

**Schools' Use of Assessments for Kindergarten  
Entrance and Placement: 1998-99**

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**Introduction**

Many schools across the nation administer entrance and placement tests to young children as they enter or are about to enter kindergarten, and schools use this information for several different purposes. They use this information from tests, along with the child's age, to decide whether a child is ready to begin kindergarten. The information from tests may also be used to support a decision on whether to admit a child who is old enough, or who is too young, according to the age cut-off set by the state, school district, or school. Test information is also used to help structure instruction to meet the needs of individual children or groups of children and to identify children who may need additional evaluation and testing.

A survey of state education departments was conducted between October 1999 and January 2000 to collect information on state policies and practices pertaining to the assessment of kindergarten children (Saluja, Scott-Little, and Clifford 2000). According to the findings from this survey, 18 states have statewide screening or assessment of children when they begin kindergarten, 26 states responded that though there was no statewide assessment effort, some local districts were assessing children before or as they entered kindergarten, 16 states said they were working toward a statewide assessment program and 6 states responded there was no assessment effort at either the state or local levels. The most often cited use of the information from these tests was to improve instruction by providing teachers with information about their incoming kindergarten class (12 states). The data were also used for school improvement purposes by helping to identify high-need schools (7 states), and to identify children with special needs (6 states).

Because many states give local school officials the authority to make decisions about whether or not to assess kindergarten children, how to assess these children, and how to use the information from these assessments, it is important to know more about these practices at the school level. This report uses data from the base-year (kindergarten) collection of the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 (ECLS-K), sponsored by the National Center for Education Statistics, U.S. Department of Education. The report describes the use of entrance or placement tests prior to kindergarten by schools in the United States that offer kindergarten classes. It examines the use of assessment

tests by public and private schools, by schools with different concentrations of low-income children,<sup>1</sup> by schools with different levels of instruction (grade levels taught in the school), and by schools with different numbers of children enrolled.

### **National Data on Entrance and Placement Testing Prior to Kindergarten**

The ECLS-K is following a nationally representative sample of children from kindergarten through fifth grade, collecting information from children, their families, teachers, and schools. The ECLS-K includes data from a nationally representative sample of schools offering kindergarten. The School Administrator Questionnaire component of the ECLS-K collects information from the principal/headmaster of these schools on a wide range of topics, including school and student body characteristics, school facilities and resources, community characteristics and school safety, school policies and practices, school-family-community connections, school programs for special populations, staffing and teacher characteristics, school governance and climate, and principal characteristics. This report uses the information principals provide about their schools' use of entrance or placement tests for kindergarten-age children.

This report examines schools' use of entrance or placement tests by school type, school level, school size, and school poverty.<sup>2</sup> School type refers to whether the school is a public or a private school (both religious and nonreligious). School level is the instructional level within the school or the grade range taught (i.e., *ends with kindergarten*; *primary*, highest grade is first, second, or third; *elementary*, highest grade is

fourth, fifth or sixth; *combined*, highest grade is seventh through twelfth). School size refers to the number of students enrolled or school enrollment (i.e., less than 150, 150-299, 300-499, 500-749, and 750 and above). In terms of school poverty, low-income schools are identified by the presence of a schoolwide Title 1 program. In 1998-99, in order to have a schoolwide Title 1 program 50 percent of the student body had to be from families in poverty. Since this is highly unlikely for private schools, the comparisons by school poverty are limited to public schools only.

### **Findings**

The ECLS-K data show that 61 percent of schools administer entrance or placement tests prior to kindergarten (figure 1). Schools are more likely to use information from such tests to evaluate the needs of children and to help guide instruction than to make decisions about whether children should be allowed to enter school or not (figure 1). These findings are described below in greater detail.

#### ***Use of Entrance or Placement Testing Prior to Kindergarten***

As mentioned, 61 percent of schools administer entrance or placement tests to children prior to entering kindergarten. A higher percentage of public schools (69 percent) than private schools (47 percent) administer entrance or placement tests to children prior to kindergarten. Combined (71 percent), elementary (65 percent), and primary (68 percent) schools are more likely than schools that end with kindergarten (21 percent) to administer entrance or placement tests prior to kindergarten. Schools with larger student enrollments (>300 students) are more likely to administer entrance or placement tests (69 to 72 percent) than schools with enrollments of less than 150 students (44 percent). In public schools, no differences were detected in the use of entrance or placement testing by school poverty.

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<sup>1</sup> In this report, low-income concentration is defined by the presence of a schoolwide Title 1 program. "Title I provides assistance to improve the teaching and learning of children in high-poverty schools to enable those children to meet challenging State academic content and performance standards. It is the largest elementary and secondary education program in the Federal government" (see the web site *Compensation and Education Programs and Title 1*. (2002) at <http://www.ed.gov/offices/OESE/CEP/mainprogresp.html>).

<sup>2</sup> The ECLS-K sample does not support estimates at the state level. For information on state assessment efforts see Saluja, Scott-Little, and Clifford (2000).

### ***Testing to Determine Eligibility When a Child is Below the Cut-off Age***

Schools use tests prior to kindergarten to inform admission decisions (Rafoth 1997). For example, if a child is age-ineligible for kindergarten (i.e., younger than the district's kindergarten cut-off age) but the parent wishes the child to attend, a test may be administered to inform the decision regarding whether to admit the child.

Thirteen percent of all schools with kindergarten programs use entrance or placement tests prior to kindergarten to inform entry decisions when a child is below the cut-off age (figure 1). No significant differences were detected in the use of tests for this purpose by school type or level of instruction. Also, no clear pattern of difference was detected by school size. Among public schools, no differences were detected by school poverty in schools' use of testing to determine eligibility when a child is below the cut-off age.

### ***Testing to Determine Children's Class Placement***

Testing to determine children's class placement can have two meanings. It can mean that children are assessed prior to entering kindergarten and assigned to homogeneous ability groups in a classroom. Or, it can mean that children are identified early as having special needs and assigned to classrooms that are equipped to serve these children's needs. The latter interpretation may fall more accurately under the use of testing to identify children who need further evaluation or individualized instruction and is discussed later in this report.

School administrators across the country reported that 19 percent of schools administer placement tests to determine children's class placements (figure 1). While no differences were detected in this use of tests by school type or school size, differences were detected by the school's level of instruction. Combined (23 percent) and elementary (19 percent) schools are more likely to administer entrance or placement tests prior to kindergarten to determine

children's class placement compared to schools ending with kindergarten (6 percent). This finding is not entirely unexpected, for schools ending with kindergarten (i.e., preschools terminating with kindergarten) tend to be smaller and may not contain as many kindergarten classrooms; therefore, testing for this purpose may be a non-issue. Public schools with a high percentage of low-income children are more likely than public schools with fewer low-income children to use tests to determine children's class placements.

### ***Testing to Identify Children Who May Need Additional Testing and Evaluation***

Schools may use placement test information to identify children who need additional evaluation for possible receipt of special services. In fact, the initial purpose of using entrance and placement tests was to identify children with special needs. Developmental assessments are used to help ensure that children with disabilities receive appropriate services (Shepard 1994).

Overall, 47 percent of schools use tests to identify children who may need additional evaluation (figure 1). Public schools (55 percent) are more likely than private schools (33 percent) to administer entrance or placement tests for this purpose (figure 2). Primary (57 percent), elementary (51 percent), and combined (50 percent) schools are more likely than schools that end with kindergarten (22 percent) to administer entrance or placement tests for this purpose. Also, a higher percentage of schools with between 300 and 499 students (57 percent) use these types of tests to identify children who may need additional evaluation, compared to schools with less than 150 students (35 percent). Among public schools, low-income schools are more likely than non-low-income schools to use tests to identify children who may need additional evaluation.

### ***Testing to Help Teachers Individualize Instruction***

Tests can help teachers to understand specific children's learning needs and can be used by teachers to individualize instruction. About half

of all schools (52 percent) use entrance and placement testing for this purpose (figure 1). Public schools (59 percent) are more likely than private schools (38 percent) to administer entrance and placement tests to help teachers individualize instruction. Primary (54 percent), elementary (57 percent), and combined (54 percent) schools are more likely to administer entrance or placement tests to help teachers individualize instruction than schools that end with kindergarten (24 percent). Small schools (less than 150 students, 37 percent) are less likely to administer entrance or placement tests to help teachers individualize instruction than larger schools (300–499 students, 58 percent; 500–749 students, 60 percent; 750 or more student, 58 percent). In public schools, no differences were detected by school poverty level in the use of testing to help teachers individualize instruction.

#### ***Testing to Support a Recommendation for Delay of Entry***

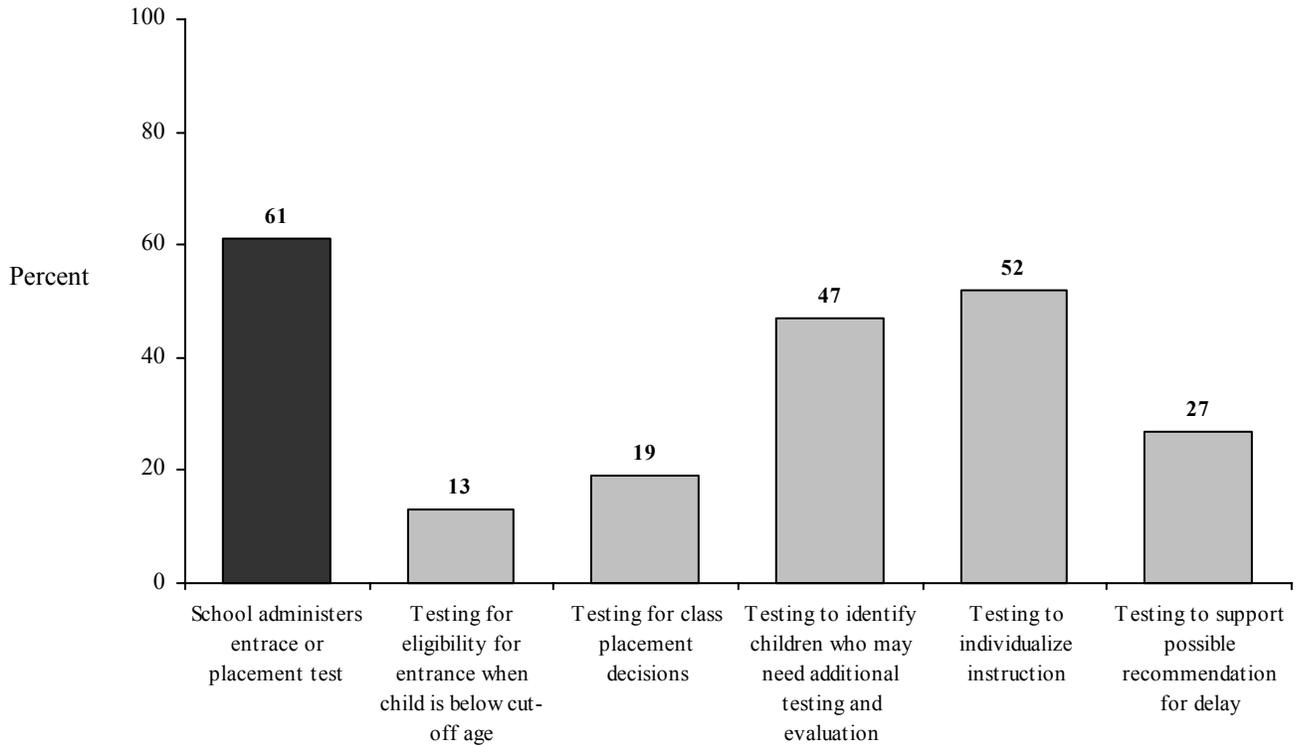
Schools may administer tests prior to kindergarten to support a recommendation to delay a child's entry to kindergarten (May and Kundert 1997). Here, the child meets the age requirement to begin kindergarten, but the child's parents or school, or both, may have a concern about the child's *readiness* for school. About one-quarter of schools (27 percent) use tests to support recommendations that children be held out of kindergarten (figure 1). No differences by school type were detected for this use of testing. Combined schools (38 percent) and elementary schools (26 percent) are more likely than schools ending with kindergarten (10 percent) to administer tests for this purpose. Schools with enrollments of 300–499 students (33 percent) are more likely than schools with 500–749 students (19 percent) to administer entrance or placement tests prior to kindergarten for this purpose. In public schools, no differences were detected in schools' use of tests to support a recommendation for delay of entry.

#### **Summary**

More than half (61 percent) of our nation's schools use some form of entrance or placement tests for kindergarten-age children. The administration of such tests and how the information from these tests is used varies by several school characteristics, such as school type, the grade levels taught, and school size. For example, schools that end with kindergarten differ from primary, elementary, and combined schools in their use of such tests (e.g., use test information for class placement or to individualize instruction). Schools that end with kindergarten are significantly less likely to use entrance and placement tests in general (21 percent vs, 65 to 71 percent). Therefore, it is not surprising that they also differ in how they use the information from these tests.

Whether or not these patterns of use are different from the past is difficult to judge. The 1999-2000 survey results reported by Saluja, Scott-Little, and Clifford (2000) and results from earlier surveys conducted in the mid-1990s (Shepard, Kagan, and Taylor 1996) and mid-1980s (Gnezda and Bolig 1988) focus on the policies and practices of states (not schools). The ECLS-K provides information about schools' use of assessments. However, both at the state level and at the school level, the findings seem consistent. Specifically, it seems that test information is more likely to be used to evaluate the needs of children and to help guide instruction than to make decisions about whether children should be allowed to enter school.

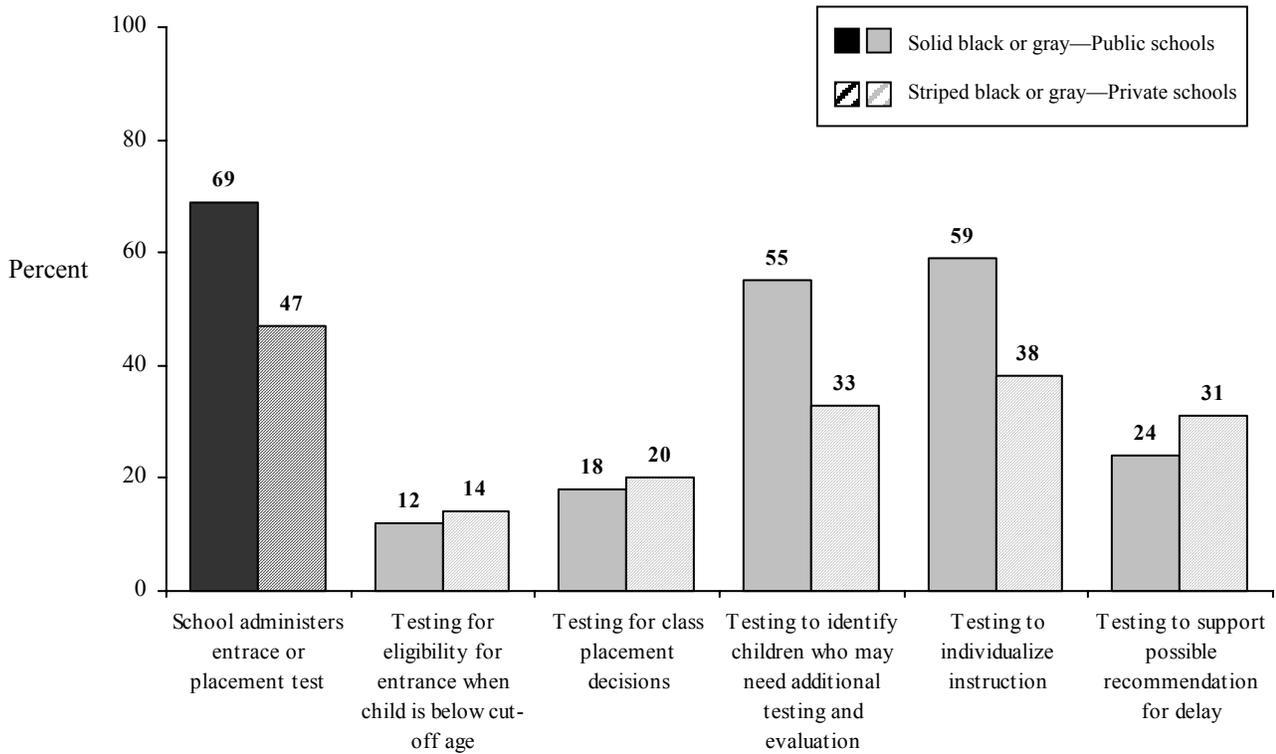
**Figure 1 Percent of schools that give a kindergarten entrance or placement test prior to kindergarten and how the test information is used: 1998–99**



NOTE: Statistics are for U.S. schools with one or more kindergarten classes.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99, Public-use Base Year Data File.

**Figure 2 Percent of schools that give a kindergarten entrance or placement test prior to kindergarten and how the test information is used, by school type: 1998–99**



NOTE: Statistics are for U.S. schools with one or more kindergarten classes.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99, Public-use Base Year Data File.

## **Methodology and Technical Notes**

The Early Childhood Longitudinal Study, Kindergarten Class of 1998–99 (ECLS–K) is being conducted by the U.S. Department of Education, National Center for Education Statistics (NCES). It is designed to provide detailed information on children’s early school experiences. The study began in the fall of the 1998–99 school year. The children participating in the ECLS–K are being followed longitudinally through the fifth grade. Estimates in this report are at the school level, and are based on the nationally representative sample of schools from the base-year of the ECLS-K.

### ***Sample Design***

A nationally representative sample of 1,277 schools offering kindergarten programs during the 1998–99-school year were sampled to participate in the ECLS–K. Both private and public schools with full-day and part-day kindergarten programs participated. The sample included traditional K-12 schools and also early childhood programs that offered kindergarten.

The ECLS–K used a dual-frame, multi-stage sampling design. The first stage of sampling involved the selection of 100 primary sampling units (PSUs) from a national sample of PSUs. The PSUs were counties and county groups. Public and private schools were then selected within the PSUs, and children were sampled from the selected schools. Public schools were selected from the Common Core of Data, a public school frame, and private schools were selected from a private school frame developed for the Private School Survey. During the spring of 1998, Westat, the ECLS-K data collection contractor, identified schools that were not found on either frame. A sample of these schools was included in the ECLS-K school sample.<sup>3</sup>

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<sup>3</sup> The Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 Base Year User’s Manual (NCES 2001-029) provides more detail on the ECLS-K school sample and school data collection protocol.

## ***Response Rates***

A total of 944 of the 1,277 originally sampled schools participated during the base year of the study. This translates into a weighted school response rate of 74 percent for the base year of the study. The school response rate during the spring of the base year (74.2 percent) was higher than during the fall (69.4 percent) due to some of the schools that originally declined to participate changing their minds and participating in the spring. Nearly all (99.4 percent) of the schools that participated in the fall of the base year also participated in the spring. A nonresponse bias analysis was conducted. For more information, please see *Analysis of Nonresponse Bias in the Base Year 1998-99 Early Childhood Longitudinal Study Kindergarten Class* (Brick, Burke and Le, forthcoming).

### ***Data Reliability***

Estimates produced using data from the ECLS–K are subject to two types of error, sampling and nonsampling errors. Nonsampling errors are errors made in the collection and processing of data. Sampling errors occur because the data are collected from a sample rather than a census of the population. A detailed discussion of these types of error can be found in *America’s Kindergartners* (West, Denton, Germino Hausken, 2000).

### ***Standard Errors and Weights***

In order to produce national estimates from the ECLS–K school administrator data, the sample data were weighted. Weighting the data adjusts for unequal school selection probabilities and adjusts for nonresponse. The first stage of the weighting process assigns weights to the sampled primary sampling units (PSUs) equal to the inverse of the PSU probability of selection. The second stage of the weighting process assigns weights to the schools sampled within PSUs. The base weight for each sampled school is the PSU weight multiplied by the inverse of the probability of selecting the school. The base weights for eligible schools are adjusted for nonresponse. These adjustments are made

separately for public and private schools. The base year school weight was used to produce all estimates in this report.

In addition to properly weighting the responses, special procedures for estimating the statistical significance of the estimates were employed because the data were collected using a complex sample design. Complex sample designs, like that used in the ECLS–K, result in data that violate the assumptions that are normally required to assess the statistical significance of the results. Frequently, the standard errors of the estimates are larger than would be expected if the sample was a simple random sample and the observations were independent and identically distributed random variables. WesVarPC version 4.1 was used in this analysis to calculate standard errors.

Replication methods of variance estimation were used to reflect the actual sample design used in the ECLS–K. A form of the jackknife replication method (JK2) using 90 replicates was used to compute approximately unbiased estimates of the standard errors of the estimates in the report.

### ***Statistical Procedures***

Comparisons made in the text were tested for statistical significance to ensure that the differences are larger than might be expected due to sampling variation. When comparisons are made, *t* statistics were calculated. The formula used to compute the *t* statistic was:

$$t = \text{Est}_1 - \text{Est}_2 / \text{SQRT}[(\text{se}_1)^2 + (\text{se}_2)^2]$$

Where  $\text{Est}_1$  and  $\text{Est}_2$  are the estimates being compared and  $\text{se}_1$  and  $\text{se}_2$  are their corresponding standard errors.

To guard against errors of inference based on multiple comparisons, the Bonferroni procedure to correct significance tests for multiple contrasts was used in this report. The Bonferroni procedure divides the alpha level for a single *t* test (e.g., .05) by the number of critical pairwise comparisons in order to provide a new alpha that adjusts for the number of comparisons being made.

## **Constructs and Variables Used in Analysis**

### ***Schools' Use of Assessments for Kindergarten Children***

As part of a larger questionnaire completed by school administrators, the ECLS-K collected information about schools' use of assessments for kindergarten children. School administrators were asked, "Are any children given a readiness or placement test before or shortly after entering kindergarten?" If they responded yes, they were then asked five follow up questions to ascertain if the placement tests were used: to determine eligibility for enrollment when a child is below the cut-off age for kindergarten; to determine children's class placements; to identify children who may need additional testing (for example, for a learning problem); to help teachers individualize instruction; and to support a recommendation that a child delay entry for an additional year. The estimated percent of schools that use assessment information in specific ways found in this report pertain to all schools, not just to those that use readiness or placement testing.

### ***Derived Variables***

Some variables used in this report were derived by combining information from one or more questions in the ECLS–K school administrator questionnaire or from other study sources. The derivation of key variables is described in this section.

School type: (S2KPUPRI) The type of school in which children attended kindergarten was collapsed into two broad categories: public and private. Private schools include those with both religious (e.g., Catholic) and nonreligious affiliations. This information is derived from the sampling frame and information provided by the school administrator.

School poverty: (SWTITLE1) School administrators provided information on the presence of Title I funding in their school. They were specifically asked if their school was operating a schoolwide Title I program during

the 1998-99 school year (yes/no response). For this analysis, schools with a schoolwide Title I program are classified as low-income schools.

Level of instruction: (S2KSCLVL) School administrators provided information on the highest grade taught in the school. If the school administrator did not explicitly answer this question, then another question was used from the school administrator questionnaire that provided information about grade levels that participated in special programs. If both of these sources were blank, or there was no School Administrator Questionnaire, sample frame data were utilized. The categories in this analysis are: ends with kindergarten; primary—highest grade is first, second or third; elementary—highest grade is fourth, fifth or sixth; combined—highest grade is seventh through twelfth.

School size: (S2KENRLS) School Administrators provided information on total school enrollment. The information was then collapsed into five categories: 0-149, 150-299, 300-499, 500-749, and more than 750. If there was no School Administrator Questionnaire or this item was left blank, then sample frame data were used.

## References

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Table 1 Percent of schools that give a kindergarten readiness or placement test prior to kindergarten and how that test information is used, by school characteristics: 1998–99

School characteristics	Total schools	Percent that test prior to kindergarten	Tests for eligibility for entrance when child is below cut-off age	Tests for class placement decisions	Tests to identify children who may need additional testing and evaluation	Tests to individualize instruction	Tests to support possible recommendation for delay
Total	100	61	13	19	47	52	27
School type							
Public	65	69	12	18	55	59	24
Private	35	47	14	20	33	38	31
School level							
Ends with kindergarten	11	21	5	6	22	24	10
Primary	6	68	13	21	57	54	14
Elementary	52	65	14	19	51	57	26
Combined	28	71	14	23	50	54	38
School size (number of children)							
Less than 150	24	44	17	18	35	37	25
150–299	26	62	11	16	45	51	28
300–499	24	72	18	19	57	58	33
500–749	19	69	7	21	54	60	19
750 and above	8	69	4	29	46	58	22
<b>PUBLIC SCHOOLS ONLY</b>							
Low-income school*							
Yes	56	73	14	22	60	63	27
No	44	65	11	14	48	54	21

\* In this report, school poverty is defined by the presence of a schoolwide Title I program. "Title I provides assistance to improve the teaching and learning of children in high-poverty schools to enable those children to meet challenging state academic content and performance standards. It is the largest elementary and secondary program in the Federal government" (for information on the current Title I program see the web site *Compensation and Education Programs and Title I*. (2002) at <http://www.ed.gov/offices/OESE/CEP/mainprogresp.html>). Schoolwide Title I programs in 1998-99 were intended for schools with poverty levels of 50 percent or higher.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99, Base-year restricted use file.

Table 1a Standard errors of schools that give a kindergarten readiness or placement test prior to kindergarten and how that test information is used, by school characteristics: Spring 1999

School characteristics	Total schools	Test prior to kindergarten	How test information is used				
			Determine eligibility when a child is below cut-off age	Determine children's class placements	Identify children who may need additional evaluation and testing	Help teachers individualize instruction	Support a recommendation for delay of entry
Total	—	2.4	1.2	1.7	2.5	2.3	1.7
School type							
Public	1.6	3.0	1.3	2.1	3.1	2.8	2.2
Private	1.6	3.7	2.5	2.8	3.5	3.2	3.6
School level							
Ends with kindergarten	1.5	5.6	2.8	3.0	5.3	5.6	4.0
Primary	.9	7.8	4.0	5.9	7.6	7.7	3.9
Elementary	2.2	3.2	1.8	2.2	3.4	3.3	2.1
Combined	1.9	3.8	2.8	3.5	4.1	4.0	4.3
School size (number of children)							
Less than 150	1.9	5.6	3.4	3.9	5.3	4.6	4.6
150-299	2.1	3.7	3.4	3.2	4.0	4.3	3.7
300-499	1.5	3.4	2.6	3.1	3.3	3.7	3.3
500-749	1.3	5.2	1.8	3.0	5.2	5.0	2.8
750 and above	1.8	5.6	1.8	5.3	6.4	5.0	4.1
<b><u>PUBLIC SCHOOLS ONLY</u></b>							
Low-income school*							
Yes	2.4	3.5	2.2	2.8	3.7	3.4	2.9
No	2.4	3.9	3.0	2.4	3.8	4.1	3.5

\* In this report, low-income concentration is defined by the presence of a schoolwide Title I program. "Title I provides assistance to improve the teaching and learning of children in high-poverty schools to enable those children to meet challenging State academic content and performance standards. It is the largest elementary and secondary education program in the Federal government" (see the web site *Compensation and Education Programs and Title I. (2002)* at <http://www.ed.gov/offices/OESE/CEP/mainprogresp.html>).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99, Base-year restricted use file.