CHILDREN ENTERING SCHOOL READY TO LEARN

School Readiness Baseline Information

School Year 2001-02
by State and County

Maryland State Department of

TABLE OF CONTENTS

Executive Summary

In September 1999, the Maryland Joint Committee on Children, Youth, and Families decided to focus its work on improving services for children, birth to five, affecting one of the eight results areas established by the Maryland Partnership – *Children Entering School Ready to Learn*.

As part of its efforts, the Joint Committee requested the Maryland Subcabinet for Children, Youth, and Families to develop a process to establish baseline information on the social, physical, linguistic, and cognitive skills of children entering kindergarten. The Maryland State Department of Education (MSDE) was charged with identifying and implementing an early childhood assessment system by school year 2000-01 that provides baseline information on children entering kindergarten. Upon the Subcabinet's recommendation, the Joint Committee selected the Work Sampling System (WSS)™ as the early childhood assessment system to be used in kindergarten for the purpose of assessing entering kindergartners skills for seven curricular domains.

The school readiness baseline information for school year 2001-02 represents the first year that all kindergartners in the state of Maryland were rated on their readiness for school, i.e., kindergarten. The statewide data for the composite score reveals that forty-nine percent (49%) of entering kindergarten students in Maryland have been rated by their teachers as fully ready to do kindergarten work. Forty-four percent (44%) of entering students are at the "approaching readiness" level and need targeted support in order to meet kindergarten expectations, and seven percent (7%) of the students are in the "developing readiness" category and need considerable support in order to do kindergarten work successfully. Most of the support is needed in the domains of scientific thinking, social studies, mathematical thinking and language and literacy.

Compared to the sample data collected in school year 2000-01, the composite ratings show that nine percent (9%) more kindergarten students came to school fully ready. All domains except Social Studies improved. The drop in social studies is less than two percentage points. The largest improvement was in physical development with 60% of the students fully ready in 2001 compared to 51% in 2000. The Arts improved by 8 percentage points between the two ratings. The domain, Social and Personal Development, improved by 7 points from 2000.

This year's report provides descriptions of the state of school readiness in Maryland. The results vary among the counties and provide trend data over time as well as information for specific groups of children.

Background

The importance of school readiness

Recent neuroscientific research strongly supports the belief that young children's learning before they enter formal education is an essential foundation for later school success. Increasingly, state policy makers across the country are addressing readiness for school by improving the learning opportunities for young children before they enter school, particularly those who are enrolled in early care and education programs. In addition, many children require the necessary family and health support to thrive developmentally.

Charge by the Joint Committee on Children, Youth, and Families and MSDE's requirements

On January 20, 2000, the Subcabinet for Children, Youth, and Families submitted a report to the Joint Committee on Children, Youth, and Families outlining strategies to improve services for young children and to prepare them to enter school ready to learn. The report states, "if progress toward our goal (of school readiness) is to be made, policymakers must have access to data by which progress may be measured (p.1)" (Subcabinet, 2000). Aside from collecting information about the increasing number of programs and services, the report states that additional information is needed to gauge children's skills and abilities when they enter kindergarten. Subsequently, the Joint Committee requested to establish a baseline describing young children's social, physical, linguistic, and cognitive skills when they enter kindergarten.

The Maryland Model for School Readiness (MMSR) and the Work Sampling System (WSS)

For the last four years, MSDE's early childhood assessment initiative for prekindergarten and kindergarten has been named the Maryland Model for School Readiness (MMSR). The MMSR is a school readiness framework designed to support teachers to improve assessment and instructional techniques to support young children's readiness for school. The MMSR includes the following components: assessment, instruction, family communication, and articulation among programs. In order to implement the MMSR effectively, teachers of young children receive intensive staff development. These seminars emphasize good assessment techniques which teachers use as the basis for supporting each child's learning to meet curricular expectations. Since 2000, the MMSR has been applied to kindergarten and many prekindergarten programs, as well as most Head Start programs in Maryland. Since early 2002, the MMSR has been available to child care programs that are working with children before they enter kindergarten.

The MMSR includes as its assessment component the Work Sampling System™ (WSS), a nationally and internationally considered state-of-the-art assessment system for early education.
The WSS helps teachers document and assess children's skills, knowledge, behavior, and academic accomplishments across a variety of curricular areas. Through observation, recording, and evaluating everyday classroom experiences and activities, teachers gain a better understanding of what their students know, are able to do, and what they still need to work on. Thus, the WSS is not a conventional readiness test. It is not used to place students in particular programs. On the contrary, it is designed to support the learning of every student toward consistent expectations for students' learning across seven curricular domains. These domains are:

1. Social and personal development;
2. Language and literacy;
3. Mathematical thinking;
4. Scientific thinking;
5. Social studies;
6. The arts;
7. Physical development and health.

The WSS is based on national and state standards. These standards are reflected in the WSS Developmental Checklists which are used by teachers to document and rate each child's growth and progress during the school year. The teachers work with specific guidelines that tell them what to look for when they assess their students. Typically, teachers evaluate their students' skills and abilities two or three times a year. Teachers share the assessment information with parents of their students and report it to the teachers of the following grade as part of the school's grade-to-grade articulation. The WSS is also used in most publicly funded prekindergarten programs. Most Head Start programs and many child care programs are initiating staff development activities related to the MMSR and the use of the WSS.

As an outgrowth of the Joint Committee's emphasis on a results-based planning process, service providers across the state are engaged in planning for results, including the tracking the progress of school readiness in Maryland. The data in this report provides the first official baseline for school readiness results from all kindergarten students enrolled in public schools.

The relationship of MMSR and the WSS to the Joint Committee's charge of implementing WSS for baseline information

The Joint Committee shares the belief, reflected in the MMSR, that young children in Maryland should be provided with the learning opportunities that have a positive impact on their success in school. School readiness is a continuum that begins at birth. This early childhood assessment is not intended to label children; rather, it is meant to provide useful information about children's skills and abilities at the point in time when they enter the public school system.

The WSS was selected for providing baseline information on children entering kindergarten in Maryland for the following reasons:

1. WSS provides an age-appropriate format for assessing young children
Young children's developmental skills and abilities vary widely when they enter kindergarten. Their understanding of their immediate world is just forming. Their skills and abilities are dependent on the stimulation they have received during the first four years of their lives before they enter kindergarten. Young children demonstrate their skills, behaviors, and knowledge in a variety of ways – when they play alone or with other children, when they interact with care providers or teachers, and when they approach specific tasks.

In order to determine what skills and abilities children bring with them when they enter kindergarten, teachers have to be excellent observers of children's learning. They have to know what to look for and how to document children's demonstrated skills and abilities. And, they have to use that information diagnostically to support and challenge children's learning. The WSS is the tool that helps them to do that. It is an in-depth and authentic way of recording children's skills. At least twice a year, teachers use the documentation to evaluate and rate children's performance to determine if they are proficient, in process, or need development in respect to the performance indicators on the WSS Kindergarten Checklist.

During the fall, teachers assess children's learning in the first few weeks of school and rate them accordingly. Documenting children's learning during the first few weeks of kindergarten affords teachers an opportunity to assess the extent to which children are ready to do kindergarten work successfully. In order to know how a group of children are doing, these "fall ratings" are collected from teachers to gauge the level of readiness skills and abilities for children.

2. WSS provides a valid, reliable, and fair measure
To use WSS for baseline information, MSDE established a system to improve the validity and reliability of the instrument and its application in the classroom. First, the instrument has to meet the rigorous test of reliability and validity. A study conducted by Meisels (2000) in 17 Title 1 schools in Pittsburgh compared teacher ratings on the WSS with student scores on a nationally-normed, standardized test and found strong evidence for the validity of WSS information and for the trustworthiness of teacher judgments.

Second, teachers receive intensive staff development to learn how to use the WSS appropriately and effectively in the classroom. At this time, teachers apply specific guidelines for evaluating and rating students' skills. As part of the training, teachers also review and evaluate student portfolios of work samples to determine the degree of accuracy.

Third, the data is reviewed and examined at MSDE for irregularities or unusual performance. The data is also reviewed by each local school system to ensure accuracy.

3. WSS reflects national recommendations on early childhood assessment
The aggregated WSS information in the form of the seven (7) domains reflects all aspects of children's learning. It reflects national policies on school readiness, particularly the recommendations of the National Education Goals Panel (NEGP). The NEGP recommends the following general principles to guide state policies and practices for the assessment of young children:

- Assessment should bring about benefits for children – either in direct services to the child or in improved quality of educational programs.
- Assessment should be age-appropriate in both content and the method of data collection. For instance, assessments of young children should address the full range of early learning and development.
- Methods of assessment should recognize that children need familiar contexts in order to be able to demonstrate their abilities.

MSDE meets these principles established by NEGP with regard to the use of WSS in kindergarten.

Method of Implementation

Statewide implementation of the WSS in school year 2001-02
Kindergarten teachers use the WSS with all children throughout the current school year. For this report, teachers have provided information on students' skills and abilities during the fall 2001. The fall assessment ratings were done on 30 selected WSS performance indicators of the 66 WSS Kindergarten Checklist indicators, reflecting skills and abilities that can reasonably be expected from children when they enter kindergarten. The 30 WSS indicators represent the aforementioned seven WSS domains (Appendix A) that were used for the school readiness baseline information.

Collection of baseline data during fall 2001

A total of 1,900 teachers observed and documented their students' performance in their classrooms during the first few weeks of school. Between November 5-16, 2001, these teachers evaluated and rated their students' performance according to the WSS assessment protocol and specific guidelines that were developed by MSDE. Seven domain scores and the composite score of all domains are provided. Local school systems provided the following demographic information on each kindergarten student:

- Student ID number
- Race/ethnicity
- Gender
- Enrollment in the Federal Free and Reduced Lunch Program
- Prior early care experience
- Students who receive special education services and have an Individual Education Plan (IEP) or have been designated as having limited English proficiency (LEP)

Assessment data for all kindergarten students was scanned and scored by NCS Pearson, a contractor, and submitted to Case Consulting, Inc. for analysis.

Reporting of the seven (7) WSS domain scores reflects the percentage of students who have reached one of the following levels of readiness:

Full readiness: Students consistently demonstrate skills, behaviors, and abilities, which are needed to meet kindergarten expectations successfully.

Approaching readiness: Students inconsistently demonstrate skills, behaviors, and abilities which are needed to meet kindergarten expectations successfully and require targeted instructional support in specific domains or specific performance indicators.

Developing readiness: Students do not demonstrate skills, behaviors, and abilities, which are needed to meet kindergarten expectations successfully and require considerable instructional support in several domains or many performance indicators.

Baseline data is available at the following levels:

- School Building
- Local School System
- State of Maryland

This report includes the county and state level baseline data. School building level information has been transmitted to local school systems.

Analysis of the school readiness baseline information

The school readiness baseline information has been analyzed for the seven WSS curricular domains and the composite. It was disaggregated (i.e., broken out) for:

- race/ethnicity
- gender
- prior early care[1]
- special education[2]
- limited English proficiency[3]
- enrollment in free and reduced priced meals program[4]

Interpretation of the Results

The baseline information is designed to provide information about the state of school readiness in Maryland regarding how many children are at the full, approaching, or developing readiness levels. The information provides descriptive data of the percentage of students at each of the readiness levels for each domain and the composite. Since each readiness level is discretely defined, the data provides information on the need of targeted or considerable support for entering kindergarten children. The data also provides information about specific groups of kindergarten students (i.e., by race/ethnicity or gender) and, thus, establishes the relationship between readiness outcomes and demographic variables. Over time, the information can be tracked for the kindergarten population as a whole or specific groups of students as they matriculate to primary grades and for each new cohort of kindergarten students.

Interpreting the results regarding the readiness levels for specific early care experiences is particularly useful if it is evaluated as a way to track progress over time for each type of prior care. A direct comparison between the types of prior early care categories offers limited use since each of the categories represent different population groups.

Results of School Readiness Baseline Information for School Year 2001-02

Major results of baseline data

The statewide data reveals that almost half of all kindergarten students (49%) have been rated "full ready" by their teachers on the composite of the seven curricular domains. Forty-four percent (44%) of all entering kindergartners demonstrated inconsistent skills, behaviors, and knowledge and need targeted support. Seven percent (7%) of all kindergartners lack the skills and behaviors which are needed for a successful kindergarten experience. The group of children needs considerable early intervention.

---

[1] This information describes the percentage of students who had their most recent (i.e., 12 months), predominant, and structured early care experience in the following types of programs: child care center; family child care, Head Start, nursery school, public school prekindergarten, or had their prior experience at home or in some kind of informal care with a relative.

[2] This information describes the percentage of students assessed who receive special education services and have an Individual Education Plan (IEP).

[3] This information describes the percentage of students assessed who have been identified by the local school system as having limited English proficiency (LEP).

[4] This information describes the percentage of students enrolled in the U.S. Department of Agriculture School Lunch Program whereby the categories "free" and "reduced" denote low and moderate family income as a means to qualify for services.

The results for selected domains for the "full readiness" level indicate that entering kindergartners' skill levels in social and personal, physical development, and the arts are above the composite score while language and literacy, social studies, and scientific and mathematical thinking are below the composite score. A detailed analysis of the relationship between the school readiness levels and demographic variables using statistical tests to interpret the data is available in Appendix C.

Comparing results for school year 2001-02 with last year's preliminary results

The baseline information from school year 2000-01 was developed as a pilot of a statewide large scale readiness assessment system. Based on a sample of 38 percent of all entering kindergarten students, last year's results provided the first glance at the level of school readiness across the state. The table below compares last year's information with this year's assessment data.

Domain	School Year 2000-01 Readiness Levels			School Year 2001-02 Readiness Levels			Difference Readiness Levels		
	Full	Approach	Devel	Full	Approach	Devel	Full	Approach	Devel
Composite	40	50	10	49	44	7	+9	-6	-3
Social/Personal	48	42	10	55	36	9	+7	-6	-1
Language and Literacy	35	48	17	36	50	14	+1	+2	-3
Mathematical Thinking	35	51	14	40	47	13	+5	-4	-1
Scientific Thinking	20	60	20	24	59	17	+4	-1	-3
Social Studies	34	57	9	32	55	13	-2	-2	+4
The Arts	43	51	6	51	42	7	+8	-9	+1
Physical Development and Health	51	44	5	60	35	4	+9	-9	-1

Note: Numbers may not add up to 10 or 100 due to rounding.

Key: Full = full readiness level
       Approach = approaching readiness level
       Devel = developing readiness level

Compared to last year, entering kindergartners improved their full readiness levels for all domains (9%) and in each domain with the exception of Social Studies. The percentage of kindergartners with approaching readiness levels has decreased with the exception of Language and Literacy. The percentage of kindergartners with developing readiness levels decreased with the exception of Social Studies and The Arts.

Recommendations for Using School Readiness Baseline Information

The primary purpose of this report is to provide background information and baseline information on the readiness of children entering school (i.e., kindergarten). It is essential that all service providers for children, birth to five, develop common goals to improve the baseline of skills, behaviors, and knowledge for entering kindergartners from year to year. For instance, child care providers, home visiting programs, and health providers in one jurisdiction could analyze the WSS information and agree on jointly targeting specific domains or indicators for improvement. Since most services are offered by county agencies, the countywide baseline information should be the platform for establishing integrated services for young children targeting the improvement of specific domains or the readiness levels as a whole. In addition, countywide WSS information will be helpful for county councils, local boards of education, and local management boards in allocating funds for services to young children.

In general, the WSS information can be used to:
- Develop a county-wide needs assessment regarding the skill levels of children entering kindergarten.
- Target federal, state, and local funds to address identified needs in the county.
- Develop forums for partnership building.
- Modify curricular and intervention programs and to target resources for kindergarten.

Based on the MSDE recommendations made last year, the following actions have been taken to use WSS baseline information for planning purposes:

1. The Ready at Five Partnership convened two School Readiness Forums with representation from each county to examine the date and develop strategic plans for improving school readiness in Maryland. The Partnership also published *Parents Matter*, a brochure for parents to inform them how they can support their children's school readiness needs. The brochure is available in English and Spanish.

2. The Maryland State Head Start Association developed the Maryland Head Start Child Outcomes Framework in response to the Federal Head Start Office's mandate to tailor Head Start programs to meet the child outcomes. The Maryland Head Start Child Outcomes have been aligned with those from the MMSR.

3. MSDE and local school systems will have WSS data available for each school building for community- and school-based planning of services.

4. The Maryland General Assembly convened a second budget hearing on the result area, *Children Entering School Ready to Learn*, to examine the causes and forces at work to explain the current status of school readiness and how it can be improved.

Frequently Asked Questions

1. **Why is the baseline information collected and reported annually?** The Maryland General Assembly is interested in improving services for young children to prepare them to enter school ready to learn. Several legislative committees want to know what children know and are able to do when they enter school. This has necessitated school readiness baseline data at the entry into kindergarten. Collecting assessment information on all entering kindergarten students will enable policymakers and other stakeholders to have access to data by which progress can be measured over time. The Maryland State Department of Education (MSDE) was the state agency charged with implementing an assessment system for kindergarten. It is required to report this information to the General Assembly in February of each year.

2. **How is the baseline information collected?** All kindergarten teachers assess and rate their students' proficiency on 30 selected indicators of the Work Sampling System™ (WSS) Kindergarten Checklist. This information is aggregated and disaggregated, i.e., broken out, into the data displayed in this report.

3. **What is the advantage of using performance-based assessment rather than a norm-referenced test to measure school readiness?** Performance-based assessments measure demonstrated skills, knowledge, and behaviors in an actual learning setting such as a kindergarten classroom. When measuring readiness for school, all developmental skill areas are important. Qualified kindergarten teachers, properly trained and prepared, are an excellent source of information for their students. They assess children's skills against established standards of learning. On the other hand, norm-referenced readiness tests compare a group of children against a national norm. At the kindergarten level, national norms are difficult to obtain and typically do not reflect all developmental skill levels.

4. **Why are entering kindergartners assessed over several weeks and not during the first week in school?** In order to learn more about the skills and dispositions of entering kindergartners, the assessment protocol for the data in this report takes into account the following:
   - Young children need a familiar and comfortable setting to show what they know and are able to do.
   - Teachers are looking for multiple sources of documentation of children's learning which are collected over a period of time.
   - The Work Sampling System™ (WSS) requires teachers to assess their students's performance in response to the instructional program during the first few weeks of school.

5. **What does the school readiness baseline information mean?** The information describes the skills, knowledge, and behaviors of children as they enter public school kindergarten programs. The assessment is based on performance indicators that define valid skills and competencies for that age group of children based on research and national standards of learning. The school readiness baseline information is broken into three categories displaying a range of skills, knowledge, and behaviors within a group of students (See Questions 6 to 8)

This information is designed to provide a profile on children's levels of readiness for parents, policymakers, schools, early care and education service providers (e.g., child care, Head Start, prekindergarten, etc.), community-based organizations, and the public at large. This information, in combination with other valuable data, will better inform those who are planning to improve the learning opportunities and services for young children.

6. **What does "full readiness" mean? Does it mean perfect scores?**
   Full readiness means that students consistently demonstrate skills, behaviors, and abilities which are needed to meet kindergarten expectations successfully.
   A student need not score "proficient" in all indicators within a domain or the composite to be rated at "full readiness". The top range of scores is considered "full readiness". (See *Introduction to Scoring* in Appendix B.)

7. **What does "approaching readiness" mean?**
   Approaching readiness means that students inconsistently demonstrate skills, behaviors, and abilities which are needed to meet kindergarten expectations successfully and require targeted instructional support in specific domains or specific performance indicators. The middle range of scores is considered "approaching readiness." (See *Introduction to Scoring* in Appendix B.)

8. **What does "developing readiness" mean?**
   Developing readiness means that students do not demonstrate skills, behaviors, and abilities which are needed to meet kindergarten expectations successfully and require considerable instructional support in several domains or many performance indicators. The bottom range of scores is considered "developing readiness." (See *Introduction to Scoring* in Appendix B.)

9. **Is the information used to place children in special programs?** No. The kindergarten teacher uses the information on children for instructional planning in the classroom. Policymakers, program supervisors, and administrators can use the information from this report for program planning purposes.

10. **Is the information used to rate kindergarten teachers' performance?** No. This is used for program and instructional planning. Kindergarten teachers provide information about children as they enter kindergarten. The assessment information is not a reflection on their performance.

11. **How are teachers using the information?** The assessment information from the Work Sampling System™ (WSS) is used by classroom teachers with their students to:
    - modify instruction
    - group students by ability levels
    - provide instructional support for individual students

12. **How are school officials using the information?** School officials, including building administrators and school improvement teams, are able to look at a profile of readiness levels in a school's kindergarten program. This review of the data could impact program development, materials expenditures and staff training.

13. **How are county officials using the information?** As county officials consider the early education opportunities within the county and the funding necessary to provide a strong kindergarten program, this data will identify needs in order to make informed decisions. Service providers (e.g., child care, prekindergarten, homevisiting, or Head Start programs) that work with young children before they come to kindergarten can review the data to align their programs with kindergarten.

14. **How are state officials using the information?** State officials use this data to make informed decisions about the result area, *Children Entering School Ready to Learn*, for state policy and budget projections. Also, state officials use the data to facilitate the planning process at the local levels.

15. **How are parents using the information?** Kindergarten teachers share the assessment information with parents in the fall as part of regularly scheduled parent-teacher conferences. Sharing this information provides a profile of each child's needs and strengths and serves as communication to support children's learning both in school and at home.

16. **What safeguards have been put in place to make sure that the teacher ratings are reliable and valid?** The following features have been developed to ensure that the teacher information reflects a consistent application of the assessment protocol:

    - MSDE has developed a professional development program for all kindergarten teachers using expert consultants who have been trained and properly oriented. The program uses consistent training materials and evaluation forms to determine the effect of each professional development session. As a result of these efforts, teachers are improving their skills of observation, systematic documentation, and evaluation of students' learning.
    - MSDE has produced specified guidelines for rating students' performances.
    - During the professional development program, teachers' accuracy in rating students' skills and abilities is assessed.
    - After a national testing company scans the student assessment information, the data is reviewed and examined for irregularities or unusual performances.

™ Work Sampling System is a registered trademark of Rebus, Inc., a Pearson Company

What Children Should Know and be Able to do When They Enter Kindergarten –
An example of skills, behaviors, and knowledge of school readiness

Introduction
Kindergarten students are active learners. In kindergarten classrooms, they solve problems, talk, draw, paint, build, dramatize, write, and read as they interact with their peers and with materials. Over time, teachers collect observations of students within the classroom setting and review the work that children produce in order to have documentation to support fair and accurate evaluations of student performance.

The assessment used is the Work Sampling System™ (WSS) that is nationally and internationally considered a state-of-the-art assessment system for early education. The WSS is not a conventional readiness test. It is not used to place students in particular programs. On the contrary, it is designed to support the learning of each student toward consistent expectations across seven curricular domains.

From September to late October 2001, teachers observed students' behaviors, documented their learning as they interacted with materials, and collected samples of their classroom work. During that time, they continually assessed kindergarten students on each of 30 performance indicators across the 7 curricular domains. At the same time, MSDE provided staff development for all kindergarten teachers, oriented them to the assessment protocol, and trained them in the use of the assessment system and standards-based instructional practices.

Within the first two weeks of November 2001, teachers reviewed their documentation and rated each student based on specific guidelines. They reflected on what they knew about each student before deciding which rating best described the student's performance at the time. Teachers either rated students "proficient," "in process," or "needs development."
The following WSS definitions for these ratings provide guidance to teachers:

- *Proficient* means that the child can reliably demonstrate the skills and behaviors represented by the performance indicator.
- *In process* implies that the skills and behaviors are intermittent and inconsistent
- *Needs development* indicates that the child cannot perform this indicator.

What are the typical skills and behaviors for children who are considered "fully ready?"
A student who consistently demonstrates skills, behaviors, and abilities, which are necessary to meet kindergarten expectations successfully, is considered "fully ready."

The following examples are based on the Work Sampling System (WSS)™ *Developmental Guidelines for Kindergarten* and represent only a <u>sample</u> of what full readiness in November might look like for the 30 WSS indicators across the following domains.

1. **Personal and Social Development.** This domain considers emotional and social competence. It describes children's sense of responsibility to themselves and others, how they feel about themselves and view others. It also refers to children's ability to interact with peers and adults and how they make decisions and solve social problems.

A student rated at *Full Readiness* in this domain might:
- choose consistently familiar classroom activities during center time.
- finish working on an assignment and take it to the "finished work" basket.
- accidentally tear a page of a book and helps the teacher repair it.
- ask another child, "What's your name?" then uses the name to begin a conversation.

2. **Language and Literacy.** This domain organizes language and literacy skills for listening, speaking, reading, and writing.

A student rated at *Full Readiness* in this domain might:
- ask the school nurse, "Are apples healthy to eat?" after listening to her talk about healthy foods.
- offers "box" to rhyme with "fox" or clap out syllables for one- or two-syllable names.
- use simple, but complete sentences when speaking (for example, when getting ready to go out to the playground, says "I want to find a worm.")
- use the pointer and lead a group reading a familiar rhyme or chant, moving the pointer from left to right and from top to bottom.
- get a book from the book corner to find out what to feed the ladybug found on the playground.
- cover a sheet of paper with letter-like symbols and letters while painting at the easel and say, for instance, "These letters are in my name."

3. **Mathematical Thinking.** The focus of this domain centers on children's approaches to mathematical thinking and problem solving. Children think in patterns, understand relationship among objects, and organize objects and ideas.

A student rated at *Full Readiness* in this domain might:
- try unsuccessfully to fit two different blocks into a space while building a structure, then "measure" the space with hands and match length to a block that fits.
- move around the circle and count each of 12 girls in the classroom to supply information for the "Girl and Boy Graph".
- use red and yellow inch cubes to create an ABAB pattern around the edge of a table.
- find three different types of solid rectangles on the block shelf and say, "These are all rectangles."

4. **Scientific Thinking.** The focus of this domain in on the children's active involvement in the scientific method through hands-on activities that encourage active investigation of the natural and physical world.

A student rated at *Full Readiness* in this domain might:
- ask some "Why?" questions (for example, "Why are there always worms on the sidewalk when it rains?").
- look at skin with a magnifier and say, "I never knew we had little lines in our skin."
- watch a demonstration of boiling water and tell the teacher, "It's disappearing into the air."
- wonder aloud while watching a worm, "What happens to worms in the winter? Do they move inside houses?"

5. **Social Studies.** The emphasis of this domain is on the gaining of understanding of human interdependence and the relationships between people and the environment. Study of present day and historical topics encourage the acquisition of social and cultural understanding.

   A student rated at *Full Readiness* in this domain might:
   - look at a book about people from many parts of the world and talk about obvious differences in hair styles, clothing, and gender.
   - make a booklet called "Jobs" and draw pictures representing some details about three jobs.
   - offer, "We could find out on the computer," when someone wonders how to learn about whales.
   - take part in a discussion about clean-up time and say, "If we don't clean-up, the room will get messier and messier."

6. **The Arts.** This domain considers how children express their understanding and appreciation for the arts. Through children's engagement with dance, dramatics, music and visual arts, they are able to express what they know and understand of the arts, culture, and history.

   A student rated at *Full Readiness* in this domain might:
   - "perform" a duet for the class with a friend while playing the tambourine.
   - dance to music, changing motions when the mood or tempo of the music changes.
   - use clay, paint, markers, etc. with a purpose in mind (for example, says, "I'm going to paint a storm today.").
   - after visiting an art museum, say, "My favorite one was the painting of the red bird."

7. **Physical Development and Health.** This domain emphasizes physical development as an essential part of a child's well-being. Gross motor skills relate to children's ability to control, balance, and coordinate body movement. Fine motor skills lay the foundation for writing, artistic expression, and self-care (e.g., tying shoes).   Another component encourages children's understanding and managing their health and safety.

   A student rated at *Full Readiness* in this domain might:
   - move quickly in all directions during a game of dodge ball.
   - work on a frameless puzzle, using the picture on the box cover as a guide.
   - hang up coat and put knapsack in cubby upon arriving at school.
   - contribute appropriate ideas to a class list of healthy snacks (for example, apples and cheese).