Expand sample of the cohort of kindergarten children in Minnesota to be assessed to approximately 3,500.** Now that Minnesota has tested a process of collecting school readiness assessment information on a sample of children, a larger sample is needed to establish further baseline data and assure greater geographic representation. A larger sample will minimize some of the challenges to the development of a geographically and demographically representative sample. The addition or loss of a school site will have less overall negative impact on the representativeness of the sample if there are more children in the overall pool.

**Collect information on children's experiences the year before they enter kindergarten.** Early experiences have been shown to have a positive effect on children's later learning and development. Kindergarten teachers could be asked to provide information regarding a child's experiences prior to kindergarten. Some teachers already collect this information. Also, consideration should be given to adding a parent survey to the study.

**Analyze results by demographics in order to determine differences in children's school readiness by different demographic variables.**

Extensive research evidence shows that more intense services are often needed for children at greater risk for school failure. By doing a demographic analysis, more can be learned about how potential risk factors are exhibited among a sample of Minnesota kindergarten children and how they relate to their proficiency on the developmental indicators being assessed.

### **Minnesota's Emphasis on Accountability**

A large and growing body of research supports the critical relationship between early childhood experiences and successful life-long outcomes. In recognition of this, the Minnesota Department of Education included within their goal of "High Achievement for All Students" the indicator: **Increase the percentage of young children who are ready for school.** In order to make progress toward achievement of this indicator, it is the purpose of the Minnesota School Readiness Initiative to develop a system that assesses young children's readiness for school.

How much do we know about how well Minnesota children are prepared for school? Some school districts have their own assessments of children and implement them as children enter kindergarten.

Approximately 92 percent of Minnesota children receive health and developmental screening between 3 1/2 - 5 years of age as part of the state's mandated Early Childhood Screening. The goal of this screening is to detect possible health, developmental or other concerns that may impact children's ability to learn and future school success. Unlike states such as Maryland and North Carolina, Minnesota has no systematic, statewide assessment of the developmental status of kindergarten children as they enter school each fall. The specific objectives of this study are: (1) to pilot a system for assessing the school readiness of a sample of Minnesota kindergarten children and (2) to obtain a picture of the readiness of a sample of Minnesota kindergartners entering Minnesota elementary schools in the fall of 2002 through this piloted system.

### **What is School Readiness?**

The work of the National Education Goals Panel (NEGP) has been the foundation for many state efforts directed at establishing school readiness developmental assessment. In addressing the first National Education Goal stating "by the year 2000, all children in America will start school ready to learn," the NEGP identified three important components of school readiness: (1) readiness in the child, (2) schools' readiness for children and (3) family and community supports and services that contribute to children's readiness (Child Trends, 2001; NEGP, 1998). Consistent with other states doing similar initiatives, in this first year of piloting school readiness assessment in Minnesota, child readiness is the component of focus, but it is anticipated that the other components will be studied in future years of the initiative. Child readiness, as described by the NEGP,

takes into account the latest research on child development and early education by highlighting five dimensions of a child's school readiness:

- Physical well being and motor development,
- Social and emotional development,
- Approaches to learning,
- Language development and
- Cognition and general knowledge.

*The Minnesota Early Childhood Indicators of Progress: A Resource Guide* (Minnesota Department of Children, Families & Learning, 2000) provides a framework for understanding and communicating a common set of developmentally appropriate expectations for young children approximately four years old, presented within a context of shared responsibility and accountability for helping children meet these expectations. This document focuses on the same five dimensions as the NEGP and an additional one of creativity and the arts. The five dimensions listed above and this sixth dimension are included in the Minnesota definition of school readiness and the pilot school readiness assessment. Specifically, school readiness is defined as the skills, knowledge, behaviors and accomplishments in the six areas of child development listed above that children know and can do as they enter kindergarten.

### **Why is School Readiness Important?**

Recent findings in early brain research reveal that children learn and develop rapidly during the first months and years of life. Young children are eager to learn and explore their world and, with support from family, communities and high quality, stimulating early learning and care environments, children are more likely to be ready for school. However, many studies have documented evidence of striking disparities in what children know and do well before they enter kindergarten. According to the recent report, *From Neurons to Neighborhoods* (National Research Council & Institute of Medicine, 2000), "Redressing these disparities is critical, both for the children whose life opportunities are at stake and for a society whose goals demand that children be prepared to begin school, achieve academic success and ultimately sustain economic independence and engage constructively with others as adult citizens (p. 386)." Minnesota needs a system in place to determine the extent of such disparities and to better inform practitioners and policymakers of the kinds of early experiences needed in order to increase the percentage of young children who are ready for school.

## Selection of Work Sampling System (WSS)<sup>®</sup> of Child Assessment

In order to gather information on Minnesota children as they enter kindergarten along the six dimensions of development identified, a portion of the Work Sampling System was selected for the assessment. The WSS is a standards-based observational assessment system designed to provide information about individual students' achievement and progress over time. The department has provided training in and encouraged use of the WSS in Minnesota public school School Readiness programs and other early childhood programs since 1994. The Work Sampling System is a required assessment for all Title I children in kindergarten through second grade in Minnesota. Most Minnesota kindergarten teachers are trained in use of the WSS because of its use to assess all Title I kindergarten children. Also, the Work Sampling System meets all of the criteria of authentic assessment – assessment that is based on everyday learning experiences, provides for actual child performance and involves children in the evaluation process. Unlike paper-and-pencil tests used to assess older children, authentic assessment involves teacher observation of the child in the everyday classroom environment over time rather than evaluating them in a different location or circumstance by someone with whom the child is unfamiliar. The criteria for authentic assessment are:

- Fair to all children regardless of culture, language background, developmental level, family background, learning style, etc.;
- Uses familiar tasks and everyday classroom activities;
- Conducted in familiar settings with familiar people;
- Based on multiple sources of information and
- Continuous and ongoing to show progress and growth over time (Dichtelmiller & Jablon, 1993; Hill, 1992; Scott-Little & Niemeyer, 2001).

A customized Minnesota WSS developmental checklist was created to be used by kindergarten teachers to assess new kindergartners during the first six weeks of the 2002-2003 school year through consultation with national experts, other states and the developer of the WSS, Dr. Samuel Meisels. Thirty developmental indicators were selected from the *WSS Preschool-4 Developmental Guidelines* to include in the Minnesota Work Sampling System<sup>®</sup> Kindergarten Entry Behavioral Checklist. These reflect the five NEGP dimensions of children's school readiness and the additional dimension from the *Minnesota Early Childhood Indicators of Progress: A Resource Guide*. The checklist includes nine indicators in the Personal and Social Development domain (approaches to learning is included within this domain), ten indicators in Language and

Literacy, four in Mathematical Thinking, four in The Arts and three in Physical Development and Health (see Appendix A). These indicators were selected because they represent what children should be able to do at the end of the year before they enter kindergarten based on widely held developmental expectations.

### **The Work Sampling System - How Does it Work?**

The Work Sampling System (Dichtelmiller, Jablon, Dorfman, Marsden, & Meisels, 2001) is a performance-based assessment that uses teacher observation and documentation of students' responses to everyday classroom activities that are already part of the ongoing curriculum and instruction process. Teachers are always on the lookout for child progress and children's readiness to learn the next new concept in a developmental domain. In this way, the WSS is embedded in curriculum and is *how* a teacher works, not something extra that they do. Teachers embed what they want children to gain exposure to, learn and demonstrate throughout all areas of the classroom and curriculum. Children are provided with multiple opportunities to learn and to show what they know and can do; this is consistent with what we know about the developmental variability in children in the early years, the need for cultural sensitivity and the effects of the discrepancies in children's early learning experiences.

Each domain and developmental indicator within the WSS developmental checklist includes expected behaviors for children at that age or grade level. For each behavioral indicator, teachers use guidelines to rate the child's performance as:

**Not Yet** - indicating that the child cannot perform the indicator, i.e., that the performance indicator represents a skill, an area of knowledge or a specific set of behaviors or accomplishments that the child has not acquired.

**In Process** - implying that the skills, knowledge, behaviors or accomplishments represented by this indicator are intermittent or emergent, and are not demonstrated reliably or consistently.

**Proficient** - meaning that the child can reliably demonstrate the skills, knowledge, behaviors or accomplishments represented by this performance indicator.

Teachers use the *WSS Development Guidelines* books for the age group with whom they work to rate children based on their observations and documentation and the correspondence between these observations and documentation and the rationales and examples for each indicator as described in the *Guidelines*. The *WSS Developmental Guidelines* are

designed to enhance the process of observation and to ensure the reliability and consistency of teachers' observations (Dichtelmiller, Jablon, Marsden, & Meisels, 2001).

### **Intended Uses of Findings**

It is the long-term intent of the Minnesota School Readiness Initiative to use study results to inform school administrators and teachers; parents; early childhood care and education teachers, providers and programs; policymakers and the public about progress towards the goals of ensuring that children are ready for school and schools are ready for children. It is expected that the project will promote children's learning and development over time through improving early childhood programs and services, better preparing schools to meet the needs of children as they enter school and easing the transition for children and families from home to school. This first phase of the study is of particular importance in testing the process for collecting school readiness data and examining the feasibility of and issues involved in expanding the assessment to a broader sample of kindergarten children in Minnesota along with providing a picture of the readiness of children in specific developmental areas as they enter kindergarten. The information gathered to complete the developmental checklists is a valuable resource to teachers in modifying curriculum, working with individual children in their classrooms, preparing for parent conferences and identifying children eligible for Title I and other services.



The Minnesota School Readiness Initiative study involved piloting use of the customized Minnesota Work Sampling System® Kindergarten Entry Behavioral Checklist with a sample of Minnesota kindergartners in a randomly selected sample of elementary schools in the fall of 2002.

### Study Preparation

In May 2002, an invitation was sent to randomly selected elementary school principals with a request for a response by the end of May (see Appendix B). All schools involved in the study were identified in late August. Packets of information with the customized WSS developmental checklists were then mailed to principals and kindergarten teachers in the 31 participating elementary schools (see Appendices C and D). These materials included instructions and a timeline for the process to be used, a *Work Sampling System Preschool-4 Guidelines 4th Edition* booklet for each teacher and a chart listing the 30 selected Preschool-4 indicators being assessed as indicators of school readiness alongside a list of the corresponding 30 kindergarten indicators with the rationale and examples for each from the *Work Sampling System Preschool-4 and Kindergarten Guidelines 4th Edition* booklets.

All kindergarten teachers in selected elementary schools were asked to observe all kindergarten children in their classrooms between the first week of school and October 15, 2002 in order to minimize the impact of kindergarten instruction. Teachers documented what they observed, rated each child's performance on each indicator using the *Work Sampling System Preschool-4 Guidelines 4th Edition* booklet and recorded their ratings on one of the Minnesota Work Sampling System® Kindergarten Entry Behavioral Checklists for each child. Completed checklists were returned to the department where they were reviewed and forwarded to Pearson Education, Inc. for scanning, scoring and data summary. Department staff did additional data analysis.

Aggregated statewide results are presented for all schools in this sample. School-level information was provided to participating schools. *Data do not identify individual children.*

### Sample Demographics

Selecting a demographically and geographically representative sample of kindergarten children was a high priority for the study. This was done by randomly selecting schools from six strata that differentiate schools based on size and location. The pool from which schools were selected did not include charter, specialty, and private schools. As one school from a given strata declined participation, an invitation was extended to another randomly selected school from that same strata. Through this process, a potential pool of 2,000 kindergarten children from 34 schools was identified. A sample of this size was chosen mainly because of resource limitations as well as a desire to pilot the process with reasonably manageable numbers that would yield a

valid sample. The final sample contained 1,851 kindergarten children from 31 schools taught by 84 kindergarten teachers. A sample of 1,800 children is needed to be representative (99% confidence) of the statewide kindergarten cohort in Minnesota with a 3 percent margin of error. This study sample meets this expectation.

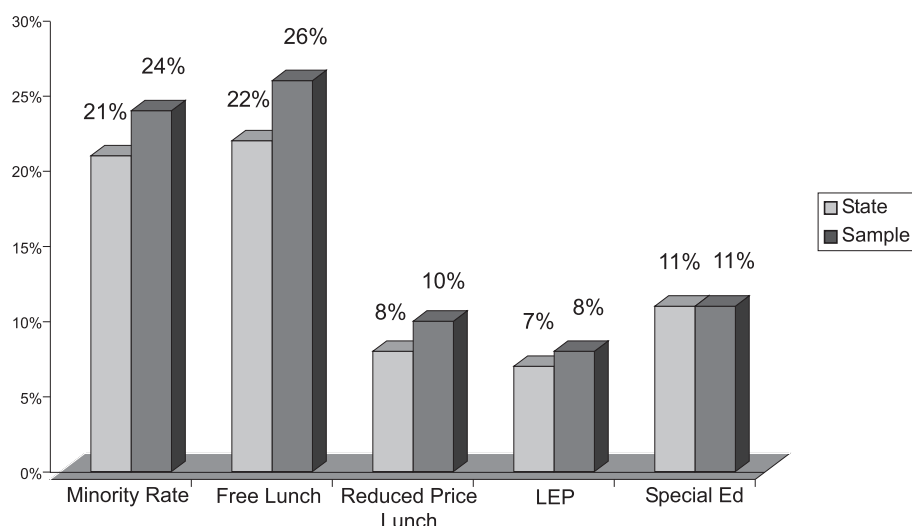
The most recent school-level demographic elementary school data was obtained from Data Management, Office of Information Technology at the department. These data included:

- Enrollment in the Free Lunch program (*Incomes 135% Federal Poverty Guidelines (FPG) and under*);
- Enrollment in the Reduced Price Lunch program (*Incomes between 136% and 185% FPG*);
- Limited English Proficiency (LEP);
- Minority rate (Asian, Black, Caucasian, Hispanic, Native American) and
- Receipt of Special Education.

Randomly selected schools were offered the opportunity to participate. The configuration of the final sample was a function of schools' willingness to take part in the study. In this pilot study, participating schools were slightly poorer (had higher rates of Free and Reduced Price Lunch use), had higher rates of children of color (minority status) and more Limited English Proficiency students than Minnesota elementary schools as a whole. (see Chart 1 below.)

Sample schools were located in urban, suburban and rural areas of the state. Representativeness by strata was within  $\pm 5$  percent with the exception of two strata, one in which students are underrepresented by 12 percent and another in which they are overrepresented by 13 percent. Geographic representativeness was particularly challenging as the admission or omission of a single school (depending upon size) sometimes had a dramatic impact on the sample.

**Chart 1. School Readiness Initiative Sample Demographics Compared to Statewide Demographics**



Source: Data Management, Office of Information and Technology, Minnesota Department of Children, Families & Learning, 2002

# Results of Pilot Kindergarten Entrance Developmental Assessment

Results of the pilot kindergarten entrance developmental assessment are presented in relationship to the two purposes of the study: (1) to provide a picture of a sample of Minnesota kindergarten children as they enter school and (2) to review the assessment process used and make recommendations for improving it based on surveys from the principals and kindergarten teachers involved. This picture of the school readiness of this sample is presented along the five domains assessed: personal and social development, language and literacy, mathematical thinking, the arts and physical development and health. Because children develop and grow along a continuum with great variability, the goal of the Minnesota School Readiness Initiative pilot study is to assess children's proficiency within and across these developmental domains and *not* establish whether or not children are ready for school with the use of a "ready" or "not ready" score. Young children develop rapidly and at varying rates, and an early, definitive determination of readiness can have unintended negative consequences. As a result, the three WSS readiness levels are used – not yet, in process and proficient – for each domain to provide an overview of children's readiness that does not label or stigmatize young children and recognizes variation across many indicators of development within and across domains.

Table 1 provides an average score summary of how the 1,851 kindergarten children in the sample were rated by their kindergarten teachers across the five domains according to the three readiness levels. Charts 2 - 6 display this same information by domain. Table 2 provides the same five domain totals along with the aggregation of teacher ratings by indicator ranked according to domain scores and indicators within each domain in relation to "proficiency" rates from highest to lowest. The readiness levels used for rating are: (1) "proficient" ratings given by teachers to children who consistently show the skill, knowledge, behavior or accomplishment represented by an indicator, (2) "in process" ratings given by teachers to children who sometimes show the skill, knowledge, behavior or accomplishment but do so inconsistently and (3) "not yet" ratings given by teachers to children who cannot perform the skill, area of knowledge or specific set of behaviors or accomplishments. To gain a picture of the number of children who demonstrate readiness skills, knowledge, behaviors or accomplishments consistently or inconsistently versus the number who have not yet acquired a skill, area of knowledge or specific set of behaviors or accomplishments, readers might combine "proficient" and "in process" ratings.

Table 1 shows that the kindergarten children in the sample were most proficient in the area of physical development and health (N = 1,143, 62%), followed by personal and social development (N = 899, 49%) and the arts (N = 885, 48%) and were least proficient in the areas of language and literacy (N = 819, 44%) and mathematical thinking (N = 785, 42%). The most children were “in process” or inconsistent in exhibiting the skills, knowledge, behaviors or accomplishments in mathematical thinking (N=816, 44%), followed by the arts (N=779, 42%), personal and social development (N=708, 38%), language and literacy (N=704, 38%) and physical development and health (N=629, 34%). Ten percent or more of the sample were not yet exhibiting the skills, knowledge, behaviors or accomplishments in four of the five domains. Language and literacy (N=289, 18%) was the area in which the most children were rated “not yet”, followed by mathematical thinking (N=247, 13%), personal and social development (N=238, 13%), the arts (N=181, 10%) and physical development and health (N=77, 4%).

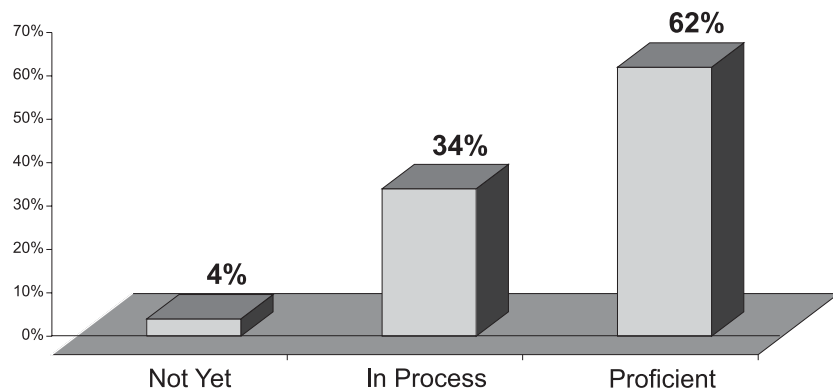
<i>Domain</i>	<b>Table 1. Readiness Levels by Domain</b> (Number and Percent) <i>N=1,851</i>		
	Not Yet	In Process	Proficient
<i>Physical Development and Health</i>	<i>N=77</i> 4%	<i>N=629</i> 34%	<i>N=1,143</i> 62%
<i>Personal and Social Development</i>	<i>N=238</i> 13%	<i>N=708</i> 38%	<i>N=899</i> 49%
<i>The Arts</i>	<i>N=181</i> 10%	<i>N=779</i> 42%	<i>N=885</i> 48%
<i>Language and Literacy</i>	<i>N=289</i> 18%	<i>N=704</i> 38%	<i>N=819</i> 44%
<i>Mathematical Thinking</i>	<i>N=247</i> 13%	<i>N=816</i> 44%	<i>N=785</i> 42%

Source: Early Learning Services, Minnesota Department of Children, Families & Learning, 2002

## Physical Development and Health

Out of the five domains, sample children were most proficient in the domain of physical development and health. “Performs some self-care tasks independently” was the indicator in physical development and health at which the sample of kindergarten children was most proficient (71%), followed by “coordinates movements to perform simple tasks” (61%) and “uses eye-hand coordination to perform tasks” (54%). In process ratings in this domain were as follows: “uses eye-hand coordination to perform tasks” (40%), “coordinates movements to perform simple tasks” (35%) and “performs some self-care tasks independently” (27%). Six percent or less of the children sampled (6%, 4%, 2% respectively) were “not yet” able to perform the tasks reflected in the indicators. (see Table 2.)

**Chart 2. Physical Development and Health Domain Summary Data**



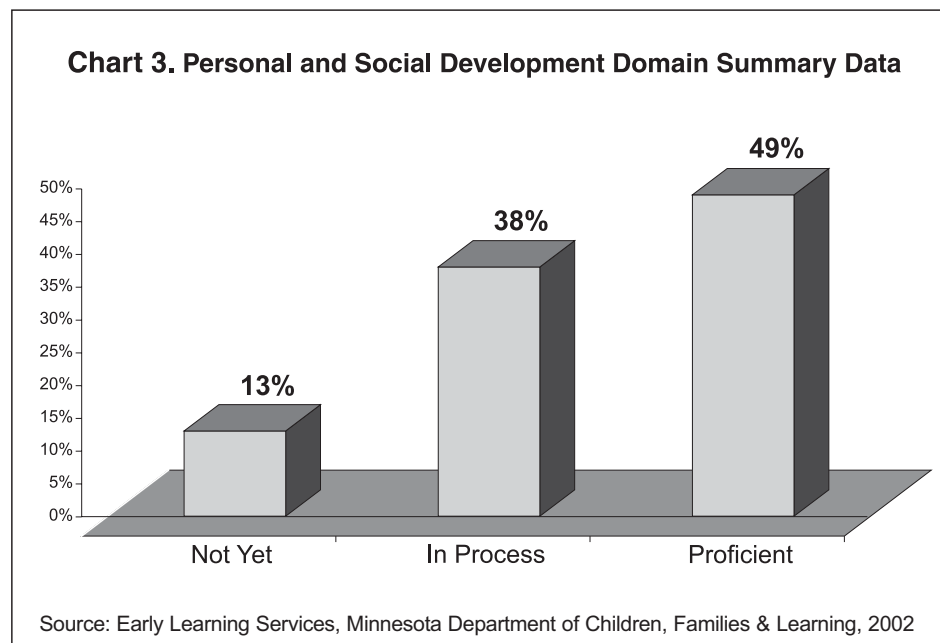
Source: Early Learning Services, Minnesota Department of Children, Families & Learning, 2002

## Personal and Social Development

The domain in which the sample of children was next most proficient was personal and social development. Children at kindergarten entry were most proficient in personal and social development with the indicators of “interacts easily with familiar adults” and “shows eagerness and curiosity as a learner” (55% each), followed closely by “interacts easily with one or more children” (52%), “shows some self-direction” and “follows simple classroom rules and routines” (51% each) and “manages transitions” (49%). Proficiency ratings were lower with regard to the personal and social indicators of “attends to tasks and seeks help when encountering a problem” (44%), “seeks adult help when needed to resolve conflicts” (42%) and “approaches tasks with flexibility and inventiveness” (41%).

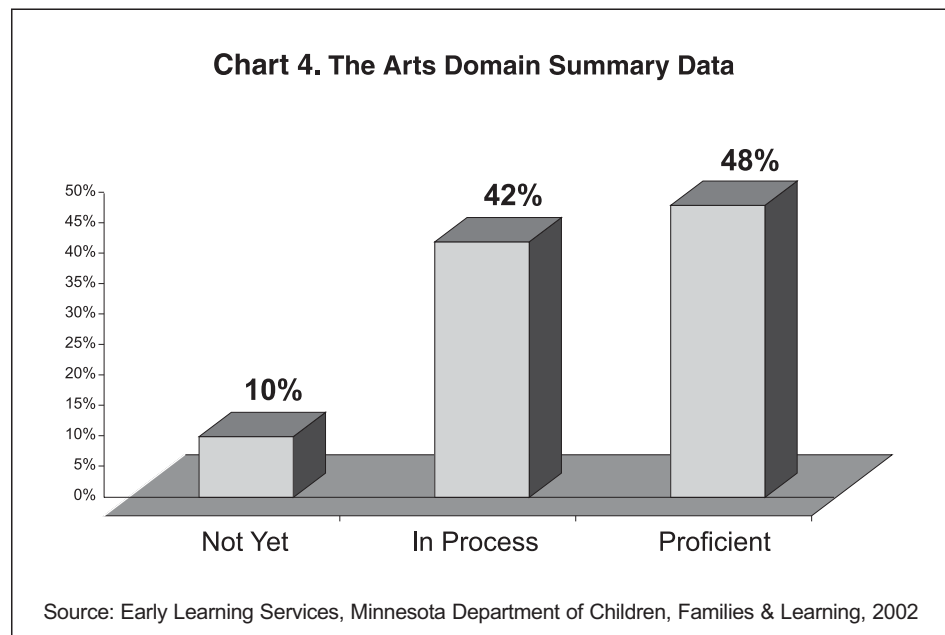
“In process” ratings were as follows in personal and social development: “seeks adult help when needed to resolve conflicts” (42%), “approaches tasks with flexibility and inventiveness” (41%), “attends to tasks and seeks help when encountering a problem” (40%), “manages transitions” and “shows some self-direction” (39% each), “follows simple classroom rules and routines” (38%), “interacts easily with one or more children” (37%), “shows eagerness and curiosity as a learner” (35%) and “interacts easily with familiar adults” (33%).

Ten percent or more of the sample were rated “not yet” in all indicators in this area. The three indicators with the highest “not yet” ratings - “approaches tasks with flexibility and inventiveness” (18%), “seeks adult help when needed to resolve conflicts” (16%) and “attends to tasks and seeks help when encountering a problem” (15%) - were the three in which the sample was least proficient in this domain. Other “not yet” ratings were “interacts easily with familiar adults” and “manages transitions” (12% each), “follows simple classroom rules and routines” and “interacts easily with one or more children” (11% each) and “shows some self-direction” and “shows eagerness and curiosity as a learner” (10% each). (see Table 2.)



## The Arts

The arts was the domain with the next highest number of children showing proficiency. Children in the sample showed highest proficiency in the arts with the indicator “participates in group music experiences” (51%), followed by “participates in creative movement, dance and drama” (48%); “uses a variety of art materials for tactile experiences and exploration” (47%) and “responds to artistic creations or events” (45%). “In process” ratings were “responds to artistic creations or events” (43%); “participates in creative movement, dance and drama” and “uses a variety of art materials for tactile experiences and exploration” (42% each) and “participates in group music experiences” (41%). The “not yet” ratings were highest in “responds to artistic creations or events” (11%), followed by “uses a variety of art materials for tactile experiences and exploration” and “participates in creative movement, dance and drama” (10% each) and “participates in group music experiences” (8%). (see Table 2.)



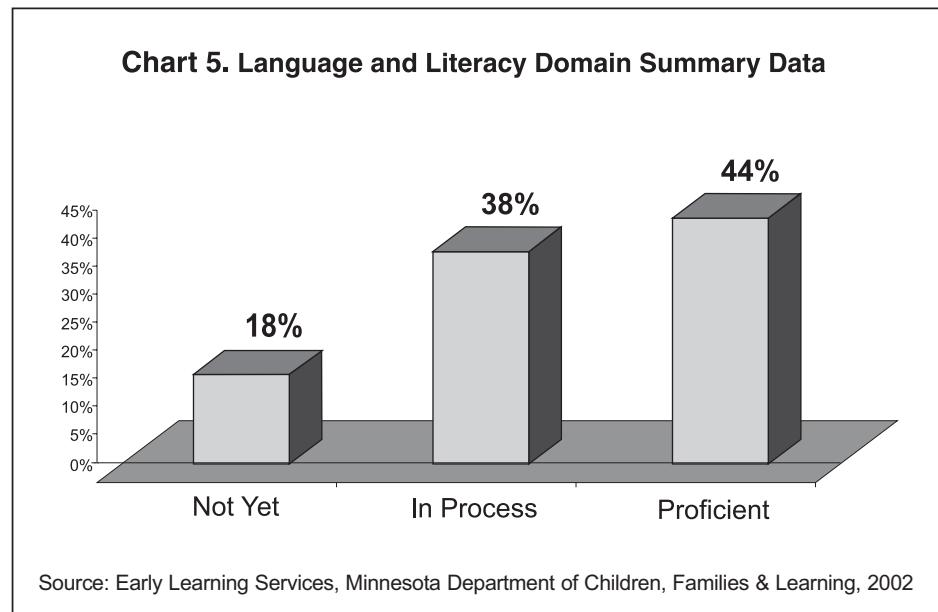
## Language and Literacy

Language and literacy was the domain with the next to the least number of children displaying proficiency. Over 50 percent of the sample was proficient in two of the ten indicators in language and literacy - “speaks clearly enough to be understood without contextual clues” (56%) and “shows appreciation of books and reading” (55%). Over 40 percent of the children were rated proficient in six of the indicators: “comprehends and responds to stories read aloud” and “gains meaning by listening” (48% each); “follows two- or three-step directions” (46%); “represents ideas and stories through pictures, dictation and play” and “uses expanded vocabulary and language for a variety of purposes” (42% each) and “shows

beginning understanding of concepts about print” (41%). Less than 40 percent of the sample of children was proficient in the remaining two indicators assessed in this domain: “uses letter-like shapes, symbols and letters to convey meaning” (37%) and “demonstrates phonological awareness” (i.e., the ability to hear and discriminate the sounds of language) (29%).

For “in process” ratings in language and literacy, “shows beginning understanding of concepts about print” was 42 percent; “represents ideas and stories through pictures, dictation and play” was 41 percent and “demonstrates phonological awareness,” “gains meaning by listening” and “follows two- or three-step directions were each 40 percent. These were followed by “comprehends and responds to stories read aloud (39%); “shows appreciation of books and reading” (38%); “uses expanded vocabulary and language for a variety of purposes” (37%); “uses letter-like shapes, symbols and letters to convey meaning” (35%) and “speaks clearly enough to be understood without contextual clues” (31%).

Only in the domain of language and literacy were more than 20 percent of the sample of kindergarten children “not yet” able to demonstrate the skills, knowledge, behaviors or accomplishments represented by specific indicators: “demonstrates phonological awareness” (31%); “uses letter-like shapes, symbols and letters to convey meaning” (28%) and “uses expanded vocabulary and language for a variety of purposes” (21%). All but one of the remaining “not yet” ratings for the other indicators in language and literacy were over 10 percent: “shows beginning understanding of concepts about print” and “represents ideas and stories through pictures, dictation and play” (17% each); “follows two- or three- step directions” (14%); “comprehends and responds to stories read aloud” and “speaks clearly enough to be understood without contextual clues (13% each); “gains meaning by listening” (11%) and “shows appreciation of books and reading” (7%). (see Table 2.)





## Mathematical Thinking

The domain with the least number of children showing proficiency was in mathematical thinking. Less than 50 percent of the sample of kindergarten children was proficient at these four indicators: “shows understanding of and uses several positional words” (46%), “begins to recognize and describe the attributes of shapes” (45%), “shows beginning understanding of number and quantity” (43%) and “begins to use simple strategies to solve mathematical problems” (36%). “Begins to use simple strategies to solve mathematical problems” (46%), “shows beginning understanding of number and quantity” and “begins to recognize and describe the attributes of shapes” (44% each) and “shows understanding of and uses several positional words” (42%) were the “in process” ratings. In all four indicators of mathematical thinking “not yet” ratings were over 10 percent: “begins to use simple strategies to solve mathematical problems” (17%), “shows beginning understanding of number and quantity” (13%), “shows understanding of and uses several positional words” (12%) and “begins to recognize and describe the attributes of shapes” (11%). (see Table 2.)

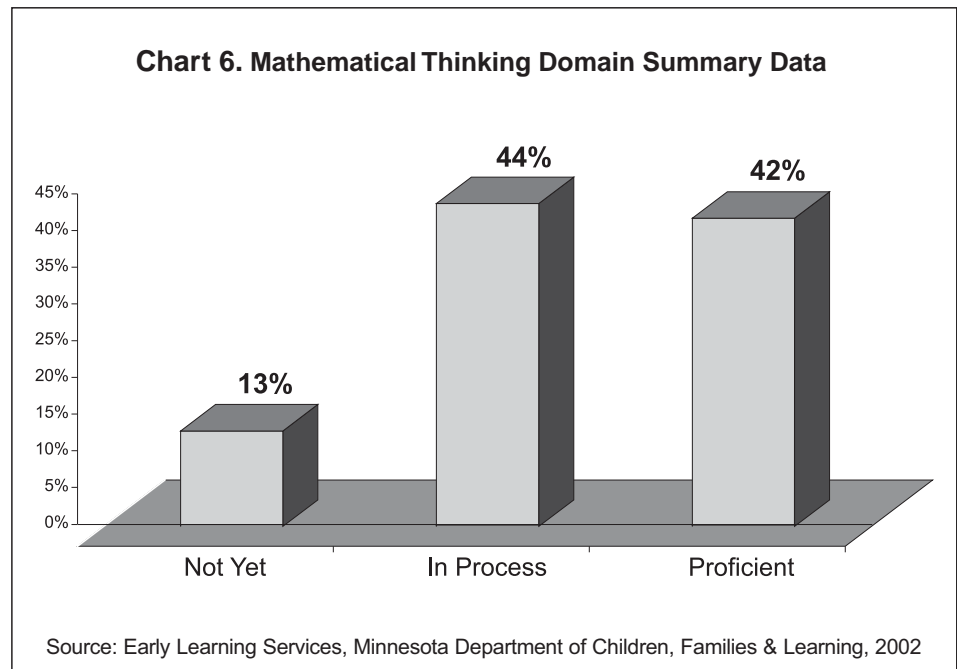


Table 2. Readiness Levels by Domain Indicators Ranked by Proficient Rate	Readiness Levels Percent ( <i>Number</i> ) <i>N</i> = 1,851		
	Not Yet	In Process	Proficient
<b>Physical Development and Health</b>			
<b>Physical Development and Health Domain Total</b>	<b>4% (77)</b>	<b>34% (629)</b>	<b>62% (1143)</b>
Performs some self-care tasks independently.	2% (40)	27% (492)	71% (1317)
Coordinates movements to perform simple tasks.	4% (79)	35% (650)	61% (1119)
Uses eye-hand coordination to perform tasks.	6% (111)	40% (745)	54% (993)
<b>Personal and Social Development</b>			
<b>Personal and Social Development Domain Total</b>	<b>13% (238)</b>	<b>38% (708)</b>	<b>49% (899)</b>
Interacts easily with familiar adults.	12% (216)	33% (611)	55% (1015)
Shows eagerness and curiosity as a learner.	10% (190)	35% (648)	55% (1010)
Interacts easily with one or more children.	11% (202)	37% (680)	52% (967)
Shows some self-direction.	10% (194)	39% (715)	51% (938)
Follows simple classroom rules and routines.	11% (208)	38% (713)	51% (927)
Manages transitions.	12% (217)	39% (719)	49% (905)
Attends to tasks and seeks help when encountering a problem.	15% (284)	40% (748)	44% (814)
Seeks adult help when needed to resolve conflicts.	16% (300)	42% (776)	42% (770)
Approaches tasks with flexibility and inventiveness.	18% (332)	41% (760)	41% (750)
<b>The Arts</b>			
<b>The Arts Domain Total</b>	<b>10% (181)</b>	<b>42% (779)</b>	<b>48% (885)</b>
Participates in group music experiences.	8% (144)	41% (768)	51% (938)
Participates in creative movement, dance and drama.	10% (184)	42% (782)	48% (884)
Uses a variety of art materials for tactile experiences and exploration.	10% (192)	42% (779)	47% (877)
Responds to artistic creations or events.	11% (205)	43% (788)	45% (841)
<b>Language and Literacy</b>			
<b>Language and Literacy Domain Total</b>	<b>18% (289)</b>	<b>38% (704)</b>	<b>44% (819)</b>
Speaks clearly enough to be understood without contextual clues.	13% (234)	31% (577)	56% (1039)
Shows appreciation for books and reading.	7% (139)	38% (697)	55% (1013)
Comprehends and responds to stories read aloud.	13% (237)	39% (713)	48% (897)
Gains meaning by listening.	11% (201)	40% (732)	48% (849)
Follows two- or three-step directions.	14% (268)	40% (732)	46% (849)
Represents ideas and stories through pictures, dictation and play.	17% (311)	41% (753)	42% (786)
Uses expanded vocabulary and language for a variety of purposes.	21% (384)	37% (680)	42% (783)
Shows beginning understanding of concepts about print.	17% (312)	42% (778)	41% (760)
Uses letter-like shapes, symbols and letters to convey meaning.	28% (528)	35% (640)	37% (681)
Demonstrates phonological awareness.	31% (576)	40% (740)	29% (530)
<b>Mathematical Thinking</b>			
<b>Mathematical Thinking Domain Total</b>	<b>13% (247)</b>	<b>44% (816)</b>	<b>42% (785)</b>
Shows understanding of and uses several positional words.	12% (230)	42% (770)	46% (844)
Begins to recognize and describe the attributes of shapes.	11% (197)	44% (820)	45% (832)
Shows beginning understanding of number and quantity.	13% (240)	44% (820)	43% (790)
Begins to use simple strategies to solve mathematical problems.	17% (320)	46% (855)	36% (672)

Source: Early Learning Services, Minnesota Department of Children, Families & Learning, 2002

## Summary

Kindergarten children in the sample were most proficient in the domain of physical development and health (62%). Less than half of the sample of children was proficient overall in the domains of personal social development (49%), the arts (48%), language and literacy (44%) and mathematical thinking (42%). Sample children were “in process” or inconsistent most frequently in mathematical thinking (44%), followed by the arts (42%), personal and social development and language and literacy (38% each) and physical development and health (34%). When combining ratings for consistent (proficient) and emerging or inconsistent (in process) skills, knowledge, behaviors or accomplishments, children were rated as follows: physical development and health (96%), the arts (90%), personal and social development (87%), mathematical thinking (86%) and language and literacy (82%), reflecting the same top three and lower two rankings among the five areas of development. These are children who demonstrate readiness skills, knowledge, behaviors or accomplishments consistently or inconsistently versus those who have not yet acquired a skill, area of knowledge or specific set of behaviors or accomplishments. Ten percent or more of the children in the sample were rated “not yet” in four of the five domains: Language and literacy (18%), mathematical thinking and personal and social development (13% each) and the arts (10%). Only four percent were rated “not yet” in physical development and health.

Across the five domains, children in the sample were generally more proficient on the simpler, less challenging indicators. As skills, knowledge, behaviors or accomplishments become more complex and demanding, ratings declined. For example:

- In the domain of language and literacy, the highest proficiency levels were shown in the child’s ability to speak clearly enough to be understood without contextual clues (56%) and in showing appreciation for books and reading (55%). Proficiency was lower for tasks demanding more complex acts from the children – representing ideas and stories through pictures, dictation and play and using expanded vocabulary and language for a variety of purposes (42% each) and showing beginning understanding of concepts about print (41%). Children in the sample found using letter-like shapes, symbols and letters to convey meaning (37% proficient) and demonstrating phonological awareness (the ability to hear and discriminate the sounds of language) (29% proficient) to be the most challenging tasks.

- The kindergarten children in the sample were most challenged overall by the indicators in the domain of mathematical thinking, especially with the task of beginning to use simple strategies to solve mathematical problems (36% proficient). Although less than half showed proficiency with the other three indicators, they fared better with them - showing understanding of and using several positional words (46%), beginning to recognize and describe the attributes of shapes (45%) and showing beginning understanding of number and quantity (43%).
- In the personal and social domain, the indicators where most proficiency was demonstrated are those reflecting a basic approach to learning –“shows eagerness and curiosity as a learner” (55%) – and those related to interaction with adults and peers – interacting easily with familiar adults (55%) and with other children (52%). Also, over half showed proficiency at the basic tasks of showing self-direction and following simple classroom rules and routines (51% each). The sample of kindergarten children was less proficient at other, somewhat more complex approaches to learning including attending to tasks and seeking help when encountering a problem (44%), seeking help when needed to resolve conflicts (42%) and approaching tasks with flexibility and inventiveness (41%).
- In the arts, ratings were fairly balanced across the four indicators, with participation in group music experiences showing the highest percentage of proficiency (51%). Less than half of the sample of children was proficient with the other three indicators, areas requiring more active engagement of the child – participating in creative movement, dance and drama (48%); using a variety of art materials for tactile experiences and exploration (47%) and responding to artistic creations or events (45%).

## Pilot Study Principal and Teacher Survey Results

The success of this pilot study rested upon the willingness of school administrators and teachers to volunteer their time to participate in the study. It was as important to test the process of gathering school readiness information as it was to gather the data itself. In recognition of this, participating school principals and kindergarten teachers were asked for their feedback on the process. They were asked specific questions about their decision to participate, barriers to participation and the associated workload and benefits (see Appendices E and F). Any expansion or replication of this effort must take these issues into account. The following information is based upon the responses of 24 elementary principals (77%) and 28 (33%) kindergarten teachers.

### **Principal Perspectives**

Principals most commonly made the decision to participate in the pilot study by first speaking with their teaching staff. The main barrier to commitment to the study when first asked was that principals were not sure who the kindergarten teachers would be in their schools until late summer. Once schools agreed to participate, the majority of the responsibility for the study shifted to the teachers. Principals reported employing a number of strategies to deal with the additional work that participation represented for their teachers. Some hired substitute teachers to free up kindergarten teachers for checklist completion. Others invested in further WSS training. Some were able to set aside other projects in order to allow teachers time to concentrate on this one. When asked what they would tell another school considering participation, most principals said that they felt the information gathered was worth the effort. They indicated that more information was better when it came to their new kindergartners. Many principals noted that they wanted to see the data before they are able to make an accurate judgment of the study's worth, the use of the data or whether or not they would recommend that another school participate.

### **Teacher Perspectives**

Kindergarten teachers reported their increased time spent on observing, documenting and rating children's behavior in the first weeks of school as the most common challenge in implementing the study. Fifty-three percent of the teachers felt that the workload outweighed the benefits while over a third felt that the workload and benefits were about equal. When asked whether the checklist information was helpful to them, 57 percent of teachers agreed that it was. Of these, most stated that it helped them to identify the needs of children earlier in the year than they would

through their usual processes. Other frequently cited benefits of the data were increased awareness of a child's developmental status, more targeted instruction for the entire class and provision of supplemental information for fall parent-teacher conferences. Other ways in which the study was helpful to teachers was that it provided an opportunity to practice and improve systematic observation and increased personal accountability for student learning.

In order to explore options for collecting data on early childhood care and education experiences of incoming kindergarten children in future years, teachers were asked as part of the follow-up survey for information regarding this issue. They were asked to estimate the proportion of their kindergarten students who had been in particular types of early childhood care and education experiences prior to kindergarten. Over half (61%) of kindergarten teachers responding to the follow-up survey already collect data on the early childhood care and education experiences of their new kindergarten children. The manner in which these data are collected varies and includes surveys to parents and local preschool programs, information from Early Childhood Screening data and reports from Early Childhood Special Education and School Readiness programs in school districts.

### **Non-Participating Schools**

Principals whose schools were invited to be part of the study in May 2002 but declined were surveyed to learn the reasons why they elected not to take part. Lack of teacher time was the most frequently stated reason. Comments indicated that teachers already had "plenty to do" and were already taking on too much. Some kindergarten teachers were already committed to other special projects and did not want to take on another one at this time. One principal indicated that full-day kindergarten teachers had more time to do this project and were more willing to do it than half-day teachers who would have twice as many children to assess. Both new principals and new teachers were reluctant to get involved.


## Limitations



Most of the limitations of this Minnesota School Readiness Initiative pilot study are reflections of the resources available. Challenges were presented in constructing the sample influencing both geographic and demographic representation. With the addition or loss of one school's participation, the children gained or lost for the sample ranged anywhere from 15-20 students (a small school with a single kindergarten classroom) to over 100 students (a large school with four or five classes of 25). As one school declined participation, it was nearly impossible to randomly select another school that had exactly the same number of students or similar demographics from the same strata. This challenge was encountered again later in the study as schools that had previously agreed to participate realized they could no longer remain in the study. With a larger sample of schools and students, the dramatic impact of individual schools joining and dropping the sample would not be as great.

Many schools could not commit to study participation until late in the summer because of uncertainty over kindergarten teachers and/or the principal staffing. Because the sample was not completed until late August, it was not possible to bring kindergarten teachers together to review study materials, clarify all aspects of the study and answer questions teachers might have. Also, resources did not allow for stakeholders to comment on the initiative.

## Conclusions



The Minnesota School Readiness Initiative pilot study of children's developmental assessment at kindergarten entrance gives a picture of the development of a sample of kindergarten children in the first weeks of school in the fall of 2002. The data yield baseline information on 30 indicators in five domains of development: personal and social, language and literacy, mathematical thinking, the arts and physical development and health. These results will be useful to public school administrators and teachers and early childhood care and education service providers as well as parents, policymakers, community members and the general public as they work to improve children's opportunities for school success. This pilot study also provides an opportunity for testing a process for gathering these data and identifying the issues in conducting such a study as consideration is given to expanding it to a larger sample of kindergarten children.

### **About Child Assessment Results**

**Children entered kindergarten with a range of skills, knowledge, behaviors and accomplishments.** As is evident in observing any group of young children, there is great variability in their knowledge and skills in the different areas of development. This variability is to be expected. It is not appropriate to expect that all children will come to school with the same level of skills and knowledge in all areas of development.


In all of the developmental domains assessed in the study, a certain percentage of kindergarten children had not yet acquired the indicators of focus. Based on findings from similar studies in other states and national studies, these children are more likely than children who can perform the indicators to live in poverty or experience other risk factors making them vulnerable for school failure. Schools, early childhood care and education service providers, policymakers and community members have a particular responsibility to focus special attention and resources on these children if they are to catch up to their peers.



## **About the Study Process**

**Using authentic assessment such as the Work Sampling System is appropriate when working with elementary school principals and kindergarten teachers to assess children's readiness as they enter kindergarten.** Many kindergarten teachers are familiar with the WSS of child assessment because it is used to assess children in Title I in Minnesota. Therefore, these teachers are able to use the same observation and documentation skills to rate the school readiness of children over a six week period as they enter kindergarten. These teacher ratings can in turn be aggregated and analyzed to provide a comprehensive and meaningful picture of the school readiness of a sample of Minnesota kindergarten children. Based on the pilot of the process used, a number of strategies have been identified for improving the process as it is expanded for use in the future with a larger sample.

## Recommendations



The findings from the Minnesota School Readiness Initiative pilot study in regard to the process and the data on the development of children at kindergarten entrance indicate that much was learned and much needs to be done to ensure that each Minnesota child enters school ready for success and is greeted by an environment that has the capacity to address the diverse needs of every child. These are the goals of the Minnesota School Readiness Initiative. The following are recommendations for action with regard to both the Minnesota School Readiness Initiative child assessment results and the pilot study process.

### **About Child Assessment Results**

**Support parents in their role as children's first teachers.** Parents are children's first and most important teachers and are critical to their children's success in school. Because of this they should have access to information and support regarding parenting. Providing information to parents about age and developmentally appropriate ways in which they can extend their children's learning through everyday activities and routines is one way this can be done. *The Minnesota Early Childhood Indicators of Progress: A Resource Guide*, which provides suggested strategies family members can use to facilitate children's development in all of the areas of learning studied, is a resource available to them for this purpose (<http://cfl.state.mn.us/ecfi/earlychi.pdf>). *Winning Ways to Learn, Ages 3, 4 & 5, 600 Great Ideas for Children* provides tips for parents and other caregivers to support the development of the skills children will need for kindergarten ([www.PearsonEarlyLearning.com](http://www.PearsonEarlyLearning.com)).

**Continue to increase schools' ability to respond to the varying needs of children as they enter kindergarten.** This study confirms that children come to kindergarten with variability in their skills, knowledge, behaviors and accomplishments. Although much can be done during the child's early years to enhance these skills, knowledge, behaviors and accomplishments, variability is normal for children entering kindergarten. Schools need to be prepared to address this variability, including both the children inconsistently or only sometimes demonstrating the skills, knowledge, behaviors and accomplishments and the children who enter school with low skills and are not yet able to perform many of the indicators.

**Continue to work with children who are progressing.** Children need continuous support and encouragement to maintain their developmental and learning momentum. Proficient ratings ranged from 42 to 62 percent in the

five domains. These children need to continue to receive at least the same level and types of home and community supports to maintain this level of readiness and thrive. Many children in each developmental area were showing the skills, knowledge, behaviors and accomplishments inconsistently only, ranging from 34 - 44 percent. These children are likely to need close observation and intentional teaching strategies from parents and teachers to move them toward proficiency in all or most of the indicators where they are not now consistently proficient.

**Continue to work toward improving the quality of all early childhood care and education programs in Minnesota.** Research tells us that children's development and learning is positively affected if early childhood care and education programs are of high quality. Quality early childhood care and education programming is of particular importance in helping to reduce the number of children who have inconsistently or not yet acquired the skills, knowledge, behaviors and accomplishments expected as they enter kindergarten.

**Focus on improving children's early language and literacy and mathematical skills.** The developmental data from this pilot study show that the sample of Minnesota kindergarten children are less proficient in the domains of language and literacy and mathematical thinking when they enter kindergarten than they are in the other three domains studied - physical development and health, personal and social development and the arts. Early language and literacy and math experiences that are age and developmentally appropriate should be more fully embedded within the everyday activities of children. These types of activities should continue as children enter the K-12 system, especially for children who are inconsistently or not yet exhibiting these skills. In doing so, however, care should be taken to avoid pushing academic activities for school-age children down to lower age levels inappropriately. It must also be remembered that the other areas of physical development and health, personal and social development and the arts continue to be critical to school success.

**Provide opportunities for parents and early childhood care and education teachers and providers to learn more about promoting improvement in children's early language and literacy and mathematical skills.** As indicated above, study data show that this sample of Minnesota kindergarten children is less proficient in the domains of language and literacy and mathematical thinking when they enter kindergarten than they are in the other three domains studied. There are a multitude of everyday, age appropriate learning experiences that can be provided to young children in the areas of language and literacy and mathematical

thinking that set the stage for school success, and there are a wide array of ways to make these learning opportunities available to children that can be easily learned and used by parents, teachers and caregivers. (see *The Minnesota Early Childhood Indicators of Progress: A Resource Guide* (<http://cfl.state.mn.us/ecfi/earlychi.pdf>) and *Winning Ways to Learn, Ages 3, 4 & 5, 600 Great Ideas for Children* ([www.PearsonEarlyLearning.com](http://www.PearsonEarlyLearning.com)) mentioned earlier.

### **About the Study Process**

**Work earlier and more closely with principals and teachers involved in the study.** Identify elementary schools to be included in the sample as soon as possible. Once sample principals agree to participate, begin communication with the kindergarten teachers involved and continue communication with them until the study is completed. If possible, meet once face-to-face with the kindergarten teachers in order to discuss all study details. If teachers lack the training needed to effectively use the Work Sampling System, make needed training available. Work with principals and kindergarten teachers to identify ways in which they can make best use of the data they gather to enhance the curriculum and learning experiences of the kindergartners in their schools and to work more closely with parents and early childhood care and education teachers and providers. Consider inviting stakeholders – parents, elementary principals, kindergarten teachers, primary teachers, early childhood education teachers and caregivers, child advocates and policymakers – to comment and advise on the study process and results.

**Expand sample of the cohort of kindergarten children in Minnesota to be assessed to approximately 3,500.** Now that Minnesota has tested a process of collecting school readiness assessment information on a sample of children, a larger sample is needed to establish further baseline data and assure greater geographic representation. A larger sample will minimize some of the challenges to the development of a geographically and demographically representative sample. The addition or loss of a school site will have less overall negative impact on the representativeness of the sample if there are more children in the overall pool.

**Collect information on children’s experiences the year before they enter kindergarten.** Early experiences have been shown to have a positive effect on children’s later learning and development. Kindergarten teachers could be asked to provide information regarding a child’s experiences prior to kindergarten. Some teachers already collect this information. Also, consideration should be given to adding a parent survey to the study.

**Analyze results by demographics in order to determine differences in children's school readiness by different demographic variables.**

Extensive research evidence shows that more intense services are often needed for children at greater risk for school failure. By doing a demographic analysis, more can be learned about how potential risk factors are exhibited among a sample of Minnesota kindergarten children and how they relate to their proficiency on the developmental indicators being assessed.

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## Appendices



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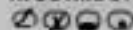


The Minnesota  
Work Sampling System®  
Kindergarten Entry  
Behavioral Checklist

## INSTRUCTIONS

CORRECT: ●

INCORRECT: ○



USE A NO. 2 PENCIL ONLY



FALL OBSERVATION PERIOD (years)

 - 
 FEMALE MALE

## LEGEND

- ⓪ Not Yet—child cannot demonstrate indicator  
 Ⓛ In Process—child demonstrates indicator intermittently  
 Ⓧ Proficient—child can reliably demonstrate indicator

BLDG CODE		DIST CODE	
01	02	03	04
05	06	07	08
09	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36
37	38	39	40
41	42	43	44
45	46	47	48
49	50	51	52
53	54	55	56
57	58	59	60
61	62	63	64
65	66	67	68
69	70	71	72
73	74	75	76
77	78	79	80
81	82	83	84
85	86	87	88
89	90	91	92

The Work Sampling System *Preschool-4 Developmental Guidelines* (4th edition) contains full descriptions of each performance indicator. (Number in parentheses indicates the page in the Guidelines where the indicator is described.)

## I Personal and Social Development

## A Self concept Fall

- 1 Shows some self-direction. (p. 1) ⓪ Ⓛ Ⓧ

## B Self control Fall

- 1 Follows simple classroom rules and routines. (p. 1) ⓪ Ⓛ Ⓧ  
 2 Manages transitions. (p. 2) ⓪ Ⓛ Ⓧ

## C Approaches to learning Fall

- 1 Shows eagerness and curiosity as a learner. (p. 2) ⓪ Ⓛ Ⓧ  
 2 Attends to tasks and seeks help when encountering a problem. (p. 2) ⓪ Ⓛ Ⓧ  
 3 Approaches tasks with flexibility and inventiveness. (p. 3) ⓪ Ⓛ Ⓧ

## D Interaction with others Fall

- 1 Interacts easily with one or more children. (p. 3) ⓪ Ⓛ Ⓧ  
 2 Interacts easily with familiar adults. (p. 3) ⓪ Ⓛ Ⓧ

## E Social problem-solving Fall

- 1 Seeks adult help when needed to resolve conflicts. (p. 4) ⓪ Ⓛ Ⓧ

## II Language and Literacy

## A Listening Fall

- 1 Gains meaning by listening. (p. 5) ⓪ Ⓛ Ⓧ  
 2 Follows two- or three-step directions. (p. 5) ⓪ Ⓛ Ⓧ  
 3 Demonstrates phonological awareness. (p. 5) ⓪ Ⓛ Ⓧ

## B Speaking Fall

- 1 Speaks clearly enough to be understood without contextual clues. (p. 6) ⓪ Ⓛ Ⓧ  
 2 Uses expanded vocabulary and language for a variety of purposes. (p. 6) ⓪ Ⓛ Ⓧ

## C Reading Fall

- 1 Shows appreciation for books and reading. (p. 6) ⓪ Ⓛ Ⓧ  
 2 Shows beginning understanding of concepts about print. (p. 7) ⓪ Ⓛ Ⓧ  
 3 Comprehends and responds to stories read aloud. (p. 7) ⓪ Ⓛ Ⓧ

## D Writing Fall

- 1 Represents ideas and stories through pictures, dictation, and play. (p. 8) ⓪ Ⓛ Ⓧ  
 2 Uses letter-like shapes, symbols, and letters to convey meaning. (p. 8) ⓪ Ⓛ Ⓧ

## III Mathematical Thinking

## A Mathematical processes Fall

- 1 Begins to use simple strategies to solve mathematical problems. (p. 11) ⓪ Ⓛ Ⓧ

## B Number and operations Fall

- 1 Shows beginning understanding of number and quantity. (p. 11) ⓪ Ⓛ Ⓧ

## C Geometry and spatial relations Fall

- 1 Begins to recognize and describe the attributes of shapes. (p. 12) ⓪ Ⓛ Ⓧ  
 2 Shows understanding of and uses several positional words. (p. 12) ⓪ Ⓛ Ⓧ

## IV The Arts

## A Expression and representation Fall

- 1 Participates in group music experiences. (p. 21) ⓪ Ⓛ Ⓧ  
 2 Participates in creative movement, dance, and drama. (p. 21) ⓪ Ⓛ Ⓧ  
 3 Uses a variety of art materials for tactile experience and exploration. (p. 21) ⓪ Ⓛ Ⓧ

## B Understanding and appreciation Fall

- 1 Responds to artistic creations or events. (p. 22) ⓪ Ⓛ Ⓧ

## V Physical Development and Health

## A Gross motor development Fall

- 1 Coordinates movements to perform simple tasks. (p. 23) ⓪ Ⓛ Ⓧ

## B Fine motor development Fall

- 1 Uses eye-hand coordination to perform tasks. (p. 24) ⓪ Ⓛ Ⓧ

## C Personal health and safety Fall

- 1 Performs some self-care tasks independently. (p. 24) ⓪ Ⓛ Ⓧ





## ABOUT THE BEHAVIORAL CHECKLIST

This Checklist assists teachers in observing, recording, and evaluating an individual child's skills, knowledge, behaviors, and accomplishments. It is intended to help teachers monitor what children know and can do, and to assist teachers in planning learning experiences throughout the year. The behaviors and skills described here are those considered to be developmentally appropriate for most children at this age level.

The Checklist reflects common experiences and expectations in classrooms that are structured around activities appropriate for most children of this age. Teachers may need to set up specific opportunities or activities that enable their students to demonstrate specific skills, although it is recommended that these activities be integrated into typical classroom routines as much as possible.

### Kindergarten Entry Guidelines

The Checklist presents each specific skill, behavior, or accomplishment in the form of a one-sentence performance indicator. The Checklist is accompanied by a set of detailed Guidelines that explain and elaborate on each performance indicator by providing a rationale and examples. The rationale provides a context that explains the meaning and importance of the indicator and briefly outlines reasonable expectations for children of this age. The examples show several ways children might demonstrate the skill or accomplishment represented by the indicator. Since teachers might otherwise interpret the same indicator in different ways, the Guidelines promote consistency of interpretation and evaluation across children, teachers, and schools. The Guidelines are essential for correct and effective use of the Checklist. Each performance indicator on the Checklist includes a reference to the page in the *Preschool-4 Developmental Guidelines* (4th edition) where the indicator is described.

### Checklist Ratings

These categories reflect the degree to which children have acquired the skill, behavior, and/or demonstrated the accomplishments required by each of the performance indicators listed in the Checklist and described in the Guidelines. Three types of ratings are possible:

**Not Yet** — indicates that this child cannot perform this indicator, i.e., that this performance indicator represents a skill, an area of knowledge or a specific set of behaviors or accomplishments that the child has not acquired.

**In Process** — implies that the skills, knowledge, behaviors, or accomplishments represented by this indicator are intermittent or emergent, and are not demonstrated reliably or consistently.

**Proficient** — means that this child can reliably demonstrate the skills, knowledge, behaviors, or accomplishments represented by this performance indicator. Although the child may have advanced beyond the level of difficulty of the indicator, and may no longer participate in activities that are described by the indicator, if the teacher has observed the child perform such tasks, and if the tasks are clearly within the child's range or repertoire, the indicator should be marked "Proficient."

2002023





May 10, 2002

Dear Principal

We invite you to participate with us in an exciting pilot study to look at school readiness for children who will enter your Kindergarten classes this fall. Your school has been randomly selected to represent the diversity of schools in Minnesota.

The Governor's Results Management Initiative sets a goal of high achievement for all children. One of the ten indicators includes increasing the percentage of young children who are ready for school. The purpose of the study is to develop a statewide profile of children's school readiness based on developmental domains using an indicator checklist completed by Kindergarten teachers. Your teachers will recognize the indicators from the Work Sampling System (WSS) currently used with children identified for Title I services. We ask that your teacher respond to 30 indicators and check if the child has not yet demonstrated, is in process, or is proficient in each identified skill.

The checklist will be mailed to your school in August.. **We ask for all forms to be completed and returned by October 15.** The short turn around time is in order to measure the skills at Kindergarten entrance and minimize the effect of Kindergarten instruction.

The Department will aggregate data from all participating schools and report findings. Data will not identify individual children nor be reported publicly by individual schools. Individual school data will however, be tabulated for your use. We hope that this information will be helpful to your teachers in individualizing curriculum, preparing for parent conferences and identifying children eligible for Title I services earlier.

We want this to be an opportunity for your teachers to help shape this initiative in the state. Your feedback and ideas for future school readiness assessment processes will be appreciated. The long-term outcomes of this project will be to promote children's learning and development, identify children for health and special services, and improve early childhood services and programs.

We welcome your participation in this venture. If you have questions, you may contact Barbara O'Sullivan, Supervisor at (651) 582-8422. Please respond using the attached form or e-mail your response to [Barbara.osullivan@state.mn.us](mailto:Barbara.osullivan@state.mn.us) **by May 24.**

Sincerely,

Karen Carlson, Assistant Commissioner

Jessie Montano, Assistant Commissioner

**Department of Children, Families & Learning**  
**Early Childhood and Family Support**  
**School Readiness Initiative Summary**

**Purpose:** The Governor’s Results Management Initiative includes the goal “High Achievement for all Students.” There are ten indicators of for this goal. Indicator # 8 is:

Increase the percentage of young children who are ready for school.

The purpose of this project is to: **Develop a system that assesses young children’s readiness for school that includes all young children in Minnesota.**

**Background:** The National Education Goals Panel (NEGP) and Minnesota’s own Early Childhood Indicators of Progress report include five domains of readiness for a child: the child’s health and physical development; social and emotional development; approaches toward learning; language development and communicative skills; cognition and general knowledge. Minnesota also recognizes a sixth domain: creativity and the arts. NEGP and Child Trends also identify two other components of school readiness: schools’ readiness for children and family and community supports that contribute to children’s readiness.

Sources: The National Education Goals Panel  
Minnesota Early Childhood Indicators of Progress  
Child Trends

**Scope:** Phase 1 of this initiative will pilot a survey of kindergarten children in a representative sample of Minnesota schools to assess their readiness in the domains of health and physical development, social and emotional development, approaches toward learning, language development and communicative skills, and cognition and general knowledge. A customized version of the Work Sampling System Developmental Checklist will be used to collect this data along with demographic information on gender, poverty, Limited English Proficiency, and Special Education status. The results of the pilot survey will provide aggregate data to profile children’s proficiency across the developmental domains at the time of entering Kindergarten. In later phases, the profile will be expanded to include kindergartners in all Minnesota schools.

**Use of Study Results:** The profile of children’s readiness for school will be used by policymakers, schools, early care and education providers (i.e. child care, Head Start, Early Childhood & Family Education, School Readiness programs, etc.), and the public to track progress towards the goal of ensuring that all children are ready for school and to inform planning and programming for young children. Efforts to support families, educate parents, expand access to health care and raise the quality of early care and education are a shared responsibility. Through the use of the profile, early childhood programs, in partnership with schools and communities, can become more responsive to family’s needs. Profile results will only be available publicly in aggregate form for all schools in the sample. However, CFL will provide school-level profiles to participating schools for their own use in planning. Kindergarten teachers may also find the results of the Work Sampling Developmental Checklist to be a valuable resource in working with individual children in their classrooms.

## **Timeline for Phase I:**

- |               |   |
|---------------|---|
| a. April      | Select sample schools;                                    |
| b. May        | Contact principals of selected sites to become partners.  |
| c. August     | Mail letter and survey to selected Kindergarten teachers. |
| d. October 15 | Survey completed and returned to CFL.                     |
| e. November   | Analyze results.  |
| f. January 03 | Report of findings.                                       |

## **Sources for information on School Readiness Assessment**

National Education Goals Panel

<http://www.negp.gov/Reports/child-ea.htm>

Child Trends

<http://www.childtrends.org/>

Work Sampling

<http://www.pearsonearlylearning.com/index2.html>

North Carolina Smart Start

<http://www.fpg.unc.edu/~smartstart/>

Maryland Kindergarten Report

<http://www.mdk12.org/practices/ensure/mmsr/index.html>

Governor's Results Management Web site

[www.BigPlanResults.state.mn.us](http://www.BigPlanResults.state.mn.us)

**School Readiness Initiative Response Form**

**Please send this information by May 24, 2002 to:**

Barbara O'Sullivan  
Department of Children, Families & Learning  
1500 Highway 36 West  
Roseville, MN 55113  
Phone: (651) 582-8422  
Fax: (651) 582-8496  
E-mail: barbara.osullivan@state.mn.us

**Name of School** \_\_\_\_\_

**Name of Principal** \_\_\_\_\_

**E-mail:** \_\_\_\_\_

**Please check your response:**

**I accept the invitation to participate in the pilot study**

**I will not participate in the pilot study**

**If you accept this invitation, please reply to the questions below.**

**Number of Kindergarten classes expected fall, 2002** \_\_\_\_\_

**Number of Kindergarten teachers expected fall, 2002** \_\_\_\_\_

**Number of Kindergarten teachers trained in Work Sampling** \_\_\_\_\_



August, 2002

Dear Principal :

Thank you very much for agreeing to participate in the pilot study of school readiness of children entering kindergarten in a random sample of elementary schools throughout Minnesota this fall. We expect that the outcomes of this project will have the long-term benefits of promoting children's learning and development, identifying children for health and special services as needed and improve early childhood services and programs.

Enclosed is the information that your kindergarten teachers will need to participate in the study. Each kindergarten teacher in your elementary building should receive from you ASAP the enclosed packets (one packet per kindergarten teacher) including:

- Kindergarten Teacher Instructions for School Readiness Indicator Project
- A Work Sampling System *Preschool-4 Developmental Guidelines* 4th Edition booklet for each teacher to keep
- A side-by-side chart listing the 30 selected P-4 indicators being assessed as indicators of school readiness along side a list of the corresponding 30 kindergarten indicators with the rationale for each from the *P-4 and Kindergarten Developmental Guidelines* booklets
- Copies of the Minnesota Work Sampling System Kindergarten Entry Behavioral Checklist for each kindergarten teacher in your building to use with each child in their classroom, a customized developmental checklist printed exclusively for this study by NCS Pearson (The number of copies you receive is based on classroom enrollment for 2001-2002. If more are needed, please contact me.)

Also enclosed is a **Confirmation Sheet** that we ask that you return to the fax number or e-mail address listed by **August 30** verifying that you have received these materials and listing the names and e-mail addresses of each of your kindergarten teachers in order for us to be able to communicate directly with them between now and the end of the project. We expect to e-mail them a list of "Answers to Most Frequently Asked Questions About the School Readiness Indicator Project" in mid-September and a feedback form for them to complete at the end of the project on October 15. Once kindergarten teachers in your school have completed the checklists for each child in their rooms, they are to return the checklists to you, and we ask that you **return the checklists** from all children in all of your kindergarten classrooms in one packet **on or by October 15** to:

**Anita Larson**  
**Minnesota Department of Children, Families & Learning**  
**1500 Highway 36 West**  
**Roseville, MN 55113-4266**

After you and your kindergarten teachers read the instructions regarding the project, feel free to contact me or either of the individuals listed on the Kindergarten Teacher Instructions for School Readiness Indicator Project if you have questions now or at any time during the project. I can be reached at 651-582-8422 or [barbara.osullivan@state.mn.us](mailto:barbara.osullivan@state.mn.us). Thank you again for being part of this important work.

Sincerely,

Barbara O'Sullivan, Research and Evaluation Supervisor

# SCHOOL READINESS INDICATOR PROJECT

## CONFIRMATION SHEET

School Name and Number \_\_\_\_\_

School Principal Name \_\_\_\_\_

School Principal E-Mail Address \_\_\_\_\_

Kindergarten Teachers Name

E-Mail Address

1.

2.

3.

4.

**Please complete and RETURN BY AUGUST 30 to Barbara O'Sullivan by  
faxing 651/582-8494 or e-mailing [barbara.osullivan@state.mn.us](mailto:barbara.osullivan@state.mn.us).**

**THANK YOU!**



August 15, 2002

Dear Kindergarten Teachers:

First, a big THANK YOU to you for being a participant in this pilot study of school readiness of children entering kindergarten in a random sample of elementary schools throughout Minnesota this fall. The information about children's readiness for school resulting from this study will be used by policymakers, schools, early childhood care and education teachers and providers and the public to follow progress towards the goal of ensuring that all children are ready for school and to inform planning and programming for young children. Results will only be available publicly in aggregate form for all schools in the sample. Data will not identify individual children. However, CFL will provide school-level information to participating schools FOR YOUR USE ONLY. You may find the results of the Work Sampling Developmental Checklist to be a valuable resource in working with individual children in your classroom, preparing for parent conferences and identifying children eligible for Title I and other services. You are likely to recognize that many of the indicators on the Kindergarten Entry Behavioral Checklist are similar to those from the Work Sampling System (WSS) that you currently use with children identified for Title I services.

You are receiving the following packet of materials from your principal in order for you to participate in the study:

- Kindergarten Teacher Instructions for School Readiness Indicator Project
- A Work Sampling System *Preschool-4 Developmental Guidelines* 4th Edition booklet that you can keep
- A side-by-side chart listing the 30 selected P-4 indicators being assessed as indicators of school readiness along side a list of the corresponding 30 kindergarten indicators with the rationale for each from the *P-4 and Kindergarten Developmental Guidelines* booklets
- Copies of the Minnesota Work Sampling System Kindergarten Entry Behavioral Checklist to use with each child in your classroom, a customized developmental checklist printed exclusively for this study by NCS Pearson (If you need more, please contact anyone listed at the end of this information.)

Between the first week of school and October 15, 2002 you will be observing ALL children in your kindergarten classroom, documenting what you observe, rating each child's performance on each indicator (not yet, in process or proficient - see legend on checklist and explanation on the back of the checklist for each rating category) and recording your ratings on one of the enclosed Minnesota Work Sampling System Kindergarten Entry Behavioral Checklists for each child. You are then asked to return all of the checklists from each child in your kindergarten classroom in one package to your principal who will in turn send one package of checklists from all kindergarten teachers in your school to CFL.

We expect that the information you obtain by completing the checklists on each child in your classroom will give you a head start in your Title I identification process and help you identify children in need of additional support as well as providing the first phase of statewide data giving us a better picture of the school readiness of Minnesota children as they enter kindergarten. THANK YOU again for being a part of this important pilot study.

Sincerely,

Barbara O'Sullivan, Research and Evaluation Supervisor



## **KINDERGARTEN TEACHER INSTRUCTIONS FOR SCHOOL READINESS INDICATOR PROJECT**

The following are important details to help you in this process:

- The 30 indicators on the WSS Kindergarten Entry Behavioral Checklist are from the WSS Preschool-4 Developmental Guidelines 4th Edition that is enclosed. P-4 indicators were selected because they are the appropriate expectations of children as they enter kindergarten. The page numbers after each indicator on the Kindergarten Entry Behavioral Checklist refer to pages in the P-4 Developmental Guidelines booklet describing the rationale for each indicator.
- Enclosed in addition to the P-4 Developmental Guidelines booklet is a side-by-side chart of the 30 indicators selected for the study from the entire list of P-4 indicators and the corresponding kindergarten indicators from the Kindergarten Developmental Guidelines 4th Edition. This is for your reference and should help you differentiate clearly between the K-Entry (P-4) Indicators and Kindergarten Indicators.
- On the side-by-side chart it becomes obvious that several of the indicators use exactly the same wording for the P-4 and corresponding K indicator. For these it is critical that you read the rationales on the side-by-side chart or in the P-4 booklet in order to note the differences in the expression of the indicator by the two age groups. You'll be rating the children in your kindergarten classroom based on the P-4 rationale, NOT the kindergarten rationale.
- On the side-by-side chart where the P-4 and K indicators differ, the key wording differences between the P-4 and K indicators are highlighted in *Italics* in order to make these distinctions very clear. Again, you will be using the P-4 rationale for these P-4 indicators and NOT the K rationale.
- On the Kindergarten Entry Behavioral Checklist for each child you'll note that the Fall Observation Period and Bldg and Dist Codes have already been completed for you by CFL with a No. 2 pencil. You will need to mark whether each child is female or male in addition to rating each child on each of the 30 indicators just prior to October 15. Please use a No. 2 pencil only. If you make a mistake marking a checklist, please thoroughly erase the mistake and change it to the appropriate choice. Because these forms will be electronically scanned, it is important that you make no marks on the checklist other than indicating the sex of the child and marking the rating for each of the 30 indicators.
- If you have late enrollees in your kindergarten classroom, you can include them in the study if they enroll on or before September 16.

## SCHOOL READINESS INDICATOR PROJECT TIMELINE

1. **Late August:** Become very familiar with the WSS Kindergarten Entry Behavioral Checklist directions on the back of the checklist, the 30 indicators on the checklist and the P-4 rationale for each.
2. **First Week of School in September:** Start observing ALL children in your classroom and documenting their behaviors related to the 30 indicators. Based on your experiences using Work Sampling, keep in mind that this is NOT meant to be a one-time, on-demand assessment. Instead, you will be observing children during typical daily activities on several occasions between the start of school and mid-October before making a final rating on the Kindergarten Entry Behavioral Checklist for each child on each indicator by October 10-11.
3. **Third Week of September:** Review observation documentation notes and make a preliminary scan of your documentation in relation to the 30 indicators. Make note of indicators where you need to do more observation for specific children. Continue observing and documenting.
4. **October 10-11:** Mark rating for each indicator on each Kindergarten Entry Behavioral Checklist for each child in your kindergarten classroom using your observation documentation notes. Give completed checklists on all children in your classroom in one packet to your principal.
5. **October 15:** Principal will mail all completed Kindergarten Entry Behavioral Checklists to CFL from all children in all kindergarten classrooms in your elementary school building to the address on the principal's letter. If you want copies of the checklists, please make copies at your school before you return the originals to CFL. IT IS IMPERATIVE THAT WE RECEIVE THE **ORIGINAL FORMS** FOR SCANNING.

*If questions now or at any time throughout the process contact either:*

Barbara O'Sullivan at 651-582-8422 or [barbara.osullivan@state.mn.us](mailto:barbara.osullivan@state.mn.us)

Betty Cooke at 651-582-8329 or [betty.cooke@state.mn.us](mailto:betty.cooke@state.mn.us)

Nancy Wallace at 651-582-8259 or [nancy.wallace@state.mn.us](mailto:nancy.wallace@state.mn.us)

# I. Personal and Social Development

## A. Self concept

### Preschool-4

#### 1. Shows *some* self-direction.

Four-year-olds often seem independent because they want to do everything on their own. However, they still require encouragement to act independently in unfamiliar situations or when trying challenging tasks. Four-year-olds can make simple choices among activities, but occasionally need support in trying new classroom activities. Examples of initiative and independence include:

- Finding materials with which to work, such as scissors, tape, and markers, for acting on an idea or desire (for example, making a pretend camera for taking pictures);
- Finding and putting on one's own jacket, mittens, and hat before going outdoors;
- Deciding to build an airport with blocks, forming a plan, and then implementing it with others already working with blocks;
- Trying a new activity (for example, soap painting or a cooking project), and pursuing it for a meaningful period of time;
- Playing with different children rather than the same friend or friends every day;
- Choosing one activity out of several and becoming involved with it;
- Responding positively to suggestions to try something new.

### Kindergarten

#### 1. Shows *initiative and self-direction*

Independence in thinking and action enables children to take responsibility for themselves. Most five-year-olds can make choices among familiar activities, participate in new experiences, and are willing to take some risks. Children who choose familiar activities repeatedly and are hesitant to venture into new areas need help from adults in order to expand their independence. Some examples of independence are:

- Finding materials for projects (for example, glue to add their name card to a bar chart);
- Eagerly selecting new activities during choice time, such as trying the carpentry table or the computer for the first time;
- Assuming classroom chores without being asked (for example, sweeping sand from the floor, helping to clean up spilled juice);
- Choosing to work on a social studies project because the activity interests them, rather than because friends are doing it;
- Originating projects and working on them without extensive direction from the teacher.

## B. Self control

### Preschool-4

#### 1. Follows *simple* classroom rules and routines.

Four-year-olds find established routines very comforting. They feel safer and better able to participate when rules are clear and followed consistently. They can follow simple rules and procedures with gentle reminders. They show their acceptance and understanding of rules and routines by:

- Waiting patiently until someone leaves the water table when the rule is “only four people at a time”;
- Independently going to the circle area after clean-up;
- Clearing off their places at the snack table by taking their cups to the designated place and throwing their napkins and leftovers with few reminders;
- Turning off the tape recorder after listening to a story;
- Removing a finished painting from the easel and knowing where to hang it to dry;
- Holding hands when crossing a street that has no traffic light or crossing guard;
- Washing hands before a snack.

### Preschool-4

#### 2. Manages transitions.

Four-year-olds sometimes are upset when routines change or things are done differently. They manage transitions most successfully when they are told what to expect in advance. Children show they are learning to manage transitions by:

- Using a routine, such as waving from the window or blowing a kiss goodbye, to man-

### Kindergarten

#### 1. Follows classroom rules and routines.

Children who are successful within a group know and accept the rules established for that particular group. Five-year-olds are learning this skill and can be quite stubborn with their peers, insisting on adherence to the rules. They are comfortable when they know the routines and can plan their activities around the daily schedule. Ways that children show this ability are:

- Moving their name tags to the “in” column to show their attendance at school;
- Remembering to wash hands before a cooking project;
- Putting away a puzzle before starting another activity or shutting off the tape player before leaving the listening center;
- Bringing a book with a torn page over to the book repair box;
- Knowing that only three people can be at the computer at one time and writing their names on the waiting list to reserve a spot;
- Recognizing that because it is almost time for snack, there is only enough time to build a small addition to their block structure.

### Kindergarten

#### 2. Manages transitions *and adapts to changes in routine.*

Adapting to and accepting change in routine is an important skill if children are to function comfortably in school. Five-year-olds are anxious to establish order in their lives and prefer consistent routines. However, because change is also a part of growth, children need to acquire flexibility in order to deal with change.

## Self control continued

age the transition from home to school;

- Accepting transitions with little or no protest;
- Moving from free play to clean-up with ease and purposefulness;
- Helping the teacher give transition signals;
- Cleaning up ahead of schedule because a visitor has come to lead a special group time.

Five-year-olds are beginning to adjust to changes and learn that different situations call for different behaviors. Children show this flexibility by:

- Going from home to school without anxiety;
- Moving smoothly from one routine to another (for example, from activity period to clean up, or from story time to getting ready to go home);
- Remembering to whisper when visiting the library;
- Going to music class and following the music teacher's rules about where to sit;
- Greeting visitors who come into the classroom and then continuing with their work;
- Anticipating the afternoon assembly with pleasure, even though it means they will miss gym class.

## C. Approaches to learning

### Preschool-4

#### 1. Shows eagerness and curiosity as a learner.

Most four-year-olds are naturally curious and continually ask questions about everything they encounter. They display growing maturity when they respond to answers to their questions by asking for clarification or additional information, rather than saying, "Why? Why?" Examples include:

- Showing interest in stories and events related by other children;
- Being excited and curious about new things in the classroom, such as a collection of fall leaves or shells from the sea shore;
- Looking at a picture of a castle and trying to reproduce it with blocks;

### Kindergarten

#### 1. Shows eagerness and curiosity as a learner.

Five-year-olds are curious, active learners, excited about their environment and the wide variety of materials available to them in school. They enjoy using realistic props in dramatic play and experimenting with different artistic media. They are fascinated by audiovisual media and by technology and can become very insistent when they have strong ideas about what they want to do. Examples include:

- Showing interest in and asking questions about stories and events related by other children;
- Using play and a variety of different media to process new ideas and represent knowledge;

## Approaches to learning continued

- Continuing a discussion by asking related questions or making comments;
- Asking how water makes the wheel turn at the water table.

### Preschool-4

#### **2. Attends to tasks and seeks help when encountering a problem.**

Four-year-olds attend to most tasks for short periods of time (10-20 min.). They will persist longer when they have chosen the activity. Learning to work until tasks are finished or problems are solved is often difficult for this age group. Ways that children show persistence and willingness to accept help in problem-solving include:

- Paying attention to songs and stories during circle time;
- Raising their hands or touching the teacher's arm to indicate that they need help;
- Trying to start the zippers on their coats repeatedly until they can do the task without help;
- Following teacher or peer suggestions for solving a problem (for example, understanding that putting another block at the base of the tower would make it more stable);
- Completing favorite puzzles over and over again;
- Beginning to put the blocks away and asking for help to finish more quickly;
- Accepting help from the teacher when putting together a difficult puzzle.

- Demonstrating the meaning of "sinking" and "floating" by acting out how the rubber duck floats and the paper clip sinks;
- Asking how the caterpillar can live in a cocoon with no food or water;
- Using a computerized painting program to depict their houses and yards;
- Acting out how angry their own mother was when the car broke down while telling the story to the teacher.

### Kindergarten

#### **2. Sustains attention to a task, persisting even after encountering difficulty.**

Five-year-olds can attend to open-ended tasks they have chosen for reasonably long periods of time (20-30 minutes). However, it is more difficult for them to concentrate on tasks they have not selected or activities that require skills beyond their current abilities. When engaged in challenging tasks, they may need encouragement to continue. They are beginning to understand that making mistakes is an important part of learning and acquiring new skills. Some examples include:

- Watching the new class gerbil eat and play on the wheel in the cage for most of choice time;
- Making several attempts at solving a problem (for example, trying different ways to attach tape when building a 3-D collage);
- Continuing projects from one day to the next, such as working on a clay sculpture for several days or creating pictures from a storybook;
- Counting the blocks with the teacher as she helps rearrange them to make it easier for the big truck to park in the block garage;

## Preschool-4

### 3. Approaches tasks with flexibility and inventiveness.

Four-year-olds, who are the most comfortable with repetition and familiar people and places, often do not understand that there are different ways to work with materials or solve problems. They are just beginning to understand that there are many possible ways to accomplish a task. Children show flexibility and willingness to try new ideas by:

- Using two short cardboard tubes as binoculars in the dramatic play area;
- Trying to staple pieces of paper together after unsuccessfully trying to tape them together;
- Trying several different ways to form play dough into a specific object such as a birthday cake or a snowman;
- Using prior experience to figure out what to do in present situations (for example, asking the teacher for red paint to color the play dough because last week the teacher made the dough green with green paint);
- Experimenting with a brush to find ways to keep paint from dripping;
- Implementing the suggestions of others (for example, playing a different role than usual during dramatic play).

- Remembering on a day-to-day basis to maintain long-term projects (such as watering seeds regularly, recording daily plant growth on a chart, reading the thermometer and recording temperatures regularly).

## Kindergarten

### 3. Approaches tasks with flexibility and inventiveness.

Five-year-olds are learning how to approach tasks creatively and to attempt more than one way to solve a problem. Trial and error nurtures and encourages their creativity. Some children are reluctant to try new approaches because an unsuccessful outcome may be difficult to accept. After children have tried repeatedly to solve problems, it is important for them to know when and where to get help before they become frustrated. Examples include:

- Creating something new (for example, a pretend camera) by combining several familiar materials (for example, a milk carton and tape);
- Asking for and accepting suggestions for alternate ways to build a tall tower that will remain standing;
- Using table blocks and small vehicles and figures to explain to a friend how they get to school;
- Communicating frustration in an acceptable way after failing to accomplish a task;
- Using a drawing program on the computer to illustrate a story;
- Using resources to spell words needed to write a sign;
- Trying several ways of folding or cutting paper to make a kite or airplane;
- Attempting several different ways to solve a problem (for example, trying to build a roof over a structure with different types of blocks).

## D. Interaction with others

### Preschool-4

#### 1. Interacts easily with one or more children.

At age four, preschoolers are beginning to make the transition from parallel play to cooperative play. Taking turns, sharing, and conversing during play are new skills for many four-year-olds. They are developing special friendships and starting to understand that it is possible to have more than one friend at a time. Examples of interaction include:

- Playing with whomever is in the dramatic play area rather than only playing there when alone or with a special friend;
- Making decisions with another child about who will put out the cups and napkins and how many they will need;
- Working cooperatively with another child who is painting on the same side of the easel;
- Removing the toys from the sand table with a friend in order to start a new project;
- Talking (or using alternative communication) with another child to plan ways to build a block structure;
- Using rhythm instruments with several children.

### Preschool-4

#### 2. Interacts easily with familiar adults.

Four-year-olds are learning how to interact with adults. They engage in conversations

### Kindergarten

#### 1. Interacts easily with one or more children.

Five-year-old children are beginning to play cooperatively with one or more children, listen to peers and understand their feelings, and solve problems cooperatively. The meaning of friendship (What does having a friend mean? How does friendship work?) is very interesting to them. They have preferences about who they want to play with and are sometimes tentative about interacting with peers they do not know very well. Examples include:

- Playing cooperatively with a group of children during recess;
- Following suggestions given by a friend about how to proceed in their play (for example, deciding to build a fire station with the large hollow blocks in response to a friend's suggestion);
- Asking a friend politely to borrow the scissors and saying "thank you" when returning them;
- Choosing to work with children who are new to the class;
- Giving assistance to peers who are trying to solve a problem (helping to tie shoes or figuring out how to divide the Legos among three children);
- Switching from being the cashier to being the customer so everyone gets a turn at the pretend grocery store.

### Kindergarten

#### 2. Interacts easily with familiar adults.

Young children often have more experience talking and interacting with adults than with



## Interaction with others continued

and follow directions given by familiar adults much more readily than with unfamiliar adults. Some children need explicit instructions about positive ways to say “hello,” respond to adults’ comments and questions, or gain an adult’s attention. Children show their skills in this area by:

- Responding appropriately when an adult says “Good morning”;
- Answering a teacher’s question about who they played with on the playground;
- Asking for attention by raising a hand, touching the teacher’s arm, or other reasonable actions;
- Listening to and talking with adults;
- Requesting the teacher’s attention verbally without becoming impatient, pulling at the teacher’s clothing, or jumping up and down.

their peers. Five-year-olds who feel at ease with adults will show affection, respond to questions, initiate conversations, and follow directions given by familiar adults. Examples include:

- Greeting the teacher or other adults when arriving in the morning;
- Expressing curiosity about a new adult in the classroom by asking questions about who he is or why he is there;
- Relating events and anecdotes to the teacher with ease and comfort;
- Following directions given by a parent volunteer about when to get off the bus during a field trip;
- Interacting easily with other adults in the school, such as the custodian, the lunch room monitor, or the crossing guard.

## E. Social problem-solving

### Preschool-4

#### 1. Seeks adult help *when needed* to resolve conflicts.

Four-year-olds need a great deal of adult support and guidance in learning how to settle conflicts (for example, how to share a limited amount of materials or deciding who will get to go outside first). Their natural responses are physical, such as hitting, kicking, or throwing. They are beginning to learn alternatives from adults who suggest and model ways to use words and other simple formulas. Children show they are gaining awareness of alternatives by:

- Asking an adult to help when another child wants the same truck or when other children keep pushing in the line waiting for a turn on the slide;
- Using words suggested by an adult to express anger, such as “I don’t like it when you push me” or “That makes me mad!”;

### Kindergarten

#### 1. Seeks adult help *and begins to use simple strategies* to resolve conflicts.

An initial step in conflict resolution is recognizing when there is a conflict and getting help to solve it. Communicating and using varied strategies to resolve conflicts (for example, “fair trades” or taking turns by mutual agreement) are emerging skills for five-year olds. They still need adult support and modeling to use words to solve problems, suggest possible solutions, and participate in compromise. Children show they are learning these skills by:

- Asking for help when a second child wants to use the same blocks;
- Asking the teacher to set the timer so each person will know how long he or she can use the computer;

## Social problem-solving continued

- Asking a child to return a toy he or she has grabbed, and turning to an adult for help when the child refuses;
  - Giving alternatives to friends, such as “I’m playing with these, you play with those”;
  - Asking the teacher to use a timer to decide when one child’s turn on the bike ends and their own turn begins;
  - Using facial expressions or gestures to communicate needs or resolve conflicts;
  - Using words to explain that the sand table is full because only two children are allowed at a time;
  - Negotiating with other children to solve a problem with the teacher’s support.
- Negotiating with another child to divide the markers and determine how many each will use;
  - Settling a dispute with another child through negotiation, addressing their own rights as well as accommodating the other child’s needs (for example, “I’ll use the paste for these two pieces of paper and then give it to you.”);
  - Using words suggested by an adult to settle conflicts;
  - Taking turns without pushing or other physical conflict;
  - Sharing without grabbing;
  - Using words to express feelings, such as, “I don’t like it when you push me”;
  - Using and accepting compromise when intruded upon (for example, when a new child wants to enter a game already underway, making room for him or her during an appropriate break).

## II. Language and Literacy

### A. Listening

#### Preschool-4

##### 1. Gains meaning by listening.

Four-year-olds gain knowledge about their world by watching and listening. They acquire the skill to listen not only when they are spoken to one-on-one by adults and peers, but also to listen when they are spoken to as part of a group. This “group listening skill” is important for learning and acquiring information in school settings. Listening with understanding is enhanced as stories are read to large and small groups and as children participate in singing and chanting activities.

#### Kindergarten

##### 1. Gains meaning by listening.

Young children are actively involved in learning about their world by watching and listening. At five years, children can listen for meaning in such different situations as one-on-one conversations with children or adults, small and large group activities, story times, and videos. They demonstrate their attentiveness through body language, eye contact, and active participation. They show their understanding by asking questions, making comments relevant to the topic, and reacting

## Listening continued

Children show their developing listening skills by:

- Carrying on a conversation with another person that extends a thought or idea expressed to the group earlier;
- Responding to stories read to the whole class, rather than responding only when read to as part of a small group;
- Understanding a change in the morning activity schedule described by the teacher;
- Watching and listening to a video and discussing the story later in the day;
- Listening to audio-taped stories and showing understanding through body language, pointing to appropriate pictures, or retelling what they heard.

### Preschool-4

#### **2. Follows *two- or three-step* directions.**

Remembering and following directions is critical for preschool children's independent functioning in educational settings. Four-year-olds are beginning to follow simple two- and three-step directions with relative ease. They also respond to group directions rather than always needing individual instruction. Four-year-olds show they can follow directions by:

- Responding to the instruction to the class "Go get your coats and when you are dressed, sit down on the rug";
- Repeating an instruction to a friend;
- Following directions on a tape or CD to perform various movements;
- Following directions given to the class to "Take this note about our class trip home, ask your family to read it, have a family member sign it, and bring it back to me";
- Following directions given by the teacher to "Go wash your hands and then sit down at the table."

appropriately to what is heard. Children demonstrate their listening skills by:

- Using information from a story about transportation to create a city in the block area;
- Asking a question to clarify their understanding of a video about bears;
- Showing understanding during a group discussion by leaning forward, frowning, or smiling;
- Recognizing the intent behind the words of peers (for example, accepting an apology given for causing an accident);
- Understanding the message or story expressed in a book, audiotape, or CD-ROM.

### Kindergarten

#### **2. Follows directions *that involve a series of actions*.**

Five-year-olds can follow three-step directions immediately after they hear them, but sometimes forget instructions over time or become distracted before they can complete a longer series of actions. The ability to focus and remember is important for school success. Children demonstrate their growing ability to follow directions by:

- Understanding teacher directions given to the class without needing to ask the teacher to repeat what to do;
- Following a set of instructions without reminders (for example, going out to recess without forgetting any steps in the routine);
- Leaving the classroom earlier than the other children to deliver a message to the school secretary and then meeting the class at the doors to the playground;
- Remembering instructions given earlier (for example, going to the circle area after snack today, rather than to the quiet reading area as usual);
- Relating a set of instructions to a classmate.

## Preschool-4

### 3. Demonstrates *phonological* awareness.

Phonological awareness refers to the ability to hear and discriminate the sounds of language. Four-year-olds can attend to and distinguish the smaller units of sound within words with teacher support. They can begin to hear and discriminate syllables, the beginning sounds of words, and rhyming sounds, prerequisite skills for being able to decode words when reading. Children show developing phonological awareness by:

- Listening to the word the teacher says and then finding a word to rhyme with it;
- Hearing the sound of the first letter in their own names and using this ability to sound out or “read” classmate’s names that begin with the same letter;
- Experimenting with words, giving them new beginning sounds;
- Clapping out the number of syllables in their names;
- Saying the sound of a letter when they see it in a new word because they recognize it from a familiar word (for example, the “s” sound in “stop”);
- Hearing rhyming sounds, and creating rhyming words and nonsense words such as “funny, bunny, runny, tunny, sunny”;
- Chanting familiar rhymes with classmates during circle time or as they play.

## Kindergarten

### 3. Demonstrates *beginning phonemic* awareness.

For children to become fluent readers, they must be able to hear the smallest units of sound within words (phonemes) and to focus on these sounds separate from the meaning of the word. With frequent demonstrations by the teacher, children recognize and produce rhyming words, identify beginning and ending sounds, and begin to discriminate the smallest parts of words, first distinguishing syllables and, later, phonemes within syllables.

Examples include:

- Announcing that Marc’s and Matt’s names begin with the same sound as Mike’s name;
- Identifying two words that rhyme, given a series of three words;
- Knowing that words are made up of sounds and being able to identify the smallest units of sound (phonemes) in a word (for example “cat” has three phonemes: /c/ /a/ /t/);
- Naming the word left when you take away the /b/ from “bat”;
- Sorting pictures of objects into two groups based on their beginning sounds;
- Generating single-syllable words that rhyme while playing a rhyming game during snack;
- Commenting that “table” and “carrot” have two parts (syllables), but “book” has only one;
- Recognizing that some words end with the same sound (for example, stating that “tan” ends like “man”).

## B. Speaking

### Preschool-4

#### 1. Speaks clearly *enough to be understood without contextual clues.*

By four years of age, children usually speak with sufficient clarity so that it is easy to understand what they are saying without the help of additional information or gestures. four-year-olds generally use correct syntax, but sometimes overgeneralize rules (for example, “We goed to the store.”). Although they may still make some articulation errors, the length of their utterances and the grammatical complexity of their language is increasing. Evidence of this includes:

- Speaking clearly enough so that a classroom visitor knows what they are saying;
- Accurately delivering a message from home to the teacher;
- Using common social conventions such as “please” or “thank you,” although often needing reminders;
- Communicating in a way that other children understand what is being said without constantly having to asked “What did you say?”;
- Telling the class about the trip to visit their grandmother;
- Using sign language to indicate whom they want to sit next to on the trip to the orchard.

### Preschool-4

#### 2. Uses expanded vocabulary and language for a variety of purposes.

Four-year-olds are expanding their vocabulary daily through exposure to books, trips, and other classroom activities. At the same time, they are beginning to converse about objects

### Kindergarten

#### 1. Speaks clearly and *conveys ideas effectively.*

At five, most children’s speech is easily understood by listeners. During kindergarten, children begin to understand how to express their ideas coherently in group discussions as well as in one-to-one conversations. They speak loudly enough to be heard by their listeners. Their sentences become longer and more complex as their language becomes richer and more detailed. Children show emergent skills in this area by:

- Retelling the morning events in more than short phrases;
- Asking “how” and “why” questions in sentence form rather than by using only a word or two;
- Initiating conversations with peers about what they did over the weekend;
- Participating in conversations around the snack table or on the playground, speaking loudly enough to be heard by the group;
- Relaying a message from the teacher to the school nurse;
- Explaining why they think snowflakes melt more quickly than ice cubes.

### Kindergarten

#### 2. Uses expanded vocabulary and language for a variety of purposes.

During kindergarten, children’s expanding vocabularies provide them with a larger knowledge base that will assist them as they begin to read. They are acquiring words to

## Speaking continued

and events that are not physically present, are somewhat abstract, or that they remember from the past. They are learning the social rules for conversation, but continue to have difficulty staying on topic in a group discussion. By this age, children are proficient enough with speech and language skills so that they can be creative and humorous in their explorations of how words work and sound. Examples include:

- Waiting for their turn to speak before announcing the arrival of their new puppy;
- Using words to communicate their feelings;
- Telling a classroom visitor about the different trucks in the truck area, using the appropriate terminology;
- Adding a relevant idea to another child's comment;
- Telling jokes and giggling, even though they do not understand the significance of the word relationships in jokes and puns (for example, Knock-Knock jokes);
- Asking question related to the current topic of discussion;
- Thinking up rhyming words for a song or finger play.

name or describe many different things, and they are refining their social use of language by initiating conversations, taking turns in group discussions, and asking questions and making comments related to topics being discussed. Five-year-olds continue to use language for many purposes, such as playing with the sounds of language, reciting poems and rhymes, giving directions, explaining events, describing objects and asking questions. Examples include:

- Trying out a new word learned at morning circle later in the day while playing in the block area;
- Telling a joke to a friend or making up new jokes such as a “Knock-Knock” joke;
- Waiting for their turn before talking about their favorite movie;
- Initiating a conversation with a visitor in the classroom;
- Asking questions relevant to an event reported by another child;
- Wondering what the word “environment” means and discussing possible definitions in the context of hearing an informational book read aloud;
- Making up lists of rhyming words, including invented words;
- Noticing a word they don't understand when listening to a story and guessing what the word means from how it is used.

## C. Reading

### Preschool-4

#### 1. Shows *appreciation* for books and reading.

Depending on how often they have been read to at home and in other situations, children come to preschool with varying abilities to enjoy and understand the written word. By four, children can begin to learn about authors and illustrators, and enjoy making their own

### Kindergarten

#### 1. Shows *interest in and knowledge about* books and reading.

Children enter school with varying levels of experience with and interest in books and reading. Through repeated exposure to literature, kindergarten children can be expected to understand that authors write books, illustrators draw pictures, and books convey informa-

## Reading continued

books. Children are encouraged to want to read when they are read to, taught how to handle books, and asked to respond to stories. Children show interest in books and reading by:

- Recognizing specific books by their covers;
- Looking at books in an orderly fashion, turning one page at a time and going from front to back;
- Pretending to read by pointing to words with one finger as they recite the text;
- Listening or attending to a story without becoming distracted
- Asking questions about the details of a story just heard;
- Improvising dialogue for the re-enactment of a story in the dramatic play area;
- Creating voices for characters in books.

### Preschool-4

#### **2. Shows *beginning* understanding of concepts about print.**

Four-year-olds are beginning to learn how print works. They understand that speech can be written down and then read, and that the print on a page conveys the story. They have some awareness that reading is done from top to bottom and left to right, and are beginning to acquire the concept of “a word.” Four-year-olds understand that print takes different forms (for example, grocery lists, signs, stories) and that it can be read for enjoyment as well as for informational purposes. Children demonstrate a growing understanding of print by:

- Protesting when a different version of a familiar story is read because they know that the words in a story book do not change;
- Asking the teacher for help in making a sign for the dramatic play area that says “Doctor’s Office” or “Clinic”;

tion and stories. Five-year-olds can listen attentively to stories and develop preferences for books by certain authors or topics of special interest. Examples of their interest and knowledge include:

- During free play, choosing to listen to an audiotope of the story the teacher read during group time;
- Using books to find out about road-building machinery or to locate the name of a particular dinosaur;
- Pretending to read a book using pictures or memory as cues;
- Noticing that the book they are looking at has the same kind of drawings as a Richard Scarry book they have at home;
- Listening attentively to a story and saying why they liked that story.

### Kindergarten

#### **2. Shows *some* understanding of concepts about print.**

Five-year-olds are beginning to understand how print is organized and read. They realize that print conveys meaning, spoken language can be written down and read, and certain words are always written the same way. They begin to notice spaces between words, distinguish letters from drawings and numerals, recognize different types of text (storybooks, poems, newspapers, grocery lists, signs, letters, labels), label the parts of a book (front cover, title page, back cover) and track print from left to right and top to bottom, pointing to the words as they are read. Examples include:

- Finding the front of the book, turning to the first page of text before they begin reading, pointing to where the teacher should begin reading and then turning the pages one by one;
- Sweeping a finger from left to right across

## Reading continued

- Pointing to words using a left to right progression when “reading” picture books;
- Writing a series of scribbles separated by spaces under a drawing of a truck;
- Checking the classroom job chart to find out whose job it is to feed the gerbil.

### Preschool-4

#### 3. Comprehends and responds to *stories read aloud.*

As four-year-olds become involved with familiar stories, their comprehension grows. They begin retelling stories in a variety of ways (looking at the pictures and making up the text, acting out part of the story in dramatic play, or telling the story using a flannel board) and asking why things happened as they did. With teacher guidance, they can begin to guess or make predictions about what will happen next and to connect the story to their own experiences. Four-year-olds show their comprehension of stories by:

- Acting out a familiar story with their classmates;
- Asking questions and making comments about a story;
- Retelling the main events of a story just read or told by the teacher;
- Telling about when the family car was towed after hearing a story about a tow truck;
- Guessing what will happen next by looking at the picture on the following page;
- Commenting on the actions described in a story (guessing why the monkeys threw down the caps from the tree in *Caps for Sale*).

print on a page as they “read” a favorite story from memory;

- Asking whether they are the “author” of the story dictated to the teacher;
- Listening to an audiotope and following along in the book, turning the pages at the correct time.

### Kindergarten

#### 3. Comprehends and responds to *fiction and non-fiction text.*

Kindergartners expand their vocabulary and general background knowledge as they listen to fiction and non-fiction texts read aloud. They demonstrate their understanding of what they hear by answering questions about the text, predicting what will happen next using pictures and content for guides, and retelling information from a story in sequence, adding more detail and story elements over time. After children comprehend a text, they begin to relate their own experiences to what they have read. Examples include:

- Looking at pictures in a book and predicting what will happen next,
- Answering questions and adding their own comments about a story as it is being read;
- Predicting what will happen to characters in a story based on the character’s actions thus far;
- Guessing book or story content from the book’s title and cover;
- Retelling a story in sequential order (beginning, middle and end).



## D. Writing

### Preschool-4

#### 1. Represents *ideas and stories* through pictures, dictation, and play.

Four-year-olds continue to investigate how symbols can stand for or represent other things. Before they can learn to write, children must first realize that letters and words are symbols which represent spoken words and stories. They know that labels on toy shelves tell where to put the toys, that the print in books tells the teacher what to read, and that their own drawings can represent their feelings, ideas and experiences. They continue to gain experience with representation by:

- Retelling the story *Caps for Sale* using cutouts of colored hat shapes;
- Pretending to be a doctor in the dramatic play area and “writing” on a patient’s chart;
- Dictating a story about a picture and asking the teacher to write it down;
- Building a block structure to represent the fire station in a story and asking the teacher for help writing “Fire Station”;
- Drawing a monster shape to go along with *There’s a Monster in my Closet*.

### Preschool-4

#### 2. Uses letter-like shapes, symbols, and letters to convey meaning.

As children observe the teacher making lists and putting names on art work, they often want to write for themselves. Position of letters on the paper, actual formation of the letters, and correct order are not yet part of most four-year-olds’ repertoires. Many children become interested in writing their names and perhaps a few other significant words,

### Kindergarten

#### 1. Represents stories through pictures, dictation, and play.

Many five-year-olds understand that words represent things, ideas and events, and that letters make up words. They enjoy telling and “writing” stories. Long before they use conventional forms of writing, they willingly describe their drawings, use drawings to tell stories with a beginning, middle and end, and represent stories as they play. They can focus on an idea for a story and make a simple plan for expressing it. Examples include:

- Dramatizing a story about a mother and her children in the dramatic play area;
- Dictating a story to the teacher about the class trip to the farm;
- Sharing their drawing of a monster with a friend;
- Building a city with small blocks and using pretend people to act out stories in the city;
- Drawing the caterpillar from *The Very Hungry Caterpillar* and adding more details after talking about it with their teacher.

### Kindergarten

#### 2. Uses letter-like shapes, symbols, letters, and words to convey meaning.

As children begin to understand that writing communicates a message, they become motivated to produce words, even if they do not possess conventional writing and spelling skills. They begin by using drawings to convey ideas, adding letters to words randomly. With experience, they begin to form words by

## Writing continued

while others will continue to ask for words to be written for them. Children’s efforts to write at this age include:

- Making rows of squiggles and shapes on a paper and calling it writing;
- Labeling a drawing with several randomly placed letter-like shapes;
- Writing their own names from memory on their artwork;
- Spontaneously writing upper-case letters they know;
- Copying letters from signs and labels posted around the room, enjoying the power of doing “real writing”;
- Making shopping lists consisting of pictures, scribbles, and letter-like shapes in the dramatic play area before going to the grocery store;
- Beginning to write several letters correctly.

using letters from their names, copying words, approaching others for help, sounding out words using letter-sound associations, and using invented or temporary spelling. By the end of kindergarten, many children can write most upper- and lower-case letters and know the conventional spelling for some words. Examples include:

- Making marks that resemble letters, starting at the top of the paper and moving from left to right and top to bottom;
- Writing their names on their artwork;
- Drawing a picture of a computer in their journal and using invented spelling to write “I LK CMPTRS”;
- Using invented spelling to form words with initial and final consonants.

## II. Mathematical Thinking

### A. Mathematical processes

#### Preschool-4

##### 1. Begins to use *simple* strategies to solve mathematical problems.

Four-year-olds encounter real life mathematical problems throughout the day: How many cartons of milk do we need for snack? How can I fit these boxes together? How many days until we go to the zoo? With guidance, and in a classroom environment that supports asking questions, preschoolers can begin to solve simple mathematical problems in concrete ways, and offer basic explanations for their solutions. Examples include:

- Asking a friend if there are “more people in

#### Kindergarten

##### 1. Begins to use *and explain* strategies to solve mathematical problems.

Solving real-life problems helps children make connections among the math they are learning at school, other parts of their lives, and other types of learning. Problem-solving involves posing questions, trying different strategies, and explaining one’s thinking by stating reasons a particular strategy worked. Young children solve problems and explain their reasoning by working with concrete objects, drawing pictures, or acting out solutions. They show this emerging skill by:

## Mathematical processes continued

- your house or in mine?”;
- Trying to find a way to keep building a house with blocks, even though the long rectangular blocks have all been used;
- Asking a friend for a particular pattern block to complete a design;
- Figuring out how many small cups it takes to fill the pitcher at the water table;
- Wondering aloud how they can make their balls of play dough into a snake as long as the teacher’s;
- Deciding who is older if one child is 4 and another is  $4 \frac{1}{2}$ .

- Asking questions to clarify problems (for example, “Will the new rabbit cage be big enough for the baby bunnies?”);
- Saying “I gave Sammy one of my cookies because I had three and he had one. Now we have the same, two and two!”;
- Estimating whether there are enough blocks to build a road from here to there, and then testing the guess by building the road;
- Solving problems by guessing and checking (for example, figuring out how many apples are needed for snack if each child is served half an apple).

## B. Numbers and operations

### Preschool-4

#### 1. Shows *beginning* understanding of number and quantity.

Four-year-olds can count five to ten objects meaningfully using one-to-one correspondence, and some can count verbally to 20 or 30. Most four-year-olds understand that the last number named in the collection represents the last object as well as the total number of objects. They are just learning that the next number in the counting sequence is one more than the number just named and continue to explore the meaning of “more” and “less.” Examples include:

- Pointing to each object they count and assigning the appropriate number to it;
- Recognizing that there are four blocks without counting them;
- Commenting that there are more cars than tow trucks in the block area;
- Telling a friend who is first in line “I am second”;
- Adding a friend’s two yellow beads to their own yellow beads and saying “I have four beads.”;
- Filling in the next number when the teacher says “4, 5, 6,....”;
- Counting footsteps, jumps, or repetitions of exercise.

### Kindergarten

#### 1. Shows understanding of number and quantity.

Kindergarten children can count objects to at least 20; many learn to count verbally (that is, by rote) to 100. They can count using one-to-one correspondence reliably, use objects to represent numbers, and use numerals to represent quantities. With experience, they can begin to understand that a set of objects equals the same number regardless of the position, shape or order of the objects. They continue to learn about ordinal numbers (first through tenth) and understand that the last number named in a collection represents not only the last object, but the total number of objects as well. Examples include:

- Explaining that there are 17 people at the circle today, after counting them aloud with their classmates;
- Associating the correct numeral with sets of up to ten objects;
- Using number words to show understanding of the common numerical property among nine children, nine cups, nine trucks, and nine blocks;
- Continuing counting pennies to ten after a friend stopped at 6 (...“7, 8, 9, 10”).

## C. Geometry and spatial relations

### Preschool-4

#### 1. *Begins to recognize and describe the attributes of shapes.*

Four-year-olds begin to notice similarities and differences in the attributes of different shapes if attention is drawn to shapes in the classroom and environment. With encouragement, four-year-olds can recognize different variations of shapes (for example, equilateral triangles and isosceles triangles are all triangles), identify particular shapes in different orientations as being the same shape, and labels shapes and discuss their characteristics. Demonstrating familiarity with geometric shapes includes:

- Pointing out a triangle and counting its sides;
- Labeling shapes by their feel rather than visually (for example, identifying shape blocks in a “feely box”);
- Locating individual shapes in pictures composed of overlapping shapes;
- Announcing that a shape on a poster looks like “ a triangle with its head cut off”;
- Matching and sorting shapes;
- Recognizing an isosceles triangle as a triangle even when it is shown without a horizontal base;
- Finding all the triangles that are exactly the same size.

### Preschool-4

#### 2. *Shows understanding of and uses several positional words.*

Four-year-olds continue to develop spatial sense, which is the awareness of themselves in relation to the people and objects around them. They acquire the vocabulary of position

### Kindergarten

#### 1. *Recognizes and describes some attributes of shapes.*

As children play with unit blocks, pattern blocks, shape sorters, peg boards and geoboards, they gain a concrete understanding of shape and form. Five-year-olds can identify, describe, label and create a variety of common 2-D shapes and solids (circle, square, triangle, rectangle, cube, sphere) and begin to describe their attributes (corners, curves, edges). This concrete experience is important to later geometrical thinking and problem solving. Examples include:

- Creating (drawing, folding, cutting) models of circles, squares, rectangles, and triangles with varied materials (for example, crayons, a geoboard, folding paper);
- Describing characteristics of shapes (for example, a triangle has three straight sides);
- Understanding that two triangles, even if they are oriented differently in space, are still triangles;
- Recognizing that equilateral triangles, triangles with sides of different lengths, triangles with oblique angles, and triangles with right angles are all triangles.

### Kindergarten

#### 2. *Shows understanding of and uses direction, location, and position words.*

Children learn positional vocabulary as they develop spatial awareness and a recognition of symmetry and balance. Through discovery,

## Geometry and spatial relations continued

and begin to learn about direction, distance, and location. By age four, children should understand a number of positional and directional words, such as “above,” “below,” “under,” “beside,” and “behind.” They demonstrate this understanding by:

- Knowing where to stand if asked to stand behind a classmate in the line;
- Putting the bedroom doll house furniture in the same arrangement as the furniture in their apartments;
- Using distance words like “near” and “far”;
- Verbalizing their positions as they work and play;
- Going over to sit beside (or in front of) a classmate when asked to do so;
- Placing felt cutouts of trees, a sandbox, swing, and slide to make a map of the playground;
- Putting the ball under the chair when asked to do so.

experimentation, and experience, children form beginning understandings of direction (Which way?), distance (How far?), and location (Where?). Examples include:

- Placing an object inside and outside, behind and in front, under and above, beside and on a box, and describing its changing locations;
- Commenting that an object is nearer to me and farther from you;
- Identifying who is sitting beside the teacher and who is sitting in front of her;
- Completing an obstacle course that asks the runner to crawl through the tunnel, run behind the swings, run in front of the slide, jump beside the sandbox, and jump on the ramp;
- Giving directions to a partner in the block area to place the curved block on top of the long rectangle block;
- Using direction, location, and position words spontaneously as they participate in play activities.

## IV. The Arts

### A. Expression and representation

#### Preschool-4

##### 1. Participates in group music experiences.

Four-year-olds quickly become involved in singing, finger plays, chants, musical instruments and moving to music. They are usually quite unselfconscious when participating in music activities and can gain a sense of mastery if there are no expected outcomes or performances. Examples of involvement include:

- Participating in finger plays and musical games;
- Listening to music tapes during choice time;

#### Kindergarten

##### 1. Participates in group music experiences.

Five-year-olds are able to master simple instruments, such as rhythm sticks, tambourines, or drums. They are interested in the sounds that more complicated instruments (for example, piano or guitar) make and in how they are played. They enjoy singing, making up silly and rhyming verses, imitating rhythmic patterns, learning finger plays, and using music to tell stories and express feelings. Often, they will make up songs to accompany other activities such as when playing on the

## Expression and representation continued

- Starting and stopping the playing of their instruments when the piano or tape starts or stops;
- Knowing the words of oft-repeated songs, humming or singing them during other parts of the day;
- Using rhythm sticks or other instruments to time to a beat;
- Making up songs to accompany their play activities;
- Clapping hands in time to a song or a record, or copying the clapping beat of the teacher.

### Preschool-4

#### **2. Participates in creative movement, dance, and drama.**

Four-year-olds can participate with abandon in dancing and creative movement. Their imaginations are overflowing with images and ideas that they can express with movement. They pantomime movement of familiar things, act out stories, and re-enact events from their own lives in dramatic play. Examples include:

- Using scarves ribbons, or other materials to create special movements and dances;
- Dramatizing a story read aloud during circle time;
- Using movement to interpret or imitate feelings, animals, and such things as plants growing or a rain storm;
- Dancing to a variety of different kinds of music, such as jazz, rock, ethnic, classical;
- Galloping, twirling, and “flying,” or performing almost any other imaginative movement in response to music;
- Acting out the role of the mother in a dramatic play;
- Creating innovative movements to accompany audio tapes or group singing.

swings or putting on their clothes to go outside. Examples of music participation include:

- Singing songs from different cultures;
- Clapping to the beat of a song or tape;
- Exploring musical instruments that are in the classroom and using common objects to produce a variety of sounds;
- Composing their own songs and singing as they perform classroom routines, wait in line, or use the swings;
- Using musical instruments to create a mood to go along with a puppet show or a creative dance.

### Kindergarten

#### **2. Participates in creative movement, dance and drama.**

Five-year-olds are very active and need opportunities to move and stretch their bodies. They are in constant motion, wiggling, changing positions, and sitting in a variety of ways. They can harness this energy into creative and descriptive expressions of feelings and experiences through movement, dance, and drama. Examples include:

- Participating in a group movement experience and suggesting ways to move and animals to imitate;
- Planning or joining with others in the dramatization of a book or the retelling of a class event;
- Pantomiming the actions of a leaf falling, a ball bouncing, or a bird flying;
- Dramatizing a story they created;
- Making up a drama about something they studied or visited, such as a circus or a trip to the zoo;
- Creating a movement that responds to the beat of a record or interpreting the mood conveyed by a classical composition.

## Preschool-4

### **3. Uses a variety of art materials for tactile experiences and exploration.**

Four-year-olds are very active, and can sustain attention to art activities for only limited periods of time. They engage in the artistic process with great enthusiasm, but show little desire to produce a product. This enables them to explore various media with freedom. They demonstrate exploration by:

- Trying a variety of materials and ways of using the materials (for example, using a big brush to paint broad strokes, single lines going this way and that, or combining colors);
- Experimenting with play dough by rolling and patting it, cutting it with cookie cutters, sticking things into it, or sometimes making it into an object;
- Drawing or otherwise creating backdrops for puppet shows or signs for block structures;
- Using new implements such as Q-tips or straws, to paint a picture;
- Constructing a symmetrical design with pattern blocks;
- Using chalk on the blackboard or on paper;
- Using stamps or other objects to print with paint or ink.

## Kindergarten

### **3. Uses a variety of art materials to explore and express ideas and emotions.**

Through extensive exploration with art materials, five-year-olds become confident using a variety of media and enhance their sense of mastery and creativity. Although they are primarily interested in the creative process, they are beginning to become more critical of the products they create. They can express their feelings and ideas through their art work, in addition to expressing them verbally. Examples of exploration and expression with art materials include:

- Trying a variety of expressive media (markers, brush and finger painting, printing, collage, play dough, clay);
- Drawing or painting the way they feel when they are happy;
- Making a book with their own pictures to illustrate a story they dictated;
- Using one medium for a period of time to develop greater control and expertise;
- Constructing a sculpture from wood pieces, fabric and foil;
- Creating an object or animal with clay.

## B. Understanding and appreciation

## Preschool-4

### **1. Responds to artistic creations or events.**

Many children express their interest in the arts as observers rather than as producers. With teacher guidance, children can begin to com-

## Kindergarten

### **1. Responds to artistic creations or events.**

Many children express their interest in the arts as observers rather than producers. Five-year-olds are able to appreciate the artistic cre-

## Understanding and appreciation continued

ment on each other's work, asking questions about methods used, showing interest in the feelings being expressed, or noticing details. With teacher support, four year olds can attend to and appreciate children's concerts, dance performances, and theater productions. Examples include:

- Listening to music tapes during choice time, indicating appreciation through body language and facial expressions;
- Watching classmates as they engage in creative movement and activities;
- Imitating the voice of a classmate to play Papa Bear;
- Exclaiming about the skill a classmate displays in painting, modeling with play dough, or building with Legos;
- Closely watching a guest magician or musician who is performing for the class.

ations of others, the skill of a dancer, or someone's ability to play a musical instrument. They are excited when a picture of sculpture reminds them of people, objects or events in their own lives. Some ways that children express this appreciation include:

- Listening to music tapes or records during choice time, indicating involvement by body language and facial expression;
- Commenting to a friend, "I like how you used so many colors to make your picture look stormy";
- Looking at illustrations in a book and appreciating the skill, humor, or beauty of the drawings;
- Identifying the painting they liked best in the art museum and telling why;
- Listening with attention and pleasure to a visiting artist, such as a poet, writer, musician or magician;
- Drawing pictures of their favorite character in a play;
- Watching as classmates put on a puppet show or perform a dance the class created.

## V. Physical Development and Health

### A. Gross motor development

#### Preschool-4

##### 1. Coordinates movements to perform *simple* tasks.

Four-year-olds are able to combine movements to accomplish increasingly challenging physical tasks. They can now kick balls, aim and throw bean bags, climb and swing on jungle gyms, and ride tricycles with increasing control. They love to practice these new skills in games, especially with adult companions. Ways they show increasing coordination include:

#### Kindergarten

##### 1. Coordinates movements to perform tasks.

Five-year-olds are busy experimenting with how their bodies move. They are ready to combine various independent skills to accomplish new feats and meet new challenges. These include:

- Moving their bodies into position to catch a ball, then throwing the ball in the right direction;



## Gross motor development continued

- Throwing a ball in the right direction, aiming at a target with reasonable accuracy;
- Catching a ball by moving their arms or bodies to adjust for the direction the ball is traveling;
- Kicking a large ball with a two-step start;
- Riding a tricycle on a path around the playground;
- Using the slide, seesaw, or swings;
- Hitting a stationary object with an overhand throw.

- Bouncing a ball and catching it;
- Kicking a stationary ball using a smooth running step;
- Sweeping with a broom and using a dust pan;
- Skipping smoothly, alternating feet;
- Hanging a picture on a wall with tape or push pins;
- Throwing a medium-sized ball with some accuracy;
- Walking, galloping, jumping, and running in rhythm to simple tunes and music patterns.

## B. Fine motor development

### Preschool-4

#### 1. Uses eye-hand coordination to perform tasks.

Four-year-olds demonstrate their eye-hand coordination skills as they start to construct with unit blocks, Tinker Toys, and Legos; put together puzzles; and experiment at the sand and water tables. Their artwork tends to become more complicated as they use newly mastered skills to create products. Examples of eye-hand coordination include:

- Zipping coats;
- Cutting on a line or around a large picture with scissors;
- Stringing beads or pasta with holes onto a length of yarn;
- Dressing dolls using snaps and buttons;
- Constructing or copying buildings and roads with the table blocks;
- Explaining to a classmate how to place individual puzzle pieces by matching shapes or colors or looking at picture clues;
- Using a hammer to try to pound nails into soft wood.

### Kindergarten

#### 1. Uses eye-hand coordination to perform tasks *effectively*.

Five-year-olds are continuing to improve their eye-hand coordination and accomplishing tasks with greater precision. They enjoy playing with manipulatives and blocks and sometimes work with a finished product in mind. Five-year-olds demonstrate eye-hand coordination by:

- Putting together 18- to 25- piece puzzles using pictures as well as shape cues;
- Dressing in a variety of costumes in the dramatic play area (buttoning shirts, zipping jackets);
- Building specific block structures from a model without knocking the structures down;
- Cutting fabric into shapes to use for collage;
- Using tape, stapler, and glue to create 3-D objects, such as a house or an airplane;
- Constructing planned projects out of Legos, Bristle Blocks, table blocks and Tinker Toys.

## C. Personal health and safety

### Preschool-4

#### 1. Performs *some* self-care tasks *independently*.

Four-year-olds love performing self-care tasks and daily routines on their own. Sometimes they need guidance to avoid becoming silly or to remember what they are doing. They forget rules easily because they are busy with other thoughts, but they can usually meet expectations after verbal reminders. They show growing self-care skills by:

- Using the toilet independently;
- Washing and drying hands with only occasional reminders;
- Managing dressing tasks independently (such as putting on coats, pants, and boots);
- Pouring juice or milk from a small pitcher without spilling;
- Mastering zippers, buttons and sometimes buckles (tying shoes is not yet expected);
- Using tissues to wipe their noses and throwing the tissues in the wastebasket.

### Kindergarten

#### 1. Performs self-care tasks *competently*.

Kindergartners are quite competent about taking care of their own physical needs and often volunteer to help classmates who are struggling with buttons and laces. They take pride in their skills and will often practice zipping jackets and tying bows just for the pleasure of doing it. They demonstrate competence by:

- Taking care of their own toilet needs, asking for help with suspenders or other complicated clothing;
- Remembering to wash their hands before snack;
- Putting on their own outdoor clothing with very little help and few reminders;
- Pouring juice easily and without spills for snack or lunch;
- Spreading peanut butter and doing other simple tasks with food;
- Keeping track of their personal belongings and taking responsibility for keeping them safe;
- Cleaning up art projects or other messy activities with relative skill.

**Minnesota School Readiness Initiative Post Pilot Principal Survey, Fall 2002**

THANK YOU once again for participating in the first-ever Minnesota School Readiness Initiative. One of the main objectives of this project was to test a new process. Your perspectives on the workload, costs, and benefits associated with this project will be critical to any discussions around replication or expansion of this effort. Please take a few minutes to answer the following questions about the School Readiness Initiative process as it affected you and your staff. Your responses will be kept confidential. Please feel free to complete this survey electronically and return via e-mail to [anita.larson@state.mn.us](mailto:anita.larson@state.mn.us), or FAX to 763-795-9597 by **November 15, 2002**. You may also choose to mail via regular mail to:

**Anita Larson**  
**Research & Evaluation Team**  
**Minnesota Department of Children, Families & Learning**  
**1500 Hwy. 36 West**  
**Roseville, MN 55113**  
*Call with questions: 651-582-8420*

1. Decision to Participate

A. How was the decision made to participate in the School Readiness Initiative?

- Consulted with kindergarten teachers
- Unilateral decision (yours or another administrative staff person)
- Consulted School Board
- Something else? \_\_\_\_\_

B. What were some of the potential barriers or concerns for you or your staff about participating in the Initiative?

- No barriers / No concerns
  - Current kindergarten teacher workloads
  - Similar initiatives were already in place
  - Others :
  - Uncertainty about staffing (teachers or principal)
  - Training in Work Sampling System locally available
- \_\_\_\_\_
- \_\_\_\_\_

C. How did you overcome the potential barriers or concerns related to participating?

\_\_\_\_\_

\_\_\_\_\_

D. From your perspective, to what degree do you feel the workload associated with this process was or was not balanced by the immediate benefit(s)?

- workload outweighed benefits (workload > benefit)
- workload and benefits were about equal (workload = benefit)
- workload was outweighed by benefits (workload < benefit)
- I don't know.

E. How do you plan to use your school-level data from this project? (*e.g.*, Some states doing annual school readiness assessments at kindergarten are using the school or district level data to target changes in curriculum in community early education and care programs.)

\_\_\_\_\_

\_\_\_\_\_

F. What would you tell another school principal about the project if s/he were considering participating?

\_\_\_\_\_

\_\_\_\_\_

2. About you

How long have you been a principal? \_\_\_\_\_

How long have you been in the field of education? \_\_\_\_\_

Have you had experience with other school-readiness assessment models? (Please tell us which ones.)

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How can we improve this process?

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Do you have any recommendations for the next phase of this project (fall, 2003)?

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3. Comments or Questions:

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**Thank you again for your time! Have a great school year!**



Yes: Please briefly describe how and when this is collected: \_\_\_\_\_

No

B. If possible, please estimate the proportion of your current kindergarten classroom students who had the following pre-kindergarten experiences:

Type of Pre-Kindergarten Care	Example (proportion of students)	Your Estimates
Head Start	10%	
Pre-kindergarten (public)	10%	
Private nursery school	10%	
Center child care	35%	
Family child care	25%	
Home/Informal care	15%	

*\* Percent total may be more than 100% because of multiple arrangements.*

### 3. Use of Technology

Pearson, the publisher of the Work Sampling System, has launched a new on-line checklist that can be used in place of the paper form. Would you be willing to use a web-based checklist system in future years?

Yes       No

If you would like to tour the new web-based checklist, please visit: <http://www.worksamplingonline.com/School/Home/Tour/>

### 4. About you

How long have you been teaching? \_\_\_\_\_

How long have you been a kindergarten teacher? \_\_\_\_\_

Do you currently use the Work Sampling System in your instruction?

Yes : In what ways? \_\_\_\_\_

No

Have you experience with other school-readiness assessment models? (Please tell us which ones.)

\_\_\_\_\_  
\_\_\_\_\_

How can we improve this process?

\_\_\_\_\_  
\_\_\_\_\_

Do you have any recommendations for the next phase of this project (fall, 2003)?

\_\_\_\_\_  
\_\_\_\_\_

5. Comments or Questions:

\_\_\_\_\_  
\_\_\_\_\_

**Thank you again for your time! Have a great school year!**